Time to accelerate

Activity Report 2018

elia group

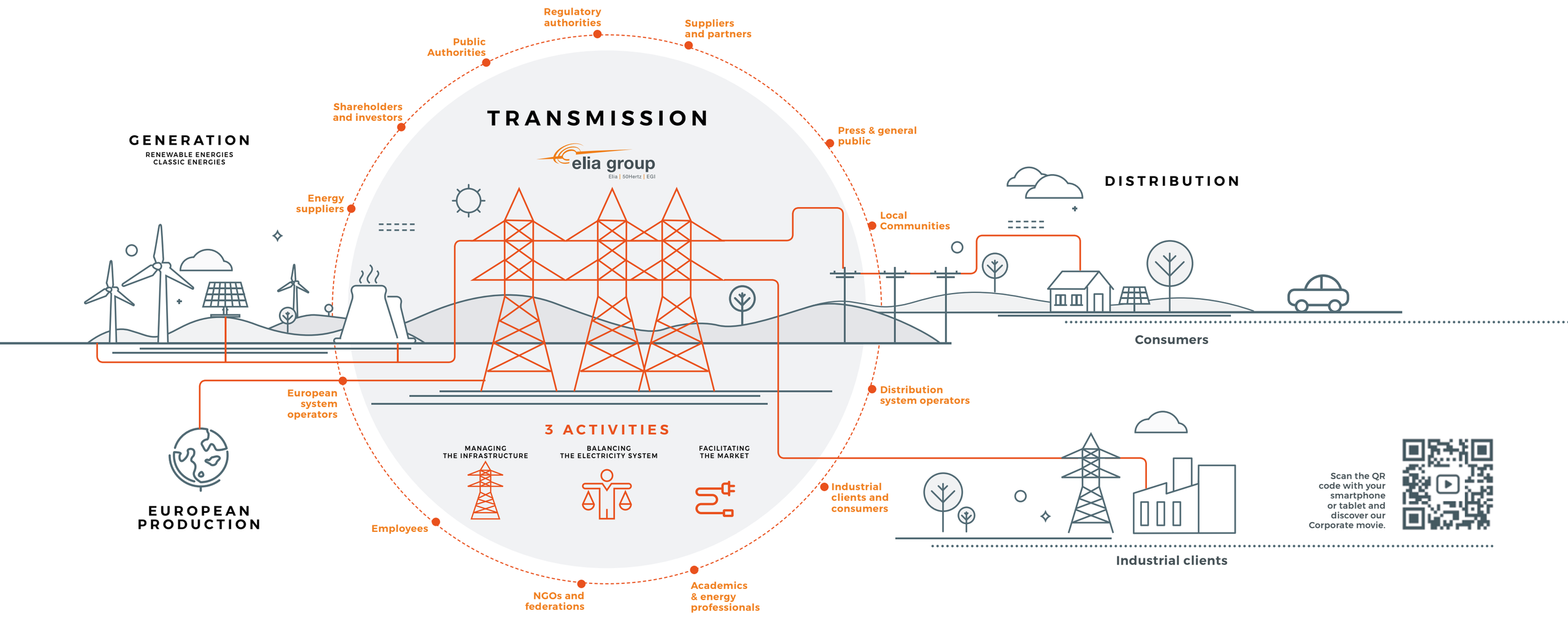
Elia | 50Hertz | EGI

For a successful energy transition ...

... in the interest of society

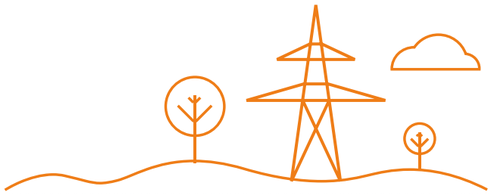
We connect generation and distribution

GRI 102-40
GRI 102-9



Scan the QR code with your smartphone or tablet and discover our Corporate movie.

Contents



Regulated information, published on 12 April 2019 after trading hours.

* These chapters form the annual report cf. article 119 of the Belgian company code.

Elia Group's Annual Report 2018 consists of three parts: the Activity Report, the Sustainability Report and the Financial Report where we inform our stakeholders about our projects, corporate social responsibility, and financial results, corporate governance and risk management, respectively.

You are currently reading the Activity Report. Please visit our download centre to consult parts two and three.

Scan the QR code to visit our download centre.

It's time to accelerate ...

... to develop the grid of the future that integrates increasing amounts of renewable energy generation.

... to prepare the system of the future while keeping the lights on and ensure our infrastructure is fully available to the market.

... to create a culture of innovation and entrepreneurship, and redesign the market by embedding all kinds of technologies and market players and integrating new types of consumption in a secure way.

... to contribute to the single European internal energy market by operating and developing interconnectors.

... to implement a corporate Group culture that leverages the full potential of our talents to establish a high performance organisation.

... to live up to the needs of society and the expectations of our stakeholders.

... to make sure we are ready to take on new tasks.

GRI Standards

This report has been prepared in accordance with the GRI Standards, the first global standards for sustainability reporting. Whenever you see a GRI reference number throughout the Activity Report, Elia Group is reporting on economic, environmental or social impacts. More information on the subject can be found in the corresponding section of the Sustainability Report on page 16.

The QR codes in this report provide more in-depth information on a subject by way of a video, brochure or web page. Simply scan the QR codes with your tablet or smartphone and discover more.

Time to accelerate

Interview with Chris Peeters and Bernard Gustin, the CEO and the Chairman of Elia Group

GRI 102-14
GRI 102-15

2018 saw Elia Group shift up a gear in a number of areas. Now that Elia has acquired an additional 20 percent stake in 50Hertz and a new local investment partner has come on board, the partnership between Elia in Belgium and 50Hertz in Germany is stronger than ever. Together, the two companies aim to become one of Europe's leading groups of transmission system operators. The context in which they operate is changing rapidly and becoming increasingly supranational due to the energy transition, the emergence of new market players, innovative technologies and the rise in digitalisation. The only option is to move forward – and quickly, rather than slowly.

Why is Elia Group in such a rush to change?

Chris Peeters: It is what society expects of us. The UN climate change conference in Poland once again highlighted the urgent need for action. The way things are going now, we are heading for a temperature increase of 3.2 degrees Celsius. That is completely unacceptable. Progressive countries are trying to speed up the energy transition: for instance, Germany has decided to increase its share of renewable energy to 65 percent by 2030.

Bernard Gustin: Our activities are central to the issues that most concern young people today: the climate and the rise in digitalisation. Our grid has equipped us with the resources we need to respond to this. We are making the energy transition possible and ensuring that it is progressing at the right pace. We want to move forward with digitalisation too. The technology is available. As a leading energy company, we have to live up to our responsibility, along with the distribution system operators and the rest of the sector. This is a key shift in our role. Ten years ago, we, as a system operator, were just another boring, regulated transmission monopoly.

Chris Peeters: We are also seeing a trend towards convergence. Technologies and market parties are moving ever closer to one another: heating and mobility are going electric, and a third horizon is opening up through Power-To-X. The pieces are all in place for major changes to be made very quickly. Of course, this means that Elia Group will have to adapt too – both locally and at European level, since the integrated, low-carbon economy will be a European economy.

Bernard Gustin: That is why it is still extremely relevant for the Group to operate in two countries through Elia and 50Hertz. Our shareholding structure may be Belgian, but if you look at our figures and our activities, you will see that we are just as German as Belgian. And although we are not the biggest player in the market, our unique position has made us a European leader in our industry. We intend to fully live up to our responsibility and will seek further opportunities to become an even stronger European player.

"Ten years ago, we, as a system operator, were just another boring, regulated transmission monopoly. Today, we are central to the issues that are most important to society: the climate and the rise in digitalisation."

Bernard Gustin – Elia Group Chairman

"Operating in Belgium and Germany – two countries that currently have different approaches to the energy transition – gives us real added value, which is directly relevant to present developments in Europe."

Chris Peeters – Elia Group CEO

Was that also the Group's reason for increasing its stake in 50Hertz?

Chris Peeters: Definitely. It is time for us, too, to accelerate. We want to bolster our profile as a European Group that actively assists local and European policymakers in devising the energy system of the future. Our vision paper on digitalisation and the consumer-centric energy system is a good example of what we can do. We have put forward concrete proposals to advance the goals set by the European Commission's Clean Energy Package. Operating in two countries that currently have different approaches to the energy transition gives us real added value, which is directly relevant to present developments in Europe. The acquisition was a good move in financial terms too. The market reacted favourably to news of the additional stake:

65%

SHARE OF RENEWABLE ENERGY IN GERMANY BY 2030

our share price is rising, going against the prevalent downward trend. The acquisition will have a major impact on our internal structure too. 2019 will see us expand some group functions to cover areas including IT, purchasing, innovation, finance and communication. We want to move towards a structure that allows our talent to make an active contribution to our international activities, which will give us an edge in the 'war for talent'.

Bernard Gustin: Our additional stake in 50Hertz is so much more than an extra 20 percent in a company in which we already held a 60 percent stake. The acquisition has given us a far more solid base in one of Europe's key countries. We are one of the few system operators to operate in two countries and have experience with international expansion. This puts us in a good position to grow further and exploit new developments. For instance, we will be looking to make digitalisation a more prominent part of our profile in 2019. Our size enables us to set up a dedicated team and devise a range of concepts.

The additional stake in 50Hertz is not the only thing that has changed. The Group's investment partner is different too. IFM Investors from Australia has been replaced by KfW Bankengruppe (KfW) from Germany. Why is it so important for the Group to have local roots?

Chris Peeters: Local roots are essential for us because our activities are intrinsically linked to the local context. To be successful, it is vital to understand the local market and have your finger on the local pulse. Our new German partner has an excellent insight into the local context. KfW is a German investment bank and is thus closely connected and highly sensitive to local political developments. This is important because it allows us to better judge the pace at which we should carry out developments and makes it easier for us to seize future opportunities. Ultimately, we need to ensure that our achievements also benefit the local community. For our German partner, this is a strong incentive to work with us to make our partnership a success.

Bernard Gustin: It is extremely challenging for a multinational group to strike the right balance between integration and having local roots. While integration is essential for boosting our performance on the integrated European market, we also want to respect local identity. That is why it is very positive to have a strong local partner. For me, the changes in the Group's shareholding structure are one of the highlights of 2018. The changes took place in two stages, each lasting six weeks. Our teams were under tremendous pressure but they pulled everything off in the end, which is a testament to their dedication.

"Local roots are essential for us because our activities are intrinsically linked to the local context. To be successful, it is vital to understand the local market and have your finger on the local pulse."

Chris Peeters –
Elia Group CEO

"Our shareholding structure may be Belgian, but if you look at our figures and our activities, you will see that we are just as German as Belgian. And although we are not the biggest player in the market, our unique position has made us a European leader in our industry."

Bernard Gustin –
Elia Group Chairman

How can Elia and 50Hertz strengthen one another?

Chris Peeters: We are moving towards the future together. And the future appears, in part, to lie in offshore energy. Offshore energy is set to grow exponentially in the seas in which we operate. As we integrate new technologies and innovations, we will need new skillsets, so stepping up our offshore activities is a major concern for us. Not only will it change how we manage our technical infrastructure, it will also create a new dynamic in system management. I am thinking of 50Hertz's Combined Grid Solution project, the world's first interconnector connecting two wind farms between two countries. The amount of available interconnection capacity will increase and decrease depending on the wind. How can you bring that capacity to market while also ensuring that the market can take maximum advantage of something that will, by its very nature, be highly variable? It is an extremely complex issue, but we are very excited to be working on it.

Bernard Gustin: I was very impressed by the positive response of the international press to the launch of the Nemo Link project to build a subsea interconnector between Belgium and Great Britain. The specific skillsets of the Group's two companies complement one another perfectly here: offshore (50Hertz) and interconnections (Elia). Nemo Link is an entirely new activity that will be added to our profile in 2019 and is sure to have an impact on our figures. At the end of the day, that really matters for a privately-held company.

Elia Group wants to be a leading European energy company. But what does that mean to you?

Bernard Gustin: To me, it means building on our diverse activities to become one of the biggest system operators in quantitative terms, but also thinking about the future. We are a regulated monopoly and thus have a societal role that sets us apart from other, entirely privatised operators.

Chris Peeters: With that in mind, we are working with innovative technologies and exploring new ways of thinking about the energy system of the future. To me, being a leader means setting the tone in the move towards a low-carbon society and contributing to a social debate that reaches beyond our company. In 2019, we will work with the sector to launch several pilot projects on digitalisation in which the user will have a greater role. But we need to think in supranational terms too, and reflect on how we can use our infrastructure more efficiently at European level. Consumers expect it of us, and Elia Group wants to play a pioneering role in this regard.

Bernard Gustin: We are also planning some fairly substantial investments. In Belgium, we want to enhance our role as a European energy hub by further developing offshore activities, building additional interconnectors and upgrading the domestic grid. Our projects in Germany include the construction of the SuedOstLink, which will carry the growing volumes of renewable power generated in northern Germany to consumption centres in the south of the country, and the further expansion of offshore activities, like the development of the Westlich Adlergrund 2 cluster. We also aim to excel in safety by taking both our own standards and those of our suppliers to an even higher level.

Finally, who would you like to thank in 2018?

Chris Peeters: I would like to thank our employees and our grid users in Belgium and Germany. A special mention also goes to the Board of Directors, which helped the Group to move towards a more growth-oriented approach with the deals it concluded over the past year, aided by highly professional, constructive collaboration on the part of the German authorities and our new partner. We look forward to a year of fruitful cooperation with KfW, our regulators and the various local, federal and European authorities in 2019.

Bernard Gustin: As well as my fellow directors, I want to thank Elia Group's management and staff. 2018 was a very busy year, with many events and developments to be handled on top of all our usual work. There is always some degree of apprehension about any change. While our people were sometimes tested by the events of the past year, their dedication gives us the confidence to continue with our transformation into an international group. This is a vital step for our Group.

Elia Group

Who?

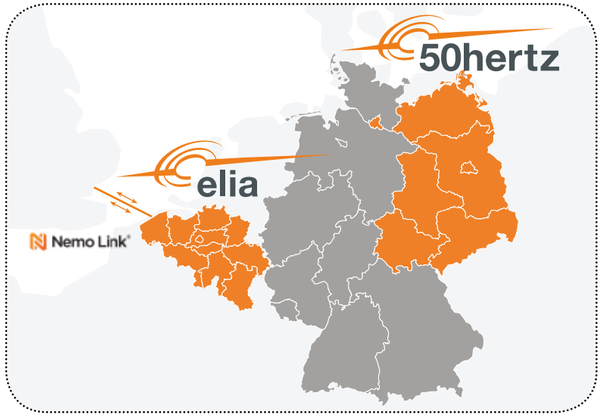
One of Europe's top 5 TSOs

GRI 102-1

Elia Group is active in electricity transmission. With its two TSOs - Elia in Belgium and 50Hertz in Germany - we operate 18,990 km of high-voltage connections that secure the power supply of 30 million end users. With a reliability level of 99.999 percent, we provide society with a robust electricity grid.

Elia operates an electricity transmission system with voltage levels between 30 and 400 kilovolt (kV), and 50Hertz transports electricity over high-voltage levels of 150, 220 and 380 kilovolts (kV).

We lead the way in a successful energy transition ensuring a reliable, sustainable and affordable energy system for the future.



How?

Through cooperation and innovation

We operate and develop our grid infrastructure in close collaboration with all stakeholders. We are highly focused on safety and our goal is zero accidents. We are committed to innovation and continuously improve our operational systems. In Germany, we are already integrating over 56.5 percent renewable energy safely into the grid. This is how we make the energy transition happen.

What?

Our core tasks GRI 102-2

Grid ownership – We prepare to deliver the infrastructure of the future

We develop, build and maintain our transmission grid according to long term needs. We heavily invest in the integration of renewable energy, the development of an offshore high-voltage grid and the construction of interconnectors to facilitate the integration of the European energy market. By doing so, Elia Group drives the transition to tomorrow's energy system.

System control – we maintain the balance

Operating the electricity system is an increasingly complex task due to the sharp rise in renewable generation sources, the continuous arrival of new players and technologies and the development of supranational coordination. To ensure a reliable supply and efficient operational management of our grids, Elia Group monitors the electricity system in real time. This requires specialist knowledge as well as sophisticated tools and processes.

Market facilitation – We are part of the European integrated market

Elia Group makes its infrastructure available to all market players in a transparent, non-discriminatory way. Digitalisation and the latest technologies offer market players new opportunities to optimise their electricity management by selling their surplus energy or temporarily reducing consumption. We develop services and mechanisms allowing the market to trade on different platforms, which promotes economic competitiveness and the well-being of society.

Trusteeship* – We transparently integrate renewable energies into the market

The German legislator has transferred the responsibility for coordinating and processing legal levy systems to promote environmentally friendly technologies to the transmission system operators. 50Hertz collects these levies as a trustee, administrates these and coordinates their distribution to the recipients. If the electricity from renewables is not marketed directly, we sell this electricity on the power exchange.

* Only for 50Hertz

Why?

In the interest of society

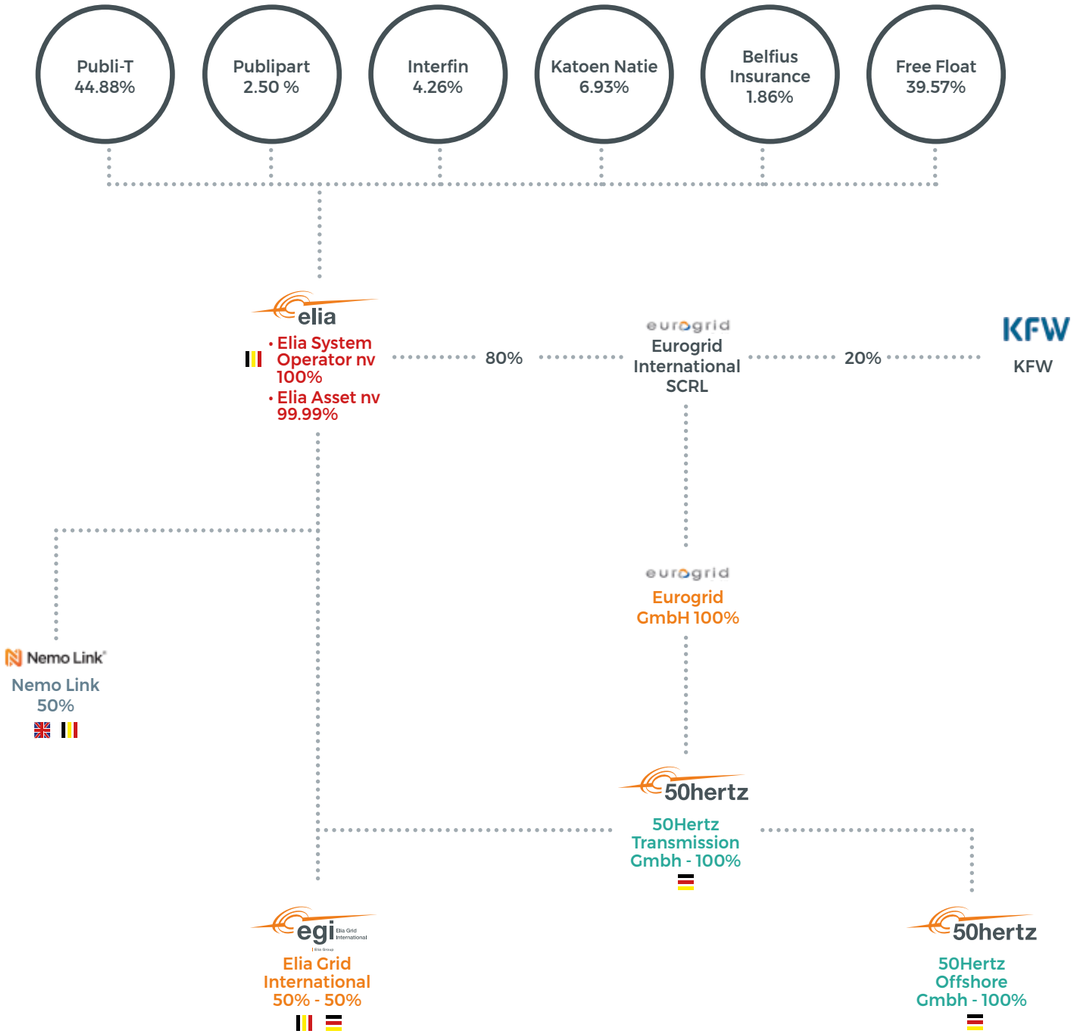
The electricity grid is a key pillar of the energy policy that supports our socio-economic prosperity. Elia Group aspires to be a catalyst for a successful energy transition and consequently, a reliable, sustainable and affordable energy system. By building interconnectors and integrating renewable energy generation, Elia Group promotes both the integration of the European energy market and the decarbonisation of our society.

Shareholder structure

GRI 102-5
GRI 102-45

Elia Group is commonly known as the umbrella brand of the Belgian and German transmission system operators Elia System Operator sa/nv ('Elia') and 50Hertz Transmission GmbH ('50Hertz'). Elia Group operates under the legal entity and listed company Elia. Its main shareholder is the municipal holding Publi-T. Elia holds the 80 percent majority in Eurogrid International SCRL/CVBA ('Eurogrid'), which holds, through its 100 percent subsidiary Eurogrid GmbH, 100 percent of the shares in 50Hertz. The remaining 20 percent in Eurogrid is held by Kreditanstalt für Wiederaufbau (KfW).

In addition to our activities as transmission system operator in Belgium and in north and east Germany, Elia also participates in the Nemo Link joint venture that operates the first subsea interconnector between Belgium and the United Kingdom (collaboration with the British system operator National Grid). Elia and 50Hertz also provides various consulting services to international customers through their joint subsidiary Elia Grid International sa/nv (EGI).



"As a leading company in the energy sector, 50Hertz is very closely connected to the German society that it serves. Elia as main shareholder, looks forward to collaborating with KfW as our new partner and feels confident that this stronger national anchorage will inspire us to continue building the infrastructure to realise the energy transition in Germany."

Catherine Vandenborre – Chief Financial Officer at Elia

CHANGE IN SHAREHOLDING IN 2018

GRI 102-10

From 60 to 80 percent

On 26 April 2018, Elia System Operator SA/NV ('Elia') completed the acquisition of an additional 20 percent stake in Eurogrid International SCRL ('Eurogrid'). Following this transaction, Elia owns 80 percent of Eurogrid and fully controls 50Hertz.

The additional acquisition allows further strengthening of the cooperation between Elia and 50Hertz and is a major step forward in realising Elia Group's growth strategy to be one of the leading transmission system operators in Europe.

Elia decided to exercise its pre-emption right after IFM Global Infrastructure Fund (IFM) stated that it intended to sell half of its 40 percent shareholding in Eurogrid in February 2018.

Elia welcomes German Bank KfW as new partner

In August 2018, Elia announced the closing of the transactions with IFM and the German state-owned bank Kreditanstalt für Wiederaufbau (KfW). As a result, KfW, on behalf of the German Federal Government, replaces IFM as shareholder in Eurogrid.

The additional change in share ownership followed a second notification received in May 2018 from IFM of an agreement with a third party for the acquisition of IFM's remaining 20 percent stake in Eurogrid. After obtaining an 80 percent stake in Eurogrid, Elia achieved its objective and decided to exercise its pre-emption right and to partner with KfW by selling the remaining 20 percent stake at the same price.

Successful refinancing of bridge loan

In August 2018, Elia successfully launched a EUR 300 million 10-year senior bond and EUR 700 million perpetual hybrid to refinance a bridge loan for the acquisition of an additional 20 percent stake in Eurogrid. Investors showed great interest, with book building completed in just a few hours due to high demand and the bonds were significantly oversubscribed.

The EUR 300 million senior bond matures in 2028 and has an annual coupon of 1.50 percent. The EUR 700 million hybrid bond has a first call date in December 2023 and a coupon of 2.75 percent, with a reset every five years thereafter.

More information on the Elia share in 2018 → see page 110

Corporate bodies

GRI 102-18

More information on our corporate governance and specific obligations in terms of transparency, neutrality and non-discrimination towards all stakeholders involved in our activities, can be found in part 2 of the Annual Report 2018: Corporate Governance & Consolidated Financial Statements.

ELIA

Executive Committee

Chris Peeters

Chris Peeters
Chief Executive Officer and Chairman

Catherine Vandenborre

Catherine Vandenborre
Chief Financial Officer

Markus Berger

Markus Berger
Chief Infrastructure Officer

Patrick De Leener

Patrick De Leener
Chief Customers, Market & System Officer

Frédéric Dunon

Frédéric Dunon
Chief Assets Officer

Pascale Fonck

Pascale Fonck
Chief External Relations Officer

Peter Michiels

Peter Michiels
Chief Human Resources and Internal Communication Officer

Ilse Tant

Ilse Tant
Chief Community Relations' Officer

Board of Directors

GRI 102-18
GRI 102-22
GRI 102-23

Bernard Gustin

Claude Grégoire

Geert Versnick

Michel Allé

Luc De Temmerman

Frank Donck

Cécile Flandre

Philip Heylen

Luc Hujoel

Roberte Kesteman

Jane Murphy

Dominique Offergeld

Rudy Provoost

Saskia Van Uffelen

50Hertz

Executive Committee

Boris Schucht

Boris Schucht
Chief Executive Officer*

Dr. Frank Golletz

Dr. Frank Golletz
Chief Technical Officer**

Marco Nix

Marco Nix
Chief Financial Officer

Dr. Dirk Biermann

Dr. Dirk Biermann
Chief Markets and System Operation Officer

Dr. Katharina Herrmann

Dr. Katharina Herrmann
Chief Human Resources Officer (until October 2018)***

* Boris Schucht left the company on 28 February 2019
** Dr. Frank Golletz is acting CEO from 1 March 2019 onwards
***Sylvia Borcherding succeeded Katharina Hermann from January 2019 onwards

Supervisory Board

Chris Peeters

Peter Hausmann*

Markus Berger

Dr. Lutz-Christian Funke

Andrea Ludwig*

Dr. Lutz Pscherer*

50Hertz is controlled and monitored by Eurogrid and a co-determined Supervisory Board. The Supervisory Board of 50Hertz Transmission GmbH consists of six members:

Chris Peeters
Chief Executive Officer, Elia System Operator SA-NV, Chairman

Peter Hausmann*
Member of the Executive Main Board, Union for the Mining, Chemical and Energy Industries, Deputy Chairman

Markus Berger
Chief Infrastructure Officer, Elia System Operator SA-NV

Dr. Lutz-Christian Funke
Executive Director KfW

Andrea Ludwig*
Electrical engineer

Dr. Lutz Pscherer*
Electrical engineer

* Workers' representatives

Group priorities

For a successful energy transition in a sustainable world

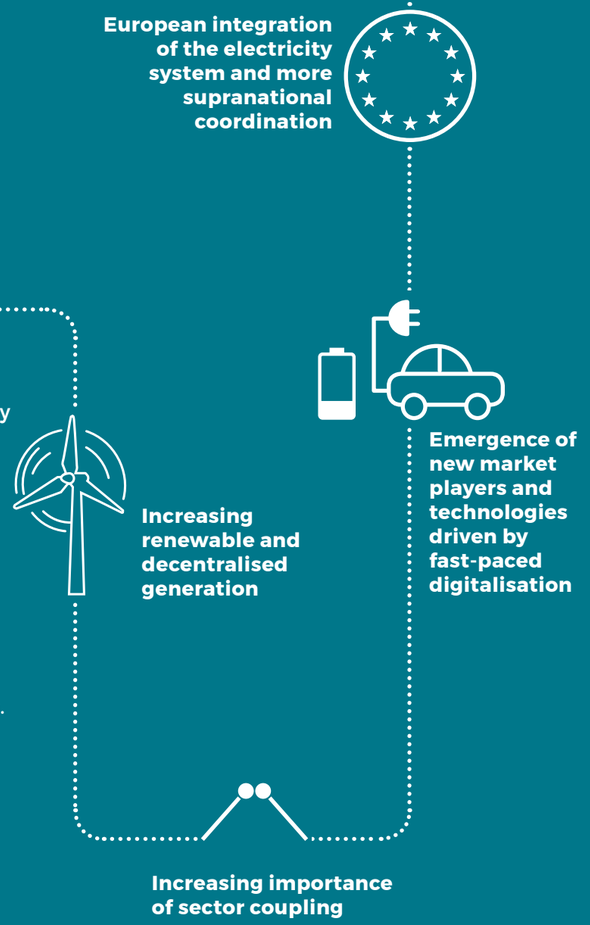
GRI 102-15

AN EVOLVING ELECTRICITY SYSTEM

As transmission system operators, Elia and 50Hertz lead the way in the energy transition. Our grids have a crucial role to play in the decarbonisation of the energy sector and society in general.

Besides the rise of renewable generation, the energy transition is also bringing other changes: increasing decentralised generation, more supranational coordination and the emergence of innovations like Internet of Things (IOT), Artificial Intelligence (AI) and Blockchain that are contributing to the fast-paced digitalisation of our society. As a result, new market players and new technologies appear such as electric cars, battery storage, Power-To-X technologies and so on.

In a future, decarbonised and progressively digital world, managing the power system becomes increasingly complex. Not only will electricity generation become ever more weather-dependent, it will also be produced by millions of assets connected everywhere in the European grid. Both transmission and distribution system operators will need more flexibility to keep the system in balance and to manage congestions and voltage issues.



SAFETY

We go for Zero accidents

The safety of everyone, everywhere, is always our number one priority. We continuously invest in safety and work in a responsible and safe manner. Our goal is zero accidents. Every employee and contractor knows the principles of our safety programme. We ensure that Elia Group's safety instructions are properly applied in order to prevent incidents.

INNOVATION

To accelerate the energy transition

We integrate innovative technologies and keep up with the latest developments in the energy sector. Through a range of initiatives, we encourage our employees to be at the forefront of the energy transition, not only with ideas, but also with practical applications for system operation, asset management and market development. In doing so, we draw on our own expertise but are also keen to learn about and develop ideas from outside the Group through collaboration and open innovation.

IN THE INTEREST OF SOCIETY

For a reliable, sustainable and affordable energy system

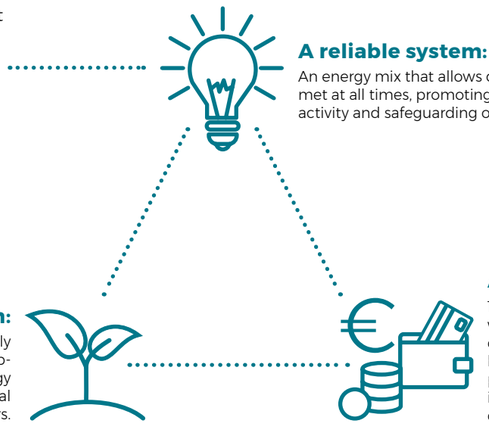
Security of supply is a condition for a prosperous society. We are aiming for a reliable, sustainable and affordable energy system. Developing our grid infrastructure is critically important to this goal. We realise the grid of the future through proactive dialogue with a variety of stakeholders, based on mutual respect and empathy to come to the best societal and environmental solutions.

We also believe that our technical knowledge and analyses support policymaking and contribute to the public debate on the future of the energy system. A system operator that always puts society first is key to successfully implementing the energy transition.

What is the Energy Triangle (Trias Energetica)?

GRI 201-2

The idea of the 'Energy Triangle' is used to describe the triple challenge of balancing energy security, socio-economical impact and environmental sensitivity. The way towards a carbon free society requires long-term and significant investments at a time when meeting the challenges of energy poverty and competitive energy costs are more relevant than ever.



Our strategy

Elia Group is a frontrunner in the transition of the energy sector. To achieve this goal we have a strategy that accommodates the profound and rapid changes in the energy sector. At the same time, our strategy is robust and reflects our essence, so that we continue to create value for society in the future.

Given the capital-intensive nature of our business and the necessary management attention in a transforming business, we focus on six building blocks:

1

We ensure a secure, reliable and efficient grid

We are preparing the system of the future, integrating high levels of renewable energy and new types of consumption in a secure way, while keeping the lights on and giving the market maximum use of our infrastructure.

2

We deliver the transmission infrastructure of the future

We develop the grid of the future that integrates increasing amounts of onshore and offshore renewable energy generation into the integrated European grid.

3

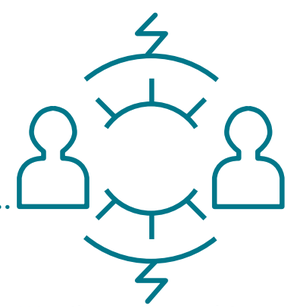
We develop the electricity system and the market

We are redesigning the market to encompass all kinds of technologies and market players, independently from the grid they are connected to, so they can fully exploit the economic benefits. We are committed to fostering a single European internal energy market.

6

We have our eyes wide open for innovation

We create a culture of innovation and entrepreneurship to accelerate the energy transition. We build an ecosystem to develop the tools and methods that will enable a more digital, decentralised and sustainable energy system.



5

We align culture with strategy

We want to implement a corporate group culture that puts safety and sustainability at the centre of our activities and leverages the full potential of our talents to establish a high performance organisation.

4

We cooperate to create value for society

We continue to conduct a proactive and open dialogue to stimulate participation from our various stakeholders. We are a transparent and trusted advisor for decision makers to create value for society.

Sustainable actions in the interest of society

Responsible and sustainable operations are part of the core business of a transmission system operator. Elia Group considers itself as a responsible service provider to society. In addition to social and ecological demands, a sustainable economic basis is needed for the successful energy transition. For this reason, Elia Group has firmly integrated sustainability into its corporate strategy.

In the past, Elia and 50Hertz reported on their strategy, management approaches and measures in separate sustainability reports. For the first time, this report brings the various joint indicators together. The Global Reporting Initiative (GRI) provides the framework and both companies report in accordance with the GRI Core standard. Efforts to deliver a joint sustainability report in the future will continue. This goes hand in hand with a continuous improvement in sustainability performance.

In a comprehensive approach, the respective stakeholder groups, their concerns and important topics were identified in a so-called materiality matrix. The complete analysis of the economic, ecological and social impact of Elia Group's activities is detailed in the Sustainability Report 2018. Below we identified the most material topics.

ELIA GROUP'S MOST MATERIAL TOPICS

GRI 102-44
GRI 102-47

Availability, reliability and future of the power system

This concerns providing information on Elia Group's plans and processes to ensure reliability, delivering sufficient capacity to the market and to facilitate the future power system to transport electricity to customers.

Accident & incident management

This topic concerns managing accident and incident risks for Elia Group's own employees, as well as its subcontractors. This is translated into robust safety programmes aiming for zero accidents.

Systematic risk management

This topic concerns the management of risks such as damage to the grid due to bad weather, catastrophes, etc. to ensure power transmission can be guaranteed. This requires contingency planning measures, disaster/emergency management plans, training programmes and recovery plans.

Employee health, safety and well-being at work

This topic relates to the physical, mental and social wellbeing of workers and the prevention of working conditions causing an impact on health. It also relates to the adaptation of the occupational environment to the physiological and psychological needs of our employees.

"As a strong TSO group, Elia and 50Hertz play a leading role in the energy transition. This first joint report emphasises the importance of sustainability in both our core business processes, operations and corporate strategies."

Chris Peeters –
Elia Group CEO

GRI 102-14

Sustainable Development Goals

Elia Group has also extended its perspective to sustainability. In order to facilitate global sustainable development that works at economic, ecological and social levels, the United Nations has defined 17 concrete goals that apply to all countries worldwide. In order to successfully implement these Sustainable Development Goals (SDG), everyone is called upon. Elia Group wants to contribute to the achievement of the SDGs. In a first internal step, the most appropriate SDGs were identified and clustered in 3 priority levels:

The reporting on the SDGs will successively be expanded and the activities of Elia Group will be linked to these global sustainability goals. During 2019, Elia Group will discuss the goals and their targets with its stakeholders.

TOP PRIORITY

HIGH PRIORITY

MEDIUM PRIORITY

Overview of Elia Group's engagement with stakeholders

GRI 102-42
GRI 102-43

Elia Group has many stakeholder initiatives. The method and frequency of engagement per stakeholder group and the link to the material topics have been summarised in the table on the right*.

Stakeholder group	Mode of engagement	Frequency	Main topics / expectations
Employees	– Performance management – Intranet – Donations	– Regular	– Employees - Human development – Employees - Wellbeing – Community involvement
Customers	– Customer satisfaction survey – Users' Group / Working Groups – Elia extranet	– Annual – 4 to 6 times a year	– Transmission services – Environment – Fair operating practices
Society	– Social events – Engagement via own employees	– Regular	– Community involvement
Shareholders	– Shareholder meeting	– Regular	– General corporate performance incl. the contribution to society
Regulators	– Reports – Communication	– Regular	– Fair operating practices

* Belgium only

The strategy, management approach and sustainability measures of Elia Group are explained in more detail in the Sustainability Report 2018. Seeing each country has its own regulatory particularities, not all indicators can be applied to both entities.

GRI 103-1
GRI 103-2
GRI 103-3

Key figures 2018

GRI 102-44

Operational

30 mio
END USERS
(ELIA GROUP)

18,990 km
OF HIGH VOLTAGES LINES
& CABLES
(ELIA GROUP)

140,147 km²
COVERED
(ELIA GROUP)

Environmental

4,810.1 kg
OF IT MATERIAL RECEIVED
A SECOND LIFE
(ELIA GROUP)

26.24 km
OF BIRD MARKERS
INSTALLED UNTIL
31/12/2018 (ELIA)

56.5%
PERCENTAGE OF RENEWABLE
ENERGY INTEGRATION (50Hertz)

Social

2,441
TOTAL NUMBER OF
EMPLOYEES
(ELIA GROUP)

24
NATIONALITIES
(ELIA GROUP)

172
NEW HIRES
(ELIA GROUP)

Financial

GRI 201-1

€ 9.2 billion
REGULATORY ASSET BASE
(ELIA GROUP)

€ 280.8 mio
NORMALISED NET PROFIT
(ELIA GROUP)

€ 1.66
GROSS DIVIDEND
(ELIA GROUP)

Elia Group in 2018

01

Elia completes an additional 20 percent stake in 50Hertz

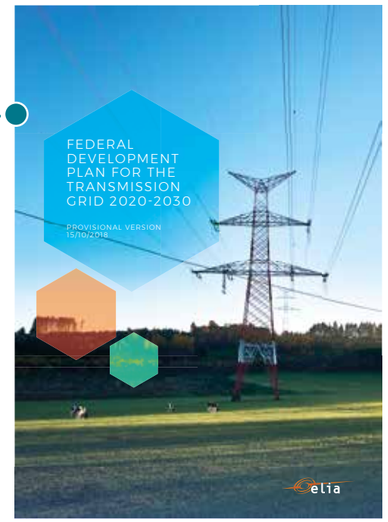
On 26 April 2018, Elia completed the acquisition of an additional 20 percent stake in Eurogrid, the holding company of 50Hertz. Following this transaction, Elia owns 80 percent of Eurogrid and fully controls 50Hertz. Elia decided to exercise its pre-emption right after IFM Global Infrastructure Fund (IFM) stated that it intended to sell half of its 40 percent shareholding in Eurogrid in February 2018.

02

KfW as new partner in 50Hertz

In August 2018, Elia announced the closure of the transactions with IFM and the German state-owned bank Kreditanstalt für Wiederaufbau ('KfW'). As a result, KfW, on behalf of the German Federal Government, replaces IFM as shareholder in Eurogrid. The additional change in share ownership followed a second notification received from IFM in May 2018. Elia decided to exercise its pre-emption right and to partner with KfW by selling the remaining 20 percent stake at the same price.

03



Federal Development Plan 2020-2030 (Belgium)

In line with the legal obligation to draw up a Federal Development Plan every four years, in late May 2018 Elia submitted a draft plan to CREG on the medium-term future of the Belgian high-voltage grid (Federal Development Plan 2020-2030). Elia advocates an accelerated approach to infrastructure development in order to fully exploit the advantages of the energy transition. The Federal Development Plan 2020-2030 was available for viewing in late 2018 during a public consultation. More information on page 53.

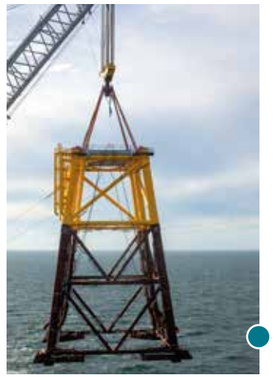
04

Elia Group publishes Vision Paper on consumer-centric system

In November 2018, Elia Group published a Vision Paper outlining better services and optimised energy bills for consumers. 'Towards a Consumer-Centric System' encourages households and industries to directly benefit from advanced energy services via a real-time communication platform, an appropriate market design and digital innovations. Elia encouraged market parties to sign up for an open sandbox environment where innovative concepts will be tested in 2019. More information on page 68.

Nemo Link officially inaugurated

On Wednesday, 5 December, Elia and National Grid inaugurated the first submarine electricity interconnector between Belgium and the United Kingdom. Federal Energy Minister Marie Christine Marghem and the Minister for the North Sea Philippe De Backer attended the ceremony. More information on page 48.



06

MOG foundation installed at sea

Belgium's first ever 'power plug at sea' is one step closer to becoming a reality when the jacket was successfully installed on the seabed in November 2018. More information on page 44.

05

08

Launch of XBID facilitates trading across European borders

The go-live of the European Cross-Border Intra-Day (XBID) solution in June marked an important step on the path to an integrated European intraday market. The XBID platform will deliver continuous trading of electricity across 14 European countries: Austria, Belgium, Denmark, Estonia, Finland, France, Germany, Latvia, Lithuania, Norway, The Netherlands, Portugal, Spain and Sweden. Most other European countries are due to take part in a second 'wave' and will go-live with XBID in the summer of 2019. More information on page 64.

09

Awards & recognition

Elia was awarded the Top Employer of 2018 title, identifying it as one of Belgium's 64 top employers and one of the three best in the energy sector. Elia Group's corporate movie was awarded the first prize at the Belgian Corporate Movie Festival and Elia Group's Annual Report 2017 won the 'Best 1st Sustainability Report', an initiative of the Belgian Institute of auditors. Peter Michiels was elected Belgian 'HR Manager of the Year' and there were nominations for Catherine Vandenborre and Chris Peeters respectively for 'CFO of the Year' and 'Manager of the Year'.

07

ALEGrO progress at halfway stage

Work on the first electricity interconnector between Belgium and Germany is running to schedule. Elia completed 50 percent of the construction on Belgian soil, while Amprion started working on the 41 km connection that will traverse Germany. Commissioning is scheduled for end-2020. More information on page 49.

Elia

50Hertz

10

Safely handle everyday work

The 'gib8' Work Safety Campaign was launched in the first quarter of 2018. The messages reach everyone in the company and on the construction sites. For this reason, special materials, activities and training courses are provided to address different groups of employees with suitable topics. The occupational safety campaign is also aimed at external contractors. More information on page 91.

11

€ 465 mio

redispatch costs saved

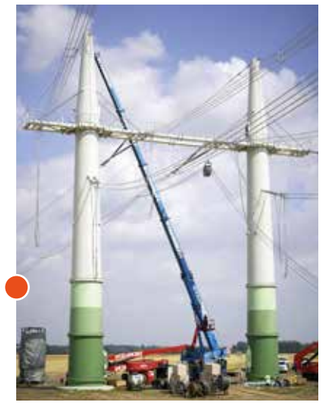
Since the commissioning of the southwest interconnector from Bad Lauchstädt in Saxony-Anhalt to Redwitz in Bavaria, redispatch costs of € 465 million have been saved up to 31/12/2018. The line offers 5000 megawatts additional capacity from northern and eastern Germany to the south. With this interconnector, power plants and wind farms in the 50Hertz grid area replace more expensive power plants in Bavaria or Austria.

12

Improved electricity flows to the Czech Republic and Poland

In July, the modernisation and expansion of the Vierraden substation was completed and the assets were integrated into the grid. An important component of the new 380 kV line are the phase shifting transformers, which are used to control the power flows. This will enable the power flows on the interconnector to Poland to be controlled more efficiently in future. Already in January, two further phase shifting transformers were put into operation at the Röhrsdorf substation. This will allow the cross-border power flows between the 50Hertz grid and the grid of the Czech partner ČEPS to be better controlled. More information on page 65.

13



CompactLine commissioned

After 11 months of construction, the compactLine was commissioned in August. The innovative pilot line is a completely new technological design and much more compact than a conventional 380 kV overhead line. The new design fits in an existing 220 kv corridor. Under the responsibility of 50Hertz, the compactLine was developed by a research consortium from 2013 and has been installed in Jessen since September 2017. More information on page 105.

14

WindNODE Flexibility Platform in test operation

In November, 50Hertz launched the Flexibility Platform as part of the WindNODE project with four distribution system operators and other partners from its own grid area. Regional producers, consumers and storage operators offer the transmission system operators the flexible use of their facilities on the platform so that renewable energy can be reduced in the case of grid congestion. More information on page 63.

15

Excellent Training

50Hertz is a member and supporter of the Campaign Fair Company. In 2018, 50Hertz was again awarded various certificates highlighting its excellent training opportunities. These certificates assess the company by questioning trainees, students and employees. Since 2014, the 50Hertz trainee programme has been awarded the annual Absolventa certificate for career supporting and fair trainee programmes.

New wind power in-feed record

After 50Hertz had integrated more than 15,000 megawatts of wind energy into the grid for the first time in October, the record was again broken in December. Very strong wind caused a wind energy in-feed in the 50Hertz grid area of 15,672 megawatts.

16

17

Further milestones in offshore expansion

In November, after three years of construction, all of the Ostwind 1 submarine cables were put into test operation. The 220 kV submarine cables connect the Viking and Arkona wind farms with the connection point in Lubmin. This marks another important milestone for a successful energy transition. In the same month, the 150 kV submarine cables between the two substation platforms of the German offshore wind farm Baltic 2 and the Danish wind farm Kriegers Flak were successfully tested. The future German-Danish interconnector Combined Grid Solution is a further milestone for the Danish-German grid expansion project.

For the Ostwind 2 offshore project, 50Hertz placed an order in November for the manufacture and laying of 220 kV submarine cables (with a total cable length of 270 kilometres) for the connection of two more Baltic Sea wind farms to the grid. They will transmit power from the two wind farms Arcadis Ost 1 and Baltic Eagle to the 50Hertz substation in Lubmin. More information on page 46.

Elia Grid International in 2018

Elia Grid International (EGI) is a subsidiary of Elia Group. Its core activities are to export the unique knowledge and experience about the energy transition, and to support the move towards climate saving technologies. Owned by Elia and 50Hertz (50/50), Elia Grid International provides consultancy services in asset management, power system operations and security, system and market operations, owner's engineering and investment advisory to international clients, thanks to the expertise and solid track record of these two TSOs.

Elia Grid Intenational is a truly international company with offices in Brussels, Berlin, Riyadh, Doha and Dubai, employing experts from 17 nationalities.

GRI 201-2

01

GCCELAB and Elia Grid International sign MoU

On 11 November, GCC Electrical Equipment Testing Lab (GCCELAB) and Elia Grid International (EGI) signed a Memorandum of Understanding (MoU) intended to further develop their joint services in the Gulf States. This collaboration will allow future customers to call on both the experience of two leading European system operators and their specific local market expertise.

02

Elia Grid International supports Vietnam with three projects on RES integration

Vietnamese transmission system operator NLDC and local authorities called on Elia Grid International's expertise to support the transition of the Vietnamese power system. EGI has worked on three projects including system studies, recommendations and capacity building. Following this first successful collaboration, NLDC and EGI are now entering into a long-term contract.

03

Elia Grid International obtains ISO9001:2015 certification

Elia Grid International was successfully re-certified with the new internationally recognised Quality Management System Standard ISO9001:2015 in April 2018. During a 2-day audit by the German TÜV Süd, all Elia Grid International's locations (Brussels, Berlin and Dubai) got certified. The new standard requires incorporating the Quality Management System (QMS) into the strategic orientation of the company and puts focus on having a comprehensive risk- and stakeholder management.

04

National Grid Saudi Arabia attends workshop at Elia Grid International

From the 11th until the 19th of April, a Saudi Arabian delegation composed of members of the transmission system operator in Saudi Arabia (National Grid SA) participated at a workshop in Elia Grid International's offices in Brussels and Berlin. The lecture series presented by Elia and 50Hertz technical experts aims at conveying best practices of the Elia Group with regard to grid planning, especially in the context of increasing penetration of renewable energy resources.

05

Ukrenergo experts participate in a workshop at Elia Grid International Berlin

On the 22nd and 23rd of May experts and operational managers of the Ukrainian transmission system operator Ukrenergo participated in a workshop at Elia Grid International's premises in Berlin. They had the opportunity to gain insights into different processes like operational planning, congestion management, frequency control and balancing. The workshop is part of the project run by Elia Grid International that aims to support Ukrenergo in its preparations for the synchronisation of the Ukrainian power system with the rest of Europe.

Scan to read the full articles.

#1

We ensure a secure, reliable and efficient grid

One of Elia Group's core tasks is to transport energy in an affordable and efficient way from where it is generated to where it is consumed. Our investment projects anticipate the further integration of renewable energy, increasing international cooperation and the emergence of innovative technologies. As an enabler of the energy transition, Elia Group is therefore preparing its infrastructure for the system of the future. At the same time, we continue to ensure system stability which provides a safe and reliable power supply throughout both countries, the whole year round.

GRI 203-1
GRI 203-2

To cope with the changing context of the energy transition, Elia Group is developing new maintenance policies aimed at maximising grid availability, smoothing out peaks in equipment replacement and minimising costs. The Group is drawing on new technologies and methods to move to a system of decision-making based on the condition of equipment, rather than just a predetermined maintenance or replacement frequency.

Electrical infrastructure is and always will be dangerous. That is why safety is our top priority in all that we undertake. As part of our commitment to safety, Elia Group is working towards a zero accident rate. Continuous development of technical, managerial and behavioural competencies is therefore a core responsibility of our Competence Centre.

By striving towards operational excellence in all that we do, Elia Group is able to ensure a secure, reliable and efficient grid for all our stakeholders, while supporting economic development at a European level.

99.999%

RELIABILITY RATE OF THE GRID (ELIA)

"At Elia Group, we invest in our talents. They are the cornerstone of our asset management and operation & maintenance practices. Yet again in 2018, they played a key role in setting a record year regarding the availability of the system, replacing a phase shifter transformer in less than three months (transport from Germany included), and erecting a temporary pylon in a few days just to name a few."

Frédéric Dunon –
Chief Asset Officer at Elia

OUR AMBITIONS

Facilitating the energy transition while ensuring a reliable grid 24/7

As more and more generation capacity from renewable energy sources is installed, maintaining the balance and ensuring a highly reliable electricity grid becomes a particularly challenging task. As a system operator, we aim to maximise the availability of our electricity system and keep the lights on at all times to support economic activity and the wellbeing of the population. To this end, we constantly optimise our critical and strategic processes in order to minimise operational risks. At the same time, we strive for efficiency and cost effectiveness.

Implementing improved asset management while applying the highest safety standards

A sophisticated asset management strategy has been put in place to closely monitor the functioning of critical infrastructure components. Investment peaks are levelled out thanks to a balanced maintenance and replacement policy. As working methods evolve, staff need training to help them develop the requisite skills and techniques. We provide professional training courses and apply the highest safety standards so our staff and contractors have a safe working environment. More information on our safety programmes can be found on pages 88 - 91.

18,990 km

ELIA GROUP MANAGES 18,990 KM OF HIGH VOLTAGES LINES & CABLES

Learn more about how 50Hertz ensures a secure,reliable and efficient grid.

OBJECTIVES

We are preparing the system of the future, integrating high levels of renewable energy and new types of consumption in a secure way, while keeping the lights on and giving the market maximum use of our infrastructure.

GRI 203-1

System security

We maintain the balance

As European system operators, it is our role to design and develop the fitting infrastructure to enable the energy transition. On the one hand, we have to develop the necessary infrastructure that transports the energy in an affordable and efficient way from where it is generated to where it is consumed. On the other hand, we have to ensure system stability at all times. Thanks to new technologies and methods to monitor the complex and large volumes of data, we are able to balance the infeed and consumption thus ensuring the security of the electrical system the whole year round.

Discover how we manage the system, while integrating renewable energy.

+ 18%

In Belgium, renewable energy generation grew by 18 percent in absolute terms in comparison with 2017. At 3 p.m. on 28 July, wind and solar power covered 46 percent of Belgium's total load, an absolute record. The months of May (517 GWh), June (464 GWh) and July 2018 (555 GWh) saw the highest monthly solar generation levels ever recorded in Belgium. Onshore and offshore wind power also broke generation records in January (403 GWh) and December (452 GWh).

15,672 MW

SYSTEM MANAGEMENT SAFELY INTEGRATES 15,672 MW WIND ENERGY INTO THE GRID.

Just a few weeks after 50Hertz had integrated more than 15,000 megawatts of wind energy into the grid for the first time, the record has been broken again. On 8 December, very strong wind between 1 p.m. and 1.15 p.m. led to a wind energy feed-in of 15,672 MW in the 50Hertz control area.

105.4 MWh

In 2018, we set the record for the lowest Energy Not Supplied (ENS) score in Belgium. The ENS is the amount of energy that we were not able to supply to our customers due to internal outages. This record is a testament to our excellent, cross departmental collaboration, quick decision-making and efficient asset management.

The ENS score equals the sum of the duration of an outage multiplied by the interrupted power. For the calculation, only outages that last more than 3 minutes are considered.

Unexpected unavailability of multiple plants for winter 2018-2019 in Belgium

G4 – EUS –DMA DISASTER/ EMERGENCY PLANNING AND RESPONSE

After a study analysis of what can be imported if market conditions are favourable, Elia in Belgium increased the import level in the first half of 2018 from a maximum of 4,500 MW to 5,500 MW. The need for an optimised capacity allocation was immediately highlighted during the second half of 2018 when half of the nuclear units had unexpected outages (Doel1, Doel2, Tihange2 and Tihange3), on top of those that were already planned (Doel4, Tihange1).

This has never been seen before in Belgium, causing a 3,000 MW capacity shortfall until mid-December (i.e. 25 percent of total installed manageable generation capacity in Belgium). In November, only 1 out of 7 nuclear plants was operational and in December, 4 were still out of service.

To deal with the crisis, Elia participated actively in a taskforce that was led by the Ministry of Energy, and ran a weekly operational process reviewing the outlook for the upcoming week. Thanks to international support, reshuffled maintenance interventions and market efforts to find additional capacity, security of supply was never at risk despite the critical situation.

"We are pleased that Elia was able to carry out its responsibilities in a professional manner and that we helped to avoid a load shedding, however, one lesson learnt is that this situation cannot continue in the longer term. Belgium should not have to face these issues every winter. Our country has to prepare itself and take measures to ensure the security of supply, seeing that the nuclear plants are due to phase out in 2025."

Pascale Fonck – Chief External Relations Officer at Elia

In light of the imminent energy scarcity, the Belgian Minister of Energy, Marie Christine Marghem, met her German counterpart, Peter Altmaier, to discuss what Germany could do to help during possible power shortages. During her stay in Berlin, the minister also visited the 50Hertz headquarters.

Consult the Redispatch Calculator to find out the current status about how much we have saved.

€ 465 mio

NUMBER OF REDISPATCH COST SAVINGS THANKS TO SOUTH-WEST INTERCONNECTOR

In 2017, the 380 kV South-West Interconnector (5000 MW) between north-eastern Germany and Bavaria was fully operational after 15 years of development and construction. The new line had – together with improved congestion management - an immediate effect and led to significant congestion management savings. Until 31 December 2018, 50Hertz managed to save over EUR 465 million.

CONGESTION MANAGEMENT AND REDISPATCH

On particularly windy and solar-intensive days, more power is traded than can physically be transported by the grid. In order to ensure system security even in such situations, conventional power producers which are spatially near a grid bottleneck, are instructed to reduce their power. At the same time, power generation on the other side of the grid bottleneck is activated. This so-called redispatch is complex and cost-intensive, because while the electricity producers in the North and East of Germany are shut down, reserve power plants in the South of Germany or Europe are powered up at the same time. The costs incurred by the power plants are compensated. If this is not enough to resolve grid congestion, the generation of electricity from renewable energies must also be restricted through infeed management. This also leads to compensation payments made to producers of renewable energy. The total costs of all of these measures are the so-called congestion management costs.

Boris Schucht* – CEO 50Hertz

INTERVIEW WITH BORIS SCHUCHT, CEO 50Hertz

How Germany can reach its climate targets for 2030

GRI 201-2

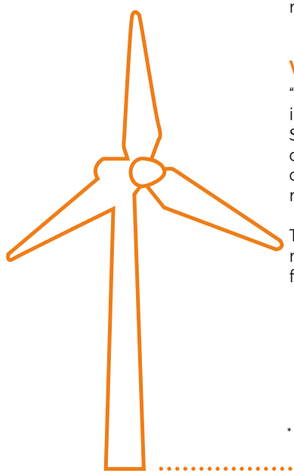
In 2018, 50Hertz saw 56.5 percent of the consumption in its grid area covered by renewable energy. That is another record. What might we expect in the coming years as the German Energiewende (energy transition) is rapidly progressing?

"To reach the Paris Climate Agreement goals, the German government increased its renewables targets for 2030 to 65 percent, which means that instead of 90,000 MW installed renewables (photovoltaic and wind) in Germany today, an amount of about 130,000 MW plus a few thousand additional offshore wind turbines will be required and will have to be connected to the grid. Besides this, a commission of experts has just ended a monthly discussion with a compromise on when and in which manner the coal phase-out will take place in Germany. And this accelerated phase-out means that Germany has to cope with a system with fewer conventional power plants much earlier than expected. This will be a further challenge we have to prepare for.

50Hertz sees its main role as developing a grid which is able to handle the future demand of society and ensures the secure electricity supply of the country as well as that of Europe. It is our mission to effectively and efficiently integrate the constant increase in renewables in the system. While optimising the transport capacity of the existing grid by using innovative technologies, we still have to further extend our grid in the next 10 to 15 years to reach the 65 percent renewables target and to offer the society the infrastructure it needs."

56.5%

ELECTRICITY CONSUMPTION IN THE 50Hertz GRID AREA COVERED BY RENEWABLE ENERGY IN 2018.



What role will grid expansion play in the future?

"In the past, there was a tremendous increase in redispatch costs. But following the inauguration of the South-West Interconnector in 2017, which runs from Saxony-Anhalt to Bavaria, these costs could be reduced by more than 50 percent. What does this mean? Well, it shows that grid extension is decisive and one of our major tasks to sustainably reduce redispatch costs and by doing so reduce the energy costs for consumers.

To allow this continuous development of the grid, a stable framework on the regulatory side is vital in order to avoid unnecessary interruptions or difficulties for us financing our investments in the grid."

* Boris Schucht left the company on 28 February 2019.
Dr. Frank Golletz is acting CEO from 1 March 2019 onwards.

What will it be like when we have achieved 65 percent renewables in electricity consumption?

"All of 50Hertz's analysis show that although the ambitious 65 percent target is a big challenge, it is achievable in Germany until 2030. But our analysis also shows us that we cannot use the same philosophy of today "grid follows renewables" by building new wind farms or overhead lines through the country. Society will not accept unlimited new infrastructure or turbines. This philosophy has pretty much reached the public acceptance borders, which is why we expect a paradigm shift towards a target grid from this point in time.

Innovation and optimisation in grid operation will become even more important and have to be put into practice to a greater extent. On the other hand, it is crucial that renewables must be expanded where sufficient grid capacity is available. Renewables to follow the grid will be the new philosophy. Practically, this involves 50Hertz looking at the system and identifying where it can safely integrate more renewables. This is more efficient for society than allowing everybody to build renewables wherever they want.

Additionally, with 65 percent renewables in the system, the consumption market will be saturated, and therefore new technologies such as power to gas, power to heat are required to make use of the excess amounts of renewables and thus to facilitate an even higher share of renewables integration."

What else is needed to reach the German Climate Targets?

"In Germany, the energy sector has been pretty successful in reducing CO_2 emissions and has done its homework. Another central area of focus is the so-called sector coupling. Without it, we will certainly not achieve our climate targets. If we take climate protection seriously, we need to tackle the transformation in the mobility and heating sectors. CO_2 can be saved significantly in these sectors. The climate protection targets are achievable if we manage to take the other sectors along with us.

All our considerations on the 65 percent target show that storage solutions will play a very important role. Therefore, Germany and Europe need to create the framework to develop these technologies and make them marketable. In the past, legislators have strongly promoted these frameworks for innovations in the energy sector. Showcase projects such as our joint WindNODE project have emerged in various areas. This is a good development that should be continued. For 50Hertz, it is important that we fully understand what this means for the electricity system, overall consumption and for the transportation needs so we can prepare the infrastructure for such a world in the right way."

"Society will not accept unlimited new infrastructure or turbines. This philosophy has pretty much reached the public acceptance borders, which is why we expect a paradigm shift towards a target grid for this point in time."

Boris Schucht – CEO 50Hertz

Asset Management & Maintenance

We endeavour to achieve operational excellence

We continue to invest in the development and use of new technologies that help us optimise the maintenance and replacement of our assets. We highly value our maintenance activities seeing they contribute significantly to our common goal of continuously delivering an outstanding service to all our customers. Elia Group uses a range of methods to digitalise work in the field, including connected equipment (PCs, smartphones and smart devices), new mobile applications and the overhaul of current processes.

In our line of work, operational excellence is key to safety, which is an absolute priority for Elia Group. Our primary objective is for anyone who works on or near our facilities – both Elia employees and external staff – to return home safely every day. To achieve our goal, good operational dialogue is required between all parties.

AMEX IN A NUTSHELL

AMEX programme in Belgium

The Asset Management Excellence (AMEX) programme provides Asset Fleet Strategies (AFS) to optimise the maintenance and renewal of ageing assets by analysing the asset condition, performance level, costs and associated risks.

Since its implementation in 2016, we have defined clear strategies for power transformers (including Phase Shifting Transformers), Air Insulated Switchgear (AIS) & Gas Insulated Substations (GIS), high voltage cables, protections, overhead lines, batteries and diesel generators. In 2018, the fleet strategy for overhead lines presented promising results about inspection, painting and pruning, leading to significant savings. We also developed an ambitious replacement strategy for ageing protections and are well on our way to finalising the Buildings and Datacom/Telecom fleet. For the development of the strategies concerning the offshore and HVDC systems, we called on the experience and expertise of our colleagues at 50Hertz.

€ 8 mio

CAPEX SAVINGS THANKS TO PROLONGING THE LIFETIME OF CERTAIN ASSETS SUCH AS TRANSFORMERS IN 2018 (ELIA).

"As AMEX is reaching its end in 2019, it's crucial that the processes, models, methods but also the roles, responsibilities and behaviours are anchored into the organisation. The implementation of the improvement levers shall also be monitored even if the programme structure has closed. This transition will be ensured by a sustainability roadmap including competence development, supporting processes and tools."

Stéphanie Hammer – Amex Manager at Elia

In 2019, Elia will start implementing the new strategies to realise efficiency gains, and preparing the integration of new technologies in close collaboration with 50Hertz.

We developed a professional approach to consolidate the implementation of the different transformation programmes (AMEX, MWOW, and GO FOR ZERO) to enable us to have consistent end-to-end processes in the field. We choose to work with half-yearly releases, each of them focusing on a specific aspect: safety, quality of inspections, efficiency savings on painting and pruning, and deployment of new protection technologies.

IN 2018 WE REALISED THANKS TO AMEX:

- **More than € 8 million CAPEX savings thanks to prolonging the lifetime of certain assets such as transformers,**
- **€ 730k OPEX savings via optimisation of maintenance activities,**
- **The maintenance activity workload decreased by the equivalent of 6.5 FTE. These FTEs have been reallocated to new activities such as offshore.**

Successful implementation of the first ACC wave in Belgium

The Asset Management team successfully implemented the first wave of the Asset Condition & Control (ACC) project. The ACC project helps us to switch from Time Based to Condition Based Asset Management. Concretely, this means that our employees have remote access to our digital assets to calculate the equivalent age for the transformers, circuit breakers, separators and voltage and current measurement transformers.

One of the most important data sources are the measurements from the tour post, which we are able to capture via the eForms application since this year. Thanks to the information we get from all these data sources, the asset manager can determine whether a particular asset needs maintenance or replacement. This is then based on the assets real wear and tear, and no longer based on the theoretical time intervals that we have used in the past.

"For Asset Management, this is a new step in the use of data and even Big Data. It was therefore quite a challenge to collect and process the data from different sources, but thanks to solid cooperation with driven people from Asset Management, IT, Mainteance Assessment & Commissioning and Network Operation, we managed it!"

Diederik Moers – Manager Asset, Condition & Control at Elia

ProjectWise

In 2018, all the latest versions of the as-built plans stored on different servers and IT tools throughout Elia were migrated to a single plan management application: ProjectWise.

Plan Management worked with the various sectors (Low Voltage, High Voltage, Telecom and Linear Assets and Structure) to devise special workflows (and determine the roles and responsibilities of those involved), the aim being to manage the plan life cycle and make plans securely available. Standardised plan management processes were created and approved to ensure consistency in working methods within and between departments.

ProjectWise enables all users to view the latest versions of the available plans in a centralised digital location and check their status within the plan life cycle. It facilitates the reservation of plans for studies and allows users to follow up redline requests and get information about the classification of as-built plans at substations.

A number of paper documents are still being digitalised. This large-scale migration project, encompassing over 800,000 master plans and some 1,000,000 files, will keep the Plan Management teams busy for some years to come in view of the volume of work involved. Sorting metadata and eliminating duplicate documents are just two of the tasks to be performed.

€ 33 mio

The BOOST project was launched in 2014 with the aim of optimising cost management. It was rolled out in three successive waves: underground engineering, IT activities, and overhead lines and substations. Thanks to this initiative, Elia saved more than €33 million over the first three years of the 2016-2019 tariff period.

Moving towards condition-based maintenance

In addition to these Elia programmes, 50Hertz has been investing in improving the efficacy of its maintenance programmes, whereby it is aiming to reduce the maintenance costs of its assets over their entire lifetime. Previously, maintenance schedules were based on certain timeframes but 50Hertz is introducing a system much closer to condition-based maintenance. For example, the higher the usage of an asset, the shorter the time between maintenance interventions. This programme was largely put in place in 2018.

50Hertz regional centres reorganised

In 2018, 50Hertz prepared a new location concept that came into force at the beginning of 2019. The new concept was needed because of the further integration of offshore wind farms, the use of the new HVDC cable SuedOstLink and further EEG-related grid expansion measures, which are expected to result in a 25percent asset growth. Furthermore, 50Hertz will add another 20 onshore substations to the existing ones in the next few years. Because of this asset expansion, the company has also restructured its regional branches with the number of locations increasing from seven to 10, and these are now managed in five regional centres. The new locations reduce reaction and travel times and thus ensure efficiency.

150 pylons exchanged in Saxony-Anhalt and Brandenburg

As part of its pylon reinforcement programme, 50Hertz is increasing the reliability and stability of its pylons. 150 pylons built in the 70s and 80s were reinforced and a further 300 pylon reinforcements are planned for the entire grid area in the coming years.

150

NUMBER OF PYLONS REINFORCED IN 2018 (50Hertz GRID AREA)

"With the presence of our regional centres, we can guarantee a rapid response in the support of our technical assets and at the same time give 50Hertz a face in our grid area. With our additional sites, we already have the right structure today for the expansion of substations, switching and cable systems and overhead lines in the context of the energy transition."

Jochen Mueller –
Head of Grid Operation
at 50Hertz

#2

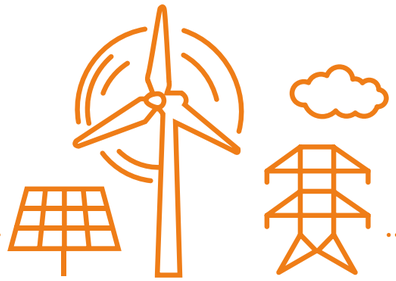
We deliver the transmission infrastructure of the future.

Elia Group embarked on unprecedented levels of investment in the last few years and this continued in 2018 as the Group pressed on with its efforts to realise the energy transition. For the next three years, Elia and 50Hertz will be investing a staggering € 1.1 billion per annum in the integration of renewable energy, the development of an offshore high-voltage grid and the construction of interconnectors to facilitate the integration of the European energy market.

GRI 201-2

These investments are largely a reflection of the need to shore up the security of supply. In Belgium and even more so in Germany, the ability to generate energy is becoming increasingly diversified, as well as throughout the whole of Europe as each country aims to achieve the renewables targets of 2030. Society is ever less reliant on major utilities only and at the same time, renewables are characterised by intermittent generation.

Elia Group is robustly addressing these challenges.



€ 1.1 billion

ELIA GROUP'S INVESTMENTS IN 2018 (+19% VS 2017)

"Elia is on track with its ambitious investment programme. We delivered what we promised, although we are confronted with major challenges every year. In 2018, we managed the € 600 million investment programme successfully, something we can really be proud of!"

Markus Berger –
Chief Infrastructure Officer at Elia

Discover how Nemo Link helps support security of supply.

OBJECTIVES

We develop the grid of the future that integrates increasing amounts of onshore and offshore renewable energy generation into the integrated European grid.

€ 636.7 mio

GRID INVESTMENTS IN BELGIUM IN 2018

AMBITIONS

Delivering on time, budget and quality

We aim to deliver the future grid on time to allow society to reap the benefits of the energy transition. We want to provide affordable power for society and take care of designing and constructing the grid with the highest quality standards. As a result, we deliver a reliable energy system that continues to support economic activity.

Integrating renewables

With our infrastructure ranging from 400 kV to 30 kV, Elia Group wants to facilitate the uninterrupted flow of renewable energy from where it is produced to where it is consumed. Our grid is an enabler of the energy transition. We want to become a leader in infrastructure development to contribute to our sustainability targets.

Realising interconnections with neighbouring countries

We develop and build interconnectors to support security of supply and to enable the integration of renewable generation at European level. By doing so, we facilitate the single European energy market and support the competitiveness of our countries at the same time: to find the cheapest energy wherever it is produced, while offering export opportunities to our domestic plants.

"2018 was a milestone year in the ambitious investment programme to strengthen and extend the existing grid, both on- and offshore. In light of the target that renewables should realise a 65 percent share of the energy mix in Germany by 2030, 50Hertz is planning a 1,800 km grid expansion. Furthermore, the company will add another 20 onshore substations to the existing ones in the next few years."

Frank Golletz –
Chief Technical Officer at 50Hertz

€ 491.5 mio

GRID INVESTMENTS IN GERMANY IN 2018

Facilitating Offshore Energy

Offshore energy is set to grow exponentially in the seas in which Elia and 50Hertz are operating. In Belgium, the construction of the Modular Offshore Grid (MOG) progressed rapidly in 2018. In Germany, 50Hertz achieved the cable connections (representing 190 km) for two offshore wind farms in the Baltic Sea.

Learn more about the MOG, Belgium's first 'power plug at sea'.

The Modular Offshore Grid (MOG)

The MOG project comprises two offshore platforms located approximately 40 km off the coast of Zeebrugge. They will act as a 'power plug', bundling the subsea cables of four Belgian wind farms (Rentel, Seastar, Mermaid and Northwester 2).

The combined cable infrastructure will enable the wind farms to transmit as much of the electricity generated to the mainland as possible. In total, the switchyard platform will connect 130 km of 220-kV cables with the Stevin high-voltage substation in Zeebrugge.

Belgium's first ever 'power plug at sea' is one step closer to becoming a reality.

The jacket was successfully installed on the seabed in early November, anchoring the platform to the seabed with four posts at a depth of 60 m. Meanwhile, the first 220-kV cables for the Modular Offshore Grid (MOG) were successfully tested at the production centre. In spring 2019, the topside, which is being built in Zwijndrecht, will be fitted onto the jacket. After this stage is completed, the first cables will be connected in 2019, when some of the wind farms will already be able to be connected to the MOG. The full capacity will be available in 2020.

Minister Philippe De Backer visits construction site MOG

On November 27, Philippe De Backer, Federal Minister for the North Sea, visited the Zwijndrecht site where the switchyard platform is being built.

Philippe De Backer: "The development of the MOG is part of a long-term strategy: in time, we will be able to connect new wind farms to the offshore power plug. I also believe that other European countries will eventually be able to connect their energy to Belgium's offshore power plug, making the North Sea a real energy hub in Western Europe."

Project Cluster Westlich Adlergrund (Ostwind 1)

The Ostwind 1 project started in 2015 and is part of the grid connection of the cluster Westlich Adlergrund and includes the connection of the Arkona (385 MW) and Wikinger (350 MW) offshore wind farms to the 50Hertz grid in Lubmin. The cluster Westlich Adlergrund represents an area of 109.2 km² and is situated in the Exclusive Economic Zone. It is located at about 42 km from the closest coast of Rügen island, and some 90 km from Lubmin in the bay of Greifswald. In 2018, after three years of construction, all Ostwind 1 submarine cables were put into test operation. The cable connections are a key part of the the grid to feed renewable energy into the grid.

For the first time in Germany, the Ostwind 1 project uses 220 kV AC (alternating current) technology, making higher electricity transmission capacity possible. Until now, the connections of offshore wind farms in the German Baltic Sea consisted of 150 kV, three-phase cable systems. At the Lubmin substation, the electricity is transformed to 380 kV and fed into the 50Hertz transmission system. In 2018, Wikinger wind farm fed in 885 GWh of renewables into the 50Hertz grid representing the electricity consumption of 220,000 households. The project is ahead of schedule and around 10 percent below budget.

Discover the progress 50Hertz made on the Ostwind 1 project.

885 GWh

In 2018, Wikinger fed in 885 GWh of renewables into the 50Hertz grid representing the electricity consumption of 220,000 households.

"The Baltic Sea is an attractive region for the wind power industry because of its high wind yield, which needs not fear comparison with the North Sea. In April, Germany held the auction for the next wave of offshore projects. Concessions totalling 733 MW were awarded to Baltic Sea projects, which is much more than the expected 500 MW. 50Hertz embarked on a programme to purchase more cables and ramp up the project team to be able to serve these new Baltic wind farm projects, which will come onstream in 2022-2023."

Henrich Quick –
Head of Projects Offshore at 50Hertz

OSTWIND 2 IS UNDERWAY

Following an offshore wind tender in late April 2018, Germany's national regulatory authority (Bundesnetzagentur German Federal Network Agency) allocated 733 MW of connection capacity to the Baltic Sea, specifically to the Arcadis-Ost 1, Baltic Eagle and Wikinger Süd wind farms. After initiating talks with the wind farm operators, 50Hertz awarded the manufacturing and installation contract of three 220 kV AC cables for the Ostwind 2 project to the consortium NKT-Boskalis.

Towards a more interconnected European Grid

Besides preparing their grid for the energy transition, Elia and 50Hertz are also committed to developing an integrated, European-wide electricity market. To ensure that this is as efficient as possible, the company believes that interconnectivity should be further increased between the different markets. That is why 50Hertz is investing in major projects such as Combined Grid Solution and Hansa PowerBridge. Elia is using the benefits of its geographical location at the centre of the European energy system to bolster security of supply and to strengthen the development of interconnections with neighbouring countries such as Nemo Link (UK) and ALEGrO (Germany).

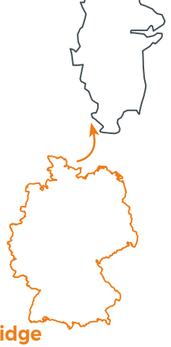
"European electricity grids will grow and become more and more interconnected in the upcoming years. And the development of a real meshed offshore grid integrating renewable energies and interconnectors is an essential part. I am very happy to have joined this exciting journey while working for the Combined Grid Solution project, which is the first of its kind. Every day our very committed 50Hertz team together with the Danish partner Energinet is gaining new experiences that will help all of us to realise the large scale projects of the future."

Elke Kwapis –
Project Leader Combined Grid Solution at 50Hertz

Combined Grid Solution - a world first!

Between Denmark and Germany

The Combined Grid Solution is a major offshore project and a joint project with the Danish system operator Energinet. It is a hybrid system that interconnects the grid of the German north-eastern region with the Danish area of Sjaelland by using the grid connection infrastructure of the German offshore wind farms Baltic 1 and 2 and the Danish offshore wind farm Kriegers Flak. Furthermore the Combined Grid Solution contributes to the objective of the EU Council to provide 15 percent of generating capacities as interconnector capacities and increasing the security of supply by stabilising the electricity system. The operation will start in 2019.



The Hansa PowerBridge

Between Sweden and Germany

Hansa PowerBridge is an onshore/offshore cable connection that will run from the Guestrow substation in Mecklenburg-Western Pomerania, through the Baltic Sea to Sweden. The 300-km distance will be bridged by a high voltage direct current (HVDC) interconnector: the Hansa PowerBridge.

The project will provide an important contribution to the security of the transmission systems and will allow for the indirect storage of electricity from German renewable energy sources. Both countries will profit from combining Swedish hydropower with German generation system.

Hansa PowerBridge will have a capacity of about 700 MW and be operational in 2025/ 2026. 50Hertz is partnering with Svenska Kraftnät. In May 2018, the first seabed inspection took place of the Baltic Sea on the way to the territorial waters of Sweden. Thirteen defined targets were inspected with a Remotely Operated Vehicle equipped with sensitive technology to enable the submarine cable to be laid safely. All targets were cleared up and fortunately no remnants from the last World War were found.

Discover more about how CGS & Hansa PowerBridge increase interconnectivity.

"The Hansa PowerBridge means that 50Hertz gets a fifth electric neighbour. Both sides will benefit from the interconnector. Surplus wind power from Germany will help to lower electricity prices in southern Sweden. During calm wind periods, Germany can receive electricity from the huge water reservoirs in northern Sweden."

Gert Schwarzbach –
Head of Interconnectors at 50Hertz

Nemo Link
Between United Kingdom and Belgium

One of the most important achievements of 2018 and a milestone in the company's history is the inauguration of Nemo Link, Elia's very first high voltage direct current project (HVDC) and the first subsea electricity interconnector between the United Kingdom and Belgium.

Nemo Link is a collaborative effort organised by Elia (Belgium) and National Grid (UK), which created a joint venture with a mixed Belgian-British team. Connecting the Richborough (UK) and Herdersbrug (Belgium) converter stations via a 140 km cable (130 km submarine) was an extremely complex undertaking that entailed many technical challenges.

Nemo Link is a crucial step in the integration of the electricity grid between continental Europe and the UK and facilitates access to renewable energy all over Europe, as well as allowing excess energy to be exported. Nemo Link is expected to see 1,000 MW in electricity exchanges (equivalent to the capacity of a nuclear reactor), a significant plus in terms of ensuring security of supply. The interconnector will be commissioned in Q1 2019.

"The Nemo Link is a fantastic example of how a technically complex project that required huge investment can be delivered by countries and companies working together to bring something that will deliver real value to both the UK and Belgium and to countries further afield."

Laurence Slade –
CEO Energy UK

Scan the code and discover what our stakeholders and partners think about Nemo Link.

12,000 objects found on the seabed

Before work began, the Nemo Link cable route was thoroughly examined for UXO and historical heritage. The project teams came across thousands of objects from the First and Second World Wars. They worked closely with authorities, agencies and military services in France, the UK and Belgium to detect and decommission these items.

ALEGrO
Between Germany and Belgium

ALEGrO (Aachen Liège Electrical Grid Overlay) is besides the Nemo Link project, a second, key direct current (HVDC) project linking the Lixhe (Belgium) and Oberzier (Germany) converter stations. The project is a joint venture between Elia and Amprion, one of the four German system operators.

The 90 km interconnector (49 km in Belgium and 41 km in Germany) will have a capacity of 1,000 MW when commissioned in 2020. The cable runs underground for the entire route and mainly follows existing road and rail infrastructure.

During the year, works progressed well on Belgian soil and main works are due to be completed by the end of 2019. Activities in Germany were initially hampered by permitting processes but these were solved in October and work continued apace.

ALEGrO will contribute to the integration of renewable sources of energy, price convergence between the markets and security of supply.

"The ALEGrO project is progressing according to schedule and a lot of work has already been performed, something we are truly proud of. In 2018, more than 50 percent of the cables have been laid on Belgian soil. We are currently building the 20-metre high converter station in Lixhe and the first transformers have arrived. Our German partner Amprion received the permits and launched their works as well."

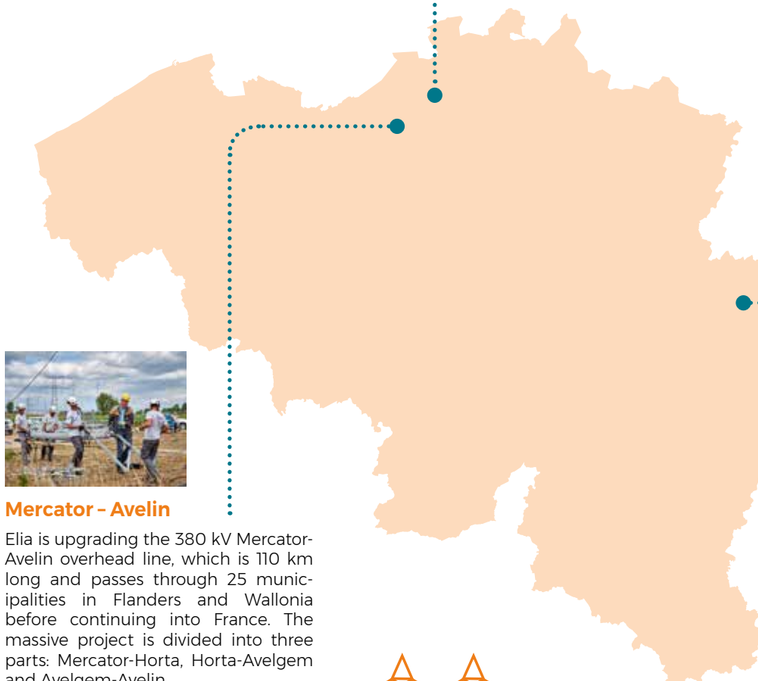
Els Celens –
Project Manager ALEGrO at Elia

Reinforcing the onshore grid

In addition to the substantial work on the offshore grid and interconnectors, Elia and 50Hertz are also further expanding and optimising the onshore grid. Many projects are currently underway to respond to the needs and accommodate local renewable energy generation.

Brabo

With the Brabo project, Elia aims to strengthen the high-voltage grid and consolidate security of supply in and around the Port of Antwerp. The project is being rolled out in three phases between 2016 and 2023.



Rabosée – Battice

In 2018, Elia finalised the construction of a new 150 kV, underground electricity connection linking the Battice substation and Rabosée (Wandre-Haut). The underground link is now connected to the 150 kV Bressoux-Cheratte-Lixhe overhead connection and a new transition substation was also constructed at Rabosée.

Mercator – Avelin

Elia is upgrading the 380 kV Mercator-Avelin overhead line, which is 110 km long and passes through 25 municipalities in Flanders and Wallonia before continuing into France. The massive project is divided into three parts: Mercator-Horta, Horta-Avelgem and Avelgem-Avelin.

Boucle de l'Est II

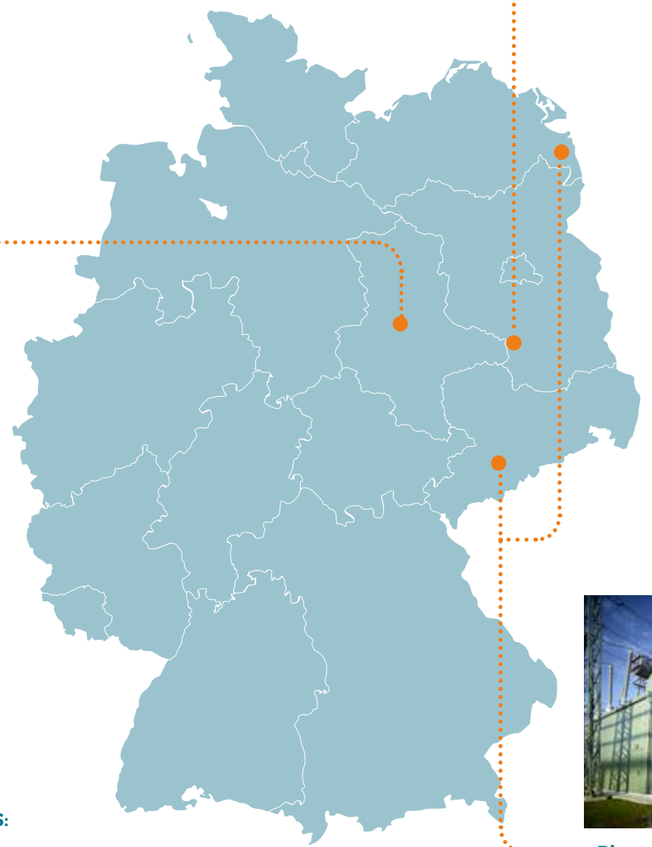
Elia started stage 2 of the East Loop project that involves replacing and upgrading the overhead line connecting the Bévercé (Malmedy), Bronrome, Trois-Ponts and Brume sites. The work is scheduled to run until 2022.

compactLine pilot project

compactLine is a 380 kV line that, due to its compact design, fits into sections of existing 220 kV lines. The line is characterised by lower pylon heights, narrower routes and smaller, solid pylons. From September 2017 to August 2018, a two-kilometre pilot line was built at the Jessen/Nord substation. Commissioning took place in the third quarter of 2018. The compactLine's practical suitability will be examined in a subsequent, one-year monitoring phase.

SuedOstLink (South-East Link)

This high-voltage direct current (HVDC) power link between Saxony-Anhalt and Bavaria will be able to transmit up to 2,000 MW of electricity, with an approximated length of about 580 km, mostly realised underground. 50Hertz is responsible for the Northern part of the project. TenneT is handling the Southern part in Bavaria. In 2018, the in-depth spatial planning for the first of a total of four sections was submitted. 50Hertz presented the planning results in the context of the early public participation. In parallel to the permission process, potential suppliers of a new 525 kV technology for underground cables undergo a rigorous technical test to develop a new sustainable technical solution for SuedOstLink. Construction is scheduled to start in 2022 and commissioning is aimed for 2025.



STATUS OF FURTHER PERMISSIONS:

- **Approved: Stendal – West-Wolmirstedt (50 pylons)**
- **Approval in progress: Berliner Nordring, Uckermarkleitung**
- **Permits in preparation: SuedOstLink, Güstrow - Parchim, Parchim - Perleberg, Perleberg-Stendal West, Röhrsdorf – Weida, Weida – Remptendorf, Pulgar-Vieselbach and for substations Wessin, Berlin Charlottenburg, Lubmin**

Phase-shifting transformers (PST)

A major achievement in 2018 was the commissioning of Phase-shifting transformers (PST) for the interconnectors to both the Czech Republic and Poland in Röhrsdorf and Vierraden respectively. Both projects highlight the close working relationship between 50Hertz and its neighbouring transmission system operators. PSTs are used to control the electricity flows and to avoid overloading individual lines.

Shaping the future grid

Elia Group is trying to ensure that its stakeholders reap the full benefits of an integrated market, while at the same time meeting sustainability objectives. To be able to achieve this ambition, it is vital that the development of the Belgian and German grid infrastructure stays ahead of market developments. That is why both Elia and 50Hertz draw up development plans to make sure the grid is determining the speed at which the energy transition takes place and not the other way around.

GRI 201-2, G4 - EUS – DMA DEMAND-SIDE MANAGEMENT PROGRAMMES

"As the new Development Plan includes some very large investment projects such as 'Boucle du Hainaut' and 'Ventilus' with a major impact on society – nationally, but also locally – much effort has been put into the interaction with stakeholders to create buy-in on the need for these projects at a very early stage. We were only able to realise this thanks to a very good cooperation between colleagues from different departments. I personally think major steps were taken on optimising such interaction, however we should also all be aware that we will have to keep up this approach and effort through the whole lifecycle of the projects to ensure their successful and timely realisation."

Kristof Sleurs – Head of Grid Development at Elia

Federal Development Plan Belgium

In line with the legal obligation to draw up a Federal Development Plan every four years, Elia in Belgium submitted a draft plan in late May 2018 on the medium-term future of the Belgian high-voltage grid: the Federal Development Plan 2020-2030. Elia advocates an accelerated approach to infrastructure development in order to fully exploit the advantages of the energy transition. The Federal Development Plan 2020-2030 was available for viewing in late 2018 during a public consultation.

The Federal Development Plan 2020-2030 identifies the investments that must be made over the period in order to meet the future needs of our electricity system. The Plan focuses on developing the high-voltage 380 kV grid by concentrating on three key areas: upgrading Belgium's electricity power grid, integrating additional offshore wind power generation and continuing to develop interconnectors.

It also entails upgrading, adapting and extending the 220 kV to 110 kV grid to enable the integration of more renewable energy generation and to cope with increasing energy flows. Some of the investments set out for the period beyond 2025 are still indicative and depend on the findings of further studies.

Read Belgium's Federal Development Plan.

Electricity Grid Development Plans in Germany (Netzentwicklungsplan)

Since 2012, the need for grid expansion and conversion in Germany has been determined in a three-stage process. This is regulated in the Energy Industry Act (EnWG) of 2011. In 2016, an amendment to the Energy Industry Act came into effect which changed the essential principles for the preparation of the network development plan (NEP). Key points were the conversion of the rhythm for the preparation of the NEP to a two-year cycle, the introduction of an implementation report and more flexibility in the observation horizon of the scenarios among others.

According to this the four German transmission system operators 50Hertz, Amprion, TenneT and TransnetBW draw up a biennial NEP, which determines the requirements they have identified for the conversion of the extra-high voltage grid. This is publicly discussed and confirmed by the Federal Network Agency (BNetzA). Finally, the Bundestag, the German parliament, transfers the confirmed projects for grid expansion into the so-called Federal Requirements Plan.

More information on 50Hertz's grid development.

The first implementation report was published in 2018. The report transparently lists all projects with their planning and implementation status. In early 2019, the German transmission system operators will jointly present the first draft of the grid development plan for the target year 2030. This will form the basis for the upcoming Federal Requirements Plan, in which the grid development projects will be legally defined. In the NEP 2030, the transmission system operators show how the political goal of integrating 65 percent renewables into the grid and compliance with the climate protection targets of the federal government can be achieved.

WHEN IT COMES TO DEVELOPING THE POWER GRID OF THE FUTURE, ELIA GROUP IS COMMITTED TO THREE PRINCIPLES:

01 Minimising the construction of new infrastructure by giving priority to optimising and improving existing infrastructure.

02 Open dialogue with all the stakeholders during the entire development process from a very early stage.

03 Respect for people and the environment when building and operating our infrastructure.

#3

We develop the electricity system and the markets.

Given the growth in renewable energies and their variable generation, greater flexibility is needed within the electricity system to maintain a constant balance between supply and demand. Digitalisation and the latest technologies offer market players new opportunities to optimise their electricity management by selling their surplus energy or temporarily reducing consumption (demand flexibility). By opening up our system to new players and technologies, Elia Group wants to create a more competitive energy market while maintaining security of supply at all times. To achieve this, Elia Group ensures that every market player has transparent, non-discriminatory access to the grid.

G4 - EUS – DMA DEMAND-SIDE MANAGEMENT PROGRAMMES

Elia Group wants to facilitate further market integration, at both of national and European level. We give new players and technologies a chance by innovating in our systems and by introducing new market products.

Developing cross-border balancing mechanisms requires greater cooperation and coordination, as well as an appropriate legislative framework.

30 mio

END USERS (ELIA GROUP)

Learn more about the Consumer-centric System.

"In 2018, Elia Group has taken the first major step in creating an open system that puts consumers at the centre. Experts at Elia partnered up with innovative market players to realise the ambitions outlined in Elia Group's Vision Paper 'Towards a consumer-centric system'. There is still a great deal of research and development to be done to get the system off the ground, but technology is developing at the speed of light. Elia Group is currently in the sandboxing stage, in close cooperation with the distribution system operators. "

Patrick De Leener –
Chief Customers, Market & System Officer at Elia

OBJECTIVES

We are redesigning the market to encompass all kinds of technologies and market players, independently from the grid they are connected to, so they can fully exploit the economic benefits. We are committed to fostering a single European internal energy market.

AMBITIONS

Towards an open and integrated market

Making transmission capacity available to market players across international borders is a source of added economic value for the community as a whole. It makes energy markets more accessible and thus more competitive. Consumers can access the cheapest energy wherever it is available.

Steer and implement the European regulatory framework

Initiated by the European Commission, the European Network Codes are drawn up on the basis of proposals by the transmission system operators and are designed to provide the energy market with a common legislative framework applicable to all Member States. The European Union (EU) is keen to strengthen the strategies in place to make the pan-European energy market a reliable, competitive and low-carbon sector – as the Clean Energy for All Europeans package has intensively shown.

Efficient use of the grid

Elia Group makes its contribution to achieving the climate goals by integrating the continuously increasing amount of renewables into the grid in the most effective and efficient way.

Our expertise at society's service

Elia Group is an active member of a number of national and European associations and gladly makes its expertise available to help plan the energy system of the future. We regularly conduct in-depth studies to enable us to give sound advice about the electricity system's needs. Moreover, Elia Group is highly society-oriented and sets up project groups in order to gain a better insight into market players' needs and requirements and to identify the best solutions.

"50Hertz has to bridge the gap between what is feasible in terms of grid expansion and what is needed given the increase in renewables and the energy transition. We recognise that we cannot expand the grid indefinitely and we also believe that public acceptance is near its limits. To handle future increased transport capacity, innovative solutions are necessary. In addition to high-voltage direct current lines (HVDC), such as the SuedOstLink, grid reinforcement measures with high-temperature low sags (HTLS) or weather-dependent overhead line operation. Furthermore, we test the possibilities of the planned and plannable higher capacity utilisation of individual lines in our grid."

Dirk Biermann –
Chief Markets and System Operation Officer at 50Hertz

Efficient use of the grid and control of the system

To make sure the grid runs smoothly 24 hours a day, the transmission control centres of both Elia and 50Hertz activate the regulation tools needed to ensure a secure grid. This led to a reliability rate of 99.999 percent in 2018. They have access to ancillary reserves which contribute to maintaining the frequency and voltage on the electric system, managing congestion and balancing generation and consumption in real time. Historically, mainly large conventional power plants have been providing these ancillary services. As the leading role is shifting from conventional power plants towards renewables (e.g. defined in the German 65 percent renewables goal), providers like battery storage, power-to-X technology and also the different renewable energy technologies will play an important role in the coming years and decades. Additionally, "demand response" like detachable loads and new flexibilities from small-scale devices will be needed for a secure and efficient system operation.

01 **Frequency Containment Reserve**

Frequency Containment Reserve (FCR) is activated upwards and downwards automatically and on a continuous basis, within 0 to 30 seconds, as required to stabilise the frequency of the European grid.

02 **Automatic Frequency Restoration Reserve**

Automatic Frequency Restoration Reserve (aFRR) is activated upwards and downwards automatically and on a continuous basis, in a timeframe of 30 seconds to 15 minutes, as required to handle sudden imbalances in the area managed by Elia Group.

03 **Manual Frequency Restoration Reserve**

Manual Frequency Restoration Reserve (mFRR) can be activated upwards manually at Elia Group's request. It is used to address a major imbalance in the area managed by the Elia Group and/or to deal with congestion problems.

Discover what tools Elia Group's Control Centres use to ensure a reliable grid.

Grid optimisation

Today, 50Hertz is already successfully integrating around 56.5 percent renewables into the transmission grid in northern and eastern Germany. Despite the high proportion of volatile wind and solar energy, system security is always guaranteed. While in Germany a share of 65 percent is planned as a target share for 2030, at the 50Hertz grid area we expect this will already happen in 2021.

What challenges does 50Hertz face in integrating further renewables into the grid?

Dr. Dirk Biermann: "The ambition of 50Hertz and the other German TSOs in the next few years is to integrate the increasing amount of renewables into the grid in the most effective and efficient way. Additionally, 50Hertz has to further develop the grid to enable the extra transmission of renewables from the north to the south and from the east to the southwest. As permitting procedures for new lines are lengthy, 50Hertz is looking at what it can do including optimised usage of the existing infrastructure and enhanced congestion management."

Where do you see the greatest development potential?

Dr. Dirk Biermann: : "Let us first have a look at where we are coming from: when the wind is blowing we have heavy traffic, in particular from north to south, and we face significant bottlenecks on our lines. Also in these critical cases we respect the security rules saying that overloading and tripping of lines has to be avoided, even in case of an additional outage in the system. This is European standard. To meet this requirement, we keep redundant transmission capacity available just for the outage case (the "n-1 case"). Nevertheless we believe that part of this redundancy could also be used in normal operation if we can ensure that we are flexible and fast enough to react on outages appropriately. This sounds logical and easy, but it means a paradigm shift towards new automation concepts in system operations, new steering mechanisms for power flows in the grid and the optimised coordination of flexibility sources. We believe so strongly in such innovation that we have incorporated it already to some extent in the German grid development plan. On the one hand this makes sure that we do not go for any investment that ultimately might not be required, on the other hand, we rely on future innovation that nobody can foresee today. It is good to be optimistic and we will deliver this innovation in the coming years. Society however should be aware of the fact that our promise is not a given, not a short-term solution, but a long and uncertain research and development project that takes effort and time."

And what about batteries?

Dr. Dirk Biermann: "Battery prices have dropped significantly and they will gain more and more importance as flexibility providers. For the optimisation of system operations they could help us to react fast enough in the case of outages. We are investigating this as the so-called 'grid booster' concept."

65%

RENEWABLES TARGET SHARE FOR 2030 IN GERMANY

Dirk Biermann – Chief Markets and System Operation Officer at 50Hertz

OPTIMISATION PROJECTS

REEAL - Renewable Energy Sources Unit Redispatch

With a growing share of renewable energy, there is an increasing number of situations in which grid congestion can no longer be efficiently remedied by intervening in the generation of conventional units. In regions with a high share of RES units and little conventional generation, congestion management must in part be remedied by redispatch with distant power plants, leading to considerably higher costs.

In the future, system operators should also be able to use smaller conventional power plants and RES units with an installed capacity of 100 KW onwards for redispatch purposes. This multiplies the number of relevant installations and requires close coordination with the distribution system operators, to which a large number of such units are connected.

According to the current planning, the new regulations will enter into force in 2020. 50Hertz has therefore launched an extensive project to implement the new legal obligations. Employees from many different departments are working together on REEAL, which stands for Redispatch mit Erneuerbaren Energien Anlagen (Renewable Energy Sources Unit Redispatch). Close coordination between the German TSOs, distribution system operators, direct marketers and the Federal Network Agency is to follow.

Integration of alternative flexibility into the secondary reserve

Since mid-2016, Elia has been examining the feasibility of integrating flexibility, other than large gas-fired generation units, into the secondary reserve market and opening participation to units of various sizes and diverse technologies (e.g. biogas, cogeneration, heat pumps), including demand response. In 2018, Elia has developed and consulted with stakeholders concerning a proposal for the Automatic Frequency Restoration Reserve (aFRR) design and implementation plan. In this study, several modifications are proposed including the implementation of a merit order activation, a daily aFRR procurement, rules enabling portfolio bidding and other new features which facilitate the opening of the aFRR market to all technologies, independent of the voltage level and the type of aFRR provider (BRP/BSP). Elia foresees that the new aFRR design, together with a separate procurement of FCR and aFRR products, will go-live in July 2020. Based on a technical and economic assessment, Elia recommends the postponement of the choice to implement Transfer of Energy in the aFRR market.

Preparations for the implementation of dynamic dimensioning and daily procurement of reserves

In 2018, Elia developed a software tool to determine its required reserve capacity on a daily basis. This tool allows the implementation of the new method to 'dynamically' size the balancing reserve needs in near-real time based on day-ahead predicted system conditions, including offshore and onshore wind power, solar photovoltaics, electricity demand, power plant schedules and transmission. Implementation of the dynamic dimensioning together with a daily procurement of Manual Frequency Restoration Reserve (mFRR) is foreseen in 2020, after concluding a parallel run during 2019.

Integrating battery technology for the first time

One of the key responsibilities of Transmission System Operators is to keep the electricity system in perfect balance. In order to achieve the balancing needed, TSOs have contracts in place with many different sources to obtain megawatts in case of a shortage.

On a European level, there is a Frequency Containment Reserve (FCR) in place with 3,000 MW, which is available for the whole continent. This means that any country in Europe can call upon the European FCR in their hour of need. In turn, each country in Europe has an obligation to contribute to this FCR. Belgium, for example, has to contribute 100 MW. As of this year, battery capacity can also be included in the contribution mix in Belgium, enabling other technologies with different voltage levels to participate.

TSO-scale Batteries

In Germany batteries have already been used for primary control reserve for quite a few years. Alongside TSOs and other stakeholders, 50Hertz is exploring the potential of large-scale batteries adding significant additional flexibility to the system. Batteries can be steered to feed-in additional power very quickly – or to ingest power from the system. This can help to react very quickly to outages and incidents. With this innovative system operation we might be able to reduce redundancy in the grid and thus, help to increase the capacity. This idea is now being investigated in a three-year study that started in 2018.

Inertia Stability Study - System Stabilising Measures

50Hertz embarked on a study this year to examine the impact that a decline in conventional power plants has on the system. In Germany there are still a large amount of coal-fired plants and the inertia created by the turbines has a stabilising effect on the grid. However, when there are fewer conventional plants in the system, 50Hertz still has to maintain the grid's stability and make sure there is enough inertia for both regular and emergency operations. Ultimately, 50Hertz believes that it is likely that new devices have to be built in the system to compensate for the decline in conventional power plants.

"The prices for batteries have dropped significantly in the past and this might continue. Although it will remain unrealistic in the short term to economically reduce the transmission task by TSO-scale batteries, it is likely that such components will play an important role to ensure system security in highly loaded grids with little conventional generation in the long term."

Dr. Klaus v. Sengbusch – Head of Strategic Grid Planning at 50Hertz

MARKET PLATFORMS TO MANAGE INCREASING FLEXIBILITY

The BidLadder project

BidLadder is a market platform set up by Elia that has been operational since September 2017. It allows all market players to offer their flexibility on a daily basis to keep the system balanced, regardless of the voltage level they are connected to and the technology they use (generation or demand-side management). This means that smaller units can participate with a high degree of flexibility. Until now, only large generation units with an installed capacity of at least 25 MW could offer their available energy, whereas smaller generation units and demand flexibility were excluded. The platform has been operational since September 2017 for customers connected to the Elia grid. Since early 2018, the platform is also available for the distribution system. Elia will facilitate data exchange within BidLadder by means of the DataHub platform, developed in collaboration with distribution system operators.

"The DataHub is an important step in terms of cooperation and moves towards an integrated market. Three regions - Flanders, Wallonia and Brussels – have worked closely together to align their processes. This really is a joint initiative, with a joint project team and with true, joint governance."

Patrick De Leener – Chief Customers, Market & System Officer at Elia

DataHub project

On 1 January 2018, Elia and the Belgian distribution system operators (DSOs) launched a joint platform called T-DSO DataHub for exchanging data. This is an important initiative to capture a bigger range of flexibility to reduce the balancing cost and therefore the cost to all grid users.

Generators and users connected to the transmission or distribution system (for all voltages greater than or equal to 5 kV) which are able, upon request, to generate electricity or temporarily limit consumption, have had the option of offering Elia this flexibility on a daily basis. When Elia uses the capacity on offer – generally the next day – the market players and grid users are remunerated. In so doing, market players and grid users can actively help to maintain balance on the system.

The DataHub development follows the launch of BidLadder, a platform allowing market players to provide Elia with all the flexibility they have in their portfolio. To open BidLadder to the distribution system, Elia and the DSOs needed a tool to facilitate these data exchanges. DataHub is that tool.

WindNODE flexibility platform

The WindNODE partner project supported by the Federal Ministry for Economic Affairs and Energy (BMWi) gathers over 70 partner companies and offers an ideal basis to realise such system innovations. The partner network represents all stakeholders of the energy industry, so that direct development feedback can be generated. 50Hertz is the consortium leader for this project.

In 2018, an important sub-project of the 50Hertz-led WindNODE project entered the test phase: The flexibility platform that is intended to show how decentralised systems can be better integrated into processes in the energy industry. 50Hertz together with regional DSOs developed the flexibility platform, which allows additional market participants to offer switchable or shiftable loads and thus their flexibility. On the basis of these offers, distributed flexibilities can be integrated into the grid congestion management processes in a technology-neutral way.

In a second sub-project, 50Hertz will further develop the balancing power procedures to improve deployment options for decentralised flexibilities. To be successful, the smart meter infrastructure will provide an important basis as the automated processing of measured values is utterly important for the efficient handling of processes. Furthermore, the data from the intelligent measuring systems will be used to improve the prognosis for markets and system operation – which at the end of the day helps to make the energy transition happen.

"In 2017 alone, renewables amounting to 641 GWh were cut back in the 50Hertz grid area in order not to overload the grids. With this amount of energy, the city of Berlin could have been completely supplied with electricity for two weeks. This is where the flexibility platform comes in as a central building block: suppliers use the platform to report previously unused regional flexibilities for electricity consumption or generation. Bids for the following day and for the same day are possible. System operators check these bids and use them when grid congestion becomes visible in their calculations."

Dr. Georg Meyer-Braune – Project Manager Windnode at 50Hertz

WINDNODE

Towards a single European internal energy market

Elia Group aims to develop the electricity grid and markets from a cross-border perspective. As a Group, Elia and 50Hertz are working closely with other European TSOs and DSOs to improve current methodologies to optimise capacity allocation to increase the potential of electricity exchanges.

XBID, the European Cross-Border Intraday solution

In June 2018, the Nominated Electricity Market Operators (NEMOs) and Transmission System Operators (TSOs) launched the European Cross-Border Intraday (XBID) solution, as well as 10 Local Implementation Projects. This marked an important step towards creating a single, integrated European Intraday market.

The go-live with the 10 Local Implementation Projects enables continuous intraday trading of electricity across the following countries: Austria, Belgium, Denmark, Estonia, Finland, France, Germany, Latvia, Lithuania, Norway, The Netherlands, Portugal, Spain and Sweden. Most other European countries are due to take part in a second 'wave', which is targeted in the summer of 2019.

The XBID solution is based on a common IT system with one Shared Order Book (SOB), a Capacity Management Module (CMM) and a Shipping Module (SM). In the intraday timeframe it allows orders entered by market participants for continuous matching in one bidding zone to be matched by orders similarly submitted by market participants in any other bidding zone within the geographic scope of the XBID solution reach, as long as transmission capacity is available. The XBID solution supports implicit continuous trading and if needed explicit allocation (German/French border). It is in line with the EU Target model for an integrated intraday market.

European-wide intraday coupling is a key component for completing the European Internal Energy Market. With the rising share of intermittent generation in the European generation mix, connecting intraday markets through cross-border trading is an increasingly important tool for market parties to keep positions balanced. The purpose of the XBID initiative is to increase the overall efficiency of intraday trading.

Phase Shifting Transformers

Another major achievement in 2018 was constructing the phase shifting transformers for the interconnectors to both the Czech Republic and Poland. Together with the partners ČEPS and PSE respectively. This project is a shining example of European cooperation.

The TSOs are now able to jointly steer the flow of electricity in a more efficient way. The phase shifters have relieved the load on the grids of our Polish and Czech neighbours and enable us to provide more capacity for European electricity trading at the cross-border interconnectors. In the future, this will play a much greater role than before in successfully advancing the energy transition, with ever higher proportions of renewable energies and the usual high system stability.

Federal Grid Code

After two years of intensive talks with all the market players involved, on 15 March 2018 Elia launched a formal public consultation to revise the Federal Grid Code. This forms the legal foundations converting the European Network Codes into Belgian directives. It governs cross-border transactions on the Belgian electricity market, among other things. This is the first time it has been extensively revised since 2002. After a period of consultation, the amended proposal was submitted to the relevant authorities on 17 May 2018.

XBID HIGHLIGHTS

- **After 5 years of Herculean effort XBID solution went live 12th/13th June 2018**
- **1,550 pages of contracts (MSA, DSA Hosting and DSA Maintenance) were negotiated and agreed with the service provider**
- **11,800 test cases/scenarios were executed by the XBID Testing Group (XTG)**
- **25,403 actions were formally recorded by the Steering Committees, Task Forces and Working Groups**
- **344 physical meetings**
- **480 was the highest number of XBID related emails received in a single day**

OUR COLLEAGUES IN ENERGY ASSOCIATIONS

GRI 102-12

Pascale Fonck, Elia's Chief External Relations Officer, became an ENTSO-E Board Member in June 2017. Patrick De Leener, now Chief Customers, Market & System Officer at Elia, was CEO of CORESO until November 2016, while Jan Van Roost, formerly Head of Settlement, Metering & Data Reporting at Elia, has held the position of CORESO COO since August 2017. Cécile Pellegrin, Elia's Head of Network Operations, has been Head of Development at CORESO since August 2017. In November 2018, Olivier Feix, Head of Communications and Public Affairs at 50Hertz, again became a member of the board at RGI for a two-year period.

Jan Van Roost
COO at CORESO

Patrick De Leener
Chief Customers, Market & System Officer at Elia

Pascale Fonck
Elia's Chief External Relations Officer

Cécile Pellegrin
Head of Development at CORESO

Olivier Feix
Head of Nature Conservation and Permits at 50Hertz

International Cooperation

GRI 102-13

Elia Group is an active member of various international organisations that work to promote the security, sustainability and reliability of the world's electricity grids.

ENTSO-E

The European Network of Transmission System Operators for Electricity (ENTSO-E) represents all European Union operators and other transmission system operators that are connected to the European electricity grid. ENTSO-E acts as a point of contact for bodies such as the European Commission and the Agency for the Cooperation of Energy Regulators (ACER) for matters concerning technical problems and market-related issues.

CORESO and TSC Net

The regional technical coordination centres CORESO and TSC Net bring together various European transmission system operators with a view to enhancing the operational security of grids in Central West Europe. The development of intraday markets has triggered a rise in cross-border electricity flows. CORESO and TSC Net also strives to improve the region's integration of renewable energy generation by exchanging data and expertise.

EPEX SPOT SE

Elia has a minority stake (17 percent) in the holding HGRT, which is a shareholder (49 percent) in the European Power Exchange SE. EPEX SPOT manages a number of electricity trading platforms, mainly in the Central West Europe region (i.e. Germany, France, the United Kingdom, the Netherlands, Belgium, Austria, Switzerland and Luxembourg). These markets account for 50 percent of Europe's electricity consumption.

GO15

Elia Group is a founding member of GO15, a voluntary initiative that brings together the world's 19 largest transmission system operators. The organisation represents 3.4 billion consumers on six continents and draws up joint action plans designed to improve the security and reliability of the global electricity grid.

EEX | EPEX

50Hertz is committed to the development of a common European electricity market. To further this goal, 50Hertz holds 10 percent of the shares in the European Energy Exchange (EEX) in Leipzig and as such also indirectly participates in the European Power Exchange (EPEX) in Paris.

RGI

Both Elia and 50Hertz are founding member of Renewables Grid Initiative (RGI), a unique collaboration of environmental NGOs and transmission system operators from across Europe. RGI promotes transparent, environmentally sensitive grid development to enable the further steady growth of renewable energy and the energy transition.

Delegation from European Commission visits Elia Group HQs in Brussels and Berlin

On March 15, a delegation from the European Commission visited Elia HQ in Brussels to receive training. It concerned a group of civil servants working on various energy projects in the European Commission's representation offices throughout the world, from Burundi to Tajikistan. Elia Group gave a presentation on the company, the role of the National Control Centres and the European electricity market. Later on, Elia Grid International elaborated on the consultancy services it offers clients. Such initiatives allow Elia Group to show the European Commission that we are a reliable partner with the necessary expertise.

As a responsible transmission system operator, 50Hertz regularly hosts delegations of visitors from around the world. Visitors from countries such as the USA, Mexico, Turkey, the United Arab Emirates, Ghana, India and China visited the Transmission Control Centre in Neuenhagen and the 50Hertz Netzquartier building in Berlin. They came to learn about our experience with the secure integration of renewable energies into the transmission system and about the development of the electricity market.

Elia Group CEO opens Best Paths conference and European Utility Week

Chris Peeters called for ongoing commitment to innovation and international cooperation in his speech at the Best Paths conference. The Best Paths project brings together a multidisciplinary team from 11 countries including Elia in Belgium and 50Hertz in Germany. Best Paths aims to develop novel technologies to increase pan-European transmission grid capacity and electricity system flexibility.

Additionally, Mr Peeters was one of the guest speakers at the European Utility Week in Vienna. On November 6, he presented Elia Group's vision regarding a consumer-centric energy system. The event is an annual forum bringing together all the major players in the European energy system. This year's edition focused on digitalisation, decarbonisation, energy markets and innovation.

"Digitalisation is one of the key challenges for Elia Group as it is evolving rapidly in other sectors. This creates high expectations within society, wanting to enjoy its benefits in the energy sector as well. Consumers wish to fully use their flexibility and their investments to maximise their comfort and to minimise their energy bills. On the one hand, by deploying their electrical appliances when electricity is at its cheapest, thus contributing to the system by consuming surpluses during off-peak hours. On the other hand, they want to offer their solar generation onto the grid at a time of their choosing."

Chris Peeters –
Elia Group CEO

Our expertise at society's service

In our role as transmission system operators, Elia Group publishes forward-looking studies to keep our finger on the pulse in the market.

Towards a consumer-centric system

G4 - EUS – DMA DEMAND-SIDE MANAGEMENT PROGRAMMES

In November 2018, Elia Group published a Vision Paper outlining better services and optimised energy bills for prosumers. 'Towards a Consumer-Centric System' encourages households and industries to directly benefit from advanced energy services via a real-time communication platform, an appropriate market design and digital innovations. This will enable end users to fully exploit their technological investments, optimise their electricity bills and contribute to system balance.

With this Vision Paper Elia Group aims to provide insights and open the debate on the energy system of the future. Up until now, there is no direct link between consumer's behaviour in the lower voltage levels and the price signals of the wholesale market. The consumer hardly receives any incentive to respond to the needs of the system that copes with variable renewables and the increasing challenge to keep the balance between energy generation and consumption.

By opening the system to potentially millions of prosumers, we could align the interests of system operators, commercial energy players, and consumers, creating benefits for all parties involved: consumers get to increase their comfort and optimise their energy bills, commercial players can create value on new services and system operators will benefit from behaviours more aligned with system needs..

In 2019, Elia - in close cooperation with the distribution system operators - and 75 market parties from different sectors will participate in an open sandbox environment to test innovative concepts for providing energy services to prosumers. The test phase will run until end-2019. In 2018, Elia in Belgium already developed I.O. Energy, an initial use case to test the concept of a real-time communication platform. This was done in partnership with Fluvius, Luminus, Enervalis and Scholt.

ELIA GROUP DEFINES 3 KEY BUILDING BLOCKS TO MAKE THE CONSUMER-CENTRIC ENERGY SYSTEM HAPPEN:

01 A real-time communication platform that sends data from millions of digital assets between the end user and the parties (system operators, market parties, clearing houses, etc.) designated by the end user. The data will remain the property of the end user.

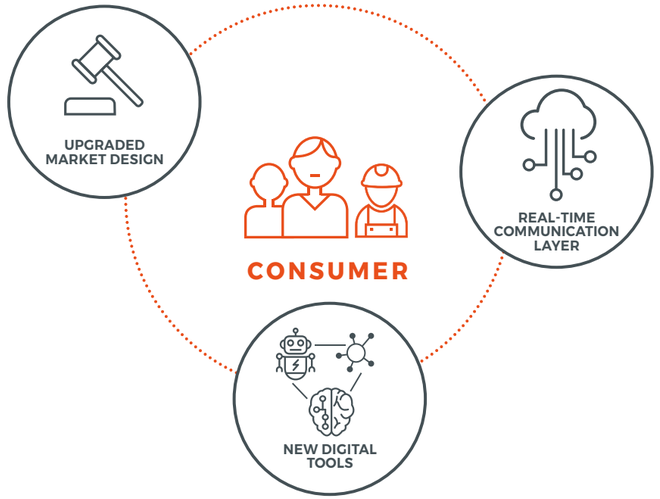
02 An upgraded market design in which it is possible to send signals so that end users modify their generation and consumption behaviour in line with market needs. To this end, commercial parties can develop new services that not only enhance end user comfort but also optimise energy bills by boosting the return on prosumers' technological investments.

03 New digital tools such as Blockchain, the Internet of Things (IoT) and artificial intelligence (AI) that help manage complex system operation with more bidirectional electricity flows. Thanks to improved monitoring, analysis and inspection, system operators can better predict expected generation and adjust the supply accordingly. Commercial market parties can better manage their customer portfolio using improved digital tools and offer fully automated energy services that activate the end user's flexible capacity.

Elia presented the Vision Paper at its annual Stakeholders' Day on Friday, 23 November. More than 250 experts from the energy sector were present to discuss current and future projects. Scan the code to read the paper.

"I'm delighted that Elia, as one of the leading TSOs, has come forward with its vision on how to implement what we are currently discussing at a political level. This is exactly what we need; we need to be fast, we need to anticipate, we need to come forward at an early stage with ideas about how to make the electricity market design revolution happen. I'm very grateful that Elia has taken this initiative."

Klaus-Dieter Borchardt –
Director Energy Market
European Commission



#4

We cooperate to create value for society.

GRI 102-29, GRI 413-1

Elia Group's activities have an impact on the socio-economic development in Belgium and Germany. As a key player in the energy system, Elia Group is committed to continuing an open and transparent dialogue with its various stakeholders. Elia Group takes account of society's needs and concerns at every stage of its infrastructure projects. We approach our stakeholders with empathy, expertise and integrity.

This means that the company takes its corporate social responsibility very seriously, which includes an active commitment to environmental and climate protection. Elia Group respects flora, fauna and biodiversity, uses natural resources conservatively and keeps the energy consumption and emissions of our activities as low as possible.

116.3 hectares

50Hertz MANAGES OVER 116.3 HECTARES OF GREEN CORRIDORS UNDER OVERHEAD LINES.

"To construct the lines and infrastructure of the future, earlier and more systematic cooperation is necessary. 50Hertz is convinced that stakeholder participation leads to better project outcome. The company aims to involve all stakeholders at a very early stage in the process - far before the project is technically designed. By doing so, we incorporate the input into the various planning stages over the entire lifecycle of the project. 50Hertz grid projects are therefore evolving with the stakeholders. We need to enhance our grid project together! Stakeholder participation - not just acceptance."

Olivier Feix –
Head of Nature Conservation and Permits at 50Hertz

G4 - EUS – DMA - STAKEHOLDER PARTICIPATION

OBJECTIVES

We continue to conduct a proactive and open dialogue to stimulate participation from our various stakeholders. We are a transparent and trusted advisor for decision makers to create value for society.

AMBITIONS

Proactive dialogue & stakeholder engagement

We realise the system of the future through proactive dialogue with a variety of stakeholders during the entire project duration based on mutual respect and empathy to come to the best societal and environmental solutions.

Our expertise available for the interest of society

We perform the necessary studies and analyses and act as an advisor to the different governments with regard to the realisation of the energy transition in the interest of society.

"In 2018, Elia set up a new approach for its large infrastructure projects. A key role is given to the governor of the province in which the project will be realised. The governor gathers representatives of civil society (environmental, economical and agricultural) in order to obtain a preliminary consensus on topics such as ambitions, technology, mitigating measures and corridor. Such a consensus is then used to gather input from mayors and citizens. This approach helps not only to control risks but also offers opportunities for project improvement. Sustainability is also on top of the agenda and a number of projects were introduced to minimise Elia's ecological footprint and to assist local communities."

Ilse Tant –
Chief Community Relations' Officer at Elia

G4 - EUS – DMA - STAKEHOLDER PARTICIPATION

Stakeholder participation

GRI 102-43, GRI 102-44

Elia Group is convinced that early involvement with all stakeholders is vital for the success of the energy transition and for the huge projects needed to make it happen. In 2018, the Group continued its efforts to gather valuable input right from the start. Already in the early concept stage, we are working closely with all stakeholders such as local communities, associations, NGOs and various government organisations. We've set up several initiatives with governors and mayors who are indispensable when it comes to bringing all the interested parties together.

STAKEHOLDER ENGAGEMENT

GRI 102-21

Roadshows to help build bridges

In 2018, Elia embarked on a roadshow to seek the opinions of the federal and regional politicians and members of civil society on the large future grid projects which are part of the new federal development plan 2020-2030. The support obtained during the roadshow was the basis to start the permitting preparations for two large projects in the Flanders and Walloon region. In that respect, Elia works closely with the Belgian provincial governors, who take a lead role in outlining infrastructure plans to the residents in their region. Governors help build bridges between Elia and the regional interests. They understand the local sensitivities and know the interest of their province.

Tailor-made participation using a standardised toolkit

50Hertz has a special toolkit, which incorporates a strategic approach applied to all of its grid projects. The toolkit includes a wide variety of initiatives from town hall meetings, info markets, dialogue tours, workshops, meetings, info campaigns to digital platforms. The participatory tools are enhanced yearly, also thanks to the exchange of experience with other international infrastructure companies and NGOs.

Tariff Methodology 2020-2023

In the first months of 2018, CREG and Elia consulted each other on the tariff methodology that will apply for the 2020-2023 regulatory period. This consultation led to adjustments in different areas, such as the setting of incentives for the new regulatory period, the way in which the fair margin is determined, the level of adequate gearing, but also different adaptations to reasonableness criteria or the tariff structure. Following consultation with Elia, CREG submitted its proposal for a Tariff Methodology for public consultation. After taking into account the comments made, the CREG definitively approved this Tariff Methodology on 28 June 2018. Elia will have to comply with this Tariff Methodology in order to establish the 2020-2023 Tariff Proposal, on which a public consultation is being held at the end of winter 2019.

Watch the video on how 50Hertz involved its stakeholders in the compactLine project.

"Elia aims to get the political stakeholders and regulators involved as early as possible and in 2018 started discussions up in the early phases of many projects. Improving the information flow also in turn, builds up trust. A good example concerns the Federal Regulatory Framework whereby Elia has to outline its transmission tariffs for the next four years. The next tariffs will be applicable as of 2020, but Elia has already discussed with the CREG the tariff methodology fixed by CREG in 2018. This gives all parties a chance to outline their point of view and explain the drivers in plenty of time, rather than merely announcing new tariffs in 2020."

Pascale Fonck – Chief External Relations Officer at Elia

Stakeholder events

50Hertz held various information events in 2018 with different stakeholders. In November, more than 250 guests from all political persuasions attended **a Parliamentary Evening** held at 50Hertz headquarters having the leader of the Green Party, Annalena Baerbock, the CEO of the German Association of Energy and Water Industries (BDEW) and the Parliamentary State Secretary at the ministry of environment, Rita Schwarzluehr-Sutter, as keynote speakers on the panel. Representatives from several federal ministries, the German Parliament, major industrial companies, NGOs and associations attended the evening to get involded in a lively exchange on how to safely integrate 65 percent renewable energies in the grid by 2030.

In the political arena, 50Hertz also holds a regular **'Energy Lunch'** in Berlin whereby it meets with political stakeholders, NGOs and associations. Regarding the Federal State level, 50Hertz is invited regularly to a so-called "Ländertreff Netze Nordost" where representatives of all the Federal States in the 50Hertz grid area discuss the most pressing energy policy challenges with 50Hertz experts. Additionally, the company has about 100 meetings a year with international, national and local politicians, industry representatives or NGOs to provide transparency to specific topics where it is needed and asked for.

DSOs, electricity consumers, steel plant operators, manufacturers, producers of lignite and renewables developers were just some of the clients participating in the one-day **Client Forum**, which includes tough discussions but a mutual respect for each other's point of view.

250

GUESTS FROM ALL POLITICAL PERSUASIONS ATTENDED A PARLIAMENTARY EVENING HELD IN AT 50Hertz HEADQUARTERS.

"On the one hand there is clearly the overall political and societal drive to achieve the energy transition and the clear legal framework and even pressure to accelerate the required high-voltage grid extension in Germany. On the other hand, however, there are concrete and very personal concerns, that are quite understandable. In this dilemma, 50Hertz believes that dialogue with all stakeholders is the only way forward and the most effective way to finding a balanced solution between these fundamentally opposite viewpoints. This dialogue takes many forms, depending on the stakeholders, but is and always has to be conducted in a respectful and transparent manner."

Kerstin Maria Rippel – Head of Communications and Public Affairs at 50Hertz

Elia's Stakeholders' Day 2018

On Friday, 23 November, Elia held the annual Stakeholders' Day, bringing together more than 250 experts, market players and stakeholders from the energy sector to discuss current and future projects. Two ministers were guest speakers at this event: Alexander De Croo (Belgian Deputy Prime Minister and Federal Minister of Development Cooperation, Digital Agenda, Telecommunications and Postal Services) and Marie Christine Marghem (Belgian Federal Minister of Energy, Environment and Sustainable Development).

Watch the Stakeholders' Day 2018 aftermovie.

CONCEPT NOTE MOG II

Understanding the government's ambition to achieve the energy transition, and the need for more renewable energy, Elia participated in a Task Force created by the Belgian government to draft a 'Concept Note' for the legal framework for the second wave of offshore grid infrastructure such as 'MOG II'. MOG II will connect new wind farms in the Belgian part of the North Sea, in line with Belgium's energy strategy/pact and the government's Marine Spatial Plan 2020-2026 for new zones for the generation and transmission of electricity. Work on the Concept Note began early in the year and was approved, enabling the Task Force to create the first elements of the new legal framework.

Elia's Users' Group

The Users' Group is a consultation body that brings together representatives of various groups such as major consumers, power producers, suppliers and distribution system operators, but also employers' organisations, power exchanges, public authorities and many more. Elia uses the Users' Group as a forum for informing and consulting these stakeholders about a range of specific areas connected to the operation of the electricity market. Moreover, positions on specific issues and recommendations are passed on to the relevant minister(s) and/or regulators.

Elia launched public consultation on the Federal Technical Regulations amendment

On 15 March, after two years of intensive talks with all the market parties involved, Elia launched a formal public consultation for the revision of the Federal Technical Regulations. This is the basis for the legal document that regulates cross-border transactions for the Belgian electricity market. The proposal put forward by Elia is the first thorough review since 2002.

During the consultation period which lasted four weeks, stakeholders have been able to share their views and officially react to previous proposals from different meetings and workshops organised by Elia in the framework of the Users' Group.

On 17 May 2018, Elia submitted the final proposal to revise the Federal Technical Regulations to the competent authorities, including a submission note with the consolidated reactions from the consultation process.

Draft proposal Capacity Remuneration Mechanism

At the end of 2017, Elia published an Adequacy Outlook report concluding that there is a need for investment in new generation capacity in Belgium in light of the planned nuclear phase-out by 2025. Other independent studies came to the same conclusions.

During 2018, upon the Belgian government's request, Elia, together with the Energy Administration and the CREG assisted the federal government in working out the high level design principles of a so-called Capacity Remuneration Mechanism (CRM). The aim of a CRM is to outline a framework to provide timely investments in generation capacity (thermal capacity, demand side management etc.) which is necessary to ensure Belgium's adequacy in 2025 and beyond.

The Belgian government is set to approve the initial CRM design proposal in the first quarter of 2019. Following that the detailed design principles will have to be worked out with all the stakeholders before the design is submitted to the European Commission for validation. The intention, outlined in the draft law, is to have a first auction in 2021. The resulting new capacity has to be delivered by the 2025 deadline.

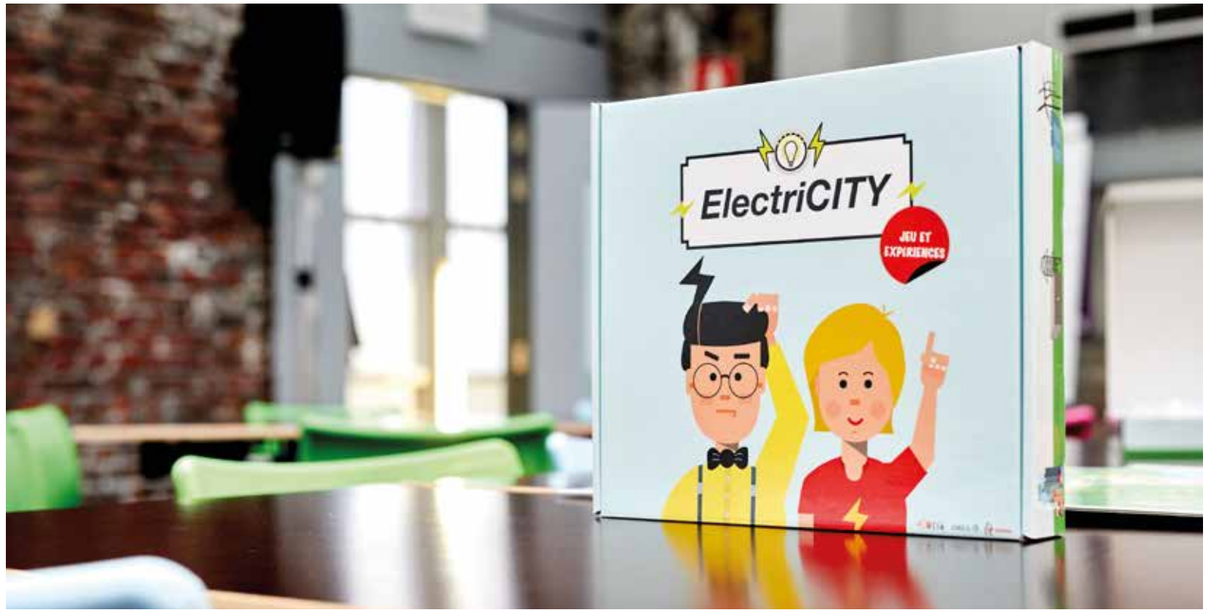
Enhanced stakeholder dialogue

In 2018, 50Hertz continued to systematically work with local mayors and this has proven to be invaluable. By providing mayors with details of a proposed project first hand and as early as possible, they are enabled to share this knowledge with local residents. This approach greatly supported the process of early participation of citizens and stakeholders and enriched the dialogue.

"The 50Hertz stakeholder participation approach in grid development is also very much appreciated by society and politics. 50Hertz treats its stakeholders with respect, shows local presence and that it is handling projects in a sensitive and sustainable way. Ultimately, it is most important to improve our projects by integrating local knowledge. Hence, Public Acceptance is an integrated part of the permitting procedure."

Danuta Kneipp –
Head of Public Participation Combined Grid Solution at 50Hertz

G4 - EUS – DMA - STAKEHOLDER PARTICIPATION



CORPORATE CITIZENSHIP

Helping refugees find employment

For the second year, Elia took part in a training scheme for young refugees called 'Rising You' in partnership with the Flemish employment agency VDAB and IRIS Anticorrosion, a company specialising in the condition and maintenance of industrial production sites.

In spring 2018, "Rising You" organised specialised training courses in painting power pylons, mast and telecom tower climbing. The hugely successful project resulted in 46 of the 48 refugees finding work and will be pursued in 2019.

Partnership with Be Planet

For the past two years, Elia has been working with the public utility foundation Be Planet to develop and support ecological transition initiatives by citizens in municipalities where Elia infrastructure projects are underway.

On 18 December, Elia, Be Planet and Courcelles municipal council unveiled the winners of the call for projects launched in Courcelles, in the province of Hainaut. The winners were chosen on the merits of their projects promoting the ecological transition and sustainable development. The partners have allocated €30,000 to provide material and/or financial support to four community projects ranging from the safeguarding of bees and biodiversity to promote local and environmentally-friendly food production.

Take a look behind the scenes of Open Site Day 2018.

EDUCATIONAL PROJECTS

Elia gives guest talk on ElectriCity at primary school in Temse

On October 18, Elia experts gave a guest talk on energy at Hollebeek Free Primary School in Temse. Its pupils see the progress of the Mercator-Horta project on a daily basis, so this provided an ideal opportunity to give a talk on the subject.

Using the ElectriCity game that Elia launched last year, the pupils were able to learn about energy in a fun way, including the energy transition and how to cope with the challenges involved in expanding the high-voltage grid.

ElectriCITY is a free educational pack for children aged 10 to 14, which Elia developed in collaboration with the distribution system operators. The pack aims to make young people aware of the importance of electricity and the rational use of energy. In 2018, Elia finalised the German and French versions.

Fifth-year pupils at the Calmette community primary school in Frameries were the first to test the new educational kit during a press conference organised at the Pass de Mons scientific adventure park, attended by Walloon Minister of Energy Jean-Luc Crucke, Elia CEO Chris Peeters and representatives of Ores and Resa.

50Hertz participatory exhibition is making the energy transition tangible

The participatory exhibition "Turning Energy Together", developed by 50Hertz and the Independent Institute for Environmental Issues (UfU e.V.) at the end of 2012, illustrates various aspects of the energy system transformation in a playful way. The exhibition has been honoured by the German UNESCO Commission as a project of the UN Decade of Education for Sustainable Development. In 2018, more than 1,100 school pupils attended the participatory exhibitions.

Open Site Day: Elia opens doors of Nemo Link conversion station in Bruges

On 6 May 2018, Elia once again participated in Open Site Day, an initiative of the Belgian Construction Confederation. On this day, special building sites are opened to the public. Elia offered one-time access to the Nemo Link conversion station in Bruges, due to be operational in early 2019.

Boarding for offshore wind

With the support of Elia, 800 people enjoyed a free trip to the wind farms in the Belgian North Sea over the weekend of 15 and 16 September 2018. On the way they were given some technical insights that helped them to fully appreciate the experience. The wind turbines now operating are generating enough electricity to meet the annual power needs of 1 million Belgians, and Elia and the Belgian Offshore Platform (BOP) organised this joint public event to celebrate the milestone. Elia will connect the future wind farms to the Modular Offshore Grid. See page 44.

At the 4th Renewable Energy Day in Mecklenburg-Vorpommern around 300 interested citizens had the opportunity to get information about the various offshore projects.

" Be Planet's mission fits perfectly with our social role as a grid operator. We are working to ensure a smooth transition to the electricity grid of the future, which will be reliable, sustainable and affordable. This involves cooperating closely with regional and local actors and, where possible, creating win-win situations. Be Planet helps us to connect with local community organisations and work with them to enhance biodiversity and energy efficiency."

Julien Madani – Project Communication Manager at Elia

Mitigating environmental impact & promoting ecological diversity

GRI 304-1
GRI 304-2
GRI 304-3

Energy infrastructure projects are linked to legal obligations to mitigate and compensate environmental impact. However, Elia Group sees environmental aspects as an opportunity to properly integrate mitigation measures into the planning process and then enter into a collaborative dialogue to work out suitable societal measures with local stakeholders.

For an overview of all compensation measures taken by Elia and 50Hertz please consult the Elia Group Sustainability Report 2018.

Discover how Elia creates green corridors under overhead lines.

"This Green Deal is a strong commitment from Elia to further enhance and promote biodiversity and rehabilitation of natural habitats along the power lines and around our substations."

**Igor Lefebvre –
Head of Environment & CSR
at Elia**

IN BELGIUM

Elia signs up for Green Deal Business and Biodiversity

Elia has joined more than 100 companies in signing the Green Deal Business and Biodiversity, an initiative by the Flemish government's Environment Department encouraging companies to enhance biodiversity on their premises. Elia is committed to implementing additional measures along our high-voltage infrastructure over the next three years.

26.24 km

OF BIRD MARKERS INSTALLED UNTIL 31/12/2018 (ELIA)

Creating green corridors under overhead lines 2.0

To ensure our security of supply, safety distances around the electrical conductors of our high-voltage lines must be respected. Unfortunately, this implies regularly cutting down everything that grows below the lines. In 2011, Elia set up the Life+ project in collaboration with RTE, and funded by the European Commission and the Walloon Region, to try and find solutions that ensure safety distances, whilst preserving biodiversity.

This seven-year project was hugely successful and we managed to transform 130 km of forest corridors into fully-fledged 'ecological corridors'. Instead of cutting down trees and shredding vegetation, Elia now plants small trees, creates ponds or brings in sheep to graze the vegetation naturally. This method presents no risk to the grid or wildlife and encourages local fauna and flora, which are gradually reclaiming the land. Decisions were always taken in consultation with owners, farmers, hunting clubs, municipalities and administrations, and long-term agreements were concluded.

In view of these positive results, Elia decided to launch a five-year follow-up project, LIFE 2, but this time without any external funding.

Installing bird markers

In 2015, a joint study by Elia, Natuurpunt, Natagora, Vogelbescherming Vlaanderen and the Flemish Institute for Nature and Forest Research (INBO) found that 3.4 percent of Elia's network of overhead lines was hazardous to birds. This is because some high-voltage lines are almost invisible to flying birds. Based on precise mapping of the areas most at risk, Elia drew up an action plan to reduce the risk of bird mortality by installing bird markers. These spring-like devices are fitted on the lines and reduce the risk of collision considerably. Since 2016 we have installed bird markers on more than 26 km of lines.

Installing nest boxes on our facilities

Elia places nest boxes on some of its facilities to provide secure nesting places to help to preserve endangered species. The birds' natural nesting periods are taken into consideration when installing these boxes. Over the past 17 years, Elia has set up no fewer than 56 nesting boxes for protected bird species, including kestrels, peregrine falcons and tawny owls. Some of these nest boxes are very successful, for example as many as 42 peregrine falcons have been hatched in the nest box in Schelle since 2002.

Learn more about 50Hertz's compensation measures.

710

COMPENSATION MEASURES IMPLEMENTED IN 2018 TO MINIMISE THE IMPACT ON NATURE AND DIVERSITY (50Hertz)

IN GERMANY

710 Compensation measures

50Hertz pursues the principle of minimising the impact on nature and limiting biological diversity. Whenever interference with the environment cannot be avoided, 50Hertz implements compensation measures. In 2018, 710 compensation measures were implemented.

Southwest interconnector: Important biotope secured

The Kaiserwiese is home to many protected plants and insects. 50Hertz supports the region of the Ilmkreis in securing and upgrading this important natural heritage site, which is under the protection of the European Flora Fauna Habitat Directive. After the Second World War, the meadow was a drop zone for aircraft bombs. The necessary annual mowing in autumn was only possible under stringent safety precautions and high expenditure. For years, the head of the Lower Nature Conservation Authority had tried in vain to organise the necessary care for the important habitat of native plant and insect species.

Now in summer, the gladiola is in full bloom. Swarms of butterflies, including very rare species, indicate that the measures have been successfully implemented. The management plan for future care is still being worked on. The time for mowing in autumn, for example, must be well chosen in order to take rare insects into consideration.

Large biodiversity projects and ecopool partnerships

2018 has been the year where 50Hertz has worked out a long-term ecological approach to foster the development of ecopools in its region through offering multi-annual partnerships. Such ecopools can combine multiple ecological dimensions to enrich ecosystems with fauna and flora. Against the background of the offshore development on the coastal region of Mecklenburg-Western Pomerania, 50Hertz has paid a lot of attention to developing maritime projects such as the removal of a large, artificial dam in the Baltic Sea which was blocking the way water was flowing, leading to a build-up of harmful sedimentation. 50Hertz also initiated the development of a concept to reconstruct reefs in the Baltic Sea region with WWF.

Ecological aisle management

In order to accommodate an overhead power line in forest areas, aisles are usually built. Due to the necessary safety distances, the conductors need sufficient clearance to the sides and to the ground. Trees must therefore be removed regularly in sections along the corridors. However, trees and shrubs provide habitats for numerous animals and plants. Therefore, the goal of 50Hertz is to impair these natural spaces as little as possible in the long term and to increase biodiversity under the overhead lines. In the course of the project, a biologically diverse and valuable aisle develops. German authorities demand that ecological aisle management has to be realised in new construction projects. 50Hertz adheres to these demands and also uses ecological aisle management on existing terrains on a voluntary basis.

Improving the birds' protection line

High voltage lines can have an adverse effect on birds. Besides concrete actions to support bird species (such as special nests on pylons, aviaries for birds of prey), in 2018, 50Hertz installed additional bird protection markers along specially chosen sections of the existing grid. In the frame of the Renewables Grid Initiative, the company further improved a project conducted by Naturschutz Deutschland e. V. to set up a national "Vogelfund und Stromleitung" hotline (bird finds and power lines hotline). This pioneering initiative – which is the first bird find hotline ever – provides the opportunity to systematically assemble precise information about the impact lines have on birds.

EXAMPLES OF COMPENSATION MEASURES

PLANTING
Planting tree aisles and rows, hedges, orchards

FORESTRY
Forest restructuring, first afforestation

HYDRAULIC ENGINEERING
Pond renaturation, restoring straightened rivers to their original condition, creating small bodies of waters, renaturation of flowing and still bodies of waters

OTHERS
Cabling medium voltage lines

DEMOLITION
Unsealing, demolition of buildings in community outdoor areas

SPECIES PROTECTION
Building amphibian protection facilities, nesting aids, bat habitats, reptile habitats, species protection towers

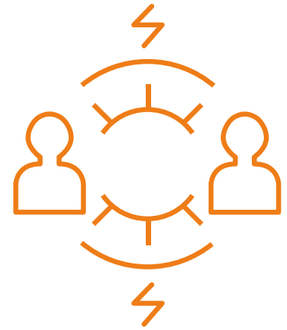
#5

We align culture with strategy.

2018 was a particularly important year for Elia Group because of the change in shareholdership. By further joining forces, Elia and 50Hertz will play an important role in positioning Elia Group as a strong brand in the European labour market. We are well aware that the success of Elia Group relies on the achievements and engagement of our people.

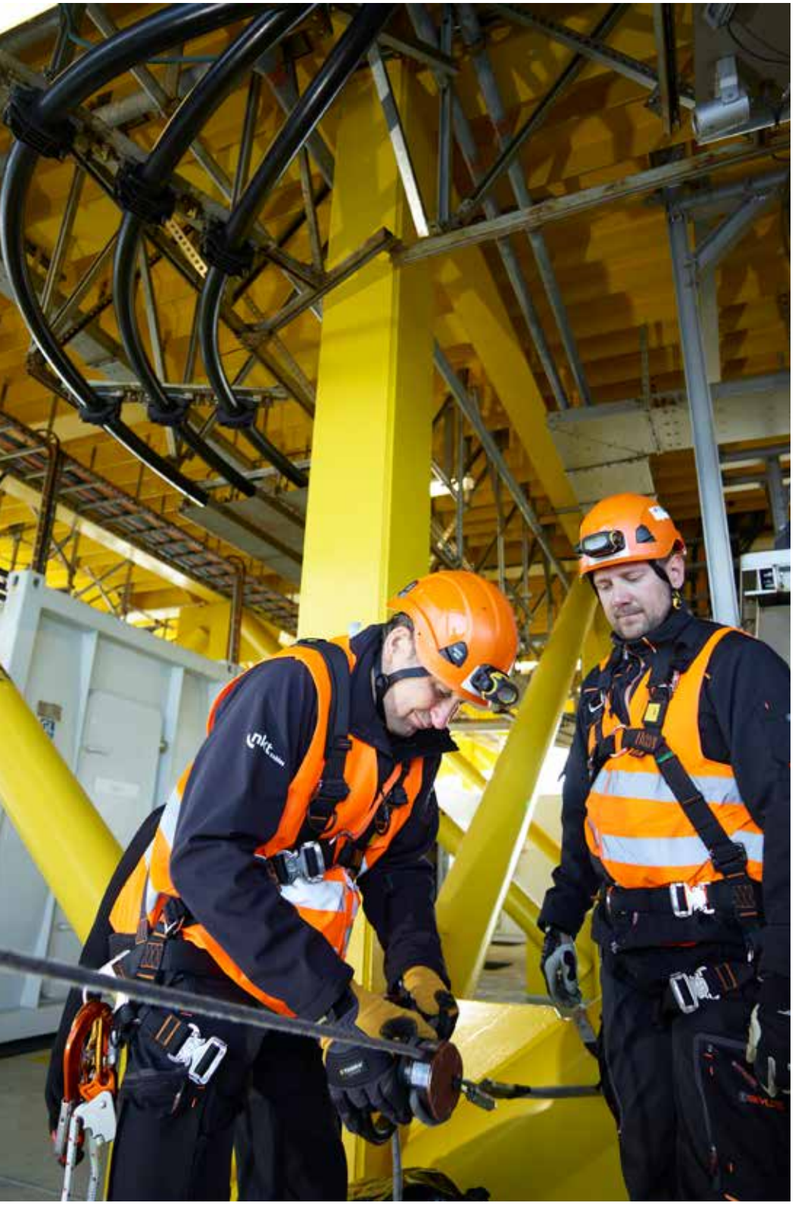
We want to attract the brightest talents by being the leading Group of TSOs in Europe guaranteeing equal opportunities for all. We want to help our employees to develop their skills to create a high-performance organisation that empowers people to take more initiatives.

By establishing a corporate group culture with strong safety and sustainability awareness, Elia Group will positively face the challenges of tomorrow.



2,441

TOTAL NUMBER OF EMPLOYEES (ELIA GROUP)



"Elia Group is an ambitious company that operates in a fast changing sector. To be able to maintain our key role in this dynamic environment, we are strongly committed to innovation and cooperation across departments. We also strive towards a company culture of permanent feedback. By giving feedback in a constructive way, we support each other in our daily tasks. This is essential for a modern and agile company that wants to respond quickly to trends both within and beyond company boundaries."

Peter Michiels –
Chief Human Resources and Internal Communication Officer at Elia

OBJECTIVES

We want to implement a corporate group culture that puts safety and sustainability at the centre of our activities and leverages the full potential of our talents to establish a high performance organisation.

AMBITIONS

Putting safety first

As a Group, we constantly invest in safety and expect our staff (both in the field and at administrative sites), subcontractors, colleagues, the distribution system operators, and all others to work safely and responsibly at all times.

Growing our talents

Elia Group analyses the available and required talent within its organisation to identify possible talent gaps. We are committed to continuously develop talent by providing individual growth opportunities. Additionally, we stimulate diversity in the composition of our teams and strongly condemn any discriminatory acts in the work environment.

A culture based on feedback

In order to ensure excellent performance at work, we encourage an open feedback culture, which outlines our expectations regarding competencies and behaviours. From these dialogues, we derive consequences to keep performance at a high level.

Making sustainability part of our DNA

Elia Group wants to play a central role in the sector and create value for all stakeholders. That is why we consider sustainability in all aspects of our business.

GRI 102-16

OUR ASPIRATIONAL VALUES

In a changing energy sector, four aspirational values are key to achieving Elia Group's strategy. They are reflected in the behaviour and attitude of our staff.

We are entrepreneurial

Our staff work proactively and take initiatives with a view to improving how they work and exploring new ways of doing things.

We collaborate

Elia Group values collaboration, both within the company and with external partners. Our staff share their expertise and their information and question each other, thus enabling their ideas to mature. They seek fruitful collaborations and win-win partnerships.

We are accountable

All of our staff take full responsibility for their projects and tasks. They achieve their motivating, ambitious targets and work hard on their projects until they are completed.

We are agile

In a world of constant change, our staff embrace new developments, are proactive and persevere.

"In 2018, 50Hertz continued to set the course for future sustainable development by addressing a number of factors such as the regulatory setting, empowerment measures and also the further development of the Environment Social Governance (ESG) framework. This had an influence on the company's strategy and several measures have been included in its new business plan. We are keen to see sustainability becoming a part of the company's DNA, and consequently wants to see standards firmly embedded in the culture of the company. Sustainability is a vital consideration in all aspects of the business but particularly when it comes to those at the heart of the company – the employees."

Marco Nix –
Chief Financial Officer at 50Hertz

Safety always comes first

GRI 403-1

Safety is a critical part of our corporate culture. Elia Group aims to develop a genuine safety culture, pursued by each and every person and department within the company. Right from day one, our employees are given thorough safety training to ensure that they respect their own safety and that of their fellow workers and the environment at all times. In addition, we have a special focus on the safety of the subcontractors and third parties that work alongside us.

"50Hertz's main priority is that its employees have a safe and healthy working environment. A big campaign was conducted during 2018 highlighting best safety practices. At the various touchpoints of the different target groups there was information and instruction that was directly tailored to the respective group. These ranged from a broad programme to spotlight lessons learnt about 'near misses' or if they have an idea about how safety can be improved to a HQ sticker and poster campaign to inform staff members about potentially dangerous practice. Although 50Hertz and Elia have their own well-established, safety programmes in place, one thing is clear – the two companies have the same vision and are striving to reach the same goals. By exchanging best practices we can learn from each other and support each other in reaching our goals."

Thorsten Schröder –
Head of Health and Safety at 50Hertz

IN BELGIUM

GO FOR ZERO safety programme

GO FOR ZERO is a company-wide initiative and includes all projects that aim to optimise the safety culture within Elia. Our primary objective is for anyone who works on or near our facilities to return safe and sound every day. We firmly believe that excelling in this area is a prerequisite for operational excellence.

GO FOR ZERO SAFETY PROGRAMME

THE FIVE PILLARS OF GO FOR ZERO

01 People & technical skills

In an ever-changing world, everyone needs to hone their skills constantly and learn continuously.
The People & Technical Skills project aims to catalogue the technical and behavioural skills within Elia, then develop training paths to enhance these Elia skills.

02 Operational & Safety Excellence

Feedback, open dialogue and regular communication within and between teams are all absolutely vital if Elia's ambitious targets on safety, efficiency and operational quality are to be met. Continuous improvement entails researching and developing solutions to operational problems.

03 Operational & Safety Excellence with DSOs

Elia shares many high-voltage substations with distribution system operators. In view of this fact, Elia and its colleagues in the distribution sector decided to launch a project to enhance safety.

04 Safety for Contractors

In response to the energy transition, Elia is undertaking the most ambitious investment programme in its history. In cooperation with its contractors, Elia is striving to ensure that they too, have optimal safety and zero accidents.

05 Safety Leadership

Elia structurally implemented a management style that encourages employees to report risky behaviour and to work safely. Every manager must inspire and set an example, while also creating a climate of trust in which all employees adopt safety-oriented attitudes and behaviour and never compromise on safety.

"Elia Group believes that the safety culture is not about more procedures, but about aligning peoples' behaviour. Everyone needs to be a 'safety leader'. If they see anything unsafe, they must stop the work and give their colleague feedback. Work shouldn't restart until the work is deemed safe again. This 'stop work' authority was presented during the Make a Difference Roadshow throughout the year.

In Germany, an initiative rolled out whereby all leaders are asked to be role models and speak with one voice. An internal HR team was assembled and explained this new behaviour and culture in every team meeting."

Stéphane Otto –
Head of Health and Safety at Elia

"At Elia Group, we are committed to ensure that everyone returns home safely every day. This includes our employees, our contractors and anyone working in the vicinity of our installations. Together we go for Zero Accidents, resulting in a Safe Today and a Safe Tomorrow. We aim to achieve these goals by cultivating the right skills, focusing on good operational dialogue between all teams and continuous improvement."

Walter Geelen –
Head of Maintenance & Commissioning South at Elia

ELIA'S SAFETY WEEKS

Each year, Elia organises Safety Weeks for its staff in May and September in an effort to raise awareness about the importance of safety. The programme included various communications, training sessions and team exercises, designed to ensure that everyone got involved and took the messages on board. In May 2018, the spotlight was on non-negotiables, i.e. behaviours that we no longer wish to see in the company. In September, we focused on "Safety on the road".

Awareness campaign highlighting the dangers of Elia facilities

In 2018, Elia relaunched its safety campaign for third parties who work on or near our facilities. By raising awareness about the different risks concerned with working near electrical infrastructure, we hope to limit the number of incidents. Despite our continuous efforts, three fatal accidents occurred this year involving third parties and subcontractors. This has caused Elia to stress the importance of safety measures even further and campaigns will continue to run in 2019.

IN GERMANY

Gib8 - Safety Programme

In March 2018, 50Hertz introduced the 'Gib8' programme, which concerns safety at both project sites and at its offices. But the high 50Hertz standards also apply to contractors working on the 50Hertz construction sites. Therefore, in addition to employees there was a particular focus on suppliers and subcontractors. And if suppliers fail to decrease the levels of safety incidents, 50Hertz is uncompromising – they will either be excluded from the next tender or barred completely from participating in the future. Additionally, suppliers are obliged to have certain sustainability management procedures and high safety requirements in place.

50Hertz GAINS OHSAS RECERTIFICATION

The company-wide, occupational health and safety management system complies with the most important international standard for health and safety at work, the "Occupational Health and Safety Assessment Series" (OHSAS) 18001: 2007.

Overall, 50Hertz is pleased to see that suppliers have been happy to jump on board with the programme and this is having a positive impact. A very good example is offshore, although working in a highly challenging environment -where all the electrical cabling works for Ostwind 1 offshore wind farm were completed ahead of schedule - the number of incidents was drastically reduced by nearly 50 percent.

Ongoing training and awareness raising

The employees working in the substations and in the field are instructed six times a year, those working in the offices once a year. In addition an occupational safety competition is held on a yearly basis to further sensitise and motivate the workforce. On the one hand, the accident figures of the individual sites of the previous year are taken into account, and on the other hand, knowledge of occupational safety is reviewed.

1,190 inspections

A TOTAL OF 1,159 SITE INSPECTIONS WERE PLANNED FOR 2018 AT 50Hertz. HOWEVER, WITH 1,190 INSPECTIONS (AS OF DECEMBER 2018) PERFORMED, THIS TARGET WAS EXCEEDED.

Cultural change

GRI 404-1

In 2018, the main focus for HR was establishing a common ground for a closer collaboration. Both companies have strong local footprints and solid business cultures. Today, we are developing a common, integrated way of working that will transform us into one multinational Group with more than 2,400 employees.

"The intensified collaboration between Elia and 50Hertz offers our employees more personal development opportunities in an international context. It allows for intercultural exchange between colleagues and encourages further knowledge sharing. We are currently working on Group-wide excellent safety standards, for example."

Barbara Verhaegen – Head of Internal Communication at Elia

Building the Elia Group

We have started a joint project to intensify the collaboration between Elia and 50Hertz. With this initiative, we are investigating how the two companies can work more closely together to create added value, increase our joint expertise and build new standards of excellence. Twelve work streams have been identified where we can exchange knowledge about the most important issues affecting the two companies and where improvements or efficiencies can be gained - ultimately in the interest of society. This will help us achieve our ambitions and strengthen our position as a leading TSO group in Europe.

CO-CREATION

Implementing change

Following on from the Employee Survey 'Sag es!' (Say it!) in 2017, 50Hertz is keen to encourage more employee participation, and in turn, more empowerment. In order to tackle the key issues raised in the survey, discussions were held at various departments and the results were translated into solutions.

In another follow up from the 50Hertz survey, a Management Conference was held where 100 managers outlined the measures they had put in place based on the results of the Survey. One key finding was the need to enhance cooperation between different departments and many managers implemented changes to improve this.

Make A Difference – culture based on feedback

At the start of 2018, Elia gave new impetus to the project around our corporate culture by introducing 'Make A Difference' (MAD), an overarching programme of initiatives to help our employees to literally make a difference at work.

One of these initiatives is developing a corporate culture of continuous improvement, in which feedback becomes a regular practice for everyone. We regard sincere, respectful and regular feedback as a tool to help colleagues improve their actions, tasks and attitudes.

"Many companies may carry out surveys but they don't always lead to change. 50Hertz in contrast, aims to implement the changes and improvements suggested by the employees. Improving communication throughout the company is a broad-based initiative."

Julia Persitzsky – Head of Learning & Development at 50Hertz

ELIA'S FEEDBACK CULTURE IS BASED ON 4 GOLDEN RULES:

01 Be honest and respectful

02 Show appreciation & be constructive

03 Be specific

04 Do it at the appropriate time

"It is of the utmost importance to reach a common understanding of all the different objectives we want to achieve during this project. Efficient collaboration and transparent communication within Elia Group helps us all take the right decisions."

Olivier Feix –
Head of Nature Conservation and Permits at 50Hertz

EXCHANGING EXPERIENCES

Elia Group Management Days

In 2018, Elia and 50Hertz continued to hold the annual Elia Group Management Days where 80 managers came once again together to informally exchange information and to continue working on a common culture.

Elia & 50Hertz colleagues exchange best practices on Data Management

On November 7, several colleagues from 50Hertz and Elia met at the headquarters of 50Hertz in Berlin to discuss topics such as customer management, metering and transparency of data. Both companies use similar technical and IT solutions, and often face the same challenges. By working more closely together, we are able to exchange best practices and help each other overcome hurdles.

"The exchange was really enriching which is why we decided to organise another meeting in Brussels in the first quarter of 2019. The aim is to present the evolution Elia has made in the field of validation techniques for measurement data and to show the first screens of the new Meter Data Management (MDM) tool that Elia is currently developing."

Patricia Haemers –
Head of Settlement, Metering, Data & Reporting at Elia

Deep dive into Combined Grid Solutions project

Improving risk management, increasing transparency and optimising the timing of our projects are just some of the objectives of the collaboration project. To underline the importance of efficient collaboration, our CEO Chris Peeters and our CFO Catherine Vandenborre visited the Bentwisch high voltage substation to meet with the teams working on the interconnection project Combined Grid Solution (CGS).

The 50Hertz team and representatives of the project partner energinet.dk gave a detailed overview of the challenges, roles and responsibilities concerning risk and supplier management during the construction of the submarine electricity cable between Germany and Denmark. Chris and Catherine also met with ABB, the construction partner for this project.

Growing our talents

Elia Group has set up several initiatives to combine the best practices of Elia and 50Hertz. The two companies are aiming to build a 'talent ecosystem' which will allow them to incorporate new skills such as digital expertise. We want to make sure that we have the right people on board to build the energy system of the future. A common framework is being established to allow talent to flow freely within the organisation.

Elia Group has revamped the way it exchanges talent between Belgium and Germany.

In the past, there had been a number of one-offs regarding talent exchange for longer term assignments, but now there are many more opportunities for exchanges of three to six months, to enable the best people and best practices to be in place for projects.

172
new hires

IN 2018, ELIA GROUP HAS STRENGTHENED ITS TALENT BACKBONE WITH 172 NEW HIRES.

"For the first time, HR is advertising job vacancies in both countries and many people have taken up the opportunity. For example, an offshore team member in Belgium has moved to Germany to work in procurement and a German employee, previously working offshore in the Baltic Sea has moved to an interconnector project in Scandinavia. Another 50Hertz employee has switched to the customer relationships' department in Belgium."

Dr. Andreas Holleczek –
Recruiting Officer at 50Hertz

Acting sustainably

For Elia Group, environmental protection and conservation of resources is an integral part of our culture and strategy. Elia and 50Hertz are working on a joint sustainability reporting platform – the standards of the Global Reporting Initiative (GRI). This has broadened the Group's view of sustainability. It is no longer simply thinking about planting some trees to mitigate any environmental disturbance; but it is taking a much wider perspective and a deeper approach.

Trainees working with NGOs

Proactive dialogue is part of our sustainable culture and that is why a key part of the traineeship is to work within an NGO to gain a better understanding of their point of view. 50Hertz expects its youngsters to have an understanding of projects from all angles, and all trainees, no matter where they are working in the company are obliged to work at an NGO.

In partnership with suppliers

The close partnership with suppliers is reflected in our supplier agreements, which cover not only occupational health and safety, but also quality management and environmental concerns. The first steps have also been taken to identify and manage human rights duties of care in the supply chain.

Elia Employee initiatives

Elia aims to be a sustainable and responsible company. To achieve that goal we work hard to reduce our ecological footprint both from the top down and bottom up. In 2018, a group of employees launched the 'ambassadorship initiative', in collaboration with Elia's Environment & CSR department. More than 30 colleagues volunteer to tackle sustainable development issues. They share their ideas on Jive, Elia's community platform, and meet on a monthly basis to share ideas and to plan actions.

The first theme is 'food' and the current actions concern battling food waste, introducing more local products and having a social impact.

Elia's Annual Report wins a sustainability award

The Elia Annual Report 2017 won the 'Best First Sustainability Report' Award in the category 'First Year Reporting' at the 2018 edition of the Awards for Best Belgian Sustainability Reports. Elia Community Relations Officer Ilse Tant collected the prize on the company's behalf from Thierry Dupont, President of the Belgian Institute of Registered Auditors. These awards are a Belgian Institute of Registered Auditors' initiative aimed at encouraging companies to report on sustainable development and they recognise the importance of transparent communication with stakeholders.

"In 2018 we further improved our ESG rating, this might be a tiny event in the grand scheme of things but all of these small steps are reflected in our purchase price, and our share value. There is a lot of acknowledgement of these soft factors. We get good results and have a solid cash flow, which enables us to perform all of our ambitious projects, and without having to approach the external market! This all signifies that we are professional, and can be trusted to do what we promise."

Marco Nix –
Chief Financial Officer
at 50Hertz

#6

We have our eyes wide open for innovation. & growth opportunities

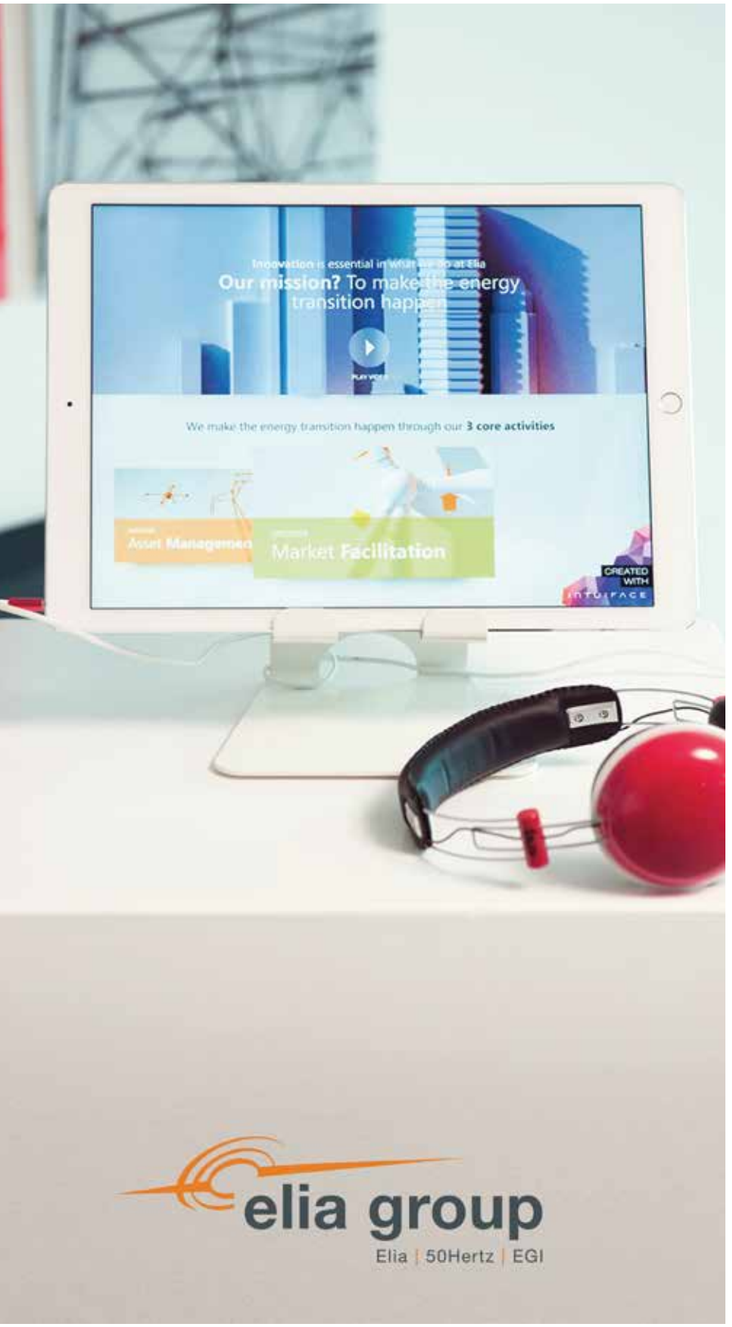
In a rapidly changing energy landscape, innovation plays a key role in understanding, anticipating and promptly adopting the changes needed to ensure the transition towards a more reliable, affordable and efficient energy system. We continue to innovate in our industry, so the power sector can evolve and benefit society now and in the future.

Identified opportunities are examined in depth and proof tested to prepare Elia Group for the next generation of state-of-the-art technologies. Once testing has proven the efficiency of the technology, the innovative initiative is effectively incorporated into our daily practices.

As well as continuing to integrate innovative technologies, we stay abreast of the latest developments in the energy sector. We see this as an opportunity and want to play a pioneering role. Elia Group has a range of initiatives that foster and reward innovative thinking, to ensure that our employees remain at the forefront of new developments.

135

135 START-UPS FROM 38 COUNTRIES APPLIED FOR ELIA GROUP'S 2ND EDITION OF THE OPEN INNOVATION CHALLENGE



"Currently, we distinguish four major trends that are driving the transformation of the energy landscape: big EU renewable power flows, renewable generation and decentralisation. Digitalisation is the motor behind all these trends and together, they will lead to the emergence of disruptive power markets and business models. It is up to us to anticipate the potential impact on our activities and to innovate with the market."

Menno Janssens –
Head of Innovation at Elia

Learn more about how digitalisation is driving the transformation of the energy sector.

OBJECTIVES

We create a culture of innovation and entrepreneurship to accelerate the energy transition. We build an ecosystem to develop the tools and methods that will enable a more digital, decentralised and sustainable energy system.

AMBITIONS

Excelling in managing assets

Renewable energy integration and increased interconnection demand more of our infrastructure. The adoption of new technologies allows Elia Group to improve the use of our assets in many ways providing increased capacity, higher efficiency and more reliability.

Developing and managing tomorrow's electricity grid

Elia Group expands and optimises the grid according to society's needs. We cope with the increase of renewable energy and progressive decentralised generation.

Continuing to be a pioneer in market facilitation

Elia Group designs an efficient and transparent electricity market to ensure a smooth transition to a sustainable, affordable, and integrated European market. Elia Group continuously collaborates with different stakeholders so the market can be adapted in line with the evolving needs of increasing flexibility on the balancing market.

Open innovation through collaboration

In a world of widely distributed knowledge, Elia Group has decided to go for open innovation. We cannot rely entirely on our own ideas and expertise to advance our technology. Buying or licensing processes or inventions from other companies, like start-ups, also makes a valuable contribution.

"In 2017, the new German coalition government stated that the German energy mix should be made up from 65 percent renewable sources by 2030. This means that additional transmission capacity is needed, which would be the equivalent gigawatts of three, huge, HVDC overhead lines.

We believe this is not going to be practicable because it will never gain public acceptance and there is simply not enough space to accommodate these huge lines. Additionally, the impact they have on the environment would be unwelcome.

It is our responsibility to manage the grid challenges and grid expansion intelligently by way of innovation. Therefore, it is the TSOs challenge to reduce the additional need for overhead lines – hence the need for grid innovation."

Nadja Ballauf –
Head of Corporate Development at 50Hertz

Excelling in managing assets

"Moving forward with testing shared air space for new usage is extremely interesting for the industry. As a utility company owning a large and critical infrastructure, being able to use unmanned aircraft for our activities enables us to ensure a reliable and affordable operation of the grid in all circumstances."

Johan Maricq – Innovation Project Leader at Elia

Discover how Elia is using drones and AI in its daily activities.

U-space drone demonstrations in Belgium

The Safe and Flexible Integration of Initial U-space Services in a Real Environment (SAFIR) consortium, consists of 13 public and private organisations that have been selected by Single European Sky ATM Research Joint Undertaking (SESAR JU). As a member of the SAFIR consortium, Elia wants to contribute to the EU regulatory process for drones and drive forward the deployment of interoperable, harmonised and standardised drone services across Europe. These demonstrations include high voltage line mapping and pylon inspection.

For Elia, the use of drones will reduce the safety risks faced by our employees during inspections. Flexibility and efficiency would also improve, helping Elia to keep grid management costs under control.

PROOF OF CONCEPT USING DRONE INSPECTIONS AND ARTIFICIAL INTELLIGENCE

Elia is currently testing two aspects on how drone technologies can improve the quality and efficiency of the inspection of overhead lines and at the same time avoid risk for our employees and colleagues:

- **Generation of an auto flight plan:** At present, a drone pilot needs to carefully operate the drone around the infrastructure while someone else is taking pictures from the camera attached to the drone. With this project, an application will automatically control the drone around the pylon and will take pictures at fixed positions, with fixed angles.
- **Post-processing of the collected pictures:** As mentioned above, inspections of our lines generate a number of pictures. To facilitate all this data, as well as optimising its potential use, new post-processing techniques and data management systems will be needed. One of the most promising techniques available today is the use of Artificial Intelligence to automatically recognise defects.

Testing high-temperature low sag conductors

One longer-term project concerns higher utilisation of the existing grid through high-temperature low sag conductors (HTLS). Convential overhead lines heat up. The more electricity flowing through the lines, the hotter they get and this can lead to lines sagging. If they sag too much, we are not allowed to operate them.

To combat this problem, Elia and 50Hertz are aiming to introduce new conductors, which can cope with a higher flow of electricity. Eight new conductors have been developed by different producers and have been put through a one-year, rigorous testing period. Twenty years of operations were simulated in just a year. We will now decide which high temperature conductors are suitable for future projects.

Satellite supported vegetation analysis

50Hertz is currently working with a Berlin-based company on a project exploring satellite-supported vegetation analysis, which will help 50Hertz manage the pylon aisles in a more ecological way. Ultimately, rather than sending out a technician analysing the necessity of cutting branches away from pylons the growth of branches can be monitored by satellite. As a result, 50Hertz can proactively manage its pylon aisles.

Virtual reality boosts safety

Always on the lookout for new technologies, Elia studied the benefits of virtual reality in our daily activities. Following the conception workshop in 2017, Elia initiated the Sarqa VR project.

Sarqa VR aims to gamify the preparation of on-site interventions. By virtually accessing high-voltage substations, our colleagues in the field are able to apply the necessary demarcations of each Work Order and to identify the potential risks in connection with their intervention.

During this preparation, they can observe whether the safety zones are respected and avoid conflicts with other planned or ongoing works. A "validator" mode is also included making it possible for a safety officer to validate their preparatory work. This tool could also be used for training new employees.

"In line with the European 'Best Paths' research project, which ended in 2018, Elia and 50Hertz jointly investigated high-temperature low sag (HTLS) conductors for overhead lines by technical research (50Hertz) and on-site demonstration (Elia). There has been a great deal of international interest. This project is a real success story and shows what Elia and 50Hertz can achieve when they join forces."

Wilhelm Kiewitt – Specialist Corporate Development at 50Hertz

Experience how we integrate Virtual Reality.

HOW DOES VIRTUAL REALITY WORK IN OUR DAILY ACTIVITIES?

The high-voltage substations are modelled on existing plans and reflect every aspect of reality.

Using a virtual reality headset, the person enters the selected substation. He or she navigates inside the substation using a remote control, and points it in the desired direction.

A second remote control, which appears on screen in the form of a tablet, offers access to various options: defining the working zones by means of cones, chains etc.; placing elements such as service vehicles to see whether these do not enter the safety zones etc.

ADVANTAGES:

- Specifying the preparation of the interventions
- Digitising the documentation regarding the preparation of the works
- Anticipating problems and visualising them within their context

Developing and managing tomorrow's electricity grid

"The construction of the compactLine using a completely new overhead line design poses a wide variety of challenges for everyone involved. Before we can test the safe operation of the new line, many new developments had to be implemented in the field for the first time. For example, the new line tensioning system required not only special fittings due to the high tensile forces, but also adapted installation equipment for the line."

Joachim Löbe –
Head of Line Projects at 50Hertz

compactLine

G4 - EUS – DMA- STAKEHOLDER PARTICIPATION

The practical test phase of the compactLine pilot project which focuses on the increasing acceptance for 380 kV overhead lines, got underway in August 2018. The new pylon is much shorter compared to the traditional Danube pylon, which reaches typical heights of 50-60 m. Additionally, due to decreased sag of conductor bundles, the compactLine technology uses less space than conventional overhead line systems in the overhead line corridor.

For this project, 50Hertz is working with the German Ministry of Economics, universities and industry partners. Issues such as new maintenance procedures and public acceptance are all being considered. New components like insulators and devices also had to be developed. All the various stakeholders, especially the local community and NGOs (for example NABU and WWF), have been closely involved right from the start of the project.

Watch the video on the compactLine project to discover more.

Insulated arms for Stevin

Two new technologies were commissioned in connection with the Stevin project in Belgium. Insulating arms were fitted to compact pylons to replace an existing 150 kV line. Transforming pylons in this way made it possible to increase the voltage level to 380 kV without having to increase the height of the new pylons. High-temperature low sag (HTLS) conductors – which reduce the effects of sag when the temperature on the line is high – now make it possible to increase power on the new 380 kV lines.

Flexibility platform in the WindNODE project

G4-EUS-DMA DEMAND-SIDE MANAGEMENT PROGRAMMES

The 'Flexibility Platform' helps improve the integration of more renewables into the grid, reducing costs and leading to reductions in CO_2 emissions.

The 'Flexibility Platform' is a digital purchasing platform to reduce wind farm cutbacks in the situation when there is grid congestion. In these critical situations some wind farms have to be cut off from the grid and a decision has to be taken concerning which ones need to be temporarily shut down. And this also means that green, renewable energy is being shut off, rather than coal-fired energy etc. Additionally, when the wind farms are closed off, it is still necessary to find another producer – typically these have been producers in Southern Europe, operating conventional energy plants.

The new platform makes it possible to coordinate as many market players as possible - from the distribution grid operator, via retail with its cooling systems and large-scale consumers to decentralised producers. This project highlights a very strong cooperation between 50Hertz and the DSOs. Flexibility Platform looks to make maximum utilisation of flexibilities from many different sources.

Four industrial plants in Berlin, with processes ranging from around 50 kilowatts to 4 megawatts, are involved in the platform, as is a nationwide supermarket chain, which is also making its flexibilities available. Fifty logistics locations and 3,800 branches throughout Germany can lower the temperatures much more dramatically when plenty of sun and wind energy is available. So called virtual power plants (bundling of decentralised generation and consumption plants) are also integrated into the project to avoid the congestion.

50Hertz is very proud to be the consortium leader and to bring more than 70 market players together to reach the test phase of the new platform. The first results of the test phase are expected to be available in Q1 2019.

Continuing to be a pioneer in market facilitation

“Elia Group is convinced that a consumer-centric system will trigger opportunities for a new ecosystem of front-runners to generate more services and comfort for consumers, as well as business opportunities for the commercial market and system stability for those operating it.”

Alexandre Torreele –
Head of Innovation & Digital
at Elia

First Consumer-centric use case IO.Energy platform

In 2018, Elia has been testing a first use case (IO.Energy) in Belgium to ensure the exchange of real time information between energy players to facilitate the design of future energy services. End consumers are being coupled to a real-time energy price in order to assess if they can make value out of their flexibility. The use case involves home batteries, heat pumps, EV chargers and cold stores totalling 500 kW and is tested on the first release of the so-called IO.Energy platform.

By enabling information exchange in real time, we create the foundation of a system where the consumers will have access to a vast offer of competitive energy services that are tailored to their needs.

Outcomes from the first use case are expected in early 2019, in view of expanding the ecosystem to include more players during the course of the year. Market parties willing to take part had to sign up before mid-January 2019. To allow as many market parties as possible, a test environment (sandbox) will be set up before mid-2019 where new and existing concepts can be tested and assessed in preparation for being scaled up at a later stage.

“Wind always has priority, i.e. if more wind is blowing than forecasted or any equipment of the interconnector trips, the market must be corrected in a way that the schedule for the border meets the capacity which is physically available i.e. corresponding countertrades must be initiated directly on the energy market. Furthermore the physical flow has to meet the schedule even under fluctuating wind conditions. The interconnector is virtually a weak, three-phase system, so that we also have major challenges with voltage stability, which are caused among other things by the strongly fluctuating power flows. In addition, the market will have to be notified of free transmission capacities at short notice. We are solving these and other challenges with the first fully automated system operation tool which is part of our control centre, the Master Controller for Interconnector Operation (MIO). A unique tool for a unique project.”

Dr. Anne Katrin Marten –
Head of Concepts and Analysis
at 50Hertz

THE FULLY-AUTOMATED SYSTEM OF MASTERCONTROLLER FOR INTERCONNECTOR OPERATION (MIO) INCLUDES:

- **Calculation of potential power exchange between Germany and Denmark, which are used to determine the power exchange schedules**
- **Voltage regulation**
- **Avoidance of equipment overloads**
- **Enables 100 percent utilisation of operating resources**

Real-time control of the interconnector, the feed-in of the wind farms and preservation of the priority in-feed

Mastercontroller for Interconnector Operation (MIO) – ‘The Brain of Combined Grid Solution’.

The Combined Grid Solution (CGS) is a globally, unique project. It connects a German and Danish offshore wind farm directly via a substation platform at sea. A back-to-back converter onshore - in Bentwisch - will harmonise the different phase angles of the Danish and German transmission grids and thus enable the exchange of electricity between the two grids. But the 50Hertz system operation is also challenged in this project.

On the interconnector, the power flows from the offshore wind farms and from the energy markets compete for the available capacity. In order to guarantee the priority of wind power feed-in, forecasts must be constantly compared with current electricity generation and consumption, taking into account voltage stability under strongly fluctuating power flows. The available capacity must be immediately communicated to the electricity market players at all times.

The brain of CGS that makes this possible is the recently successfully tested Master Controller for Interconnector Operation (MIO). MIO automatically calculates the capacity on the interconnector up to every 5 minutes for a predeterminable forecast horizon and thus supports it, together with other systems of the grid and MIO’s real time functionalities running every 5 seconds. This guarantees system security and the optimum and most economically efficient operation of the interconnector.

Europe’s first Blockchain pilot projects in the energy sector

Elia launched a pilot project to analyse possible applications of Blockchain technology in the energy sector. The increase in renewable energy generation is making it increasingly difficult for transmission system operators to guarantee that generation and consumption are balanced at all times. Power generation from renewables fluctuates constantly, so flexible reserves that can be activated swiftly (like batteries, demand management via heat pumps, etc.) are needed to ensure a steady balance. Elia is exploring the opportunities offered by Blockchain technology as a payment system to address the business side of such complex, rapid transactions. The pilot project, conducted together with SettleMint and Actility, lasted three months.

Visit the IO.Energy website for more information.

“On the 14th of November 2018, Elia was invited to present ongoing projects with regards to Blockchain technology during the Share Your ENERGY conference. The conference aims to gather the most influential energy innovators, which reinforce our image of being drivers of the energy transition. We focused on the Blockchain test we are currently testing within Elia, as well as the Proof of Concept we launched in August in collaboration with Actility and SettleMint.”

Pieter Vanbaelen –
Product Development
Manager at Elia

Learn more about Blockchain in the energy sector.

WHAT IS BLOCKCHAIN?

Blockchain is a distributed, digital transaction technology that enables secure data storage and makes it possible to execute smart contracts in peer-to-peer networks. Its intrinsic characteristics (it is unalterable, transparent and secure) also make it easier to automate contract execution.

Since the technology’s capabilities are steadily expanding all the time, Blockchain and smart contracts could help to manage multiple sources of flexibility automatically. In future, this technology could profoundly change how the energy sector operates by being applied to different levels of the market (short-term requirements, ancillary services, and so on).

Open Innovation through collaboration

Elia Group Innovation Days

On 12 November, 50Hertz hosted the sixth edition of the Innovation Day at its headquarters in Berlin. During this event, both 50Hertz and Elia colleagues presented their innovative projects. On December 7th, Elia hosted its fourth Initiative Fair. More than 200 curious colleagues attended the event to discover the various initiatives within the Elia Group.

Open innovation challenge

For the second time, Elia Group hosted the Open Innovation Challenge in Brussels. With this international start-up competition we want to develop innovative solutions to improve the quality of consumption and generation forecasts. Any start-up linked to Big Data, blockchain and AI, predictive analysis, or renewable energy could take part in this Elia Group Start-up Challenge to try and win a proof-of-concept worth €20,000.

Of the five finalists, PowerMarket convinced the jury with its solution that detects solar panels and improves solar generation prognoses. By using both satellite images and artificial intelligence, PowerMarket can very accurately identify the exact location of solar panels and their installed capacities. These valuable data can then be combined with meteorological data to estimate solar energy for every hour and every day of the year. Accurate forecasting reduces the need to activate reserves and, as a result, prevents activation costs. Elia and PowerMarket will spend three months testing the concept to demonstrate the effectiveness of this innovative solution for forecasting solar generation.

Want to know more about our Open Innovation challenge? Scan and watch the video.

50Hertz also believes it is important to remain agile and open to fresh ideas. Besides drawing on its years of experience, we collaborate with start-ups that approach the traditional energy market from a different view point. Currently, 50Hertz is working on a project to investigate how it can improve weather forecasts and grid forecasting with the help of artificial intelligence.

Hack Belgium

This year, Elia participated in the second edition of Hack Belgium. The event brought together experts from various sectors, entrepreneurs and other enthusiastic and talented individuals to develop innovative ideas that will benefit Belgian society.

By participating, Elia demonstrates its commitment to taking innovative and socially responsible action on behalf of the energy transition and Belgium's future. This also allows Elia's employees to cultivate the entrepreneurial and innovative mind-set that is so important to the company's future.

InnoDC consortium

The increasing integration of HVDC and renewable energy has transformed the grid and our understanding of it. These changes are challenging the operation of power systems. It is Elia's responsibility to guarantee the safe and reliable operation of the system, which makes it fundamental to understand what the impact of these new scenarios is and how to face the new challenges.

That is why we decided to join InnoDC, a consortium of 14 partners from industry, academia and the third sector offering a development path to researchers across Europe in the area of offshore wind and Direct Current (DC) grids. Funded by the European Commission's Horizon 2020 programme, 15 early stage researchers enrolled at the partner universities will receive training about offshore wind power and DC grids, preparing them for their role in the energy transition.

At Elia, an early stage researcher will be working on determining what modelling approaches and software tools are required to study power systems with a high penetration of power electronic devices. This allows us to better grasp existing software tools and suggest improvements. The research focuses on how to accurately model the components of the power system and to assess what level of modelling detail is really needed for different types of system studies with this new technology.

The Elia share in 2018

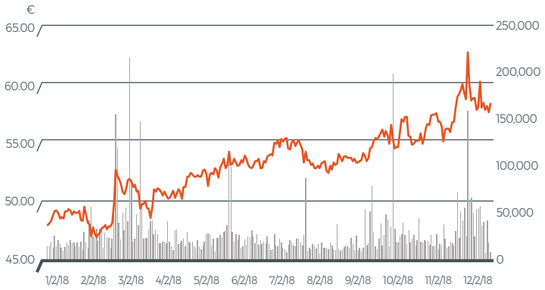
ELIA ON THE STOCK EXCHANGE

Another strong performance of the Elia share, hitting a new record high in 2018. The year ended at a price of €58.30, c. 21.7% higher than in 2017, outperforming the BEL 20 Index.

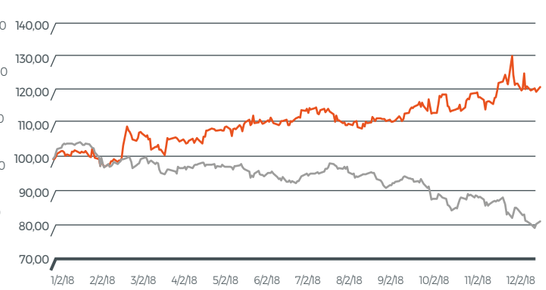
"Driven by the acquisition of the additional 20% stake in Eurogrid, resulting in its full control, and the investments we are making in our infrastructure to steer the energy transition, the Elia Group showed a further increase in its net profit"

Catherine Vandenborre – Chief Financial Officer at Elia

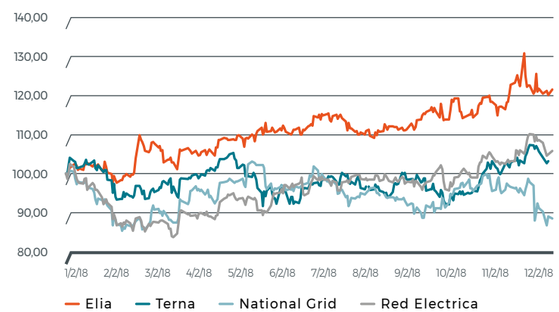
EVOLUTION IN PRICE AND TRADED VOLUMES



EVOLUTION OF THE ELIA SHARE AGAINST THE BEL20 INDEX



EVOLUTION OF THE ELIA SHARE AGAINST ITS EUROPEAN COUNTERPARTS



61%

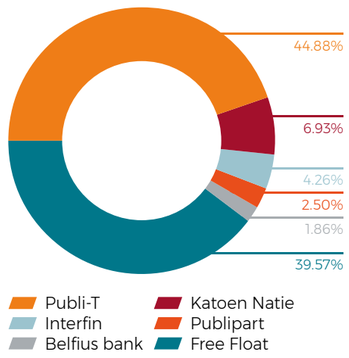
CONTRIBUTION OF GERMANY TO THE NORMALISED NET PROFIT OF THE ELIA GROUP

€ 1.66

GROSS DIVIDEND PER SHARE

Elia Group achieved strong financial performance in 2018 supported by the acquisition of an additional 20% stake in Eurogrid International. Fuelled by strong intermediary results, the full control and consolidation of 50Hertz and the realisation of strategic investments in the interest of society, shareholder confidence further increased in 2018. This was also reflected in the strong performance of the Elia share price, closing the year at a price of €58.30, up 21.7% from €47.90 at the end of 2017. The lowest price in 2018 of €46.90 was reached on 9 February, while the highest price was €62.70 on 10 December.

SHAREHOLDER STRUCTURE



The yearly return including the dividend is 24.3% and hereby largely outperforming peers and the BEL 20 Index.

The liquidity of the share remained flat compared to 2017 (from 28.106 shares per day on average in 2017 to 27.793 in 2018).

With 61,015,058 shares outstanding, the company's market capitalisation stood at €3,557,177,881 at the end of December. In 2018, 7,087,338 Elia shares were traded on the Euronext Brussels market.

Appointment of three liquidity providers for the Elia share

In late 2009 Elia concluded a liquidity provider contract with KBC Securities and Bank Degroof, both of which are officially recognised by NYSE Euronext. In 2014, a third contract was concluded with Belfius Bank. These three financial institutions have been continually present in the order book for the Elia share and are involved in both sales and purchases.

Dividend

On 21 February 2019, the Elia Board of Directors decided to propose a nominal dividend of €101.3 million, or €1.66 per share (gross) to the general meeting of shareholders of 21 May 2019, in accordance with the dividend policy and subject to approval of the profit appropriation by the annual general meeting of shareholders. This represents an increase in dividend for the fourth consecutive year and an increase of 2.5% compared to 2017.

This gives a net dividend of €1.162 per share.

The following paying agents will pay out dividends to shareholders: BNP Paribas Fortis, ING Belgium, KBC and Belfius. Dividend pay-outs for shares held in a stock account will be settled automatically by the bank or stockbroker. Elia will pay out dividends on registered shares directly to shareholders.

Dividend policy

On March 21, 2019 the Board of Directors formally approved the policy it intends to apply when proposing dividends to the General Shareholder's Meeting. Under this policy, the full-year dividend growth is intended not to be lower than the increase of the Consumer Price Index ("inflation") in Belgium.

The approved dividend policy confirms the Company's existing dividend practice. It supports the Company's long-term ambition to offer a secure dividend in real terms to the shareholders while at the same time enabling the Company to sustain a strong balance sheet that is needed to fund the Company's investment program.

The Board of Directors specifies that future dividends will remain dependent upon the results of the Company (which are affected by a number of factors, including the evolution of the long term interest rates in Belgium and factors outside the Company's control) as well as the Company's financial situation, financing needs (in particular, capital expenditures and investment plan) and business perspectives.

The proposed dividend represents a pay-out ratio of 36.80% of the IFRS reported profit attributable to owners of ordinary shares..

FINANCIAL CALENDAR

12 April 2019	2018 Annual Report available on the website
21 May 2019	General meeting of shareholders
22 May 2019	Interim statement for Q1 2019
31 May 2019	Payment of 2018 dividend
26 July 2019	Publication of half-yearly results for 2019
29 November 2019	Interim statement for Q3 2019

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Information about the Group (press releases, annual reports, share prices, disclosures, etc.) can be found on the Elia Group website www.eliagroup.eu.

Key figures

(in million EUR)	2018	2017[5]	2016	2015	2014[3, 4]
Consolidated results					
Total revenue and other operating income	1,931.8	867.1	868.1	851.4	836.3
EBITDA [1]	750.5	455.4	425.0	442.8	402.6
Results from operating activities (EBIT) [2]	*502.6*	*324.6*	*295.0*	*336.4*	*289.7*
Net finance costs	(93.2)	(76.5)	(82.9)	(92.8)	(100.6)
Income tax	(102.2)	(39.6)	(32.0)	(32.9)	(21.4)
Normalised net result	280.8	203.4	168.0	175.8	153.4
Reported net result	307.1	208.5	179.9	210.6	167.9
Non-controlling interest	*25.7*	*0.0*	*0.0*	*0.0*	*0.0*
Hybrid securities	*6.2*	*0.0*	*0.0*	*0.0*	*0.0*
Profit attributable to owners of ordinary shares	275.2	208.5	179.9	210.6	167.9

(in million EUR)	31.12.2018	31.12.2017	31.12.2016	31.12.2015	31.12.2014
Consolidated balance					
Total assets	13,754.3	6,582.3	6,241.5	6.435,6	5.697,0
Equity attributable to owners of the company	3,447.5	2,563.3	2,511.4	2.413,6	2.285,1
Equity attributable to ordinary shares	*2,741.3*	*2,563.3*	*2,511.4*	*2.413,6*	*2.285,1*
Hybrid securities	*706.2*	*0.0*	*0.0*	*0.0*	*0.0*
Net financial debt	4,605.6	2,689.1	2,557.3	2.583,4	2.539,2

	31.12.2018	31.12.2017	31.12.2016	31.12.2015	31.12.2014
Other key figures					
Regulatory Asset Base (RAB) (bn EUR) [6]	9.2	7.4	7.1	6.7	6.1
Dividend per share (EUR)	1.66	1.62	1.58	1.55	1.54
Return on Equity (%)	8.16%	8.14%	7.16%	8.73%	7.35%
Return on Equity (adj.) [7]	10.04%	8.14%	7.16%	8.73%	7.35%
Earnings per share (adj.) (EUR) [8]	4.52	3.42	2.95	3.47	2.77
Equity per share (EUR)	44.9	42.1	41.2	39.7	37.6
Number of shares (period-end)	61,015,058	60,901,019	60,753,714	60,750,239	60,738,264

1 EBITDA = EBIT + depreciation/amortisation + changes in provisions
2 EBIT = result from operating activities and share of profit of equity-accounted investees (net of income tax) vermogensmutatiemethode, na winstbelastingen
3 As from 2014, the companies previously consolidated proportionately are now accounted for using the equity method.
4 The figures of 2014 have been restated for the recognition of the reimbursement rights in accordance with IAS19
5 The Group applies IFRS 15 under the full retrospective method under which comparative figures for financial year 2017 have been restated
6 RAB includes 60% of 50Hertz until 2017 and 80% as of 2018
7 EPS (adj.) = Net profit attributable to owners ordinary shares / weighted average number of shares
8 RoE (adj.) = Net profit attributable to owners ordinary shares / equity attributable to owners of ordinary shares

Management discussion and analysis of the 2018 results

Strengthening Elia's position in 50Hertz while progressing well on key investments

- Grid investments of €636.7 million in Belgium and €491.5 million in Germany to ensure a reliable, sustainable and affordable energy system that meets society's demand for appropriate actions against global warming and climate change.
- Acquisition of an additional 20% stake in Eurogrid International in April 2018, resulting in full control of Eurogrid and a change in consolidation method
- The normalised net profit of the Elia Group is up 38.0% to € 280.8 million as a result of the acquisition of additional shares of Eurogrid, solid operational performance and release of a legal claim provision in Germany together with the realisation of strategic investments in Belgium.
- The net profit (Elia Group Share)[1] is up 32.0% to €275.2 million
- A dividend of € 1.66 per share will be proposed at the General Assembly of 21 May 2019
- Elia and 50Hertz continue to provide very high system reliability (99.999%), benefitting 30 million end-users in Belgium and Germany

ELIA GROUP (in million EUR)	2017[2]	2018
Total revenues	867.1	1,931.8
EBITDA	455.4	750.5
EBIT	324.6	502.6
Non-recurring items	*0.1*	*28.1*
Normalised EBIT[3]	324.7	474.5
Net financial costs	(76.5)	(93.2)
Normalised net profit	**203.4**	**280.8**
Reported net profit	208.5	307.1
Non-controlling interests	*0.0*	*25.7*
Net profit attributable to the Group	208.5	281.4
Hybrid securities	*0.0*	*6.2*
Net profit attributable to ordinary shareholders	208.5	275.2
Total assets	6,582.3	13,754.3
Total equity attributable to owners of the company	2,563.3	3,447.5
Net financial debt	2,689.1	4,605.6
CAPEX[4]	946.2	1,128.2
Reported earnings per share (EUR) (Elia share)	3.42	4.52
Return on Equity (adj.) (%) (Elia share)	8.14	10.04
Equity attributable to owners of the company per share (EUR)	42.1	44.9

(1) Net profit attributable to owners of ordinary shares (post non-controlling interest and post hybrid coupon)
(2) The Group applies IFRS 15 under the full retrospective method under which comparative figures for financial year 2017 have been restated
(3) The term "normalised" refers to performance measures (EBIT, Net Profit) before non-recurring items. Non-recurring items are either income or expenses which do not occur regularly as part of the normal activities of the company. They are presented separately because they are important for the understanding of the underlying sustainable performance of the company due to their size or nature
(4) CAPEX amount include 100% of the investment realised in Germany.

Results

The 2018 financial statements are strongly affected by the acquisition of an additional 20% stake in Eurogrid, which Elia acquired on 26 April 2018. This transaction increased Elia's shareholding in Eurogrid from 60% to 80%, giving Elia full control over Eurogrid. The consolidation of Eurogrid and its affiliates consequently switched from the equity method, which applied for the first four months of the 2018 financial year, to a full consolidation as from acquisition (May 2018). The total acquisition price amounts to €976.5 million for the additional 20% stake, plus €12.2 million in interest.

The acquisition was fully financed by the issuance of a €700 million hybrid bond and a €300 million senior bond, the lending costs of which are regarded as non-regulated and therefore not covered by the tariffs. The hybrid bond has no profit impact as it is equity accounted under IFRS due to its perpetual nature and the issuer's ability to optionally defer the coupons.

The **Elia Group's normalised net profit** increased by 38.0% to €280.8 million. This increase was the result of the aforementioned acquisition (and its consolidation impact) and a higher normalised result for both Elia Transmission and 50Hertz Transmission, partially offset by the higher non-regulated cost for financing the additional stake in Eurogrid.

- **Elia Transmission (Belgium)** achieved strong results, with a normalised net profit of €114.9 million (up 17.2%) driven by the full realisation of the mark-up investments since the start of the tariff period in 2016 (up €11.1 million), the higher average equity and OLO compared to 2017 (up €2.9 million) and lower regulatory settlements from the previous year (up €1.7 million). These impacts were offset to some extent by a lower contribution from incentives (down €1.8 million). Finally, the normalised net profit benefitted from limited damage to electrical installations (up €2.5 million).

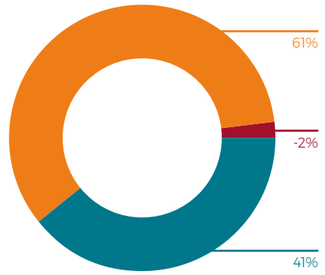
- **50Hertz Transmission (Germany) (on a 100% basis)** achieved a strong increase in normalised net profit (up 18.5%), mainly due to the release of a legal claim provision (up €50.8 million). This provision was established after German unification to cover possible legal claims by landowners in East Germany. Following a reassessment driven by a tax audit, part of the provision was released. A major portion (€48.7 million) was released in April and therefore only 60% was attributable to Elia. The ongoing investment programme at 50Hertz also resulted in higher remuneration on both onshore and offshore CAPEX (up €22.1 million) and the operating costs and other costs further decreased (up €5.5 million) on the back of the efficiency programme launched in 2017. Furthermore, the offshore investment cost coverage fell by €40.4 million, due to the transition towards a cost-plus mechanism in 2019. Indeed, the regulatory allowance for offshore OPEX changed from a 3.4% OPEX lump sum on invested CAPEX, as applied in the past, to a pass-through mechanism for incurred costs. Finally, considering the higher depreciations (down €8.3 million) linked to the ongoing investment programme and lower financial costs (up €6.3 million), the normalised net profit for the German activities amounted to € 216.3 million.

- The **non-regulated segment (incl. NemoLink)**, recorded a normalised net loss of €7.8 million (down €2.9 million). This loss is due to the non-regulated financing costs for the aforementioned acquisition (not covered by the tariffs) and EGI's lower result. As the NemoLink interconnector was not yet operational by year end 2018, its net contribution to the result was limited to €0.7 million.

The **Elia Group net profit** saw a more pronounced increase (up 47.3%) to €307.1 million. This increase is mainly related to non-recurring income linked to the acquisition (€4.3 million), as well as revenue linked to the partial commissioning of the Ostwind 1 offshore connection at 50Hertz Transmission (€23.5 million).

The **net profit of the Elia Group attributable to owners of ordinary shares** (after deducting the €25.7 million in non-controlling interests and €6.2 million attributable to hybrid securities holders) was up 32.0% to €275.2 million. This increase was driven by the acquisition of the additional 20% stake in Eurogrid and the combined result of an increase in net profit in both Belgium and Germany.

NORMALISED NET PROFIT



Capital expenditures

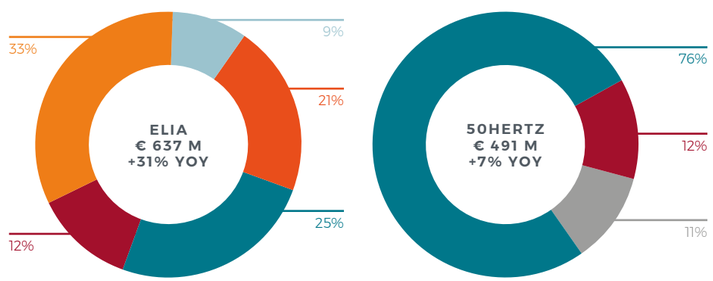
By expanding international connections and integrating ever-increasing amounts of renewable energy generation, Elia Group promotes both the integration of the European energy market and the decarbonisation of our society

Infrastructure work for greater interconnectivity

Major progress was made in **Belgium** on the construction of two new interconnectors: **NemoLink** (with Great Britain) and **ALEGrO** (with Germany). Greater interconnectivity promotes the increased integration of renewable energy and allows for more affordable prices on the European internal market. Nemo Link is a joint venture with National Grid Ventures (UK) and began commercial operations on January 30th 2019 (transfer capacity of 1,000 MW). The two converter stations on both sides of the Channel (in Bruges and Richborough) convert the high voltage direct current (HVDC) from the 140 km subsea cable into alternating current for transmission onshore (and vice versa). Work on the ALEGrO project began in mid-January 2018 and should take two years to complete. The 90-km-long underground HVDC connection (40 km of which is laid in Belgium) is being built in partnership with the German system operator Amprion.

In **Germany**, a major achievement in 2018 was the commissioning of **phase-shifting transformers** (PST) in Röhrsdorf and Vierraden for the interconnectors to the Czech Republic and Poland respectively. Both projects highlight the close working relationship between 50Hertz and its neighbouring transmission system operators. The PSTs enable the TSOs to jointly steer the international electricity flows in a more efficient way, thus helping to manage the costs of redispatching, as well as enabling higher trading capacities between EU member states. As part of an innovative project, 50Hertz installed the interconnector between two offshore wind farms, known as the **Combined Grid Solution** project (transfer capacity of 400 MW). This is a joint project with the Danish system operator Energinet. The interconnector runs between the Kriegers Flack (DK) and Baltic 2 (GE) offshore wind farms which are located barely 30 km apart. By the end of the year both offshore cables connecting the Danish and the German platform have been energised. The Combined Grid Solution project is a world first ever combination of an offshore interconnector and an offshore wind park. It will be commissioned over the course of 2019.

INVESTMENTS



Infrastructure work to integrate offshore wind

In **Belgium**, the construction of the **Modular Offshore Grid** (MOG) progressed rapidly in 2018. The offshore switchyard is being built 40 km off the coast of Zeebrugge. The MOG will serve as a 'plug' for cables from the new offshore wind farms to bring offshore wind power to the mainland. In 2018, the jacket was successfully installed while the topside was being completed. Cable production is on track and ready for installation in 2019.

In **Germany**, 50Hertz achieved the cable connections (spanning 190 km in total) for two offshore wind farms in the Baltic Sea: Arkona-Becken Südost and Wikinger, which have a capacity of 385 MW and 350 MW respectively. Works on these offshore grid connections, better known as **Ostwind 1** began in 2015. The Arkona offshore switchyard platform was successfully placed on its foundations in early April. In October 2018 the subsea cable was laid between the Wikinger offshore wind farm (Iberdrola) north of Rügen island and the connection point with the 50Hertz grid in Lubmin. In 2018 Wikinger fed in 885 GWh renewable energy into the 50Hertz grid, an amount equal to the electricity consumption of 220,000 households.

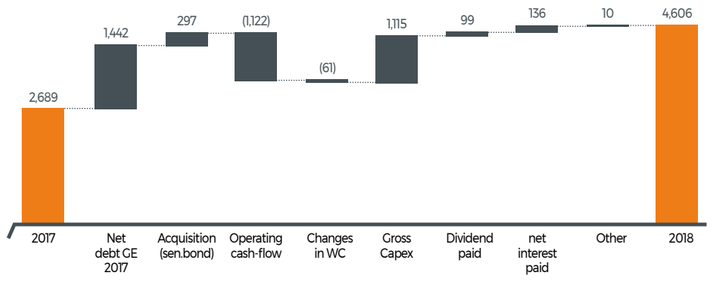
Following an offshore wind tender in late April 2018, Germany's Bundesnetzagentur (Federal Network Agency) allocated 733 MW of connection capacity to the Baltic Sea, specifically to the Arcadis-Ost 1, Baltic Eagle and Wikinger Süd wind farms. After initiating talks with the wind farm operators, 50Hertz awarded the contract to manufacture and install three 220 kV AC cables (alternating current) for the **Ostwind 2** project to the consortium NKT-Boskalis.

Net debt & credit metrics

(in € million)	2017	2018
Net debt	2,689.1	4,605.6
Leverage (D/E) (incl. NCI & hybrid))	1.12x	1.71x
Net debt / EBITDA	5.9	6.1
EBITDA / Gross interest	5.6	6.5
Average cost of debt	2.92%	2.30%
% fixed of gross debt	82.51%	92.16%

Net financial debt increased to €4,605.6 million, €1,272.9 million of which is linked to the full consolidation of Eurogrid. Net debt increased further with the issue of €300 million senior bond to finance the aforementioned acquisition and a €210 million bank loan was taken out to fund NemoLink. With regard to Elia Transmission, the sizeable CAPEX programme was mainly financed by cash flow from operating activities, the use of €50 million of commercial paper and €100 million EIB loan. Within Eurogrid, no external debt was issued in 2018.

2018 NET DEBT EVOLUTION



Elia Transmission in Belgium

(in € million)	2017[5]	2018
Total revenues	851.3	959.4
EBITDA	349.7	369.1
EBIT	218.9	228.9
Non-recurring items	0.0	0.0
Normalised EBIT	218.9	228.9
Net financial costs	(77.1)	(65.4)
Normalised net profit	**98.0**	**114.9**
Net profit	**103.0**	**114.9**
Total assets	5,449.0	5,909.2
Total equity	1,687.1	1,757.1
Net financial debt	2,511.9	2,825.1
Free cash flow	(32.8)	(263.3)

Elia Transmission's revenue rose to €959.4 million, a 12.7% increase on the same period the previous year. The increase in revenue is the result of a higher allowed regulated net profit, higher depreciations and higher taxes that are passed through into revenue. These increases were partly offset by lower costs, mainly for ancillary services and financing, which are all passed through into revenue to the benefit of consumers.

The **EBITDA** (up 5.5%) and **EBIT** (up 4.5%) were mainly affected by increased regulated net profit, higher depreciations, lower financing costs and higher current taxes to be passed on in the tariffs, partly offset by the lower result of equity-accounted investments.

Net **finance costs** (down 15.2%) fell by €11.7 million compared to the previous year. Over the course of 2018, interest rate swap contracts which matured at the end of 2017, have been renewed at lower interest rates benefitting from the low interest rate environment. The lower lending costs are entirely to the consumer's benefit, in accordance with the regulatory framework.

This resulted in an increased **normalised net profit** to € 114.9 million (up 17.2%). As no non-recurring items were recognised in 2018, the **reported net profit** increased to a lesser extent, up 11.5%.

Total **assets** increased by €460.2 million to €5,909.2 million, mainly as a result of the investment programme. The **equity** mainly increased as a result of the reservation of the 2018 profit and the capital increase of €5.3 million reserved for personnel, minus the contribution of regulated activities to the 2017 dividend payment.

€ 114.9 mio

NET PROFIT IN 2018 FOR ELIA TRANSMISSION IN BELGIUM

50Hertz Transmission in Germany

(in € million)	2017[5]	2018
Total revenues	1,330.2	1,364.9
EBITDA	472.4	475.0
EBIT	322.6	385.4
Non-recurring items	0.2	30.6
Normalised EBIT	322.4	354.8
Net financial costs	(54.3)	(45.6)
Normalised net profit	**182.6**	**216.3**
Net profit	**182.7**	**237.9**
Attributable to the Elia Group	**109.6**	**169.2**
Total assets	6,188.1	6,752.1
Total equity	1,354.4	1,491.8
Net financial debt	1,442.3	1,272.9
Free cash flow	283.8	278.7

50Hertz Transmission's revenue increased by 2.6% compared to the same period last year. This was the result of growing revenue following the ongoing CAPEX programme, partially offset by lower pass-through energy costs and a reduced allowance for offshore operational costs.

EBITDA increased slightly by €2.6 million to €475.0 million (up 0.5%). Total investment remuneration fell (down €25.9 million), as the higher onshore (up €17.5 million) and offshore (up €14.0 million) remuneration triggered by the ongoing investment programme, was more than offset by the lower regulatory allowance for offshore OPEX (down €57.4 million). The regulatory revenues from the Base Year mechanism decreased (down €3.3 million) from the annual adjustment for inflation and efficiency targets linked to the application of the regulatory framework. OPEX and other costs fell slightly (up €2.4 million). The efficiency programme implemented in 2017, resulted in a further drop in several operational expenses, such as maintenance and insurance, while own work capitalised revenues increased due to a higher allocation of personnel costs to new investments and were only partially offset to a certain extent by higher personnel costs, driven by both an increase in tariff wages and additional staffing to roll out the growing investment programme.

Normalised EBIT (up 10.1%) was further impacted by the release of a provision for legal claim easements (up €72.1 million). Following a reassessment driven by a tax audit, part of the provision was released. This was partly offset by the increased depreciations resulting from the commissioning of the southwest coupling line and the North Ring in the second half of 2017 and the partial commissioning of Ostwind 1 in 2018 (down €11.8 million).

In light of non-recurring revenue linked to the partial commissioning of the Ostwind 1 project (€33.3 million) and a bonus for the efficient management of renewable energies (€0.1 million), partially offset by regulatory settlement of prior years (-€2.8 million), the **reported EBIT** totalled €385.4 million.

Total assets increased by € 564.0 million to €6,752.1 million (up 9.1%), mainly driven by the investments made and a further increase in the cash position.

Finally, 2018 showed a positive **free cash flow** of €278.7 million, thereof €84.3 million generated by the EEG mechanism. The ongoing investment programme has been financed by operating cash flow and working capital. No new long term debt was issued by Eurogrid GmbH in 2018. **Net financial debt** consequently fell to €1,272.9 million compared to the end of 2017. It includes an EEG cash position of €859.4 million.

€ 237.9 mio

NET PROFIT IN 2018 FOR 50Hertz TRANSMISSION IN GERMANY

(5) The Group applies IFRS 15 under the full retrospective method under which comparative figures for financial year 2017 have been restated.

Non-regulated activities of the Group (including NemoLink)

(in € million)	2017	2018
Total revenues	19.8	13.9
EBITDA	(2.6)	(7.9)
EBIT	(3.0)	(8.9)
Non-recurring items	0.0	(3.3)
Normalised EBIT	(3.0)	(5.6)
Net financial costs	0.6	1.3
Normalised net profit	**(4.9)**	**(7.8)**
Net profit	**(4.9)**	**(3.5)**
Attributable to the Elia Group	**(4.1)**	**(2.8)**
Total assets	594.4	1,677.9
Total equity	334.7	1,052.7
Net financial debt	171.4	507.6

The **non-regulated revenue** decreased by 29.9% compared with 2017. This was mainly due to EGI revenue, which fell from €13.2 million to €9.5 million due to the decline in owner engineering services rendered compared to 2017 levels. Furthermore, the 2018 sale of the Training and Research Centre for Power Systems Security (GridLab) to DNV GL resulted in lower revenue (down €1.0 million).

A **normalised operating loss (EBIT)** of €5.6 million was generated due to higher non-regulated costs and the lower contribution from EGI, partially offset by a limited contribution from NemoLink (as not yet in operation in 2018). The **reported operating loss** increased more markedly to €8.9 million as the acquisition of Eurogrid generated non-recurring expenses of €3.3 million related to legal and advisory fees.

The **net finance income** increased to €1.3 million, primarily as a result of the acquisition of an additional stake in Eurogrid, which is considered as non-regulated financing and therefore does not affect tariffs. The remeasurement to fair value of the Group's initial 60% shareholding in Eurogrid resulted in the recognition of a financial non-recurring gain of €9.2 million, partly offset by the financial costs of financing this transaction. First, a bridge loan of €968.1 million was taken out, resulting in financial expenses of €1.8 million. In August, the bridge was successfully refinanced through the issue of a €300 million senior bond (coupon 1.50%) and a €700 million hybrid bond (coupon 2.75%). While the hybrid bond has no profit impact (accrued dividends are directly accounted in equity), €2.6 million of interest costs have been recognised for the senior bond (incl. issuance and hedging costs). In addition, the mid swap rate for both the senior and hybrid bond were fully hedged. The unwinding of the hedge linked to the hybrid bond resulted in a non-recurring financial loss of €3.2 million.

The **normalised net loss** increased to €7.8 million and is mainly related to the financing cost for the acquisition of Eurogrid (down €3.5 million), lower result from EGI (down €0.5 million) and higher non-regulated costs. As NemoLink was not yet in operation in 2018, the net contribution from NemoLink was limited to €0.7 million. Taking into account non-recurrent items, the **reported net loss** decreased to €3.5 million, as the remeasurement to fair value of the Group's initial participation in Eurogrid (up €9.2 million) was partially offset by acquisition-related expenses and non-recurrent financing and hedging costs (down €4.9 million).

Total **assets** increased by €1,083.5 million to €1,677.9 million driven by the increased participation in Eurogrid on which a goodwill of €703.3 million was recognised. Consequently, the **net financial debt** increased to €507.6 million and mainly reflects the senior bond contracted to finance the additional 20% stake in Eurogrid.

Non-recurring items - reconciliation table

PERIOD ENDED 31 DEC. 2018 (in € million)	ELIA TRANSMISSION	50HERTZ TRANSMISSION 100%	NON-REGULATED (INCL. NEMOLINK) (100%)	CONSOLIDATION ENTRIES	ELIA GROUP
EBIT – Non-recurring items					
Regulatory settlements prior year	0.0	(2.8)	0.0	1.4	(1.4)
Equity consolidation 50Hertz (60% net profit)	0.0	0.0	0.0	(0.6)	(0.6)
Offshore commissioning	0.0	33.3	0.0	0.0	33.3
Energy bonuses	0.0	0.1	0.0	0.0	0.1
Eurogrid acquisition costs	0.0	0.0	(3.3)	0.0	(3.3)
Total EBIT non-recurring items	**0.0**	**30.6**	**(3.3)**	**0.8**	**28.1**
Non-recurring financial cost	0.0	0.0	(3.8)	0.0	(3.8)
Revaluation participation Eurogrid	0.0	0.0	9.2	0.0	9.2
Total Before tax non-recurring items	**0.0**	**30.6**	**2.1**	**0.8**	**33.5**
Impact tax reform on deferred tax	0.0	0.0	0.0	0.0	0.0
Tax impact	0.0	(9.0)	2.2	(0.4)	(7.3)
Net profit non-recurring items	**0.0**	**21.6**	**4.3**	**0.4**	**26.3**

PERIOD ENDED 31 DEC. 2017 (in € million)	ELIA TRANSMISSION	50HERTZ TRANSMISSION 100%	NON-REGULATED (INCL. NEMOLINK) (100%)	CONSOLIDATION ENTRIES	ELIA GROUP
EBIT – Non-recurring items					
Regulatory settlements prior year	0.0	(4.6)	0.0	4.6	0.0
Equity consolidation 50Hertz (60% net profit)	0.0	0.0	0.0	0.1	0.1
Energy bonuses	0.0	4.8	0.0	(4.8)	0.0
Total EBIT non-recurring items	**0.0**	**0.2**	**0.0**	**(0.1)**	**0.1**
Impact tax reform on deferred tax	5.0	0.0	0.0	0.0	5.0
Tax impact	0.0	(0.1)	0.0	0.1	0.0
Net profit non-recurring items	**5.0**	**0.1**	**0.0**	**(0.1)**	**5.1**

Following the acquisition of the additional 20% stake in Eurogrid International, the non-regulated segment (incl. NemoLink) recognised a non-recurrent profit of €4.3 million, as the remeasurement to fair value of the Group's initial participation in Eurogrid (€9.2 million) was partially offset by acquisition-related expenses and non-recurrent financing and hedging costs (-€4.9 million).

At 50Hertz Transmission these items are mainly linked to the partial commissioning of the Ostwind 1 project (€33.3 million) and a bonus for the efficient management of renewable energies (€0.1 million), partially offset by regulatory settlement of prior years (-€2.8 million).

Reporting parameters

Registered office

This report is limited to Elia System Operator and Elia Asset, which operate as a single economic entity under the names Elia and 50Hertz Transmission.

The registered office of Elia System Operator and Elia Asset is located at
Boulevard de l'Empereur 20
1000 Brussels, Belgium

The registered office of 50Hertz GmbH is established at
Heidestraße 2
D-10557 Berlin, Germany

The registered office of Eurogrid International is located at
Rue Joseph Stevens, 7
1000 Brussels, Belgium

The registered office of Elia Grid International is located at
Rue Joseph Stevens, 7
1000 Brussels, Belgium

Reporting period

This annual report covers the period from 1 January 2018 to 31 December 2018.

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Pascale Fonck

Ce document est également disponible en français.
Dit document is ook beschikbaar in het Nederlands.

We would like to thank everyone who contributed to this annual report.

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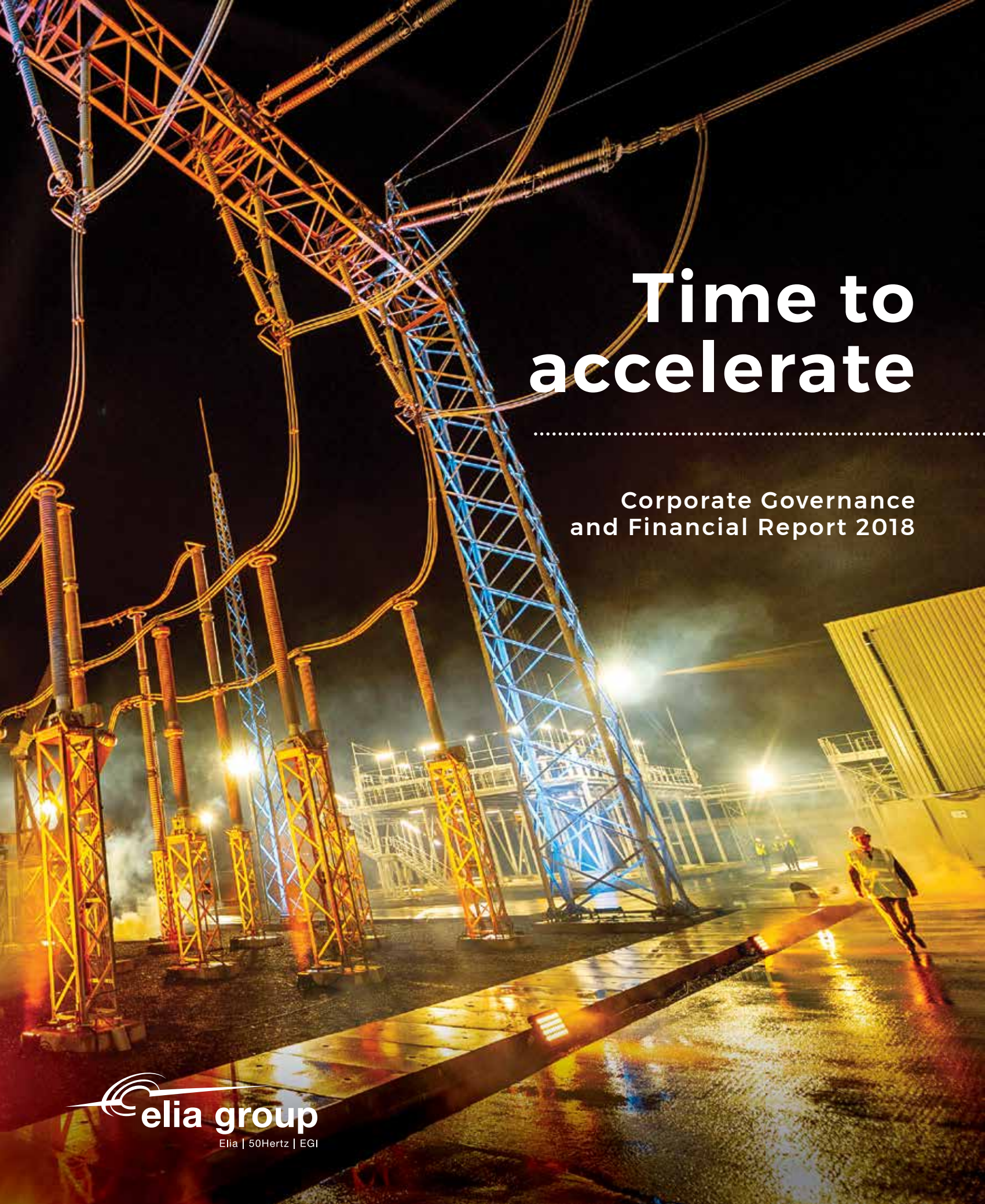

Time to accelerate

Corporate Governance and Financial Report 2018

elia group

Elia | 50Hertz | EGI

Contents

* These chapters form the annual report cf. article 119 of the Belgian company code

Regulated information, published on 12 April 2019 after trading hours.

Corporate governance statement

Elia satisfies specific obligations in terms of transparency, neutrality and non-discrimination towards all stakeholders involved in its activities.

At Elia, corporate governance is based on two pillars:

- the 2009 Corporate Governance Code[1], which Elia has adopted as its benchmark code;
- the Act of 29 April 1999 on the organisation of the electricity market and the Royal Decree of 3 May 1999 on the management of the electricity transmission system applicable to Elia as a transmission system operator.

BOARD OF DIRECTORS


Bernard Gustin


Claude Grégoire


Geert Versnick


Michel Allé


Luc De Temmerman


Frank Donck


Cécile Flandre


Philip Heylen


Luc Hujoel


Roberte Kesteman


Jane Murphy


Dominique Offergeld


Rudy Provoost


Saskia Van Uffelen

1 The Corporate Governance Code can be found on the website of the Corporate Governance Committee (www.corporategovernancecommittee.be).

COMPOSITION OF THE MANAGEMENT BODIES AS AT 31 DECEMBER 2018

Board of Directors

CHAIRPERSON
- Bernard Gustin, independent director

VICE-CHAIRPERSONS[2]
- Claude Grégoire, director appointed upon proposal of Publi-T
- Geert Versnick, director appointed upon proposal of Publi-T

DIRECTORS
- Michel Allé, independent director
- Luc De Temmerman, independent director
- Frank Donck, independent director
- Cécile Flandre, director appointed upon proposal of Publi-T
- Claude Grégoire, director appointed upon proposal of Publi-T
- Bernard Gustin, independent director
- Philip Heylen, director appointed upon proposal of Publi-T
- Luc Hujoel, director appointed upon proposal of Publi-T
- Roberte Kesteman, independent director
- Jane Murphy, independent director
- Dominique Offergeld, director appointed upon proposal of Publi-T
- Rudy Provoost, director appointed upon proposal of Publi-T
- Saskia Van Uffelen, independent director
- Geert Versnick, director appointed upon proposal of Publi-T

REPRESENTATIVE OF THE FEDERAL GOVERNMENT WITH AN ADVISORY ROLE
- Nele Roobrouck

Advisory Committees to the Board of Directors

CORPORATE GOVERNANCE COMMITTEE[3]
- Luc Hujoel, Chairman
- Luc De Temmerman
- Frank Donck
- Philip Heylen
- Jane Murphy

AUDIT COMMITTEE[4]
- Michel Allé, Chairman
- Frank Donck
- Roberte Kesteman
- Dominique Offergeld
- Rudy Provoost

REMUNERATION COMMITTEE[5]
- Luc De Temmerman, Chairman
- Philip Heylen
- Roberte Kesteman
- Dominique Offergeld
- Saskia Van Uffelen

STRATEGIC COMMITTEE[6]
- Rudy Provoost, Chairman
- Claude Grégoire
- Bernard Gustin
- Luc Hujoel
- Geert Versnick
- Michel Allé, permanent invitee

Auditors

- KPMG Réviseurs d'Entreprises SCCRL, represented by Alexis Palm
- Ernst & Young Réviseurs d'Entreprises SCCRL, represented by Patrick Rottiers

Management Committee

- Chris Peeters, Chairman and Chief Executive Officer
- Markus Berger, Chief Infrastructure Officer
- Patrick De Leener, Chief Customers, Market & System Officer
- Frédéric Dunon, Chief Assets Officer
- Pascale Fonck, Chief External Relations Officer
- Peter Michiels, Chief Human Resources & Internal Communication Officer
- Ilse Tant, Chief Community Relations Officer
- Catherine Vandenborre, Chief Financial Officer

Secretary-General

- Aude Gaudy

2 Claude Grégoire and Geert Versnick were appointed as Vice-Chairpersons with effect from 22 March 2018.

3 Saskia Van Uffelen was a member of the Corporate Governance Committee until 22 March 2018. Luc De Temmerman was appointed as a member of the Corporate Governance Committee with effect from 22 March 2018.

4 Michel Allé, Acting Chairman of the Audit Committee, was appointed as the Chairman of the Audit Committee with effect from 22 March 2018. Luc De Temmerman and Geert Versnick were members of the Audit Committee until 22 March 2018. Roberte Kesteman and Rudy Provoost were appointed as members of the Audit Committee with effect from 22 March 2018.

5 Claude Grégoire was a member of the Remuneration Committee until 22 March 2018. Philip Heylen, Roberte Kesteman and Dominique Offergeld were appointed as members of the Remuneration Committee with effect from 22 March 2018.

6 The Strategic Committee was established by the Extraordinary General Meeting of Shareholders of 15 March 2018. The members of the Strategic Committee were appointed with effect from that same date.

Board of Directors

The Boards of Directors of Elia System Operator and Elia Asset consist of 14 members, none of whom perform an executive role within either of those two companies.

The same directors sit on the Boards of both companies.

Half of the directors are independent directors, satisfying the conditions set out in Article 526*ter* of the Belgian Companies Code, Article 2(30) of the Act of 29 April 1999 on the organisation of the electricity market and in the articles of association, and having received a positive opinion ("avis conforme"/"eensluidend advies") by the CREG on their independence. The other half are non-independent directors appointed by the General Meeting upon proposal of Publi-T, as per the current shareholder structure (see also the 'Shareholder structure' section on page 80 of this statement).

In accordance with provisions stipulated by legislation and the articles of association, these Boards of Directors are supported by four committees: the Corporate Governance Committee, the Audit Committee, the Remuneration Committee and the Strategic Committee, which are the same for Elia System Operator and Elia Asset. The Boards of Directors ensure that these committees operate in an efficient manner.

In accordance with the Act of 29 April 1999 on the organisation of the electricity market, the Belgian Companies Code and the articles of association of Elia System Operator and Elia Asset, at least one third (1/3) of the Board members must be of the opposite gender to the remaining two thirds. This one-third rule is applied proportionately to the independent and non-independent directors.

In addition, in accordance with the Corporate Governance Code 2009, the Internal Regulations of the Board of Directors and the Act of 3 September 2017 on the disclosure of non-financial information and diversity information by certain large companies and groups, the composition of the Board of Directors is based on gender diversity and diversity in general, as well as on the complementarity of skills, experience and knowledge.

When searching for and appointing new directors, special attention is paid to diversity parameters in terms of age, gender and complementarity.

Diversity within the Board of Directors

Number of people on the Board of Directors of Elia System Operator and Elia Asset as at 31 December 2018	Unit	2018
Men	Aged 35 – 55	3
	Aged ≥ 55	6
Women	Aged 35 – 55	2
	Aged ≥ 55	3

Changes in the composition of the Board of Directors

The composition of the Board of Directors did not change in 2018.

Term and expiry of directorships and appointment procedure

The directors of Elia System Operator and Elia Asset are appointed or reappointed for a six-year term.

The directorships of all of the directors are due to expire after the 2023 Ordinary General Meeting of Elia System Operator and of Elia Asset for the financial year ending 31 December 2022, with the exception of the directors mentioned below, whose directorships expire on different dates.

Luc De Temmerman, Frank Donck, Luc Hujoel, Saskia Van Uffelen and Geert Versnick's directorships of Elia System Operator and Elia Asset will expire after the companies' 2020 Ordinary General Meeting for the financial year ending 31 December 2019.

Michel Allé's independent directorship of Elia System Operator and Elia Asset will expire after the companies' 2022 Ordinary General Meeting for the financial year ending 31 December 2021.

The six-year term of these directorships diverges from the term of four years recommended by the Belgian Corporate Governance Code, a fact justified by the technical, financial and legal specificities and complexities associated with the tasks of the transmission system operator, which call for greater experience in those areas.

It should be remembered that the appointment of independent and non-independent directors of the Elia System Operator and Elia Asset Boards of Directors, as well as the composition and operation of their committees, are subject to specific corporate governance rules. These provisions are laid down in the Act of 29 April 1999 on the organisation of the electricity market and in the companies' articles of association.

The Act of 29 April 1999 on the organisation of the electricity market gave the Corporate Governance Committee an important task in the proposal of candidates for the role of independent director. The directors are appointed on the basis of a list of candidates drawn up by the Corporate Governance Committee. For each candidate, the Committee takes into account their up-to-date *curriculum vitae* and their sworn declaration concerning the independence criteria as stipulated by legislation applying to Elia and the company's articles of association. The General Meeting then appoints the independent directors. These appointments are submitted to the CREG for its opinion ("avis conforme"/"eensluidend advies") on the independence of each independent director. A similar procedure applies where an independent directorship becomes vacant during the relevant term of office and where the Board co-opts a candidate proposed by the Corporate Governance Committee.

The Corporate Governance Committee therefore acts as a nominating committee for independent directors. For the appointment of non-independent directors, there is no nominating committee to make recommendations to the Board. This situation therefore deviates from that prescribed by the Corporate Governance Code. This divergence can be explained by the fact that the Board of Directors always strives, insofar as possible, for consensus. Moreover, no significant decision can be made without a majority within the groups of independent directors and non-independent directors.

Board of Directors' activity report

GRI 102-19, GRI 102-26

The Board of Directors exercises at least the following powers (non-exhaustive list):

- It defines the general, financial and dividends policy of the company, as well as its values and strategy. In transposing the values and strategy into primary guidelines, the Board of Directors takes into account corporate social responsibility, gender diversity and diversity in general.
- It exercises the powers given to it by or pursuant to the Belgian Companies Code, by the Act of 29 April 1999 on the organisation of the electricity market and by the articles of association.
- It takes all action appropriate or necessary to carry out the corporate purpose, excluding powers reserved for the General Meeting by law or the articles of association.
- It ensures oversight. Within this context it provides, inter alia, general oversight of the Management Committee in accordance with legal restrictions concerning access to commercial data and other confidential information relating to grid users and the processing of such data; as part of this oversight, it also monitors the way in which the business of the company is carried out and developed in order to, among other things, assess whether the company is being properly managed. In addition, it monitors and evaluates the effectiveness of the advisory committees to the Board and the manner in which business is carried out.

In 2018, the Board of Directors of Elia System Operator met nine times, and the Board of Directors of Elia Asset met eight times. The board primarily focused on strategic issues (specifically the acquisition of an additional 20% stake in Eurogrid International SCRL, the holding company of the German TSO 50Hertz Transmission GmbH), the financial and regulatory situation of the company and its subsidiaries, and progress on major investment projects.

Members who are unable to attend usually have a representative. In accordance with Article 19.4 of the Elia System Operator articles of association and Article 18.4 of the Elia Asset articles of association, members who are absent or unable to attend may grant a written proxy to another member of the Board to represent them at a given meeting of the Board of Directors and vote on their behalf at that meeting. However, no representative can represent more than two directors.

Evaluation

The Board's evaluation procedure is conducted in accordance with principle 4 of the Corporate Governance Code, which the company has adopted as its benchmark code.

A new methodology for evaluating the functioning of the Board of Directors (including an evaluation of the overall contribution of the directors), the functioning of its committees and the interaction between the Board of Directors and the Management Committee was approved on 27 September 2018. According to this methodology, this evaluation at Elia is conducted by means of a transparent and regular procedure that sees directors complete an evaluation questionnaire, then undergo an individual interview with the Chairman of the Board of Directors, and the Chairman of the Corporate Governance Committee. The results are discussed by the Board of Directors and, as the case may be, appropriate actions are taken. Elia organised an evaluation of the functioning of the Board of Directors at the end of 2018. The results of this evaluation will be discussed in early 2019.

Auditors

The Ordinary General Meeting of Elia System Operator and Elia Asset held on 16 May 2017 reappointed Ernst & Young Réviseurs d'Entreprises SCCRL and KPMG Réviseurs d'Entreprises SCCRL as auditors of these companies for a period of three years. Their term of office will come to an end after the 2020 Ordinary General Meeting of Elia System Operator and Elia Asset relating to the financial year ending 31 December 2019.

Ernst & Young Réviseurs d'Entreprises SCCRL was represented by Patrick Rottiers for the exercise of this office.

KPMG Réviseurs d'Entreprises SCCRL was represented by Alexis Palm for the exercise of this office.

Significant events in 2018

Establishment of an ad-hoc advisory committee

The Board of Directors approved the establishment of an ad-hoc Advisory Committee under Article 522 of the Belgian Companies Code. The ad-hoc Advisory Committee was created to help the Board of Directors and the Management Committee exercise Elia System Operator's pre-emptive right to acquire an additional 20% stake in Eurogrid International SCRL, the holding company of the German TSO 50Hertz Transmission GmbH. As a result of the transaction, Elia now holds 80% of the shares in Eurogrid International SCRL.

The members of the ad-hoc Advisory Committee were Bernard Gustin (Chairman), Michel Allé, Luc Hujoel, Roberte Kesteman and Geert Versnick.

Amendments to the articles of association following implementation of the capital increase reserved for staff members

The Extraordinary General Meeting of Elia System Operator of 15 May 2018 approved the proposed capital increase reserved for members of staff of the company and its Belgian subsidiaries.

This capital increase took place in two stages, in December 2018 and March 2019, for a maximum total of €6 million (maximum of €5,300,000 in 2018 and maximum of €700,000 in 2019) subject to the issuing of new Class B shares, with cancellation of the preferential subscription right of existing shareholders in favour of staff members of the company and its Belgian subsidiaries, as the case may be, below the accounting par value of the existing shares in the same class.

The Extraordinary General Meeting decided to set the issue price for the 2018 capital increase at a price equal to the average of the closing prices on the 30 calendar days prior to 25 October 2018, less 16.66%.

The total value of the 2018 capital increase (including share premium) was €5,295,971.16. 114,039 Class B shares in Elia System Operator were issued.

Accordingly, Articles 4.1 and 4.2 of the articles of association of Elia System Operator relating to the share capital and the number of shares were amended on 20 December 2018.

The latest version of Elia System Operator's articles of association is available in full on the company's website (www.elia.be, under 'Elia', 'Corporate Governance', 'Documents').

Establishment of a Strategic Committee

The Extraordinary General Meeting of Elia System Operator and Elia Asset of 15 May 2018 approved the proposal to establish a Strategic Committee.

The Strategic Committee has an advisory role and is tasked with issuing recommendations to the Board of Directors on matters of strategy.

As such, the Strategic Committee is responsible for:

- identifying and examining market trends and contextual factors that could influence Elia Group's strategic direction and associated strategic choices and priorities in the medium and long term;
- preparing and maintaining a dialogue about the key issues and associated options and scenarios that are relevant for Elia Group's strategy in the medium and long term;
- developing and submitting proposals about the core strategic choices and priorities that will shape Elia Group's future in the medium and long term.

The members of the Strategic Committee are not remunerated, with the exception of the Chairman, who is remunerated in the same way as the Chairs of the Board of Directors' other advisory committees.

A new Article, 16*bis*, was added to the articles of association of Elia System Operator to take account of the establishment of the Strategic Committee.

The latest version of Elia System Operator's articles of association is available in full on the company's website (www.elia.be, under 'Elia', 'Corporate Governance', 'Documents').

Other significant events

For other significant events in 2018, please consult the pages 20-25 of the Elia Group Activity Report 2018.

Remuneration Committee

In addition to its usual support role to the Board of Directors, the Remuneration Committee is responsible, pursuant to Article 526*quater* of the Belgian Companies Code, the Act of 29 April 1999 on the organisation of the electricity market and the articles of association, for making recommendations to the Board of Directors regarding remuneration policy and the individual remuneration of members of the Management Committee and directors. The Remuneration Committee also draws up a remuneration report for presentation at the Ordinary General Meeting.

The Remuneration Committee of Elia System Operator met six times in 2018[7]. The Remuneration Committee of Elia Asset met five times in 2018.

The company evaluates its management staff on a yearly basis in accordance with its performance management policy. This policy also applies to members of the Management Committee. Accordingly, the Remuneration Committee evaluates the members of the Management Committee on the basis of a series of collective and individual targets, of a quantitative and qualitative nature, also taking into account feedback from internal and external stakeholders.

It should be noted that the remuneration policy concerning the variable portion of the Management Committee's remuneration was adapted to take account of the implementation of multi-year tariffs. Consequently, since 2008 the salary scheme for members of the Management Committee has included, among other things, an annual variable remuneration and long-term profit-sharing spread out over the multi-year regulation period. The annual variable remuneration, which is connected with Elia Group's strategy, has two components: the attainment of collective quantitative targets, and individual performances, including progress on collective infrastructure projects, safety and AIT ('Average Interruption Time' – average time of interruption of electricity supply)[8].

The Remuneration Committee also approved the proposed collective targets for the Management Committee for 2018. In addition, the Remuneration Committee approved the remuneration report, which is part of the annual report for 2017, and issued a favourable opinion on the capital increase reserved for staff. The Remuneration Committee also began a review of the guiding principles of the remuneration policy for the Group's executives. This review will continue in 2019.

Audit Committee

In addition to its usual support role to the Board of Directors, the Audit Committee is, pursuant to Article 526*bis* of the Belgian Companies Code, the Act of 29 April 1999 on the organisation of the electricity market and the articles of association, responsible in particular for:

- examining accounts and controlling budgets;
- monitoring financial reporting procedures;
- ensuring the effectiveness of the company's internal control and risk management systems;
- following up on internal audits and their effectiveness;
- following up on the statutory audit of annual accounts;
- evaluating and verifying the independence of auditors;
- making proposals to the Board of Directors on the appointment and re-election of auditors and on the terms of their appointment;
- investigating, where appropriate, any issues that resulted in the resignation of auditors and making proposals as to what actions, if any, should be taken in this respect;
- verifying the nature and extent of non-audit services provided by auditors;
- verifying the effectiveness of external audit procedures.

Pursuant to Article 96, §1, 9° of the Belgian Companies Code and the articles of association, this report must contain justification of the independence and accounting and auditing competence of at least one member of the Audit Committee. The internal rules of procedure of the Audit Committee require, in this respect, that all members of the Audit Committee have the sufficient experience and expertise required to exercise the role of the Audit Committee, particularly in terms of accounting, auditing and finance. On the basis of this rule, the professional experience of at least two members of the Audit Committee must be detailed in this report.

The experience of Michel Allé, Chairman of the Audit Committee, and Dominique Offergeld, member of the Audit Committee, is described in detail below.

Michel Allé (independent director of Elia System Operator and Elia Asset since 17 May 2016 and Chairman of the Audit Committee) has degrees in physics civil engineering and economics (both from the Université Libre de Bruxelles (ULB)). Alongside his academic career as a professor of economics and finance (Solvay Brussels School, ULB's École Polytechnique), he worked for many years as a Chief Financial Officer. In 1979, he began his career at the Belgian Prime Minister's Office, as an advisor in the Science Policy Office. He was appointed Director of the National Energy R&D Programme in 1982 and then Director in charge of Innovative Companies. In 1987, he joined the COBEPA Group, where he held many positions including Vice President of Mosane from 1992 to 1995. From 1995 to 2000 he was a member of the COBEPA Group's Executive Committee. He then served as Chief Financial Officer of BIAC between 2001 and 2005 and Chief Financial Officer of SNCB (Belgian Railways) between 2005 and 2015. He also has extensive experience as a director, including past and present roles at Telenet, Zetes, Eurvest, Mobistar and D'Ieteren. He has served on the Telenet Audit Committee and chaired the Zetes Audit Committee.

Dominique Offergeld (non-independent director of Elia System Operator and Elia Asset) has a degree in economics and social science (specialisation: public economics) from Université Notre Dame de la Paix in Namur. She has taken various extra-academic programmes, including the General Management Program at Cedep (INSEAD) in Fontainebleau (France). She started her career at Générale de Banque (now BNP Paribas Fortis) in the corporate finance department in 1988, and was subsequently appointed as specialist advisor to the vice-president and minister for Economic Affairs of the Walloon Region in 1999. In 2001 she became advisor to the deputy prime minister and minister for Foreign Affairs. Between 2004 and 2005, she was deputy director of the office of the minister for Energy, subsequently becoming general advisor to the SNCB holding company in 2005. She was previously director of (among others) Publigas and government commissioner at Fluxys. She was also Chairwoman of the Board of Directors and the Audit Committee of SNCB. Between 2014 and 2016, she was Director of the Minister for Mobility's Strategy Unit, with responsibility for Belgocontrol and the SNCB. She has been CFO of ORES SCRL since August 2016, a position she also held between 2008 and 2014.

The Audit Committee may investigate any matter that falls within its remit. For this purpose, it is given the resources it needs to perform this task, has access to all information, with the exception of confidential commercial data concerning grid users, and can call on internal and external experts for advice.

The Audit Committee met seven times in 2018.

The Committee examined the annual accounts for 2017, under both Belgian GAAP and IFRS. It also examined the half-yearly results as at 30 June 2018 and the 2018 quarterly results, in accordance with Belgian GAAP and IFRS rules. Furthermore, it monitored the two projects concerning the exercise of Elia System Operator's pre-emptive right to acquire an additional 20% stake in Eurogrid International SCRL, the holding company of the German TSO 50Hertz Transmission GmbH and their impact on the Group's financing.

The Committee took note of the internal audits carried out and the recommendations made.

The Committee follows an action plan for each audit carried out, in order to improve the efficiency, traceability and awareness of the areas audited and thereby reduce the associated risks and provide assurance that the control environment and risk management are appropriate. The Committee followed the various action plans from a number of perspectives (timetable, results, priorities) on the basis, among other things, of an activity report from the internal audit department. The Audit Committee noted the strategic risks and the ad-hoc risk analyses based on the environment in which the Group operates. The Audit Committee regularly examined the compliance of the non-audit services with the legal requirements.

7 Including one meeting held before a notary in order to formally record the capital increase reserved for staff members.
8 Supply reliability indicator: number of minutes per consumer per year.

Corporate Governance Committee

In addition to its usual support role to the Board of Directors, the Corporate Governance Committee is, pursuant to the Act of 29 April 1999 on the organisation of the electricity market and the articles of association, responsible for:

- proposing candidates to the General Meeting to be appointed as independent directors;
- giving prior approval for the appointment and/or removal (where applicable) of Management Committee members;
- examining, at the request of any independent director, the Chairman of the Management Committee or any competent federal and/or regional regulatory body or bodies for the electricity market, all cases of conflicts of interests between the system operator, on the one hand, and a dominant shareholder, municipal shareholder or company associated with or linked to a dominant shareholder, on the other hand, and to report to the Board of Directors on the matter. This responsibility aims to strengthen the directors' independence above and beyond the procedure detailed in Article 524 of the Belgian Companies Code, which the company also applies;
- deciding on cases of incompatibility on the part of members of the Management Committee and personnel;
- ensuring the application within the company of provisions laid down by law, regulations, decrees and other instruments relating to the operation of electricity systems, evaluating their effectiveness in view of the objectives for the independent and impartial operation of those systems, and ensuring compliance with Articles 4.4 and 13.1(2) and (3) of Elia System Operator's articles of association. A report on this subject is submitted every year to the Board of Directors and the federal and/or regional body or bodies responsible for regulating the electricity market;
- convening, at the request of at least one third of the members, meetings of the Board of Directors in accordance with the formalities for calling meetings as laid down in the articles of association;
- examining, after notification by a director, whether a director's membership of the supervisory board, the board of directors or bodies legally representing an undertaking which exercises control, directly or indirectly, over an electricity producer and/or supplier complies with Article 9.1b), c) and d) of Directive 2009/72/EC of the European Parliament and of the Council of 13 July 2009 concerning common rules for the internal market in electricity, and reporting on this matter to the Board of Directors. As part of this examination, the Corporate Governance Committee takes account of the role and influence that the director concerned has in the undertaking concerned and of the degree of control or influence that the undertaking concerned has over its subsidiary. The Committee also examines whether, in the exercising of the director's role within the company, there is the potential or motive for favouring certain generation or supply interests as regards access to and investment in the grid, to the detriment of other grid users;
- verifying, prior to any appointment of a director, whether that be the appointment of a new director or the re-election of an existing director, whether the candidate director takes account of the incompatibilities set forth in the company's articles of association. To this end, every candidate director is required to provide the Committee with an overview of (i) any offices he or she holds on the board of directors, supervisory board or any other body of other legal entities other than the company and (ii) any other functions or activities, paid or unpaid, which he or she carries out for an undertaking performing any of the following functions: the generation or supply of electricity.

The committee met four times in 2018.

In line with its competences under the law and the articles of association and in compliance with confidentiality rules, the Committee dealt in particular with the following matters: application of and compliance with the requirements of laws, regulations and the articles of association concerning the independence of the company's independent directors, (Article 13 of the articles of association), the analysis of compliance with requirements in the area of full ownership unbundling as provided for by law and the articles of association (Article 14 of the articles of association) and preparation of the corporate governance statement. The Committee also handled the succession planning.

Strategic Committee

The articles of association stipulate that the role of the Strategic Committee is to issue recommendations to the Board of Directors on matters of strategy.

As such, the Committee is responsible for:

- identifying and examining market trends and contextual factors that could influence Elia Group's strategic direction and associated strategic choices and priorities in the medium and long term;
- preparing and maintaining a dialogue about the key issues and associated options and scenarios that are relevant for Elia Group's strategy in the medium and long term;
- developing and submitting proposals about the core strategic choices and priorities that will shape Elia Group's future in the medium and long term.

The Committee met three times in 2018. Its discussions focused on value creation through innovation, (digital) and (in) organic growth, working with various assumptions and scenarios.

Management Committee

Pursuant to Article 9(9) of the Act of 29 April 1999 on the organisation of the electricity market and the articles of association, the Management Committee is responsible in particular for:

- the operational management of the electricity grids, including commercial, technical, financial, regulatory and personnel issues related to such operational management;
- day-to-day management of the system operator;
- the exercise of powers given to it under the articles of association;
- the exercise of powers delegated to it by the Board of Directors, in accordance with the general policy rules and principles and the resolutions adopted by the Board of Directors.

The Management Committee has all powers necessary, including the power of representation, and sufficient margin for manoeuvre to exercise the powers that have been delegated to it and to propose and implement a corporate strategy, without prejudice to the powers of the Board of Directors and the obligation on the part of the Board of Directors to observe the legal restrictions in terms of access to commercial data and other confidential data relating to grid users and the processing of such data.

The Management Committee generally meets formally at least once a month. Its members also attend informal weekly meetings. Members who are unable to attend usually have a representative. A written proxy, conveyed by any means (of which the authenticity of its source can be reasonably determined), can be given to another member of the Management Committee, in accordance with the internal rules of procedure of the Management Committee. However, no representative may represent more than two members.

In 2018, the Management Committee met on 21 occasions for Elia System Operator and on 17 occasions for Elia Asset.

Each quarter, the Management Committee reports to the Board of Directors on the company's financial situation (in particular on the balance between the budget and the results stated). It also reports on transmission system management at each meeting of the Board of Directors. As part of its reporting on management of the transmission system in 2018, the Management Committee kept the Board informed of strategic issues (particularly the acquisition of an additional 20% stake in Eurogrid International SCRL, the holding company of the German TSO 50Hertz Transmission GmbH), developments in legislation applying to the company, the company's financial situation, the situation of its subsidiaries, the main decisions taken by regulators and administrations, as well as the monitoring and development of major investment projects.

GRI 102-20

Corporate Social Responsibility (CSR) at Elia System Operator and Elia Asset is the responsibility of the Chief Community Relations Officer.

Management committee

Chris Peeters
Chairman and Chief Executive Officer

Catherine Vandenborre
Chief Financial Officer

Markus Berger
Chief Infrastructure Officer

Patrick De Leener
Chief Customers, Market & System Officer

Frédéric Dunon
Chief Assets Officer

Pascale Fonck
Chief External Relations Officer

Peter Michiels
Chief Human Resources & Internal Communication Officer

Ilse Tant
Chief Community Relations Officer

Changes in the composition of the management committee

The composition of the Management Committee did not change in 2018.

In accordance with the Act of 3 September 2017 on the disclosure of non-financial information and diversity information by certain large undertakings and groups, the composition of the Management Committee is based on gender diversity and diversity in general, as well as on the complementarity of skills, experience and knowledge.

When searching for and appointing new members of the Management Committee, special attention is paid to diversity parameters in terms of age, gender and complementarity.

Code of conduct

Following the entry into force of European Regulation (EU) No. 596/2014 on market abuse, Elia amended its Code of Conduct that aims to prevent staff and those with leadership responsibilities in the Elia Group from potentially breaking any laws on the use of privileged information and market manipulation. The Code of Conduct lays down a series of regulations and communication obligations for transactions by those individuals in relation to their Elia System Operator securities, in accordance with the provisions of the Market Abuse Regulation and the Act of 2 August 2002 on monitoring of the financial sector and other financial services. This Code of Conduct is available on the company's website (www.elia.be, under 'Elia', 'Corporate Governance', 'Documents').

Corporate governance charter and internal rules of procedure of the board of directors, the board's advisory committees and the management committee

The Corporate Governance Charter and the internal rules of procedure of the Board of Directors, the Board's advisory committees and the Management Committee can be found on the company's website (www.elia.be, under 'Elia', 'Corporate Governance', 'Documents'). The responsibilities of the Board of Directors and of the Management Committee are described in detail in the articles of association of the company and are therefore not reiterated in the internal rules of the Board of Directors and of the Management Committee.

Transparency rules – notifications

Elia System Operator received no notifications in 2018 within the meaning of the Act of 2 May 2007 on disclosure of major shareholdings in issuers whose shares are admitted to trading on a regulated market and laying down miscellaneous provisions, and within the meaning of the Royal Decree of 14 February 2008 on disclosure of major shareholdings.

In accordance with Article 15 of the Act of 2 May 2007, on 18 January 2019 Elia System Operator gave notice of the capital increase reserved for the staff of Elia System Operator SA and its Belgian subsidiaries, which was formally recorded before a notary on 20 December 2018 and led to the issuing of 114,039 new shares in Elia System Operator.

See also the press release of 18 January 2019, published on the company's website (www.eliagroup.eu, under 'Investor Relations').

Elia has issued a total of 61,015,058 shares.

For more information about the shareholder structure as at 31 December 2018, see the section 'Shareholder structure on the closing date'.

Diversity within the management committee

Number of people on the Management Committee of Elia System Operator and Elia Asset as at 31 December 2018	Unit	2018
Men	Aged 35 – 55	4
	Aged ≥ 55	1
Women	Aged 35 – 55	3
	Aged ≥ 55	0

REMUNERATION REPORT

REMUNERATION OF THE MEMBERS OF THE BOARD OF DIRECTORS AND THE MANAGEMENT COMMITTEE

Procedure approved in 2016 to define the remuneration policy and the remuneration of members of the Board of Directors and the Management Committee

In accordance with Articles 16.1 and 15.1 of the respective articles of association of Elia System Operator and Elia Asset, a remuneration policy for members of the Board of Directors and the Management Committee was drawn up in 2016 by the Remuneration Committee and approved by the Boards of Directors of Elia System Operator and Elia Asset.

The remuneration policy for members of the Board of Directors was approved by the General Meeting of Shareholders of Elia System Operator and Elia Asset on 17 May 2016. The remuneration policy for members of the Strategic Committee was approved by the Extraordinary General Meeting of Shareholders of Elia System Operator and Elia Asset on 15 May 2018.

The Remuneration Committee also made recommendations regarding the remuneration policy and the remuneration of members of the Board of Directors and Management Committee members.

The composition and activities of the Remuneration Committee are covered in greater detail on page 6.

Remuneration of members of the Board of Directors

Following the decision adopted by the Ordinary General Meeting of Elia System Operator and Elia Asset on 17 May 2016, the rules on the remuneration of directors were amended. The new rules, effective from 1 January 2016, are described below.

The total cost of gross remuneration paid to the 14 directors in 2018 was €885,128.26 (€478,895.33 for Elia System Operator and €406,232.93 for Elia Asset).

The table below lists the individual gross sums paid to each director for Elia System Operator and Elia Asset combined.

These amounts were calculated on the basis of nine meetings of the Board of Directors of Elia System Operator and eight meetings of the Board of Directors of Elia Asset in 2018. In 2018, the Audit Committee met seven times, the Corporate Governance Committee four times, the Remuneration Committee of Elia System Operator six times[9], the Remuneration Committee of Elia Asset five times, the Strategic Committee three times and the ad-hoc Advisory Committee of Elia System Operator eleven times.

Directors' remuneration consists of a basic remuneration of €25,000 per annum (€12,500 for Elia System Operator and €12,500 for Elia Asset) and an attendance fee of €1,500 (€750 for Elia System Operator and €750 for Elia Asset) per Board meeting, starting with the first Board meeting attended by the director. The basic annual remuneration and the attendance fee are increased by 100% for the Chairman of the Board of Directors and by 30% for each Vice-Chairman of the Board of Directors.

For each company, additional basic remuneration for each member of an advisory committee to the Board of Directors (the Audit Committee, the Remuneration Committee, the Corporate Governance Committee and the ad-hoc Advisory Committee of Elia System Operator) is set at €3,000 per annum per committee, and the attendance fee for each member of a committee is €750 per committee meeting (starting with the first meeting attended by the member). Both the basic remuneration and the attendance fee are increased by 30% for each committee chairman. The members of the Strategic Committee are not remunerated, with the exception of the Chairman, who is remunerated in the same way as the Chairs of the Board of Directors' other advisory committees.

The basic annual remuneration and the attendance fees are indexed in January each year on the basis of the consumer price index for January 2016.

The basic annual remuneration and the attendance fees cover all costs, except (a) any costs incurred by a director resident outside Belgium in connection with the exercise of his/her office (such as travel and accommodation costs) providing that the director in question was resident outside Belgium at the time of appointment or, if the director changed his/her place of residence after appointment, providing that the Remuneration Committee gave its approval; (b) any costs incurred by a director in the event that a meeting of the Board of Directors is held outside Belgium (e.g. in Germany); and (c) any costs incurred by a director travelling abroad in connection with the exercise of his/her office upon the request of the Chairman or a Vice-Chairman of the Board of Directors. All remuneration and costs are included in the company's operating costs.

All remuneration is paid on a pro rata basis according to the duration of the director's term of office.

An advance on annual remuneration is paid to the directors at the end of the 1st, 2nd and 3rd quarter. A detailed account is prepared during the month of December for the current year.

Directors do not receive any other benefits in kind, stock options, special loans or advances. Neither Elia System Operator nor Elia Asset has issued credit to or on behalf of any member of the Board of Directors.

9 Including one meeting held before a notary in order to formally record the capital increase reserved for staff members.

DIRECTOR	REMUNERATION	BOARD OF DIRECTORS OF ELIA SYSTEM OPERATOR	BOARD OF DIRECTORS OF ELIA ASSET	AUDIT COMMITTEE OF ELIA SYSTEM OPERATOR	AUDIT COMMITTEE OF ELIA ASSET	GOVERNANCE COMMITTEE OF ELIA SYSTEM OPERATOR	GOVERNANCE COMMITTEE OF ELIA ASSET	REMUNERATION COMMITTEE OF ELIA SYSTEM OPERATOR	REMUNERATION COMMITTEE OF ELIA ASSET	STRATEGIC COMMITTEE OF ELIA SYSTEM OPERATOR	STRATEGIC COMMITTEE OF ELIA ASSET	AD-HOC ADVISORY COMMITTEE
Michel ALLÉ	€73,549.80	9/9	8/8	7/7	7/7	-	-	-	-	3/3	3/3	11/11
Luc DE TEMMERMAN[10]	€75,977.10	9/9	8/8	4/4[11]	4/4[12]	3/3[13]	3/3[14]	6/6	5/5	-	-	-
Frank DONCK[15]	€69,165.00	9/9	8/8	7/7	7/7	4/4	4/4	-	-	-	-	-
Cécile FLANDRE[16]	€37,062.00	7/9	7/8	-	-	-	-	-	-	-	-	-
Claude GRÉGOIRE[17]	€54,883.08	9/9	8/8	-	-	-	-	3/3[18]	3/3[19]	2/3	2/3	-
Bernard GUSTIN[20]	€94,090.50	9/9	8/8	-	-	-	-	-	-	3/3	3/3	11/11
Philip HEYLEN	€56,824.92	7/9	6/8	-	-	4/4	4/4	2/2[21]	2/2[22]	-	-	-
Luc HUJOEL[23]	€65,093.40	8/9	7/8	-	-	4/4	4/4	-	-	2/3	2/3	10/11
Roberte KESTEMAN[24]	€69,540.84	9/9	8/8	3/3[25]	3/3[26]	-	-	3/3[27]	2/2[28]	-	-	11/11
Jane MURPHY	€50,373.00	9/9	8/8	-	-	3/4	3/4	-	-	-	-	-
Dominique OFFERGELD	€63,088.92	9/9	8/8	7/7	7/7	-	-	1/2[29]	1/2[30]	-	-	-
Rudy PROVOOST	€56,317.54	7/9	7/8	2/3[31]	2/3[32]	-	-	-	-	3/3	3/3	-
Saskia VAN UFFELEN[33]	€51,751.08	7/9	6/8	-	-	1/1[34]	1/1[35]	4/6	4/5	-	-	-
Geert VERSNICK	€67,411.08	9/9	8/8	4/4[36]	4/4[37]	-	-	-	-	3/3	3/3	10/11

10 Luc De Temmerman's fees are paid to the company InDeBom Strategies Comm. V.

11 Luc De Temmerman was a member of the Audit Committee until 22 March 2018.

12 Luc De Temmerman was a member of the Audit Committee until 22 March 2018.

13 Luc De Temmerman has been a member of the Corporate Governance Committee since 22 March 2018.

14 Luc De Temmerman has been a member of the Corporate Governance Committee since 22 March 2018.

15 Frank Donck's fees are paid to the company Ibervest NV.

16 Cécile Flandre's fees are paid to the company Belfius Insurance SA.

17 Claude Grégoire's fees are paid to the company Socofe SA.

18 Claude Grégoire was a member of the Remuneration Committee until 22 March 2018.

19 Claude Grégoire was a member of the Remuneration Committee until 22 March 2018.

20 Bernard Gustin's fees are paid to the company Bernard Gustin SPRL.

21 Philip Heylen has been a member of the Remuneration Committee since 22 March 2018.

22 Philip Heylen has been a member of the Remuneration Committee since 22 March 2018.

23 Luc Hujoel's fees are paid to the company Interfin CVBA.

24 Roberte Kesteman's fees are paid to the company Symvouli BVBA.

25 Roberte Kesteman has been a member of the Audit Committee since 22 March 2018.

26 Roberte Kesteman has been a member of the Audit Committee since 22 March 2018.

27 Roberte Kesteman has been a member of the Remuneration Committee since 22 March 2018.

28 Roberte Kesteman has been a member of the Remuneration Committee since 22 March 2018.

29 Dominique Offergeld has been a member of the Remuneration Committee since 22 March 2018.

30 Dominique Offergeld has been a member of the Remuneration Committee since 22 March 2018.

31 Rudy Provoost has been a member of the Audit Committee since 22 March 2018.

32 Rudy Provoost has been a member of the Audit Committee since 22 March 2018.

33 Saskia Van Uffelen's fees are paid to the company Quadrature SPRL.

34 Saskia Van Uffelen was a member of the Corporate Governance Committee until 22 March 2018.

35 Saskia Van Uffelen was a member of the Corporate Governance Committee until 22 March 2018.

36 Geert Versnick was a member of the Audit Committee until 22 March 2018.

37 Geert Versnick was a member of the Audit Committee until 22 March 2018

Management Committee remuneration policy

Aspirations

Our remuneration system is designed to attract, retain and motivate the most talented individuals with a view to achieving our short- and long-term goals within a consistent framework.

The principles governing remuneration of the group's executives are:

- Focus on safety first and work in the interests of the company by targeting operational performance
- Design a salary scheme that encourages executives to live up to our core values of entrepreneurship, collaboration, accountability and agility
- Attract, retain and nurture the best talent to achieve our strategy and goals in the short and long term
- Ensure that our variable remuneration rewards both team success at company level and individual contributions
- Develop a job classification and staff remuneration system based on an objective and measurable methodology
- Position the remuneration system at the appropriate point of reference in the marketplace to attract the talent we need and to be competitive, using data from multiple providers (including Hay)
- Do not discriminate between employees on any grounds whatsoever through our remuneration system
- Design our benefit plans to promote retention and provide a secure environment for our employees and their families.

In 2018, among others, the Remuneration Committee began a review of the guiding principles behind the remuneration policy for the Group's executives. This review will continue in 2019.

The Remuneration Committee evaluates the members of the Management Committee once a year. Any change in the basic remuneration is linked to the position of each member of the Management Committee with respect to the general benchmark salary in the market and the assessment of the member's individual performance. In addition, the Remuneration Committee may, on a case-by-case basis, recommend the Board of Directors to award exceptional bonuses in view of particular performances in specific, non-recurring matters.

Since 2004, the Hay Group methodology has been used to define the weighting for each management position and to ensure that remuneration is in line with the going market rate.

The remuneration of members of the Management Committee consists of the following components:

- basic salary;
- short-term variable remuneration;
- long-term variable remuneration;
- pension;
- other benefits.

In accordance with Article 17.9 of the articles of association of Elia System Operator, an exemption from the provisions of Article 520*ter*(1) and (2) of the Belgian Companies Code is provided for members of the Management Committee.

As regards variable remuneration, the Remuneration Committee evaluates the members of the Management Committee at the end of each year based on a number of qualitative and quantitative targets. Since 2008, variable remuneration has comprised two components: a short-term one and a long-term one.

Basic remuneration

All the members of the Management Committee of Elia System Operator and Elia Asset have employee status.

In 2018, the basic remuneration paid to the Chairman of the Management Committee was €417,910.66. The basic remuneration paid to the other members of the Management Committee totalled €1,489,240.99 (€1,002,173.93 for management employed by Elia System Operator and €487,067.06 for management employed by Elia Asset).

Total basic remuneration of €1,907,151.65 was therefore paid to members of the Management Committee in 2018.

Short-term variable remuneration

The first component of variable remuneration is based on the attainment of a certain number of targets set by the Remuneration Committee at the start of the year, with 30% of variable remuneration related to the attainment of individual targets and 70% related to the attainment of the collective targets of Elia Group ("short-term incentive plan").

In 2018, the short-term variable remuneration earned by the Chairman of the Management Committee was €285,312.01.

The variable remuneration earned by other members of the Management Committee in 2018 was €605,338.46 (€415,045.65 for management employed by Elia System Operator and €190,297.82 for management employed by Elia Asset).

A total of €890,650.47 in variable remuneration was therefore earned by members of the Management Committee in 2018.

The collective targets for 2018 were:

- **Net finance costs after tax**
- **OPEX efficiency**
- **Safety**
- **Implementation and monitoring of collective projects and our company transformation**
- **AIT (grid reliability)**

Following the successful acquisition of an additional 20% stake in Eurogrid International, the holding company of the German TSO 50Hertz Transmission GmbH, the Board of Directors – acting on the advice of the Remuneration Committee – decided to award certain members of the Management Committee additional remuneration totalling €190,000 for their additional work. €100,000 of this was paid to the Chairman of the Management Committee, while €90,000 was paid to certain other members of the Management Committee (for Elia System Operator). This remuneration, which is part of the exceptional remuneration for particular performances in certain specific, non-recurring matters, was added to the aforementioned short-term variable remuneration earned for 2018.

Total annual remuneration

In 2018, the total remuneration earned by the Chairman of the Management Committee was €803,222.67.

The total annual remuneration of other members of the Management Committee was €2,184,579.45 (€1,507,124.58 for management employed by Elia System Operator and €677,364.88 for management employed by Elia Asset).

Total annual remuneration for all members of the Management Committee in 2018 was therefore €2,987,802.12.

Long-term variable remuneration

The second component of variable remuneration is based on multi-annual criteria covering a period of four years ('long-term incentive plan'). The variable remuneration earned in 2018 can be estimated at €58,005.32 (maximum amount in the event of full attainment of the multi-annual criteria for the tariff period concerned) for the Chairman of the Management Committee for the period performed in 2018 and €375,321.71 for the other members of the Management Committee (€252,592.13 for management employed by Elia System Operator and €122,729.03 for management employed by Elia Asset, respectively).

These amounts are reviewed at the end of each year based on the achievement of the multi-annual criteria. The first part of the long-term variable remuneration for the 2016-2019 tariff period was paid in 2018. The balance will be paid in 2020. The remuneration is definitively acquired at the moment of payment.

Clawback

Bonuses paid for the prior period may be clawed back in case of proven fraud or material misstatement.

Contributions to the supplementary pension scheme

Since 2007, all pension plans for Management Committee members have been defined contribution plans, where the amount paid, excluding tax, is calculated on the basis of annual remuneration. In 2018, Elia System Operator paid a total of €107,935.55 for the Chairman of the Management Committee.

For the other members of the Management Committee, Elia paid a total of €332,032.48 (€213,207.19 for management employed by Elia System Operator and €118,825.29 for management employed by Elia Asset).

Other benefits

Other benefits awarded to members of the Management Committee, such as guaranteed income in the event of long-term illness or an accident, healthcare and hospitalisation insurance, invalidity insurance, life insurance, tariff benefits, other allowances, assistance with public transport costs, provision of a company car, employer-borne costs and other minor benefits are in line with the regulations applying to all company executives.

The cost of these other benefits for 2018 was valued at €38,823.00 for the Chairman of the Management Committee and at €215,832.65 for the other members of the Management Committee (€145,427.27 for management employed by Elia System Operator and €70,405.38 for management employed by Elia Asset).

No stock options were awarded at Elia for the Management Committee in 2018.

Provisions of employment contracts and severance benefits of members of the management committee

The employment contracts of Management Committee members concluded after 3 May 2010 were drawn up in accordance with the prevailing legislation on notice periods and dismissal.

The employment contracts of members of the Management Committee hired before 3 May 2010 contain no specific provisions regarding dismissal.

If the company decides to impose a 12-month non-compete restriction on a Management Committee member, that member is entitled to an additional six months' compensation.

Elia System Operator shares held by members of the Management Committee

The members of the Management Committee held the following number of shares as at 31 December 2018:

MEMBERS OF THE MANAGEMENT COMMITTEE	as at 31.12.2018	as at 31.12.2017
Chris PEETERS *Chief Executive Officer – Chairman of the Management Committee*	3,324	1,844
Markus BERGER *Chief Infrastructure Officer*	9,156	9,156
Patrick DE LEENER *Chief Customers, Market & System Officer*	3,886	3,125
Frédéric DUNON *Chief Assets Officer*	2,171	2,852
Pascale FONCK *Chief External Relations Officer*	661	661
Peter MICHIELS *Chief Human Resources & Internal Communication Officer*	729	-
Ilse TANT *Chief Community Relations Officer*	2,460	2,460
Catherine VANDENBORRE *Chief Financial Officer*	1,406	1,389

No stock options were awarded at Elia System Operator for the members of the Management Committee in 2018. Members of the Management Committee may purchase shares via existing capital increases reserved for members of personnel or on the stock exchange.

OTHER INFORMATION TO BE COMMUNICATED PURSUANT TO ARTICLE 96 OF THE BELGIAN COMPANIES CODE AND ARTICLE 34 OF THE ROYAL DECREE OF 14 NOVEMBER 2007 ON THE OBLIGATIONS OF ISSUERS OF FINANCIAL INSTRUMENTS ADMITTED TO TRADING ON A REGULATED MARKET

This section contains the information required to be disclosed under the aforementioned legislation and not included in other parts of the annual report.

Information regarding special control rights of certain holders of securities

In accordance with Article 4.3 of the articles of association of Elia System Operator and Elia Asset, all shares in these two companies have the same rights, irrespective of the class to which they belong, unless otherwise stated in the articles of association.

In this context, the articles of association state that specific rights are associated with Class A and Class C shares regarding (i) the appointment of members of the Board of Directors (Article 13.5.2 of the articles of association of Elia System Operator and Article 12.5.2 of the articles of association of Elia Asset) and (ii) the approval of decisions by the General Meeting (Articles 28.2.1 and 28.2.2 of the articles of association of Elia System Operator and Article 27.2 of the articles of association of Elia Asset).

Information regarding statutory limitations or limitations under the articles of association on the exercising of voting rights

In accordance with Article 4.3(3) of the articles of association of Elia System Operator and Elia Asset, the voting rights associated with shares held directly or indirectly by companies active in the generation and/or supply of electricity and/or natural gas are suspended.

Information regarding the rules on amending the articles of association

In the event of the articles of association of Elia System Operator and Elia Asset being amended, Article 29 of the articles of association of Elia System Operator and Article 28 of the articles of association of Elia Asset are applicable.

Information regarding statutory limitations or limitations under the articles of association on transfers of securities

Transfers of securities within Elia System Operator are governed by Article 9 of the articles of association of Elia System Operator.

Shareholder structure on the closing date

	SHARES	% SHARES	% VOTING RIGHTS
Publi-T (Class B and C shares)	27,383,507[38]	44,88	44,88
Publipart (Class A shares)	1,526,756	2,50	2,50
Belfius Insurance (Société Fédérale de Participations et d'Investissement) (Class B shares)	1,134,760[39]	1,86	1,86
Katoen Natie Group (Class B shares)	4,231,148[40]	6,93	6,93
Interfin (Class B shares)	2,598,143[41]	4,26	4,26
Free float (Class B shares)	24,140,744	39,57	39,57
Total	**61,015,058**	**100**	**100**

38 Based on the number of shares participating in the Ordinary General Meeting of Elia System Operator on 15 May 2018.

39 Based on the number of shares participating in the Ordinary General Meeting of Elia System Operator on 15 May 2018.

40 Based on the number of shares participating in the Ordinary General Meeting of Elia System Operator on 16 May 2017.

41 Based on the number of shares participating in the Ordinary General Meeting of Elia System Operator on 15 May 2018.

RISKS AND UNCERTAINTIES FACING THE COMPANY

GRI 102-15, GRI 102-30

1. Regulatory and income risks

Unplanned and/or inconvenient changes or misinterpretations in regulatory or policy mechanisms (tariffs, incentives, renewable energy targets, operating rules) could conflict with the grid operator's existing and envisioned strategy causing severe financial and organizational impacts.

International

The two transmission system operators in the Elia Group strive to proactively anticipate European legislation, new directives and regulations being prepared at EU level or awaiting transposition into Belgian and German law in order to minimise uncertainties. Elia and 50Hertz are paying particularly close attention to ongoing discussions at European level – formalised by measures including the 'winter package' – that could have a significant influence on the duties and responsibilities of transmission system operators in future.

Both Elia and 50 Hertz have received certification as ownership unbundled transmission system operators. They are thus considered to be fully independent of electricity and gas producers and suppliers. They must constantly stay in line with the obligations arising from this certification. In addition, both Elia and 50Hertz continue to actively participate in projects designed to arrive to the Single European Energy Market, as envisaged by the European Commission.

To execute its activities, Elia and 50Hertz have a license, which can be revoked earlier if Elia or 50Hertz do not have, inter alia, the human, technical and/or financial resources to guarantee the continuous and reliable operation of the grid in accordance with the applicable legislation, as well as the unbundling obligations as described in Article 9 of the EU Electricity Directive.

Such a revocation would have an adverse material impact on Elia and/or 50Hertz.

Elia and 50Hertz are also founding members of the European Network of Transmission System Operators for Electricity (ENTSO-E), which was set up in December 2008 and brings together 43 transmission system operators from 36 countries, including the EU Member States. Amongst other things, ENTSO-E performs the role of the European Network of Transmission System Operators provided for in the third package.

National

The Belgian legal framework was established when the first EU Directive on the internal electricity market was transposed by the Electricity Act of 29 April 1999. The amendment of 8 January 2012 adapted largely the Electricity Act to comply with the Third Energy Package legislation.

In accordance with Article 258 of the Treaty on the Functioning of the European Union, the European Commission monitors the transposition of European Directives into national legislation. In this connection, it sent a Reasoned Opinion to Belgium on 25 February 2016 in which it found – as revealed in the press release – that Belgium has not correctly transposed certain unbundling rules (requiring a full separation of the ownership and accounting of the transmission system in Belgium from any generation or supply activities), as a result of which other companies than the established Belgian Transmission System Operator for electricity have been prevented from developing and operating interconnectors with other EU Member States. In addition, the European Commission argued that the rules on the powers of the federal energy regulator CREG and certain rules pertaining to consumers have not been transposed correctly. The Belgian authorities have provided the European Commission with their views and arguments in respect of the appropriate transposition of the relevant European provisions into Belgian law.

The company's net profit is largely determined by a fair return mechanism (Belgian and German) and by incentives based on tariff guidelines set out in the Electricity Act.

For the period 2016-2019, Elia's financial result is influenced annually by changes to Belgian linear bonds (10-year OLOs) and by a special mechanism that took effect since 2016. This mechanism includes an incentive linked to the progress of construction work for major projects mainly linked to interconnection capabilities (aimed at enhancing the integration of EU energy markets and systems), and a corrective term which reflects the gap between the real value of the OLO during the year and a benchmark value. Elia's financial result is also influenced by its ability to realise and/or exceed the factors for improving efficiency, by the results achieved by various incentives established by the regulation; and by the analyses of the various budget items implemented ex post by the federal regulator.

On 3 December 2015, the tariffs and mechanisms determining Elia's profitability as Belgium's transmission system operator were approved by CREG for a four-year tariff period, effective on 1 January 2016 to 31 December 2019. In case of deviations between the forecasted costs and actually incurred costs (covered by the tariffs), the CREG takes the final decision as to whether the incurred costs are not deemed unreasonable. This decision can result in the rejection of costs incurred, which will therefore not be taken into account for the setting of tariffs for the next period, and therefore will have an overall negative impact.

Elia has to submit a new tariff proposal for the period 2020-2023 to the CREG for approval, based on the 2020-2023 tariff methodology drawn up by the CREG in June 2018. Drawing up this tariff proposal will take several months and should lead, by the end of 2019 at the latest, to the setting of new transmission tariffs applicable throughout the period in question. Close monitoring of this process is essential for enabling the grid operator to have the income - and therefore the cash flow – it needs to fulfil its various missions.

Also sometime in 2019, Belgium's regulatory treatment of Elia's investments in non-regulated activities will have to be clarified, when Elia realises these investments using dedicated financing from external funds.

Elia's turnover also depends on the energy transported via its grid, and therefore on the level of business activity of its customers and the society it serves at large, including the rapid increase in decentralised electricity generation being directly injected to the distribution networks. The actual level of residential and household electricity consumption may result in differences between the electricity volumes actually transmitted and those estimates built into the 2016-2019 tariffs as approved by the regulator. Any deficit and/or extra costs incurred as a result, such as additional financing requirements, must be offset by the tariffs for the following regulatory periods, under the prevailing regulations. The impact on the electricity consumption and injection of Elia's various customer segments and the uncertainty surrounding the outlook for levels of business activity amongst industrial clients pose a risk to Elia's cash flow.

The Electricity Act recently made the transmission system operator responsible for developing a transmission grid in the marine areas over which Belgium can exercise its jurisdiction. A specific regulatory framework applicable to this network has been developed by the CREG.

This specific extension of the current regulatory framework takes into account the risks associated with such an activity, including regulatory, contractual and technical risks, in particular by granting an additional fair margin premium for own funds invested in this offshore network. The significant increase in energy expected from the new offshore wind farms will also be accompanied by a considerable rise in the levy to cover the purchase costs of new green certificates. Greater attention will be paid to managing the cash flow resulting from this situation.

Elia's income is influenced by the dividends received from companies in which it has shareholdings, in particular those of 50Hertz, via Eurogrid International.

The tariffs charged by 50Hertz are subject to regulation by the German federal regulatory agency, Bundesnetzagentur (BNetzA). Decisions made and actions taken by the BNetzA under the current regulatory framework may have a substantial impact on 50Hertz.

Furthermore, the German regulatory framework governing the activities of 50Hertz is subject to extensive European, national and regional legislation and regulation. While 50Hertz tries to anticipate European legislation, new directives and regulations in preparation at European level or existing regulations and directives awaiting transposition into national law may always cause uncertainties.

Legislation and directives regarding renewable energy sources may also have a great impact on 50Hertz's liquidity. Changes in the legislation may lead to significant variations in the current regulatory and/or liquidity risk.

Division of powers

The regulatory and legal framework entails risks with regard to the division of powers between Belgium's federal and regional entities. For instance, contradictions between the various regulations, including the grid codes, could hinder the exercise of the company's activities. The further development of and changes to these regulations may also impact the company's liability in the event of a power outage on the grid or – in the context of a reform of the State – the division of powers between federal and regional authorities, potentially including the power to approve transmission tariffs.

2. Operational risks

Energy balance

Every year, Elia and 50Hertz Transmission seek to contract, at the lowest possible cost, the reserves needed to ensure continual balance between production and consumption in their respective zones. To that end, they analyse, both at national and European level, how the growing proportion of intermittent renewable energy generation units can be safely integrated without compromising the energy ba- lance. The growth across Europe in the number of cogeneration and renewable energy units connected to distribution systems and the connection of large offshore wind farms also create new challenges for operational grid management and require the further development of their infrastructure.

An important development since 2014 has been the negative trend in Belgium's national electricity production, as a result of closures and mothballing of production units, resulting in an overall decrease in the production capacity available to Belgian consumers and a growing dependency on electricity imports from foreign markets. A consequence of these supply conditions has been the creation of strategic electricity reserves for the winter period. These reserves consist of identified and reserved electricity generation capacity sitting outside the electricity market, to be called upon by the TSO in the event of electricity shortages. The many events that occurred in recent years regarding Belgian nuclear generating facilities illustrate the uncertainties impacting supply conditions. The actual availability and location of nuclear generation also interact with maintenance and/or investment programmes on the 400 kV networks, as well as the conditions governing access to resources capable of providing the auxiliary services needed for system operation.

It cannot be ruled out that other electricity production units may be closed or mothballed in future, which will keep the supply situation under pressure. In a similar vein, uncertainty regarding the dwindling availability of France's nuclear generation facilities may lead to a decrease in the quantities of energy imported from France. The need to continue resorting to strategic reserves and/or other mechanisms therefore remains a major concern for future years.

In this regard, it is worth pointing out that the federal government has started formal steps which should culminate in the introduction of a capacity remuneration mechanism (CRM) as a way of offering more certainty in terms of Belgian security of supply. Elia is monitoring these developments closely, especially as it may find itself playing a key role in implementing this mechanism.

In addition, changing trends in offtake and injection and the enhancement of interconnection capacity between EU Member States are dependent on securing permits and approvals from local, regional, national and international authorities. The need to obtain such approvals and permits within certain timeframes represents a critical challenge to timely implementation. Moreover, these approvals and permits can be contested in the relevant courts.

Finally, while volumes of decentralised intermittent electricity generation are rising and while centralised generation capacity continues to decrease, Elia is also facing an ageing asset base. All three factors complicate the task of maintaining balance on the network.

Power outages

The reliability of the transmission systems operated by Elia and 50Hertz is among the best in Europe. Nonetheless, unforeseen events, such as unfavourable weather conditions, may occur to a degree which interrupts the smooth operation of one or more infrastructure components. In most cases, these incidents have no impact on consumers' power supply because the meshed structure of the grids operated by Elia and 50Hertz means that consumers can be reached via a number of different connections. However, in extreme cases an incident in the electricity system may lead to a local or widespread outage (known as a blackout) provoking liability claims and litigation which could negatively impact the results of operations. Such outages may be caused by natural phenomena (including extreme storms), unforeseen incidents or operational problems, either in Bel-

gium or abroad. The Elia Group regularly holds crisis management drills so that it is ready to deal with the most unexpected and extreme situations. In the event of an error attributable to Elia, the general terms and conditions of its contracts limit the liability of Elia and 50Hertz to a reasonable level, while its insurance policy is designed to limit some of the financial repercussions of these risks.

Risks associated with electronic, IT and telecommunication equipment

The incorporation and embedding of electronic, IT, digitalisation and telecommunication technologies in electricity transmission systems for the purposes of operational management, communication and surveillance (such as smart grids) modifies the nature of the electricity systems and infrastructure used by TSOs such as Elia and 50Hertz.

Failures in the telecommunications network or IT systems, including attempts to gain unauthorized access to our IT systems and our data through various channels, used to operate the electricity system may harm the latter's performance. Elia takes appropriate measures to back up the IT network and associated systems to the maximum extent allowed by technical and financial considerations. It has drawn up and regularly tests recovery plans for the most critical IT systems. However, component failures in the telecommunication network and IT systems are impossible to rule out. Where systems do fail, Elia will strive to minimise the impact on customers.

Environmental risk

Elia's results may be affected by outgoings needed to keep up with environmental legislation, including costs associated with implementing preventive or correc- tive measures or settling third-party claims. The company's environmental policy is developed and monitored in such a way as to manage these risks. Where Elia or 50Hertz might in any way be liable for decontamination, the appropriate provisions are set aside.

Permitting risk

Both Elia and 50Hertz have a duty to build an electricity grid consistent with the energy needs of their respective client bases and with the move by the energy industry into decentralised electricity generation, which necessitates a reinforced electrical grid. Consequently, electrical installations need to be upgraded or newly built, which means obtaining building permits. Occasionally, obtaining permits takes place after lengthy dialogue with local populations and authorities, which may delay the building of the infrastructure.

Risks associated with the suppliers of infrastructure work

Elia's infrastructure objectives are exposed to an increased risk of capacity problems affecting several key suppliers. This situation has arisen because demand is increasing steadily on the European market, while supply has remained relatively stable. To mitigate this risk, Elia will conduct regular forward-looking market capacity analyses and hold a proactive dialogue with its suppliers.

The difficult economic situation on the European market (see also the 'Macroeconomic risks' section) may also jeopardise suppliers' financial health, preventing them from fulfilling their contractual obligations. Infrastructure constructions may be delayed as a result.

Risk of legal disputes

Although the company operates in such a way as to minimise the risk of legal disputes, it may nonetheless become involved in such disputes. Where necessary, the appropriate provisions are laid aside for this.

Safety and welfare

The Elia Group operates facilities where accidents or external attacks may cause bodily harm to persons. Persons working in or near electricity transmission facilities may be exposed, in the event of an accident, error or negligence, to the risk of electrocution. The safety and welfare of individuals (both Elia personnel and third parties) is a daily priority for the Elia Group's management, supervisory staff and personnel. Elia has in place a health and safety policy, undertakes safety analyses and promotes a safety culture.

Risks associated with inefficient internal control mechanisms

All internal processes can have an impact on the company's results in some way. The multi-year tariff mechanism increases the need for year-on-year increases in the company's overall efficiency. To this end, the efficiency of internal processes is monitored regularly, using performance indicators and/or audits, to ensure they are kept under proper control. This is overseen by the Audit Committee, which controls and monitors the work of the Internal Audit & Enterprise Risk Management Department.

Acts of terrorism or sabotage

The electricity network and assets are widely spread geographically and are potentially exposed to acts of terrorism or sabotage. Such events could negatively affect the network operations and may cause network failures or system breakdowns. Network failures or system breakdowns could in turn have a material adverse effect on the financial condition and operational result.

3. Financial risks

The Group is exposed to various financial risks in the exercise of its activities: market risk (namely interest rate risk, inflation risk, tax risk and limited exchange risk), liquidity risk and credit risk. The risks the company faces are identified and analysed in order to establish appropriate limits and controls and monitor risks and compliance with such limits. To this end, the Group has defined responsibilities and procedures specifically for the financial instruments to be used and the operating limits for managing them. These procedures and related systems are revised on a regular basis to reflect any changes in market conditions and the activities of the Group. The financial impact of these risks is limited, as Elia and 50Hertz operate under the Belgian or German regulatory framework. See the 'Regulatory framework' section for further details.

To finance their investments and achieve their short- and long-term strategic goals, Elia and 50Hertz turn to the capital markets, which are heavily influenced by macroeconomic trends. In 2019, these will mainly be shaped by a potential tightening of monetary policy in both the US and the eurozone and by a possible esca- lation of current geopolitical tensions in the context of trade relations of various countries with the United States. For the Eurozone, further growth delays might occur, based on the uncertainties resulting from the outcome of Brexit and / or Italy. All of these macroeconomic factors are reflected at market level by major volatility, which could have a negative impact on the growth of Elia and 50Hertz and on the pursuit of their objectives.

As part of the Company's efforts to mitigate the funding risk, the Company aims to diversify its financing sources in debt instruments. The refinancing risk is managed through developing strong bank relationships with a group of financial institutions, through maintaining a strong and prudent financial position over time and through diversification of funding sources. The short term liquidity risk is managed on a daily basis with funding needs being fully covered through the availability of credit lines and a commercial paper programme (see also note 8.1 Financial risk and derivative management).

Elia and Eurogrid GmbH are rated by S&P and Moody's respectively. There is no assurance that the rating will remain the same for any given period or that the rating will not be lowered by the rating agency if, in its judgment, circumstances in the future so warrant. A decision by a rating agency to downgrade or withdraw the Company's credit rating could reduce the Company funding options and increase its cost of borrowing.

With the advent of Belgian laws and regulations governing decentralised or renewable energy generation, notably via photovoltaic solar panels and wind turbines, the Federal and Regional governments authorised the issuance of so-called 'green certificates', which are used as a financial support mechanism for renewable energy. Elia's obligation to buy these certificates at a guaranteed minimum price poses a cash flow risk, as 'green certificates' are effectively used as 'call' options and their execution is sometimes uncertain. Consequently, Elia is subject to unforeseeable influxes of large numbers of 'green certificates', which it is obliged to purchase, representing a risk to Elia's liquidity. Elia has established regulatory and cash planning mechanisms allowing it to partially reduce the cash impact that this risk may pose.

In terms of the regional public service obligations, the imbalance on the green certificates market in Wallonia is buoying sales of Elia green certificates and continued high levels of use of the guaranteed minimum price. The tariff for public service obligations for financing the support measures for renewable energy in Wallonia, which was established to cover the cost of selling green certificates to Elia, is still not enough to cover Elia's liquidity requirements. In late 2018, a new freeze was introduced to meet the need for short-term liquidity relating to green certificates in Wallonia. In a bid to cover medium-term liquidity requirements, a new draft decree was passed by the Walloon government on 13 September 2018. It aims to rebalance the green certificates market by 2025 by eliminating surplus certificates on the market with the assistance of a bank, thereby meeting the need to finance sales of green certificates at the guaranteed minimum price. Implementation of the new decree is scheduled for 2019.

As regards the federal public service obligations, the commissioning of new offshore wind farms is significantly boosting the resale of green certificates to Elia at the guaranteed minimum price and enhancing the company's cash flow. This is also pushing up Elia's liquidity requirements due to the tariff for public service obligations for the financing of green certificates. To ensure support for domain concessions with a financial close on or after 1 July 2018, a Royal Decree was published on 17 August 2018 amending the Royal Decree of 16 July 2002 on the introduction of mechanisms promoting renewable electricity generation. A new draft Royal Decree, which was approved on its first reading by the Federal Council of Ministers in October 2018, is expected to be passed in 2019. The Royal Decree will change how this tariff is calculated, taking into account the system of advance payments set out in the Royal Decree of 17 August 2018.

Similarly, 50Hertz is exposed to a cash flow risk as it is obliged to buy the electricity generated by renewable sources for a fixed price, but to sell it at variable prices dictated by the market.

4. Contextual factors

Macroeconomic risks

Economic growth has slowed down since the summer of 2018, especially in Europe. This was due to the sharp decline in German car production, concerns about Brexit and Italian fiscal policy, and the trade war between the US and China.

The main macroeconomic risks are related to external factors, due to heightened geopolitical tensions, the possible tightening of financial conditions worldwide causing elevated indebtedness, disruptions caused by intensifying patterns of automation and digitalization and a build-up of mercantilist and protectionist pressures against a backdrop of rising nationalist and populist politics.

Human resources risk

To achieve our strategic goals and enable change across the organization, we need the expertise, commitment and enablement of our employees. Elia pursues an active branding and recruitment policy to maintain an appropriate level of expertise and know- how in a tight labour market. This is an ongoing risk, bearing in mind the highly specialised and complex nature of its business. To address new and emerging risks including digitalization and demographic change the HR department reinforced their focus towards the development of more flexible approaches to career and leadership issues and towards the needs of people in all phases of employment, including those transitioning into retirement, in line with new models of work and organizational structures.

Image risk

Generally speaking, circumstances may arise that have a negative impact on the company's image. Real or perceived failures of governance or regulatory compliance could harm our reputation. Many other factors, including the materialization of the risks discussed in several of the other risk topics, could impact our licence to operate, harm our ability to secure new resources and contracts, and limit our ability to access capital markets. Elia has an internal control mechanism to guarantee, among other things, regulatory compliance including the confidentiality of data (GDPR). Despite this, external parties may pass on information in their possession that could have an impact on the company's share price.

Miscellaneous

Elia realises that there might be other risks of which the company is not yet aware. Some risks may seem limited today but could increase in the future. The subdivisions used give no indication of the potential consequences of the listed risks.

FEATURES OF THE INTERNAL CONTROL AND RISK MANAGEMENT SYSTEMS

The reference framework for internal control and risk management, established by the Management Committee and approved by the Elia Board of Directors, is based on the COSO II framework. The framework has five closely linked basic components, providing an integrated procedure for internal control and risk management systems: control environment, risk management, control activities, information and communication, and monitoring. The use and inclusion of these concepts in Elia's various procedures and activities enables the company to control its activities, improve the effectiveness of its operations, optimally deploy its resources, and ultimately achieve its objectives. The implementation of COSO II at Elia is described below.

1. Control environment

Organisation of internal control

Pursuant to the Elia articles of association, the Board of Directors has established various committees to help it fulfil its duties: the Management Committee, the Audit Committee, the Remuneration Committee and the Corporate Governance Committee. The Board has charged the Audit Committee with the task of monitoring: (i) the financial reporting procedure; (ii) the effectiveness of internal control and corporate risk management systems; (iii) the internal audit and its effectiveness; (iv) the statutory audit of annual and consolidated accounts, including the follow-up of any issues raised or recommendations made by external auditors; (v) the independence of external auditors, (vi) examining accounts and controlling budgets.

The Audit Committee generally meets quarterly to discuss the above points.

The Finance Department helps the Management Committee by providing, in a timely manner, correct and reliable financial information to aid not only decision-making with a view to monitoring the profitability of activities, but also effective management of corporate financial services. External financial reporting – one of Elia's duties – includes (i) statutory financial and tax reporting; (ii) consolidated financial reporting; (iii) specific reporting obligations applicable to public companies; (iv) reporting obligations under the regulatory framework. The structured approach developed by Elia helps to ensure that financial data is both exhaustive and precise, taking into account the deadlines for activity reviews and the actions of key players so as to ensure adequate control and accounting.

Integrity and ethics

Elia's integrity and ethics are a crucial aspect of its internal control environment. The Management Committee and management regularly communicate about these principles in order to clarify the mutual rights and obligations of the company and its employees. These rules are disseminated to all new employees, and compliance with them is formally included in employment contracts. The Code of Conduct also helps to prevent employees from breaching any Belgian legislation on the use of privileged information or market manipulation and suspicious activities. Management consistently ensures that employees comply with internal values and procedures and – where applicable – take any actions deemed necessary, as laid down in the company regulations and employment contracts.

The Ethical Code defines what Elia regards as correct ethical conduct and sets out the policy and a number of principles on the avoidance of conflicts of interests. Acting honestly and independently with respect to all stakeholders is a key guiding principle for all of our employees. Elia's Ethical Code expressly states that the Group prohibits bribery in any form, misuse of prior knowledge and market manipulation. This is confirmed by the Elia Code of Conduct. Elia and its employees do not use gifts or entertainment to gain competitive advantage. Facilitation payments are not permitted by Elia. Disguising gifts or entertainment as charitable donations is also a violation of the Ethical Code. Moreover, the Ethical Code prohibits all forms of racism and discrimination, promotes equal opportunities for all employees, and ensures the protection and confidential use of IT systems. All parties involved in procurement must abide by Elia's Purchasing Code of Ethics and all associated regulations. Elia's Purchasing Code of Ethics is published internally and externally and is based on four pillars: confidentiality, non-discriminatory treatment of suppliers, transparency, and avoidance of conflicts of interest. The management of the employees involved in the procurement and payment processes regularly provides opportunities for training and awareness-raising on these topics.

By virtue of its legal status as a power transmission system operator, Elia is subject to a large number of statutory and regulatory rules setting out three fundamental principles: non-discriminatory conduct, confidential processing of information, and transparency towards all electricity market players as regards non-confidential market information. With a view to meeting these specific obligations, Elia has drawn up an Engagement Programme, which has been approved by the Corporate Governance Committee. The Compliance Officer reports annually to the relevant regulatory bodies in this regard.

Any violations of these codes can be reported to the Compliance Officer, who handles them objectively and confidentially. The Compliance Officer declares that no such violations were reported by internal employees or external stakeholders in 2018.

Internal Audit's annual programme includes a number of actions and verification audits designed to act as specific safeguards against fraud. Any findings are systematically reported to the Audit Committee. In 2018, no relevant findings relating to financial fraud were reported in the specific audit of purchase and payment processes, nor in the other audits making up the annual audit plan.

Roles and responsibilities

Elia's internal control system relies on clearly defined roles and responsibilities at all levels of the organisation. The roles and responsibilities of the various committees established within Elia are primarily identified in the legal framework applicable to Elia, the articles of association and the Corporate Governance Charter.

Under the supervision of the Chief Financial Officer, the Accounting Department is responsible for statutory financial and tax reporting and the consolidation of the Elia Group's various subsidiaries. The Controlling Department monitors analytical accounting and reporting and assumes responsibility for all financial reporting in a regulatory context. The Investor Relations Department is responsible for specific reporting applicable to companies listed on the stock exchange.

As regards the financial reporting process, the tasks and responsibilities of all employees in the Accounting Department have been clearly defined with a view to producing financial results that accurately and honestly reflect Elia's financial transactions. A detailed framework of tasks and responsibilities has been drawn up to identify the main control duties and the frequency with which tasks and control duties are performed.

An IFRS Accounting Manual is used by all entities within the scope of consolidation as a reference for accounting principles and procedures, thus ensuring consistency, comparability and accu- rate accounting and reporting within the Group.

The Finance Department has the appropriate means (including IT tools) to perform its tasks; all entities within the scope of consolidation use the same ERP software, which has a range of integrated controls and supports task separation as appropriate. Elia also clarifies the roles and responsibilities of all its employees by providing a description of each job in keeping with the Business Process & Applications methodology.

Competencies

With a view to ensuring its various activities are performed reliably and effectively, Elia clearly spells out the vital importance of its employees' competencies and expertise in its recruitment, training and retention procedures. The Human Resources Department has drawn up the appropriate policies and defined all jobs in order to identify the relevant roles and responsibilities as well as the qualifications needed to fulfil them.

Elia has drawn up a policy for the management of generic and specific competencies in line with the company's values, and promotes training so as to enable all its employees to effectively perform the tasks allocated to them. Requirements with regard to competency levels are continually analysed by means of formal and informal self-assessments at various stages of an employee's career.

Training programmes on financial reporting are offered to all employees involved directly or indirectly with that task. The training emphasises the existing regulatory framework, accounting obligations and actual activities, with a high level of understanding enabling participants to address the appropriate issues.

2. Risk management

Risk management is another internal control system that is crucial in helping Elia to achieve its strategic objectives as defined in its mission. The Board of Directors and the Risk Manager jointly and regularly identify, analyse and assess key strategic and tactical risks. The risks are assessed qualitatively and/or quantitatively depending on their nature and potential effect. The Risk Manager then makes recommendations on how best to manage each risk considering the close interaction of Elia's entire risk universe. Based on this assessment, preventive, remedial and/or corrective actions are implemented, including the strengthening of existing internal control activities where applicable.

As part of its responsibilities, Elia's management establishes an effective internal control system to ensure, among other objectives, accurate financial reporting. It emphasises the importance of risk management in financial reporting by taking into account, with the Audit Committee, a whole range of associated activities and risks. It ensures that risks are truly reflected in financial results and reports. In addition, Risk Management goes beyond those risks known to Elia and tries to anticipate the nature and characteristics of emerging risks, which may impact Elia's objectives.

Financial risk assessments primarily involve the identification of:

1. significant financial reporting data and its purpose;
2. major risks involved in the attainment of objectives;
3. risk control mechanisms, where possible.

Financial reporting objectives include (i) ensuring financial statements comply with widely accepted accounting principles; (ii) ensuring that the information presented in financial results is both transparent and accurate; (iii) using accounting principles appropriate to the sector and the company's transactions; (iv) ensuring the accuracy and reliability of financial results. The activities undertaken by Elia, as an electricity transmission system operator in relation to its physical installations, contribute significantly to its financial results.

Therefore, appropriate procedures and control systems have been established to ensure an exhaustive and realistic inventory of physical installations. Risk management is a company-wide activity, actively supported by the delegation of relevant responsibilities to all employees as part of their specific activities, as defined in the Policy.

Continuous assessment

Employing a simultaneously top-down and bottom-up approach enables Elia to identify and, where possible, anticipate forthcoming events and react to any incidents occurring inside or outside the organisation which might affect the attainment of objectives.

Top-down approach based on strategic risks

Elia's strategic risk assessments are reviewed on a quarterly basis in the Audit Committee. Action plans or specific, theme-based risk assessments are carried out whenever there is a perception of potential threats or opportunities.

Bottom-up approach with regard to business

With a view to identifying new risks or evaluating changes in existing risks, the Risk Manager and management remain in contact and look out for any changes that may call for the relevant risk assessment and associated action plans to be amended. Various criteria are used to determine the need to re-evaluate financial reporting procedures and associated risks. Emphasis is put on risks associated with changes in the financial and regulatory context, industrial practices, accounting standards and corporate developments such as mergers and acquisitions.

Operational management assesses the relevant risks and puts forward action plans. Any significant changes to assessment rules must be approved by the Board of Directors. Risk Management is instrumental for Elia to maintain its value for stakeholders and the community, works with all departments with a view to optimising Elia's ability to achieve its strategic objectives, and advises the company regarding the nature and potential effects of future risks.

3. Control activities

Main control activities

Elia has established internal control mechanisms at its various structural levels so as to ensure compliance with standards and internal procedures geared to the proper management of identified risks. These include:

(i) clear task separation as part of procedures, preventing the same person from initiating, authorising and recording a transaction – policies have been drawn up regarding access to information systems and the delegation of powers;

(ii) integrated audit approach as part of internal procedures so as to link end results with the transactions supporting them;

(iii) data security and integrity through the appropriate allocation of rights;

(iv) appropriate documentation of procedures through the use of the Business Process & Applications Intranet, which centralises policies and procedures.

Departmental managers are responsible for establishing activities to control the risks inherent to their department.

Financial reporting procedure

For all significant financial reporting risks, Elia sets out appropriate control mechanisms to minimise the probability of error. Roles and responsibilities have been defined in connection with the closing procedure for financial results. Measures have been established for the continuous follow-up of each stage, with a detailed agenda of all activities undertaken by Group subsidiaries; control activities are performed to ensure quality and compliance with internal and external requirements and recommendations. During the financial closing period, a specific test is performed to ensure control over significantly unusual transactions, accounting checks and adjustments at the end of the relevant financial period, company transactions and critical estimates. The combination of all these controls ensures the reliability of financial results. Regular internal and external audits also contribute to financial reporting quality.

In identifying those risks that may affect the achievement of financial reporting objectives, the management takes into account the possibility of misreporting associated with fraud and takes appropriate action where internal control needs to be strengthened. Internal Audit performs specific audits based on the risk assessment for potential fraud, with a view to avoiding and preventing any instances of fraud.

4. Information and communication

Elia communicates relevant information to its employees to enable them to fulfil their responsibilities and achieve their objectives. Financial information is needed for budgeting, forecasts and ensuring compliance with the regulatory framework. Operational information is also vital for the production of various reports, essential for the well-functioning of the company. As such, Elia records recent and historical data needed for corporate risk assessments. Multiple communication channels are used: manuals, memos, emails, bulletin boards and intranet applications. Financial results are reported internally and validated at different levels. The management responsible for financial reporting regularly meets other internal departments (operational and control departments) to identify financial reporting data. It validates and documents the critical assumptions underpinning booked reserves and the company's accounts.

At Group level, consolidated results are broken down into segments and validated by means of a comparison with historical figures and a comparative analysis between forecasts and actual data. This financial information is reported monthly to the Management Committee and is discussed quarterly with the Audit Committee. The Chairman of the Audit Committee then reports to the Board of Directors.

5. Monitoring

Elia continually re-evaluates the adequacy of its risk management approach. Monitoring procedures include a combination of monitoring activities carried out as part of normal business operations, in addition to specific ad hoc assessments on selected topics. Monitoring activities include (i) monthly reporting of strategic indicators to the Management Committee and the management; (ii) follow-up on key operational indicators at departmental level; (iii) a monthly financial report including an assessment of variations as compared with the budget, comparisons with preceding periods and events liable to affect cost controlling. Consideration is also given to third-party feedback from a range of sources, such as (i) stock market indices and reports by ratings agencies; (ii) share value; (iii) reports by federal and regional regulators on compliance with the legal and regulatory framework; (iv) reports by security and insurance companies. Comparing information from external sources with internally generated data and ensuing analyses allows Elia to keep on making improvements.

Internal Audit also plays a key role in monitoring activities by conducting independent reviews of key financial and operational procedures in view of the various regulations applicable to Elia. The findings of those reviews are reported to the Audit Committee to help it monitor internal control and risk management systems and corporate financial reporting procedures.

The Group's legal entities are also subject to external audits, which generally entail an evaluation of internal control and remarks on (annual and quarterly) statutory and consolidated financial results. External auditors make recommendations for improving internal control systems. In entities that have an Audit Committee, the recommendations, action plans and their implementation are reported annually to that Committee, which in turn reports to the Board of Directors on the independence of the auditor or statutory audit firm and drafts a motion for a resolution on the appointment of external auditors.

DECLARATION BY RESPONSIBLE PERSONS

The undersigned Chairman of the Management Committee and Chief Executive Officer Chris Peeters and Chief Financial Officer Catherine Vandenborre declare that to the best of their knowledge:

a. the financial statements, which have been prepared in accordance with applicable accounting policies for financial statements, give a true and fair view of the assets, the financial position and results of Elia and of its subsidiaries included in the consolidation;

b. the annual report gives a true and fair view of the evolution and the results of the Company and of the situation of Elia and of its subsidiaries included in the consolidation, as well as a description of the most significant risks and uncertainties they are facing.

Brussels, 21 March 2019

Catherine Vandenborre
Chief Financial Officer

Chris Peeters
Chief Executive Officer

CONSOLIDATED FINANCIAL STATEMENTS

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CONSOLIDATED FINANCIAL STATEMENTS

Consolidated statement of profit or loss

GRI 201-1 (Revenues, Operating costs, Employees wages and benefits)

(in million EUR) Year ended 31 December	Notes	2018	2017 (restated *)
Continuing operations			
Revenue	(5.1)	1,822.8	808.2
Raw materials, consumables and goods for resale	(5.2)	(41.5)	(9.6)
Other income	(5.1)	109.0	59.0
Services and other goods	(5.2)	(945.7)	(344.4)
Personnel expenses	(5.2)	(229.3)	(147.2)
Depreciation, amortisation and impairment	(5.2)	(252.3)	(131.2)
Changes in provisions	(5.2)	4.4	0.4
Other expenses	(5.2)	(30.4)	(19.6)
Results from operating activities		**437.0**	**215.5**
Share of profit of equity-accounted investees (net of tax)	(6.3)	65.6	109.1
EBIT**		**502.6**	**324.6**
Net finance costs	(5.3)	**(93.3)**	**(76.5)**
Finance income		21.9	5.5
Finance costs		(115.2)	(81.9)
Profit before income tax		**409.3**	**248.1**
Income tax expense	(5.4)	(102.2)	(39.5)
Profit from continuing operations		**307.1**	**208.6**
Profit for the period		**307.1**	**208.6**
Profit attributable to:			
Equity holders of ordinary shares		275.2	208.6
Hybrid securities		6.2	0.0
Non-controlling interest		25.7	0.0
Profit for the period		**307.1**	**208.6**
Earnings per share (EUR)			
Basic earnings per share	(5.5)	4.52	3.42
Diluted earnings per share	(5.5)	4.52	3.42

* See Note 2.1 for details regarding the restatement as a result of a change in accounting policy.
** EBIT (Earnings Before Interest and Taxes) = Results from operating activities and share of profit of equity-accounted investees, net of income tax

The accompanying notes form an integral part of these consolidated financial statements.

Consolidated statement of profit or loss and comprehensive income

(in million EUR) Year ended 31 December	Notes	2018	2017 (restated *)
Profit for the period		**307.1**	**208.6**
Other comprehensive income (OCI)			
Items that may be reclassified subsequently to profit or loss:			
Effective portion of changes in fair value of cash flow hedges	(5.6)	(8.4)	9.4
Related tax		2.2	(3.2)
Items that will not be reclassified to profit or loss:			
Remeasurements of post-employment benefit obligations	(6.13)	0.8	(13.7)
Equity-accounted investees share of OCI		0.0	1.1
Effective portion of changes in fair value of investments	(5.6)	2.7	0.0
Related tax	(6.13)	(0.2)	2.3
Other comprehensive income for the period, net of tax		(2.9)	(4.1)
Total comprehensive income for the period		**304.2**	**204.5**
Total comprehensive income attributable to:			
Equity holders of ordinary shares		271.9	204.5
Hybrid securities		6.2	0.0
Non-controlling interest		26.1	0.0
Total comprehensive income for the period		**304.2**	**204.5**

* See Note 2.1 for details regarding the restatement as a result of a change in accounting policy.

The accompanying notes form an integral part of these consolidated financial statements.

Consolidated statement of financial position

(in million EUR)	Notes	31 December 2018	31 December 2017 (restated *)
ASSETS			
NON-CURRENT ASSETS		**11,362.8**	**6,079.1**
Property, plant and equipment	(6.1)	8,456.2	3,202.4
Intangible assets and goodwill	(6.2)	2,502.3	1,738.6
Trade and other receivables	(6.3)	177.0	147.8
Equity-accounted investees	(6.4)	135.4	928.6
Other financial assets (including derivatives)	(6.5)	86.9	60.9
Deferred tax assets	(6.6)	5.0	1.0
CURRENT ASSETS		**2,391.5**	**503.2**
Inventories	(6.7)	19.2	13.6
Trade and other receivables	(6.8)	558.9	281.1
Current tax assets	(6.9)	3.6	3.8
Cash and cash equivalents	(6.10)	1,789.3	195.2
Deferred charges and accrued revenues	(6.8)	20.6	9.6
Total assets		**13,754.3**	**6,582.3**
EQUITY AND LIABILITIES			
EQUITY		**3,748.9**	**2,564.4**
Equity attributable to owners of the Company	(6.11)	3,447.5	2,563.3
Equity attributable to ordinary shares		2,741.3	2,563.3
Share capital		1,521.5	1,517.6
Share premium		14.3	11.9
Reserves		173.0	173.0
Hedging reserve		(6.2)	0.0
Retained earnings		1,038.7	860.8
Hybrid securities	(6.11)	706.2	0.0
Non-controlling interest		301.4	1.1
NON-CURRENT LIABILITIES		**6,289.0**	**3,047.9**
Loans and borrowings	(6.12)	5,773.8	2,834.7
Employee benefits	(6.13)	104.0	84.3
Derivatives	(8.1)	2.9	0.0
Provisions	(6.14)	96.9	20.8
Deferred tax liabilities	(6.6)	95.2	19.5
Other liabilities	(6.15)	216.2	88.5
CURRENT LIABILITIES		**3,716.4**	**970.0**
Loans and borrowings	(6.12)	621.1	49.5
Provisions	(6.14)	16.5	4.5
Trade and other payables	(6.16)	1,989.1	378.5
Current tax liabilities	(6.9)	93.1	2.9
Accruals and deferred income	(6.17)	996.6	534.6
Total equity and liabilities		**13,754.3**	**6,582.3**

* See Note 2.1 for details regarding restatement as a result of a change in accounting policy.

The accompanying notes form an integral part of these consolidated financial statements.

2. Consolidated statement of changes in equity

GRI 201-1 (Economic value retained)

(in million EUR)	Share capital	Share premium	Hedging reserve	Foreign currency translation	Reserves	Retained earnings	Equity attributable to ordinary shares	Hybrid securities	Equity attributable to the owners of the Company	Non-controlling interests	Total equity
Balance at 1 January 2017	1,517.2	11.8	(6.1)		173.0	815.5	2,511.4	0.0	2,511.4	1.2	2,512.6
Change in accounting policy (IFRS 15)						(56.9)	(56.9)		(56.9)		(56.9)
Restated balance at 1 January 2017	1,517.2	11.8	(6.1)		173.0	758.6	2,454.5	0.0	2,454.5	1.2	2,455.7
Profit for the period						208.6	208.6		208.6	0.0	208.6
Other comprehensive income net of tax			6.2			(10.3)	(4.1)		(4.1)		(4.1)
Total comprehensive income for the period			**6.2**			**198.3**	**204.5**		**204.5**	**0.0**	**204.5**
Transactions with owners, recorded directly in equity											
Contributions by and distributions to owners											
Shares issued	0.2	0.1					0.3		0.3		0.3
Share-based payment expenses	0.1						0.1		0.1		0.1
Dividends						(96.2)	(96.2)		(96.2)		(96.2)
Total contributions and distributions	0.3	0.1				(96.2)	(95.8)		(95.8)		(95.8)
Total transactions with owners	0.3	0.1				(96.2)	(95.8)		(95.8)		(95.8)
Balance at 31 December 2017	**1,517.6**	**11.9**			**173.0**	**860.8**	**2,563.3**	**0.0**	**2,563.3**	**1.1**	**2,564.4**
Balance at 31 December 2017, as originally presented	1,517.6	11.9			173.0	938.2	2,640.7	0.0	2,640.7	1.1	2,641.8
Change in accounting policy (IFRS 15)*						(77.4)	(77.4)		(77.4)	0.0	(77.4)
Restated balance at 31 December 2017	1,517.6	11.9			173.0	860.8	2,563.3	0.0	2,563.3	1.1	2,564.4
Change in accounting policy (IFRS 9)*						2.9	2.9		2.9	0.0	2.9
Restated balance at 1 January 2018	1,517.6	11.9			173.0	863.7	2,566.2	0.0	2,566.2	1.1	2,567.3
Profit for the period						281.6	281.6		281.6	25.7	307.3
Other comprehensive income, net of tax			(6.2)	0.0		2.8	(3.5)		(3.5)	0.5	(3.1)
Total comprehensive income for the period			**(6.2)**	**0.0**		**284.4**	**278.2**		**278.2**	**26.1**	**304.2**
Transactions with owners, recorded directly in equity											
Contributions by and distributions to owners											
Shares issued	2.8	2.5					5.3		5.3		5.3
Share-based payment	1.0						1.0		1.0		1.0
Issue of hybrid securities						(3.2)	(3.2)	700.0	696.8		696.8
Distribution on hybrid securities						(6.2)	(6.2)	6.2	0.0		0.0
Tax on distribution on hybrid securities						(1.8)	(1.8)		(1.8)		(1.8)
Dividends						(98.7)	(98.7)		(98.7)	(20.0)	(118.7)
Total contributions and distributions	3.8	2.5				(109.9)	(103.6)	706.2	602.6	(20.0)	582.6
Changes in ownership interests:											
Non-controlling interest adjustments on EGI, due to acquisition						0.5	0.5		0.5	(0.5)	0.0
Acquisition				0.0		0.0	0.1		0.1	294.6	294.7
Total changes in ownership interests				0.0		0.5	0.5		0.5	294.1	294.7
Total transactions with owners	3.8	2.5		0.0		(109.4)	(103.1)	706.2	603.1	274.1	877.3
Balance at 31 December 2018	**1,521.4**	**14.4**	**(6.2)**	**0.0**	**173.0**	**1,038.7**	**2,741.3**	**706.2**	**3,447.5**	**301.4**	**3,748.9**

* See Note 2.1 for details regarding restatement as a result of a change in accounting policy.

The accompanying notes form an integral part of these consolidated financial statements.

3. Consolidated statement of cash flows

(in million EUR) Year ended 31 December	Notes	2018	2017 (restated *)
Cash flows from operating activities			
Profit for the period		**307.1**	**208.6**
Adjustments for:			
Net finance costs	(5.3)	93.3	76.5
Other non-cash items		1.1	0.1
Current income tax expense	(5.4)	105.9	29.2
Profit or loss of equity-accounted investees, net of tax		(65.6)	(109.1)
Depreciation of PP&E and amortisation of intangible assets		249.5	131.4
Gain on sale of property, plant and equipment and intangible assets		12.6	6.5
Impairment losses of current assets		3.8	–
Change in provisions		(9.2)	(5.3)
Change in fair value of derivatives		1.3	1.1
Change in deferred taxes		(3.6)	10.4
Cash flow from operating activities		**696.1**	**349.3**
Change in inventories		(1.8)	9.3
Change in trade and other receivables		(50.5)	98.2
Change in other current assets		7.8	4.8
Change in trade and other payables		(12.9)	(12.3)
Change in other current liabilities		117.9	95.3
Changes in working capital		**60.5**	**195.3**
Interest paid		(141.8)	(88.4)
Interest received		5.7	1.7
Income tax paid		(103.8)	(27.6)
Net cash from operating activities		**516.7**	**430.3**
Cash flows from investing activities			
Acquisition of intangible assets		(23.2)	(10.6)
Acquisition of property, plant and equipment		(991.1)	(369.1)
Acquisition of equity-accounted investees		(23.8)	(57.2)
Acquisition of investment	(7.1)	(988.7)	0.0
Acquired cash from acquisition of subsidiary	(7.1)	1,902.7	0.0
Proceeds from sale of property, plant and equipment		2.4	1.5
Proceeds from sales of investments		0.2	0.0
Proceeds from capital decrease from equity-accounted investees		0.0	0.1
Dividend received		2.0	56.8
Loans and long-term receivables to joint ventures		(35.7)	(84.6)
Net cash used in investing activities		**(155.2)**	**(463.1)**
Cash flow from financing activities			
Proceeds from the issue of share capital	(6.11)	5.3	0.4
Expenses related to the issue of share capital	(6.11)	(0.1)	0.0
Dividends paid (-)	(6.11)	(98.7)	(96.2)
Repayment of borrowings (-)	(6.12)	0.0	(100.0)
Issuance of hybrid (+)	(6.11)	696.8	0.0
Proceeds from withdrawal of borrowings (+)	(6.12)	656.9	247.2
Non-controlling interests		(20.0)	0.0
Other cash flows from financing activities		(7.6)	0.0
Net cash flow from (used in) financing activities		**1,232.6**	**51.4**
Net increase (decrease) in cash and cash equivalents		**1,594.1**	**18.6**
Cash and cash equivalents at 1 January		195.2	176.6
Cash and cash equivalents at 31 December		1,789.3	195.2
Net variations in cash and cash equivalents		**1,594.1**	**18.6**

* See Note 2.1 for details regarding the restatement as a result of a change in accounting policy.

The accompanying notes form an integral part of these consolidated financial statements.

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS

1. Reporting entity

Established in Belgium, Elia System Operator SA (the 'Company' or 'Elia') has its registered office at Boulevard de l'Empereur 20, B-1000 Brussels. The Company's consolidated financial statements for the financial year 2018 include those of the Company and its subsidiaries (together referred to as the 'Group' or 'Elia Group') and the Group's interest in joint ventures and associates.

The Company is a limited liability company, with its shares listed on Euronext Brussels, under the symbol ELI.

The Elia Group is organised around two electricity transmission system operators: Elia Transmission in Belgium and 50Hertz Transmission, one of the four German transmission system operators, active in the north and east of Germany. Following the acquisition of an additional 20% stake in 50Hertz Transmission (Germany) in April 2018 (refer to Note 7.1), the Group acquired control over 50Hertz Transmission (Germany). Effective from the acquisition date, 50Hertz Transmission (Germany) is considered a subsidiary and its results and balance sheet are consolidated in full. The accounting policies of Elia Transmission (Belgium) and 50Hertz Transmission (Germany) were already aligned prior to the acquisition.

The Group also has a 50% stake in NemoLink Ltd, which has constructed an electrical interconnector between the UK and Belgium known as the Nemo Link interconnector. Nemo Link is a joint venture with National Grid Ventures (UK) and began commercial operations on January 30th 2019, with a transfer capacity of 1000 MW.

With around 2,300 employees and a transmission grid comprising some 18,600 km of high-voltage connections serving 30 million consumers, the Elia Group is one of Europe's top five TSOs. It efficiently, reliably and securely transmits electricity from generators to distribution system operators and major industrial consumers, while also importing and exporting electricity from and to neighbouring countries. The Group is a driving force behind the development of the European electricity market and the integration of energy generated from renewable sources. In addition to its system-operator activities in Belgium and Germany, the Elia Group offers businesses a range of consultancy and engineering services. The Group operates under the legal entity Elia System Operator, a listed company whose reference shareholder is municipal holding company Publi-T.

2. Basis of preparation

2.1. Statement of compliance

The consolidated financial statements have been prepared in accordance with International Financial Reporting Standards (IFRS), as adopted by the European Union. The Group has applied all new and revised standards and interpretations published by IASB and applicable to the Group's activities which are effective for financial years starting on 1 January 2018.

New and amended standards and interpretations

If a standard or amendment affects the Group, it is described hereunder, together its impact.

- **IFRS 9: Financial Instruments** reflects all phases of the financial instruments project and replaces IAS 39: Financial Instruments: Recognition and Measurement and all previous versions of IFRS 9. The standard introduces new requirements for classification and measurement, impairment and hedge accounting.

  The Group elected to apply the exemption provided for in IFRS 9 with regard to transition for classification, measurement and impairment. Accordingly, it has not restated comparative periods in the year of initial application. Furthermore, in accordance with IFRS 9, the Group opted to recognise changes in the fair value of an equity investment that is not held for trading in OCI (aside from dividend income).

  The Group also reviewed in detail the impact of all three aspects of IFRS 9.

  (i) Classification and measurement

  Trade receivables are held to collect contractual cash flows and are expected to give rise to cash flows representing solely payments of principal and interest. The Group analysed the contractual cash flow characteristics of those instruments and concluded that they meet the criteria for amortised cost measurement under IFRS 9.

  Equity shares in non-listed companies are intended to be held for the foreseeable future. No impairment losses were recognised in profit or loss during prior periods for these investments. The Group decided to apply the option to present fair-value changes in OCI.

  The impact of the change on the Group in terms of equity shares in non-listed companies is detailed below:

(in € million) – Equity shares in non-listed companies	Available for sale assets	FVOCI
Closing balance 31 December 2017 – IAS 39	**0.2**	**-**
Reclassification of non-traded equities from available-for-sale to FVOCI	(0.2)	0.2
Opening balance 1 January 2018 – IFRS 9	-	**0.2**

The impact of this change on the Group's equity is as follows:

(in € million) – Equity shares in non-listed companies	Effect on Group's equity
Remeasurement of non-traded equities from available-for-sale to FVOCI – Elia Transmission (Belgium)	-
Remeasurement of non-traded equities from available-for-sale to FVOCI – 50Hertz Transmission (Germany) (*)	3.2
Effect on the Group's retained earnings	**3.2**

* Non-traded equities held within 50Hertz Transmission (Germany) were subject to a remeasurement of €5.4 million (at 100%) as at 1 January 2018.

There is no impact on the Group's accounting for financial liabilities, as the new requirements only affect the accounting for financial liabilities that are designated at fair value through profit or loss, and the Group does not have any such liabilities. IFRS 9 does not have an impact on the accounting policies for derecognition of financial assets and liabilities.

(ii) Impairment

IFRS 9 requires the Group to record expected credit losses on all of its debt securities, loans and trade receivables, either on a 12- month or on a lifetime basis.

The assessment for the Belgian segment indicated that, due to the application of the Expected Credit Losses method (ECL) at 1 January 2018, the bad debt allowance for trade receivables needed to increase by €0.3 million at that date compared with the allowance for trade receivables recognised under IAS 39. Deferred tax assets would increase by €0.1 million and net profit for the period would decrease by €0.2 million.

A similar assessment for the German segment indicated that due to the application of the Expected Credit Losses (ECL) method at 1 January 2018, the bad debt allowance for trade receivables needed to increase by €0.2 million at that date compared with the allowance for trade receivables recognised under IAS 39. Deferred tax assets would increase by less than €0.1 million, and net profit for the period would decrease by €0.2 million.

(iii) Hedge accounting

Under the amended hedging requirements, more hedge relationships could be eligible for hedge accounting, as the new standard introduces a more principles-based approach. However, at 1 January 2018, there were no additional hedge relationships to be designated.

- **IFRS 15: Revenue from Contracts with Customers** (effective from 1 January 2018) establishes a new comprehensive framework for determining whether, how much and when revenue is recognised. It replaces existing revenue recognition guidance, including IAS 18: Revenue, IAS 11: Construction Contracts, IFRIC 18: Transfers of Assets from Customers, and IFRIC 13: Customer Loyalty Programmes.

  The Group completed its assessment of the impact of the adoption of IFRS 15 on its consolidated financial statements and only identified an impact as a result of the application of IFRIC 18. The Group opted for full retrospective application of IFRS 15, which involved restating comparatives for the effect of IFRS 15. The Group also used the practical expedients for completed contracts, meaning that there was no restatement of completed contracts that started and ended in the same comparative period or of, those that were completed at the beginning of the earliest period presented.

  The Group has a number of standard contracts for its customers, covering most of its revenue. These contracts are specific to each segment. As a consequence, the analysis of the potential impact of IFRS 15 is performed by reviewing those standard contracts. In the table below, an overview of the different revenue buckets is given, with reference to the relevant contracts and the result of the potential impact under IFRS 15.

Revenue bucket (per segment)	Revenue bucket (Group)	Contracts	Status analysis	Within the scope of IFRS 15	Change in accounting policy	Change in amount of revenue	Change in timing of revenue	Impact on opening equity on 1 January 2018 (net of tax)
Elia Transmission (Belgium) revenues								
Grid connection	Revenue	Connection contract	complete	yes	no	no	no	0.0
Management and development of grid infrastructure	Revenue	Access contract	complete	yes	no	no	no	0.0
Management of the electrical system	Revenue	Access contract	complete	yes	no	no	no	0.0
Compensation for imbalances	Revenue	ARP contract	complete	yes	no	no	no	0.0
Market integration	Revenue	ARP contract	complete	yes	no	no	no	0.0
International revenues	Revenue	Congestion revenues	complete	yes	no	no	no	0.0
Other income	Transfers of assets from customers	Customer contributions	complete	yes	yes	no	yes	(63.3)
Other income	Revenue	EGI contracts	complete	yes	no	no	no	0.0
Other income	Optimal use of assets	Telecom contracts	complete	yes	no	no	no	0.0
50Hertz Transmission (Germany) revenues (at 100%)								
Vertical grid revenues	n/a	Grid use contract	complete	yes	no	no	no	0.0
Ancillary-services revenues	n/a	Contract for balancing	complete	yes	no	no	no	0.0
Other income	n/a	Customer contributions	complete	yes	yes	no	yes	(23.5)

(*) 50Hertz Transmission (Germany)'s equity adjustments are stated at 100%. Those adjustments have a 60% impact on the Group's consolidated equity. As such, the total impact on the Group's equity is €77.4 million.

Under IFRIC 18, customer contributions were recognised in full as revenue, whereas under IFRS 15, cash considerations should be presented as deferred revenue and will be recognised in revenue over the lifetime of the underlying asset.

The impact of the transition to IFRS 15 on the revenue of the segments Elia Transmission Belgium and 50Hertz Transmission Germany is shown below:

Elia Transmission (Belgium) revenues – Period ended	31 December 2017 as reported	31 December 2017 under IFRS 15	31 December 2017 difference
Grid connection	42.2	42.2	0.0
Management and development of grid infrastructure	479.2	479.2	0.0
Management of the electrical system	118.5	118.5	0.0
Compensation for imbalances	170.7	170.7	0.0
Market integration	24.3	24.3	0.0
International revenue	47.3	47.3	0.0
Other income	81.7	61.4	(20.4)
Subtotal revenue and other income	**963.9**	**943.6**	**(20.4)**
Settlement mechanism: deviations from approved budget	(92.3)	(92.3)	0.0
Total revenues and other income	**871.7**	**851.3**	**(20.4)**

Period ended	as reported	under IFRS 15	Difference
Vertical grid revenues	1,241.4	1,241.4	0.0
Horizontal grid revenues	210.2	210.2	0.0
Ancillary services revenues	94.0	94.0	0.0
Other income	72.7	73.5	0.8
Subtotal revenue and other income	**1,618.3**	**1,619.1**	**0.8**
Settlement mechanism: deviations from approved budget	(288.9)	(288.9)	0.0
Total revenues and other income	**1,329.4**	**1,330.2**	**0.8**

The summarised impact on the Group's revenue is detailed below:

Revenues – Period ended	31 December 2017 as reported	31 December 2017 under IFRS 15	31 December 2017 difference
Revenue	806.4	806.4	0.0
Transfers of assets from customers	22.1	1.7	(20.4)
Total revenue	**828.5**	**808.2**	**(20.4)**
Other operating income			
Services and technical expertise	(0.3)	(0.3)	0.0
Own production	25.5	25.5	0.0
Optimal use of assets	14.3	14.3	0.0
Other	18.5	18.5	0.0
Gain on sale PPE	1.0	1.0	0.0
Total other operating income	**59.0**	**59.0**	**0.0**

The companies included in the 50Hertz Transmission Germany segment are accounted for using the equity method (at 60%) as at 31 December 2017. As such, the impact of IFRS 15 on their revenue recognition is shown in the entry 'Share of profit of equity-accounted investees (net of income tax)' in the Group's results.

The summarised impact on the Group is detailed below:

Key figures – Period ended	31 December 2017 as reported	31 December 2017 under IFRS 15	31 December 2017 difference
Total revenues	887.5	867.1	(20.4)
Share of profit of equity-accounted investees (net of income tax)	108.7	109.1	0.4
Income tax expenses	(39.1)	(39.6)	(0.5)
Net profit	**229.1**	**208.6**	**(20.6)**
Total assets	6,596.5	6.582.3	(14.2)
Total equity	2,640.7	2.563.3	(77.4)
Key figures per share			
Basic earnings per share (EUR)	3.76	3.42	(0.34)
Equity per share (EUR)	43.36	42.09	(1.27)

The income tax expenses, as presented in the table above, include the combined effect of additional temporary differences accumulated throughout the financial year 2017 which has resulted in an increased deferred tax liability of €6.9 million, as well as an offsetting effect resulting from remeasuring the accumulated temporary differences at the lower tax rates, as enacted as part of the Belgian tax reform, and having an effect of €7.4 million.

- **Overall effect of new, revised or amended IASB standards:** As a result of the changes in the entity's accounting policies for IFRS15 and IFRS 9, comparative figures and opening balances had to be restated. As indicated here above, IFRS 9 was generally adopted without restating comparative information. The reclassifications and the adjustments arising from the new impairment rules are therefore not reflected in the restated balance sheet as at 31 December 2017, but are recognised in the opening balance sheet as at 1 January 2018.

The following tables show the adjustments recognised for each individual line item.

Condensed consolidated statement of financial position

(in € million)	31 December 2017 (as originally reported)	IFRS 15	31 December 2017 (restated)	IFRS 9	1 January 2018 (restated)
ASSETS					
NON-CURRENT ASSETS	**6,093.2**	**(14.1)**	**6,079.1**	**3.2**	**6,082.3**
Property, plant and equipment	3,202.4	0.0	3.202.4	0.0	3,202.4
Intangible assets and goodwill	1,738.6	0.0	1.738.6	0.0	1,738.6
Trade and other receivables	147.8	0.0	147.8	0.0	147.8
Equity-accounted investees	942.7	(14.1)	928.6	3.1	931.7
Other financial assets (including derivatives)	60.9	0.0	60.9	0.0	60.9
Deferred tax assets	1.0	0.0	1	0.1	1.0
CURRENT ASSETS	**503.2**	**0.0**	**503.2**	**(0.3)**	**502.9**
Inventories	13.6	0.0	13.6	0.0	13.6
Trade and other receivables	281.1	0.0	281.1	(0.3)	280.8
Current tax assets	3.8	0.0	3.8	0.0	3.8
Cash and cash equivalents	195.2	0.0	195.2	0.0	195.2
Deferred charges and accrued revenues	9.6	0.0	9.6	0.0	9.6
Total assets	**6,596.5**	**(14.1)**	**6,582.3**	**2.9**	**6,585.2**
EQUITY AND LIABILITIES					
EQUITY	**2,641.8**	**(77.4)**	**2,564.4**	**2.9**	**2,567.3**
Equity attributable to owners of the Company	2,640.7	(77.4)	2,563.3	2.9	2,566.2
Share capital	1,517.6	0.0	1,517.6	0.0	1,517.6
Share premium	11.9	0.0	11.9	0.0	11.9
Reserves	173.0	0.0	173.0	0.0	173.0
Retained earnings	938.2	(77.4)	860.8	2.9	863.7
Non-controlling interest	1.1	0.0	1.1	0.0	1.1
NON-CURRENT LIABILITIES	**2,984.6**	**63.3**	**3,047.9**	**0.0**	**3,047.9**
Loans and borrowings	2,834.7	0.0	2,834.7	0.0	2,834.7
Employee benefits	84.3	0.0	84.3	0.0	84.3
Provisions	20.8	0.0	20.8	0.0	20.8
Deferred tax liabilities	40.9	(21.4)	19.5	0.0	19.5
Other liabilities	3.8	84.6	88.5	0.0	88.5
CURRENT LIABILITIES	**970.0**	**0.0**	**970.0**	**0.0**	**970.0**
Loans and borrowings	49.5	0.0	49.5	0.0	49.5
Provisions	4.5	0.0	4.5	0.0	4.5
Trade and other payables	378.5	0.0	378.5	0.0	378.5
Current tax liabilities	2.9	0.0	2.9	0.0	2.9
Accruals and deferred income	534.6	0.0	534.6	0.0	534.6
Total equity and liabilities	**6,596.5**	**(14.1)**	**6,582.3**	**2.9**	**6,585.2**

Condensed consolidated statement of profit or loss

(in € million) – 31 December 2017	2017 (as originally reported)	IFRS 15	2017 (restated)
Continuing operations			
Revenue	828.5	(20.4)	808.2
Raw materials, consumables and goods for resale	(9.6)	0.0	(9.6)
Other income	59.0	0.0	59.0
Services and other goods	(344.4)	0.0	(344.4)
Personnel expenses	(147.2)	0.0	(147.2)
Depreciation, amortisation and impairment	(131.2)	0.0	(131.2)
Changes in provisions	0.4	0.0	0.4
Other expenses	(19.6)	0.0	(19.6)
Results from operating activities	**235.9**	**(20.4)**	**215.5**
Share of profit of equity-accounted investees (net of tax)	108.7	0.3	109.1
EBIT	**344.6**	**(20.1)**	**324.6**
Net finance costs	**(76.5)**	**0.0**	**(76.5)**
Finance income	5.5	0.0	5.5
Finance costs	(81.9)	0.0	(81.9)
Profit before income tax	**268.2**	**(20.1)**	**248.1**
Income tax expense	(39.1)	(0.5)	(39.5)
Profit from continuing operations	**229.1**	**(20.5)**	**208.6**
Profit for the period	**229.1**	**(20.5)**	**208.6**
Profit attributable to:			
Owners of the Company	229.1	(20.5)	208.6
Non-controlling interest	0.0	0.0	0.0
Profit for the period	**229.1**	**(20.5)**	**208.6**

Condensed consolidated statement of profit or loss and other comprehensive income

(in € million) – 31 December 2017	2017 (as originally reported)	IFRS 15	2017 (restated)
Profit for the period	**229.1**	**(20.5)**	**208.6**
Other comprehensive income (OCI)			
Items that may be reclassified subsequently to profit or loss:			
Effective portion of changes in fair value of cash flow hedges	9.4	0.0	9.4
Related tax	(3.2)	0.0	(3.2)
Items that will not be reclassified to profit or loss:			
Remeasurements of post-employment benefit obligations	(13.7)	0.0	(13.7)
Equity-accounted investees – share of OCI	1.1	0.0	1.1
Related tax	2.3	0.0	2.3
Other comprehensive income for the period, net of tax	**(4.1)**	**0.0**	**(4.1)**
Total comprehensive income for the period	**225.0**	**(20.5)**	**204.5**
Total comprehensive income attributable to:			
Owners of the Company	225.0	(20.5)	204.5
Non-controlling interest	0.0	0.0	0.0
Total comprehensive income for the period	**225.0**	**(20.5)**	**204.5**

Besides IFRS 9 and IFRS 15, a number of other standards, amendments and interpretations came in effect in 2018 with only limited or no impact for the Group:

- **Clarification of Classification and Measurement of Share-based Payment Transactions** (amendments to IFRS 2 – effective from 1 January 2018). The IASB issued amendments to IFRS 2 Share-based Payment that address three main areas: the effects of vesting conditions on the measurement of a cash-settled share-based payment transaction; the classification of a share-based payment transaction with net settlement features for withholding tax obligations; and accounting where a modification to the terms and conditions of a share-based payment transaction changes its classification from cash settled to equity settled. This amendment had no impact on the Group.
- **Foreign Currency Transactions and Advance Consideration** (IFRIC 22 – effective from 1 January 2018). The interpretation clarifies how to determine the date of transaction for the exchange rate to be used on initial recognition of a related asset, expense or income where an entity pays or receives consideration in advance for foreign currency-denominated contracts. This amendment had no impact on the Group.
- **Transfers of Investment Property** (amendments to IAS 40 – effective from 1 January 2018). The amendments clarify that transfers to, or from, investment property can only be made if there has been a change in use that is supported by evidence. A change in use occurs when the property meets, or ceases to meet, the definition of investment property. A change in intention alone is not sufficient to support a transfer. The Group was not impacted by this new treatment.
- **Applying IFRS 9 Financial Instruments with IFRS 4 Insurance Contracts** (amendments to IFRS 4 – effective from 1 January 2018). The amendments address concerns arising from implementing the new financial instruments standard, IFRS 9, before implementing IFRS 17 Insurance Contracts, which replaces IFRS 4. The amendments introduce two options for entities issuing insurance contracts: a temporary exemption from applying IFRS 9 and an overlay approach. These amendments are not relevant to the Group.
- **Investments in Associates and Joint Ventures – Clarification That Measuring Investees at Fair Value Through Profit or Loss Is an Investment-by-investment Choice** (amendments to IAS 28 – effective from 1 January 2018). These amendments do not have any impact on the Group's consolidated financial statements.

Standards, amendments and interpretations that are not yet effective in 2018

The standards, interpretations or amendments listed hereafter had been published on the date of approval of these consolidated financial statements but are not yet effective, and the Group did not opt for early adoption:

- **IFRS 16** was issued in January 2016 and replaces IAS 17: Leases, IFRIC 4: Determining Whether an Arrangement Contains a Lease, SIC-15: Operating Leases – Incentives and SIC 27: Evaluating the Substance of Transactions Involving the Legal Form of a Lease. IFRS 16 sets out the principles for the recognition, measurement, presentation and disclosure of leases and requires lessees to account for all leases under a single on-balance sheet model similar to the accounting for finance leases under IAS 17. The standard includes two recognition exemptions for lessees – leases of 'low-value' assets (e.g. personal computers) and short-term leases (i.e. leases with a lease term of 12 months or less). At the commencement date of a lease, a lessee will recognise a liability to make lease payments (i.e. the lease liability) and an asset representing the right to use the underlying asset during the lease term (i.e. the right-of-use asset). Lessees will be required to separately recognise the interest expense on the lease liability and the depreciation expense on the right-of-use asset.

  Lessees will also be required to remeasure the lease liability upon the occurrence of certain events (e.g. a change in the lease term, or a change in future lease payments resulting from a change in an index or rate used to determine those payments). The lessee will generally recognise the amount of the remeasurement of the lease liability as an adjustment to the right-of-use asset.

  Lessor accounting under IFRS 16 is substantially unchanged from today's accounting under IAS 17. Lessors will continue to classify all leases using the same classification principle as in IAS 17 and distinguish between two types of leases: operating and finance leases.

  IFRS 16 also requires lessees and lessors to make more extensive disclosures than under IAS 17.

  IFRS 16 is effective for annual periods beginning on or after 1 January 2019. Early application is permitted, but not before an entity applies IFRS 15. A lessee can choose to apply the standard using either a full retrospective or a modified retrospective approach. The standard's transitional provisions allow for certain reliefs.

  Transition to IFRS 16

  The Group plans to adopt IFRS 16 using the modified retrospective approach, i.e. it will apply the standard to its leases with the cumulative effect of initially applying the standard recognised at the date of initial application.

  In accordance with the standard on lease contracts, the Group will elect to use following exemptions when applying IFRS 16 accounting:
  - short-term leases, i.e. contract duration of less than one year;
  - leases for which the underlying asset is of low value;
  - intangible assets.

  The most important judgements and assumptions in determining the lease asset and liability are to be located in the following areas:
  - We made use of the practical expedients, i.e. a single discount rate per group of contracts, summarised per their duration. Those leases were assumed to have similar characteristics. No hindsight was used. The discount rate used is the Group's best estimation for the weighted average incremental borrowing rate.
  - The Group assessed the non-cancellable period of each of the contracts in scope of IFRS 16. This includes the period covered by an option to extend the lease, if the lessee is reasonable certain to exercise that option. Certainly where it relates to office rent contracts, the Group's made its best estimation of the non-cancellable period based on all information on which the Group disposes.

During 2018, the Group performed and completed a detailed impact assessment for IFRS 16. In summary, the expected impact of IFRS 16 adoption on the statement of financial position is as follows:

(in million EUR)	Impact of IFRS16 on 1 January 2019
Property, plant and equipment (right-of-use assets)	95.8
Lease liability	95.8

As the Group's assets are equal to liabilities at the date of transition, there will be no impact on the income statement at the adoption date.

The Group's operating lease commitments under the current standard IAS 17, as indicated in note 8.2, and the Group's leasing liability under IFRS16, presented here-above, can be reconciled as follows:

(in million EUR)	Reconciliation IAS 17 to IFRS 16
Minimum lease payments under operating leases IAS 17 as of 31 December 2018	**53,7**
Contracts considered not in scope for IFRS 16	(5,6)
Effect from discounting	(21,8)
Effect from lease term assumptions	69,5
Liabilities additionally recognized based on the initial application of IFRS16 as of 1 January 2019	**95,8**

Contracts considered out of scope for IFRS 16 are most often contracts where (i) no particular asset is to be identified, or where, (ii) an asset is to be identified in the contract, but over which no control can be exercised by the Group.

The effect from lease term assumptions comes from the estimation of the most probable end date of the contract under IFRS 16 which differs in certain cases from the end date stipulated in the contract:. This is often the case for contracts where it is probable that the contract will be prolonged.

- The following **standards, amendments and interpretations** had not yet taken effect in 2018. The changes in the below standards, amendments and interpretations are not expected to have a material impact on the annual accounts and are therefore not set out in more detail:
  - Amendments to IFRS 10 and IAS 28: Sale or Contribution of Assets between an Investor and its Associate or Joint Venture;
  - IFRS 17: Insurance Contracts;
  - Annual Improvements to IFRS Standards 2015-2017 Cycle; specific focus on IFRS 3, IFRS 11, IAS 12 and IAS 23;
  - Amendments to IFRS 9: Prepayment Features with Negative Compensation;
  - Amendments to IAS 28: Long-term interests in Associates and Joint Ventures;
  - IFRIC Interpretation 23: Uncertainty over Income Tax Treatment;
  - Amendments to IAS 19: Plan Amendment, Curtailment or Settlement;
  - Amendments to IAS 1 and IAS 8, regarding the definition of materiality;
  - Amendments to References to the Conceptual Framework in IFRS Standards: Amendments to conceptual framework.

2.2. Functional and presentation currency

The consolidated financial statements are presented in million euro (the functional currency of the Company), rounded to the nearest hundred thousand, unless stated otherwise.

2.3. Basis of measurement

The consolidated financial statements have been prepared on a historical-cost basis, except for the derivative financial instruments, which are measured at fair value. Non-current assets are valued at the lowest of the carrying amount and the recoverable amount to sell. Employee benefits are valued at the present value of the defined benefit obligations, less the fair value of the plan assets. Changes in fair value of financial assets are recorded through OCI.

2.4. Use of estimates and judgements

The preparation of the consolidated financial statements in accordance with IFRS requires management to make judgements, estimates and assumptions that could affect the reported amounts of assets and liabilities and revenue and expenses. The estimates and underlying assumptions are based on historical experience and various other factors that are believed to be reasonable under the circumstances, the results of which form the basis for making judgements regarding the carrying amounts of assets and liabilities. Actual results could differ from these estimates. The estimates and underlying assumptions are reviewed on an ongoing basis. Revisions to accounting estimates are recognised in the period in which the estimate is revised if the revision only affects this period, or in the period in which the estimate is revised and future periods if the revision affects both current and future periods.

The following notes include information about significant areas of estimation uncertainty and critical judgements in applying accounting policies that have the most significant effect on the amounts recognised in the consolidated financial statements:

- The net result of the Belgian segment and the German segment is mainly determined by calculation methods set by, respectively, the Belgian federal regulator, the Commission for Electricity and Gas Regulation ('CREG') and the German federal regulator, the Federal Network Agency ('BNetzA'). For certain calculations, a level of judgement is needed. More disclosures are to be found in Notes 6.17, 9.1.4 and 9.2.3.
- Consolidation of entities in which the Group holds less than 20% of the voting rights but has significant influence: under IFRS 10, the Group assesses whether it has significant influence over its associates and therefore needs to consolidate them and reassesses this in each reporting period (see also Note 6.4).
- During the year, an additional stake was acquired in Eurogrid International SCRL, which is the holding company of 50Hertz Transmission (Germany). In accordance with IFRS 3 and its guidance for step acquisitions, the existing stake had to be revalued to its fair value at the date of the transaction. This required significant judgement. More details are to be found in Note 7.1.
- Deferred tax assets are recognised for the carry-forward of unused tax losses and unused tax credits in so far as it is probable that future taxable profit will be available against which the unused tax losses and unused tax credits can be utilised. In making its judgement, management takes into account elements such as long-term business strategy and tax planning opportunities (see Note 6.6).
- Credit risk related to customers: management closely reviews the outstanding trade receivables, also considering ageing, payment history and credit risk coverage (see Note 8.1).
- Employee benefits including reimbursement rights – see Note 6.13:
  - The Group has defined-benefit plans and defined-contribution plans which are disclosed in Note 6.13. The calculation of the liabilities or assets related to these plans is based on actuarial and statistical assumptions. For example, this is the case for the present value of future pension liabilities. The present value is, among other factors, impacted by changes in discount rates, and financial assumptions such as future increases in salary. In addition, demographic assumptions, such as average assumed retirement age, also impact the present value of future pension liabilities;
  - In determining the appropriate discount rate, management considers the interest rates of corporate bonds in currencies consistent with currencies of the post-employment benefit obligation, i.e. euro, with at least an AA rating or above, as set by at least one dominant rating agency and extrapolated along the yield curve to correspond with the expected term of the defined benefit obligation. Higher and lower yielding bonds are excluded in developing the appropriate yield curve;
  - Each plan's projected cash flow is matched to the spot rates of the yield curve to calculate an associated present value. A single equivalent discount rate is then determined that produces that same present value. Hence, the resulting discount rate reflects both the current interest rate environment and the plan's distinct liability characteristics.
- Provisions for environmental remediation costs: at each year-end, an estimate is made of future expenses in respect of soil remediation, based on the advice of an expert. The extent of remediation costs is dependent on a limited number of uncertainties, including newly identified cases of soil contamination (see Note 6.14).
- Other provisions are based on the value of the claims filed or on the estimated amount of the risk exposure. The expected timing of the related cash outflow depends on the progress and the duration of the associated process/procedures (see Note 6.14).
- Goodwill impairment testing: the Group performs impairment tests on goodwill and on cash-generating units (CGUs) at the reporting date, and whenever there are indicators that the carrying amount might be higher than the recoverable amount. This analysis is based on assumptions such as market evolution, market share, margin evolution and discount rates (see Note 6.2).
- Fair value measurement of financial instruments: when the fair values of financial assets and financial liabilities recorded in the statement of financial position cannot be measured based on quoted prices in active markets, their fair value is measured using valuation techniques. The inputs for these valuation techniques are taken from observable markets where possible. Where this is not feasible, a level of judgement is required in establishing fair values. Changes in the fair value of the derivative hedging instrument designated as a cash flow hedge are recognised directly in other comprehensive income (OCI) to the extent that the hedge is effective. To the extent that the hedge is ineffective, changes in fair value are recognised in profit or loss (see Note 6.18).
- The useful life of the fixed assets is defined to reflect the real depreciation of each asset. The depreciation of property, plant and equipment is mainly calculated based on the useful lives determined by the regulatory framework in Belgium and Germany, which is considered to be the best possible approximation of actual events in terms of economic utilisation.

2.5. Approval by the Board of Directors

These consolidated financial statements were authorised for publication by the Board of Directors on 21 March 2019.

3. Significant accounting policies

3.1. Basis of consolidation

SUBSIDIARIES
A subsidiary is an entity that is controlled by the Company. The Group controls an entity when it is exposed, or has rights, to variable returns from its involvement with the entity and has the ability to affect those returns through its power over the entity. The financial statements of subsidiaries are included in the consolidated financial statements from the date that control commences until the date that this ceases. The accounting policies of subsidiaries are changed when necessary to align them with the policies adopted by the Group. Losses applicable to the non-controlling interests in a subsidiary are allocated to the non-controlling interests even if doing so results in a deficit balance of the non-controlling interests.

ASSOCIATED COMPANIES
Associated companies are those companies in which the Company exerts significant influence, but not control, over the financial and operating policies. The consolidated financial statements include the Group's share of the total recognised profits and losses of associated companies on the basis of the equity method, from the date that significant influence commences until the date that significant influence ceases. When the Group's share of the losses exceeds its interest in an associated company, its carrying amount is reduced to nil and further losses are not recognised except to the extent that the Group has incurred legal or constructive obligations or has made payments on behalf of an associated company.

INTERESTS IN JOINT VENTURES
A joint venture is an arrangement in which the Group has joint control, whereby the Group has rights to the net assets of the arrangement, as opposed to joint operations whereby the Group has rights to its assets and obligations for its liabilities. Interests in joint ventures are accounted for using the equity method. They are recognised initially at cost price. Subsequent to initial recognition, the consolidated financial statements include the Group's share of the total recognised profits and losses of joint ventures on the basis of the equity method, from the date that joint control commences until the date that joint control ceases. When the Group's share of the losses exceeds its interest in joint ventures, its carrying amount is reduced to nil and further losses are not recognised except to the extent that the Group has incurred legal or constructive obligations or has made payments on behalf of a joint venture.

NON-CONTROLLING INTERESTS
Non-controlling interests are measured at their proportionate share of the acquiree's identifiable net assets at the acquisition date. Changes in the Group's interest in a non-wholly-owned subsidiary that do not result in a loss of control are accounted for as equity transactions.

LOSS OF CONTROL
Upon the loss of control, the Group derecognises the assets and liabilities of the subsidiary, any non-controlling interests and the other components of other comprehensive income related to the subsidiary. Any surplus or deficit arising on the loss of control is recognised in profit or loss. If the Group retains any interest in the former subsidiary, then such interest is measured at fair value at the date that control is lost. Subsequently, it is accounted for as an equity-accounted investee or as a fair value through other comprehensive income financial asset depending on the level of influence retained.

ELIMINATION OF INTRA-GROUP TRANSACTIONS
Intra-Group balances and any unrealised gains or losses or revenue and expenses arising from intra-Group transactions are eliminated when preparing the consolidated financial statements.

Unrealised gains from transactions with associated companies are eliminated to the extent of the Group's interest in the entity. Unrealised losses are eliminated in the same way as unrealised gains, but only to the extent that there is no evidence of impairment.

BUSINESS COMBINATIONS AND GOODWILL
Goodwill arises on the acquisition of subsidiaries, joint ventures and associates and represents the excess of the consideration transferred over the Group's interest in the net fair value of the net identifiable assets, liabilities and contingent liabilities of the acquiree.

The Group measures goodwill at the acquisition date as:
- the fair value of the consideration transferred; plus
- the recognised amount of any non-controlling interest in the acquiree; plus
- if the business combination is completed in stages, the fair value of the pre-existing equity interest in the acquiree; less
- the fair value of the identifiable assets acquired and liabilities at acquisition date.

When the excess is negative, a bargain purchase gain is recognised immediately in profit or loss.

The consideration transferred does not include amounts related to the settlement of pre-existing relationships. Such amounts are generally recognised in profit or loss.

Transactions costs incurred by the Group in connection with a business combination, other than those associated with the issue of debt or equity securities, are expensed as incurred.

Any contingent consideration payable is measured at fair value at the acquisition date. If the contingent consideration is classified as equity, then it is not remeasured and settlement is accounted for within equity. Otherwise, subsequent changes in the fair value of the contingent consideration are recognised in profit or loss.

3.2. Foreign-currency translation

FOREIGN-CURRENCY TRANSACTIONS AND BALANCES
Transactions in foreign currencies are converted into the functional currency of the Company at the foreign exchange rate on the date of the transaction. Monetary assets and liabilities denominated in foreign currencies on the balance-sheet date are converted at the foreign exchange rate on that date. Foreign exchange differences arising on conversion are recognised in profit or loss.

Non-monetary assets and liabilities denominated in foreign currencies that are valued in terms of historical cost are converted at the exchange rate on the date of the transaction.

FOREIGN OPERATIONS
A foreign operation is an entity that is a subsidiary, an associate, an interest in a joint venture or a branch of the reporting entity, whose activities are based or conducted in a country or currency other than those of the reporting entity.

The financial statements of all Group entities that have a functional currency different from the Group's presentation currency are translated into the presentation currency as follows:
- assets and liabilities are translated at the exchange rate at the reporting date;
- income and expenses are translated at the average exchange rate of the year.

Exchange differences arising from the translation of the net investment in foreign subsidiaries, interests in joint ventures and associates at closing exchange rates are included in shareholder's equity under OCI. Upon the (partial) disposal of foreign subsidiaries, joint ventures and associates, (part of) cumulative translation adjustments are recognised in the profit or loss as part of the gain/loss of the sale.

3.3. Balance sheet items

3.3.1. Property, plant and equipment

Owned assets
Items of property, plant and equipment are stated at cost (including the directly allocated costs such as finance costs), less accumulated depreciation and impairment losses (see the section 'Impairment'). The cost of self-produced assets comprises the cost of materials, of direct labour and, where relevant, of the initial estimate of the costs of dismantling and removing the assets and restoring the site where the assets were located. If parts of an item of property, plant and equipment have different useful lives, they are accounted for as separate items of property, plant and equipment.

Subsequent costs
The Group recognises in the carrying amount of an item of property, plant and equipment the subsequent costs of replacing part of such an item when that cost is incurred, but only when it is probable that the future economic benefits embodied in the item will flow to the Group and the cost of the item can be measured reliably. All other costs, such as repair and maintenance costs, are recognised in profit or loss as and when they are incurred.

Depreciation
Depreciation is recognised in profit or loss on a straight-line basis over the estimated useful life of each component of an item of property, plant and equipment. Land is not depreciated. The applied depreciation percentages can be found in the table below.

Depreciation methods, remaining useful lives and residual values of the property, plant and equipment are reassessed annually and are prospectively adjusted as the occasion arises.

Administrative buildings	1.67% – 2.00%
Industrial buildings	2.00 – 4.00%
Overhead lines	2.00 – 4.00%
Underground cables	2.00 – 5.00%
Substations (facilities and machines)	2.50 – 6.67%
Remote control	3.00 – 12.50%
Dispatching	4.00 – 10.00%
Other PPE (fitting out rented buildings)	contractual period
Vehicles	6.67 – 20.00%
Tools and office furniture	6.67 – 20.00%
Hardware	25.00 – 33.00%

Impairment
The carrying amount of the Group's tangible assets is reviewed at the end of the reporting period for each asset to determine whether there is any indication of impairment. If any such indication exists, the recoverable amount of the asset is estimated.

An impairment loss is recognised whenever the carrying amount of an asset or its cash-generating unit exceeds its recoverable amount. Impairment losses are recognised in profit or loss. Recognised impairment losses relating to cash-generating units are allocated first to reduce the carrying amount of any goodwill allocated to cash-generating units and then to reduce the carrying amount of the other assets in the units on a pro-rata basis.

After recognition of impairment losses, the depreciation costs for the asset will be prospectively adjusted.

Dismantling obligation

Provision is made for decommissioning and environmental costs, based on future estimated expenditure, discounted to present values. An initial estimate of decommissioning and environmental costs attributable to property, plant and equipment is recorded as part of the original cost of the related property, plant and equipment.

Changes in the provision arising from revised estimates or discount rates or changes in the expected timing of expenditure relating to property, plant or equipment are recorded as adjustments to their carrying value and depreciated prospectively over their remaining estimated economic useful lives; otherwise such changes are recognised in the profit or loss.

The unwinding of the discount is recorded in the profit or loss as a financing charge.

Derecognition

An asset is no longer recognised when the asset is subject to disposal or when no future economic benefits are expected from its use or disposal. Gains or losses arising from the derecognition of the asset (which is determined as the difference between the net disposal proceeds and the carrying amount of the asset) are included in profit or loss, under other income or other expenses, during the year in which the asset was derecognised.

3.3.2. Intangible assets

Goodwill

Goodwill is stated at cost, less accumulated impairment losses. Goodwill is allocated to cash-generating units and is not amortised but tested annually for impairment (see the section 'Impairment'). In the case of associated companies, the carrying amount of goodwill is included in the carrying amount of the investment in the associated company.

Computer software

Software licences acquired by the Group are stated at cost, less accumulated amortisation (see below) and impairment losses (see the section 'Impairment').

Expenditure on research activities undertaken with the purpose of developing software within the Group is recognised in profit or loss as expenditure as incurred. Expenditure on the development phase of software developed within the Group is capitalised if:

- the costs of development can be measured reliably;
- the software is technically and commercially feasible and future economic benefits are likely;
- the Group plans – and has sufficient resources – to complete development;
- the Group plans to use the software.

The capitalised expenditure includes cost of material, direct labour costs and overhead costs that are directly attributable to preparing the software for its use. Other costs are recognised in profit or loss as incurred.

Licences, patents and similar rights

Expenditure on acquired licences, patents, trademarks and similar rights are capitalised and amortised on a straight-line basis over the contractual period, if any, or the estimated useful life.

Subsequent expenditure

Subsequent expenditure on capitalised intangible assets is capitalised only when it increases the future economic benefits embodied in the specific asset to which it relates. All other expenditure is recognised in profit or loss as expenditure as incurred.

Amortisation

Amortisation is recognised in profit or loss on a straight-line basis over the estimated useful life of intangible assets, unless the useful life is indefinite. Goodwill and intangible assets with indefinite useful lives are tested systematically for impairment on each end of the reporting period. Software is amortised from the date it becomes available for use. The estimated useful lives are as follows:

• Licences	20.00%
• Concessions	contractual period
• Computer software	20.00 – 25.00%

Depreciation methods, remaining useful lives and residual values of intangible assets are reassessed annually and are prospectively adjusted as the occasion arises.

Impairment

The carrying amount of the Group's intangible assets are reviewed at the end of the reporting period for each asset to determine whether there is any indication of impairment. If any such indication exists, the recoverable amount of the asset is estimated.

The recoverable amount of goodwill and intangible assets with an indefinite useful life and intangible assets that are not yet available for use is estimated at the end of each reporting period.

An impairment loss is recognised whenever the carrying amount of an asset or its cash-generating unit exceeds its recoverable amount. Impairment losses are recognised in profit or loss. Recognised impairment losses relating to cash-generating units are allocated first to reduce the carrying amount of any goodwill allocated to cash-generating units and then to reduce the carrying amount of the other assets in the units on a pro-rata basis.

After recognition of impairment losses, the amortisation costs for the asset will be prospectively adjusted.

3.3.3. Trade and other receivables

Construction contracts in progress

Construction contracts in progress are stated at cost price, plus profit based on progress made to date, minus a provision for foreseeable losses and less progress billing. The cost price comprises all expenditure directly related to specific projects, plus an allocation of fixed and variable overheads incurred during the Group's contract activities based on normal operating capacity.

Trade and other receivables

Trade receivables and other receivables are measured at amortised cost minus the appropriate allowance for amounts regarded as unrecoverable.

Impairment

For trade receivables and contract assets, the Group applies a simplified approach in calculating the Expected Credit Losses (ECLs). The Group therefore does not track changes in credit risk, but instead recognises a loss allowance based on lifetime ECLs at each reporting date. The Group has established a provision matrix that is based on its historical credit loss experience, as its best proxy for future credit losses to be incurred.

Refer to Note 8.1, ‘Credit risk’, for a detailed description of the model.

3.3.4. Inventories

Inventories (spare parts) are stated at the lower of cost and net realisable value. Net realisable value is the estimated selling price minus the estimated costs of completion and selling expenses. The cost of inventories is based on the weighted-average-cost-price method. The cost includes the expenditure incurred in acquiring the inventories and the direct costs of bringing them to their location and making them operational.

Write-downs of inventories to net realisable value are recognised in the period in which the write-offs occurred.

3.3.5. Cash and cash equivalents

Cash and cash equivalents comprise cash balances, bank balances, commercial paper and deposits that can be withdrawn on demand. Overdrafts that are repayable on demand form an integral part of the Group's cash management and are included as a component of cash and cash equivalents for the purpose of the statement of cash flows.

3.3.6. Non-financial assets

The carrying amount of the Group's assets, excluding inventories and deferred taxes, are reviewed at the end of the reporting period for each asset to determine whether there is any indication of impairment. If any such indication exists, the recoverable amount of the asset is estimated.

The recoverable amount of goodwill and intangible assets with an indefinite useful life and intangible assets that are not yet available for use is estimated at the end of each reporting period.

An impairment loss is recognised whenever the carrying amount of an asset or its cash-generating unit exceeds its recoverable amount. Impairment losses are recognised in profit or loss. Recognised impairment losses relating to cash-generating units are allocated first to reduce the carrying amount of any goodwill allocated to cash-generating units and then to reduce the carrying amount of the other assets in the units on a pro-rata basis.

After recognition of impairment losses, the depreciation costs for the asset will be prospectively adjusted.

Calculation of the recoverable amount

The recoverable amount of intangible assets and property, plant and equipment is determined as the higher of their fair value less costs to sell, or their value in use. In assessing value in use, the expected future cash flows are discounted to their present value using a pre-tax discount rate that reflects both the current market assessment of the time value of money and the risks specific to the asset.

The Group's assets do not generate cash flows that are independent from other assets. The recoverable amount is therefore determined for the cash-generating unit (i.e. the entire high-voltage grid) to which the asset belongs. This is also the level at which the Group administers its goodwill and reaps the economic benefits of acquired goodwill.

Reversals of impairment

An impairment loss in respect of goodwill is not reversed. Impairment loss on other assets is reversed if there have been changes in the estimates used to determine the recoverable amount.

An impairment loss is reversed only to the extent that the asset's carrying amount does not exceed the carrying amount that would have been determined, net of depreciation or amortisation, if no impairment loss had been recognised.

3.3.7. Financial assets

Initial recognition and measurement

The classification of financial assets at initial recognition depends on the financial asset’s contractual cash flow characteristics and the Group’s business model for managing them. The Group initially measures a financial asset at its fair value plus transaction costs.

Financial assets are managed with a view to holding them to maturity and collecting contractual cash flows. The financial assets that give rise to cash flows are solely payments of principal and interest on the principal amount outstanding.

Subsequent measurement

For purposes of subsequent measurement, financial assets are classified in two categories:

- financial assets at amortised cost (debt instruments)
- financial assets designated at fair value through OCI (equity instruments)

Financial assets at amortised cost

Financial assets at amortised cost are subsequently measured using the Effective Interest Rate (EIR) method and are subject to impairment. Gains and losses are recognised in profit or loss when the asset is derecognised, modified or impaired.

The Group's financial assets at amortised cost include loans to third parties.

Financial assets designated at fair value through OCI (equity instruments)

Upon initial recognition, the Group irrevocably classifies its equity investments as equity instruments designated at fair value through OCI when the Group does not have significant influence and the assets are not held for trading. The classification is determined on an instrument-by-instrument basis.

Gains and losses on these financial assets are never recycled to profit or loss. Dividends are recognised as other income in the statement of profit or loss when the right of payment has been established, except when the Group benefits from such proceeds as a recovery of part of the cost of the financial asset, in which case any such gains are recorded in OCI. Equity instruments designated at fair value through OCI are not subject to impairment assessment.

The Group has elected to irrevocably classify non-listed equity investments for which the Group does not have significant influence in this category.

Impairment of financial assets

The Group recognises an allowance for expected credit losses (ECLs) for its debt instruments. See Note 8.1, 'Credit Risk', for a detailed description of the approach.

3.3.8. Derivative financial instruments and hedge accounting

Derivative financial instruments

The Group sometimes uses derivative financial instruments to hedge its exposure to foreign-exchange and interest-rate risks arising from operating, financing and investment activities. In accordance with its treasury policy, the Group neither holds nor issues derivative financial instruments for trading purposes. However, derivatives that do not qualify for hedge accounting are accounted for as instruments held for trading purposes.

Derivative financial instruments are recognised initially at fair value. Any gain or loss resulting from changes in the fair value is immediately booked in the income statement. Where derivative financial instruments qualify for hedge accounting, the reflection of any resulting gain or loss depends on the nature of the item being hedged.

The fair value of interest-rate swaps is the estimated amount that the Group would receive or pay to terminate the swap at the end of the reporting period, taking into account the current interest rates and the current creditworthiness of the swap counterparties and the Group. The fair value of forward exchange contracts is their quoted market price at the end of the reporting period, i.e. the present value of the quoted forward price.

Derivatives used as hedging instruments

Cash-flow hedges

Changes in the fair value of the derivative hedging instrument designated as a cash-flow hedge are recognised directly in other comprehensive income (OCI) to the extent that the hedge is effective. To the extent that the hedge is ineffective, changes in fair value are recognised in profit or loss.

Before 1 January 2018, the Group designated all forward contracts as hedging instruments. Any gains or losses arising from changes in the fair value of derivatives were taken directly to profit or loss, except for the effective portion of cash flow hedges, which were recognised in OCI and later reclassified to profit or loss when the hedge item affected profit or loss.

From 1 January 2018, the Group designates only the spot element of forward contracts as a hedging instrument. The forward element is recognised in OCI and accumulated in a separate component of equity under hedging reserves.

If the hedging instrument no longer meets the criteria for hedge accounting, expires or is sold, terminated or exercised, hedge accounting is prospectively discontinued. The cumulative gain or loss previously recognised in OCI remains there until the forecast transaction occurs. When the hedged item is a non-financial asset, the amount recognised in OCI is transferred, where justified, to the carrying amount of the asset. In other cases, the amount recognised in OCI is transferred to profit or loss in the same period that the hedged item affects profit or loss.

When a derivative or hedge relationship is terminated, cumulative gains or losses still remain in OCI provided that the hedged transaction is still expected to occur. If the hedged transaction is no longer expected to take place, the cumulative unrealised gain or loss is removed from OCI and is immediately recognised in profit or loss.

Hedging of monetary assets and liabilities

Hedge accounting is not applied to derivative instruments that economically hedge monetary assets and liabilities denominated in foreign currencies. Changes in the fair value of such derivatives are recognised in profit or loss as foreign-currency gains and losses.

3.3.9. Equity

Share capital – transaction costs

Transaction costs in respect of the issuing of capital are deducted from the capital received.

Dividends

Dividends are recognised as a liability in the period in which they are declared.

Hybrid securities

Hybrid securities are deeply subordinated securities. With the exception of ordinary shares, hybrid securities rank as the most junior instruments in the capital structure of the Group in an insolvency hierarchy. The holders of the hybrid securities have limited ability to influence the outcome of a bankruptcy proceeding or a restructuring outside bankruptcy. Hybrid securities are perpetual instruments; the terms do not provide for any events of default nor entitle holders to demand repayment or redemption.

Subject to certain exceptions where accrued interest would be mandatorily payable (e.g. in the event that a dividend is paid on any ordinary shares), the Group may elect to defer payment of all of the interest which would otherwise be paid on an interest payment date. Any such failure to pay would not constitute a default for any purpose. In light of their characteristics, hybrid securities are classified as an equity instrument under IFRS. The associated issue costs are recognised directly in retained earnings.

3.3.10. Financial liabilities

Financial liabilities consist of interest-bearing loans and borrowings in the Group. They are recognised initially at fair value, less related transaction costs. Subsequent to initial recognition, interest-bearing loans and borrowings are stated at amortised cost price with any difference between cost price and redemption value being recognised in profit or loss over the period of the loans on an effective interest basis.

3.3.11. Employee benefits

Defined-contribution plans

In Belgium, contribution-based promises, called defined-contribution pension plans under Belgian pension legislation, are classified as defined-benefit plans for accounting purposes due to the legal minimum return to be guaranteed by the employer.

The Defined-Benefit Obligation (DBO) was determined following the Projected Unit Credit (PUC) method. For each plan, the fair value of assets equals the sum of the accrued individual reserves (if any) and the value of the collective fund(s) (if any).

In Germany, the defined-benefit plan involves a fixed pension to be paid to an employee upon retirement, which is usually based on one or several factors such as the employee's age, years of service and salary. The plan assets and plan liabilities have been determined by an actuary.

Defined-benefit plans

For defined-benefit plans, which exist in both Belgium and Germany, the pension expenses for each plan are assessed separately on an annual basis by accredited actuaries using the projected unit credit method. The estimated future benefit that employees have earned in return for their service in the current and previous periods is discounted to determine its present value, and the fair value of any plan assets is deducted. The discount rate is the interest rate, at the end of the reporting period on high-quality bonds that have maturity dates approximately equivalent to the terms of the Group's obligations and that are denominated in the currency in which the benefits are expected to be paid.

When the benefits of a plan are improved, the portion of the increased benefit relating to past service by employees is recognised as an expense in profit or loss at the earlier of the following dates:

- when the plan amendment or curtailment occurs; or
- when the entity recognises related restructuring costs under IAS 37 or termination benefits.

Where the calculation results in a benefit to the Group, the recognised asset is limited to the present value of any future refunds from the plan or reductions in future contributions to the plan.

Remeasurements – comprising actuarial gains and losses, the effect of the asset ceiling (excluding amounts included in net interest on the net defined benefit liability) and the return on plan assets (excluding amounts included in net interest on the net defined benefit liability) – are recognised immediately in the statement of financial position with a corresponding debit or credit to retained earnings through OCI in the period in which they occur. Remeasurements are not reclassified to profit or loss in subsequent periods.

Reimbursement rights (Belgium)

Reimbursement rights are recognised as a separate asset when, and only when, it is virtually certain that another party will reimburse some or all of the expenditure required to settle the corresponding benefit obligation. Reimbursement rights are presented as non-current assets under other financial assets and are measured at expected value. These rights are handled the same as the corresponding defined-benefit obligation. When the changes in the period result from changes in financial assumptions or from experience adjustments or changes in demographic assumptions, then the asset is adjusted through OCI. The components of the defined-benefit cost are recognised net of amounts relating to changes in the carrying amount of the rights to reimbursement.

Other long-term employee benefits

The Group's net obligation in respect of long-term service benefits other than pension plans is assessed on an annual basis by accredited actuaries. The net obligation is calculated using the projected unit credit method and is the amount of future benefit that employees have earned in return for their service in the current and previous periods. The obligation is discounted to its present value,

and the fair value of any related assets is deducted. The discount rate is the yield, at the end of the reporting period, on high-quality bonds that have maturity dates approximately equivalent to the terms of the Group's obligations and that are denominated in the currency in which the benefits are expected to be paid.

Short-term employee benefits

Short-term employee benefits are measured on an undiscounted basis and are expensed as the related service is provided. A liability is recognised for the amount expected to be paid out under a short-term cash bonus or profit-sharing plans if the Group has a legal or constructive obligation to pay this amount as a result of the past service provided by the employee and the obligation can be reliably estimated.

3.3.12. Provisions

A provision is recognised in the balance sheet when the Group has a current legal or constructive obligation as a result of a past event and it is likely that an outflow of economic benefits – of which a reliable estimate can be made – will be required to settle the obligation. If the effect is material, provisions are determined by discounting the expected future cash flows at a pre-tax rate that reflects the current market assessment of the time value of money and, where appropriate, of the risks specific to the liability.

If the Group expects to recover some or all of the provisions from a third party, the compensation is only included as a separate asset if it is virtually certain that said compensation will be awarded. The cost connected to a provision is included in profit or loss, net of any compensation.

The total estimated cost of dismantling and disposal of an asset is, if applicable, recognised as property, plant and equipment and depreciated over the asset's entire useful life. The total estimated cost of dismantling and of disposal of the asset is posted as provisions for the discounted current value. If the amount is discounted, the increase in the provision due to the passage of time is classified as finance expenses.

3.3.13. Trade and other payables

Trade and other payables are stated at amortised cost.

3.3.14. Government grants

Government grants are recognised when it is reasonably certain that the Group will receive the grant and that all underlying conditions will be met. Grants related to an asset are presented under other liabilities and will be recognised in the income statement on a systematic basis over the expected useful life of the related asset. Grants related to expense items are recognised in the income statement in the same period as the expenses for which the grant was received. Government grants are presented as other operating income in the income statement.

3.4. Income-statement items

INCOME

Revenues

IFRS 15 establishes a five-step model to account for revenue arising from contracts with customers and requires that revenue be recognised at an amount that reflects the consideration to which an entity expects to be entitled in exchange for transferring goods or services to a customer. These are the five steps to consider for each customer contract:

1. Identify the contract(s) with a customer;
2. Identify the performance obligations in the contract(s);
3. Determine the transaction price;
4. Allocate the transaction price to the performance obligations;
5. Recognise revenue when performance obligations are satisfied, or when control of goods or services is transferred to the customer.

Revenue includes changes in the settlement mechanism (see Note 6.17).

The standard requires entities to exercise judgement, taking into consideration all of the relevant facts and circumstances when applying each step of the model to contracts with their customers. The standard also sets out the accounting for the incremental costs of obtaining a contract and the costs directly related to fulfilling a contract. In addition, the standard requires extensive disclosures. The Group adopted IFRS 15 using the full retrospective method of adoption. The Group used the practical expedients for completed contracts.

Further details on the effect of the transition to IFRS 15 are to be found in Note 2.1.

Goods sold, services rendered and construction contracts in progress

Revenue from services and the sale of goods is recognised in profit or loss when performance obligations are satisfied, or when control of goods or services is transferred to the customer.

Construction contracts in progress are recognised using the same methodology as described above. An expected loss on a contract is immediately recognised in profit or loss.

Transfer of assets from customers

Transfer of assets from customers is recognised when control of the goods or services is transferred to the customer at an amount that reflects the consideration to which the Group expects to be entitled in exchange for those goods or services.

Other income

Other income is recognised when it is earned or when the related service is performed.

EXPENSES

Operating lease payments

Payments made under operating leases are recognised in profit or loss on a straight-line basis over the term of the lease. Lease incentives received to conclude the leasing agreement are recognised in profit or loss as an integral part of the total lease expenses.

Other expenses

Property taxes are directly recognised in full as soon as ownership is certain (generally as of 1 January of the year in question). However, these costs, qualified as non-controllable costs in the regulatory framework, are recorded as revenue through the settlement mechanism for the same amount, resulting in zero impact in terms of profit or loss.

FINANCE INCOME AND EXPENSES

Finance expenses comprise interest payable on borrowings (calculated using the effective interest rate method), foreign-exchange losses, gains on currency hedging instruments offsetting currency losses, results on interest-rate hedging instruments, losses on hedging instruments that are not part of a hedge accounting relationship, losses on financial assets classified as for trading purposes and impairment losses on financial assets as well as any losses from hedge ineffectiveness.

Finance income includes interest receivables on bank deposits, which are recognised in profit or loss using the effective interest rate method as they accrue.

Borrowing costs that are not directly attributable to the acquisition, construction or production of a qualifying asset are recognised in profit or loss using the effective interest method.

INCOME TAXES

Income taxes comprise current and deferred tax. Income-tax expense is recognised in profit or loss, except where it relates to items recognised directly in equity.

Current tax is the expected tax payable on taxable income for the year, using tax rates enacted or substantively enacted at the end of the reporting period, and any adjustments to tax payable in respect of previous years.

Deferred tax is recognised, using the balance-sheet method, on temporary differences arising between the carrying amounts of assets and liabilities for financial reporting purposes and the amounts used for taxation purposes. Deferred tax is not recognised for the following temporary differences: the initial recognition of assets or liabilities in a transaction that is not a business combination and that affects neither accounting nor taxable profit; and differences relating to investments in subsidiaries and joint ventures where these will probably not be reversed in the foreseeable future. In addition, deferred tax is not recognised for taxable temporary differences arising from initial recognition of goodwill. Deferred tax is measured at the tax rates that are expected to be applied to the temporary differences when they are reversed, based on the laws that have been enacted or substantively enacted by the reporting date. Deferred tax assets and liabilities are offset if there is a legally enforceable right to offset current tax liabilities and assets and the deferred items relate to income taxes levied by the same tax authority on the same taxable entity or on different tax entities, but they are intended to settle current tax liabilities and assets on a net basis or their tax assets and liabilities will be realised simultaneously.

A deferred tax asset is recognised only to the extent that it is likely that future taxable profits will be available against which the asset can be utilised. Deferred tax assets are reduced to the extent that it is no longer likely that the related tax benefit will be realised.

Additional income taxes that arise from the distribution of dividends are recognised at the same time as the liability to pay the related dividend.

3.5. Statement of comprehensive income and statement of changes in equity

The statement of comprehensive income presents an overview of all revenues and expenses recognised in the consolidated statement of profit or loss and in the consolidated statement of changes in equity. The Group has elected to present comprehensive income using the two-statement approach, i.e. the statement of profit or loss immediately followed by the statement of other comprehensive income. As a result of this presentation, the content of the statement of changes in equity is restricted to owner-related changes.

4. Segment reporting

4.1. Basis for segment reporting

The Group has decided to revise its segment structure from the structure in place last year. Owing to the increased stake in 50Hertz Transmission (Germany), the Group's internal reporting process has been reviewed, which ultimately resulted in amended segment reporting. The Group believes that this change results in a segment structure that more closely reflects the Group's operational activities and current internal reporting.

The Group has aligned its segment reporting in conformity with the different regulatory frameworks that currently exist within the Group. This reporting approach is also in line with the Group's internal reporting to the Chief Operating Decision Maker (CODM), enabling the CODM to better evaluate and assess the Group's performance and activities in a transparent way.

Pursuant to IFRS 8, the Group has identified the following operating segments based on the aforementioned criteria:

- Elia Transmission (Belgium), which comprises the activities based on the Belgian regulatory framework: the regulated activities of Elia System Operator NV/SA, Elia Asset NV/SA, Elia Engineering NV/SA, Elia Re SA, HGRT SAS, Coreso NV/SA, Ampacimon SA and Enervalis NV, whose activities are directly linked to the role of Belgian transmission system operator and are subject to the regulatory framework applicable in Belgium – see Section 9.1.3.
- 50Hertz Transmission (Germany), which comprises the activities based on the German regulatory framework: Eurogrid GmbH, 50Hertz Transmission GmbH and 50Hertz Offshore GmbH, whose activities are directly linked to the role of transmission system operator in Germany – see Section 9.2.3.
- Non-regulated activities (incl. Nemo Link), comprising:
    - Eurogrid International CVBA;
    - the non-regulated activities of Elia System Operator NV/SA, Elia Asset NV/SA and Elia Engineering NV/SA. 'Non-regulated activities' refers to activities which are not directly related to the role of TSO (see Section 9.1). The most substantial of these are:
        - the holding activities in the 50Hertz Transmission (Germany) segment; and
        - the holding activities in Nemo Link Ltd. This company comprises and manages the Nemo project, which connects the UK and Belgium using high-voltage electricity cables, enabling power to be exchanged between the two countries and for which a specific regulatory framework has been set up. See Section 9.3 for more details.
    - Atlantic Grid, comprising E-Offshore A LLC and Atlantic Grid Investment A Inc. Both are connected to the Atlantic Wind Connection project, which aims to develop the first high-voltage direct-current offshore grid off the East Coast of the United States;
    - EGI (Elia Grid International NV/SA, Elia Grid International GmbH and Elia Grid International LLC), companies supplying specialists in consulting, services, engineering and procurement, creating value by delivering solutions based on international best practice while fully complying with regulated business environments.

The three operating segments have also been identified as the Group's three cash-generating units, as the group of assets managed by the segments independently generates cash flows.

The CODM has been identified by the Group as Boards of Directors, CEOs and Management Committees of each segment. The CODM periodically reviews the performance of the Group's segments using various indicators such as revenue, EBITDA and operating profit.

The information presented to the CODM follows the Group's IFRS accounting policies, so no reconciling items have to be disclosed.

4.2. Elia Transmission (Belgium)

GRI 201-1 (TSO Belgium)

The table below shows the 2018 consolidated results of Elia Transmission (Belgium)

Elia Transmission key figures (in million EUR) – Year ended 31 December	2018	2017 (restated *)	Difference (%)
Total revenues and other income	959.4	851.3	12.7%
Depreciation, amortisation, impairment and changes in provisions	(140.2)	(130.8)	7.2%
Results from operating activities	227.1	217.0	4.7%
Share of profit of equity-accounted investees, net of tax	1.8	2.0	(10.0%)
EBIT	228.9	218.9	4.5%
EBITDA	369.1	349.7	5.5%
Finance income	0.6	1.9	(68.4%)
Finance costs	(66.0)	(79.0)	(16.5%)
Income tax expense	(48.6)	(38.8)	25.3%
Net profit	**114.9**	**103.0**	**11.6%**
Consolidated statement of financial position (in million EUR)	**31 December 2018**	**31 December 2017 (restated *)**	**Difference (%)**
Total assets	5,909.2	5,449.0	8.4%
Capital expenditure	600.7	388.1	54.8%
Net financial debt	2,825.1	2,511.9	12.5%

EBITDA (Earnings Before Interest and Taxes, Depreciations and Amortisations) = EBIT + depreciation/amortisation + changes in provisions
EBIT = result from operating activities and share of profit of equity-accounted investees (net of income tax)
Net financial debt = non-current and current loans and borrowings less cash and cash equivalents
* See Note 2.1 for details regarding restatement as a result of a change in accounting policy.

The tariff methodology approved by the regulator CREG on 26 November 2015 came into force in early 2016. The methodology is applicable for a four-year period (2016 – 2019). See Note 9.1 for more information about the new regulated framework.

Financial

Elia Transmission's revenues grew by 12.7% (to €959.4 million) on the same period the previous year. The revenue increase resulted from a higher allowed regulated net profit, higher depreciations and higher taxes that are passed on into revenues. These increases were partly offset by lower costs, mainly for ancillary services and financing, which are all passed on into revenues to the benefit of customers.

The table below provides more details of changes in the various revenue components:

(in million EUR)	2018	2017 (restated *)	Difference (%)
Grid revenue	904.3	882.2	2.5%
Grid connection	42.6	42.2	0.9%
Management and development of grid infrastructure	472.7	479.2	(1.4%)
Management of the electrical system	116.2	118.5	(1.9%)
Compensation for imbalances	189.5	170.7	11.0%
Market integration	25.5	24.3	4.9%
International revenue	57.8	47.3	22.1%
Other income (including EGI revenues)	61.0	61.4	(0.6%)
Subtotal revenues and other income	965.3	943.6	2.3%
Settlement mechanism: deviations from approved budget	(5.9)	(92.3)	(93.6%)
Total revenues and other income	**959.4**	**851.3**	**12.7%**

* See Note 2.1 for details regarding restatement as a result of a change in accounting policy.

Grid connection revenues increased slightly to €42.6 million (up 0.9%) mainly due to higher revenues from connection studies.

Revenues from **management and development of grid infrastructure** (down 1.4%) and **management of the electrical system** (down 1.9%) decreased slightly, mainly due to lower tariffs.

Services rendered in the context of energy management and individual balancing of balancing groups are paid within the revenues from **compensation for imbalances**. These revenues increased by €18.8 million to €189.5 million, largely due to the tariff increase for management of power reserves and black-start based on offtake (up €15.0 million), a volume decrease for management of power reserves and black-start based on injection (down €11.8 million) and higher revenues from compensation of imbalances (up €15.6

million). The increase in imbalance revenues resulted from the fact that imbalance prices were generally higher in 2018, especially in March due to an unexpected cold snap, and high imbalance price peaks occurred in the second half of 2018.

Finally, the last section of the tariff revenues encompasses the services provided by Elia Transmission within the context of **market integration;** this item increased by 4.9% to €25.5 million, mainly driven by a tariff rise.

International revenue increased by €10.5 million (up 22.1%) due to higher congestion income on the southern border as a result of improved nuclear availability in France combined with low nuclear availability in Belgium throughout 2018.

Other income remained in line with previous years at €61.0 million and mainly derived from customer contributions and income from own work capitalised.

The **settlement mechanism** (€5.9 million) encompasses both deviations in the current year from the budget approved by the regulator (+€52.9 million) and the settlement of net surpluses from the prior tariff period (-€47.0 million). The operating surplus, in relation to the cost and revenue budget authorised by the regulator, must be returned to the consumers and therefore does not form part of the revenues. The operating surplus compared to the budget is primarily a result of higher tariff sales (€5.1 million), increased cross-border revenues (€15.7 million), lower costs for ancillary services (€24.6 million) and lower financial charges (€28.8 million). This was partly offset by a higher regulated net profit (€7.3 million) and higher taxes compared to the budget (€18.6 million).

The **EBITDA** (up 5.5%) and **EBIT** (up 4.5%) were mainly impacted by increased regulated net profit, higher depreciations, lower financing costs and higher current taxes to be passed on in the tariffs, partly offset by the lower result of equity-accounted investments.

Net **finance costs** (down 15.2%) fell by €11.7 million from the previous year. In the course of 2018, interest-rate swap contracts which matured at the end of 2017 were renewed at lower interest rates, thus making the most of the low-interest-rate environment. The lower lending costs are entirely to the benefit of consumers, in accordance with the regulatory framework.

The **net profit** increased by 11.5% to €114.9million, mainly due to the following factors:

Increase in the **fair remuneration** (up €2.9 million): The higher average OLO compared to 2017 (up 0.07%) and the increase in equity due to the reservation of part of the 2017 result (€45 million) led to a fair remuneration of €44.0 million.
Decrease in the **incentives** realised (down €1.8 million): strong operational performance, primarily on the incentive linked to import capacity (up €3.4 million), welfare (up €1.1 million) and continuity of supply (up €0.6 million), was offset by lower performance on the influenceable incentive (down €2.1 million), lower incentive on timely completion of the investment programme as no project was due to go into operation in 2018 (down €1.0 million) and lower efficiency (down €1.7 million). In addition, the higher average tax rate negatively impacted the net contribution from incentives (down €2.2 million).
Higher **mark-up** for strategic investments (up €11.1 million) accounted for €42.2 million.
No major damage to electrical installations compared to 2017 (up €2.5 million).
Regulatory settlement for the previous year (up €1.7 million).
Others (up €0.2 million): mainly a higher bad debt allowance for trade receivables with the adoption of IFRS 9 and deferred tax effects.

Total **assets** increased by €460.2 million to €5,909.2 million, mainly as a result of the investment programme. The regulated **net financial debt** increased to €2,825.1 million (up 12.5%), as Elia's CAPEX programme was mainly financed by cash flows generated from operating activities, the drawing of €100 million EIB loan contracted in 2017 and commercial paper totalling €50 million.

The **equity** increased mainly as a result of the reservation of the 2018 profit and the capital increase of €5.3 million reserved for personnel, minus the contribution of the regulated activities to the 2017 dividend payment.

4.3. 50Hertz Transmission (Germany)

GRI 201-1 (TSO Germany)

The table below shows the 2018 consolidated results for 50Hertz Transmission (Germany) system operator activities in Germany:

50Hertz Transmission key figures (in million EUR) – Year ended 31 December	**2018**	**2017 (restated *)**	**Difference (%)**
Total revenues and other income	1,364.9	1,330.2	2.6%
Depreciation, amortisation, impairment and changes in provisions	(89.6)	(149.9)	(40.2%)
EBIT	385.4	322.6	19.5%
EBITDA	475.0	472.4	0.5%
Finance income	2.5	1.9	31.6%
Finance costs	(48.1)	(56.2)	(14.4%)
Income tax expense	(101.9)	(85.6)	19.1%
Profit attributable to the owners of the Company	**169.2**	**109.6**	**54.4%**
Consolidated statement of financial position (in million EUR)	**31 December 2018**	**31 December 2017 (restated *)**	**Difference (%)**
Total assets	6,752.1	6,188.1	9.1%
Capital expenditure	511.0	478.1	6.9%
Net financial debt	1,272.9	1,442.3	(11.7%)

EBITDA (Earnings Before Interest and Taxes, Depreciations and Amortisations) = EBIT + depreciation/amortisation + changes in provisions
EBIT = result from operating activities and share of profit of equity-accounted investees (net of income tax)
Net financial debt = non-current and current loans and borrowings less cash and cash equivalents
* See Note 2.1 for details regarding restatement as a result of a change in accounting policy.

50Hertz Transmission's revenues increased by 2.6% compared to the same period last year. This was the result of revenue growth following the ongoing CAPEX programme, partially offset by lower passed-on energy costs and a reduced allowance for offshore operational costs.

Total revenues are detailed in the table below:

Total revenues and other income (in million EUR)	**2018**	**2017 (restated *)**	**Difference (%)**
Grid revenue:	1,402.6	1,545.6	(9.3%)
Vertical grid revenues	1,047.3	1,241.4	(15.6%)
Horizontal grid revenues	233.8	210.2	11.2%
Ancillary-services revenues	121.5	94.0	29.3%
Other income	68.4	73.5	(6.9%)
Subtotal revenues and other income	**1,471.0**	**1,619.1**	**(9.1%)**
Settlement mechanism: deviations from approved budget	(106.1)	(288.9)	n.r.
Total revenues and other income	**1,364.9**	**1,330.2**	**2.6%**

* See Note 2.1 for details regarding restatement as a result of a change in accounting policy.

Vertical grid revenues (tariffs to end customers) declined by €194.1 million (down 15.6%) from 2017, primarily driven by the decrease in the total allowed revenues under the regulatory framework. Compensation for non-controllable energy costs shrank by €272.6 million, mainly as a result of the settlement of previous years. In 2017 a tariff deficit was recovered (caused by high energy costs in 2015), while in 2018 a tariff surplus is paid back to the customers (caused by low energy costs in 2016). Furthermore, regulatory remuneration generated from the asset base increased as a consequence of the onshore and offshore investments made (up €11.9 million). Finally, the revenues were positively impacted by higher third-party offshore costs passed on to customers (up €40.9 million).

Horizontal grid revenues (tariffs to other TSOs) increased by €23.6 million (up 11.2%), mainly driven by a higher allowance for offshore costs (up €21.2 million). In Germany, all offshore connection costs are shared across the four German transmission system operators. This means that 50Hertz bears around 20% of these costs and passes on 80% of its own connection costs to the other three TSOs. Due to rising offshore investments, which in 2018 pertained mainly to the offshore grid connection for Ostwind 1 and Ostwind 2, the cost recovery charged horizontally to the other TSOs rose and thus impacted horizontal revenues.

Ancillary-services revenues increased by €27.5 million (up 29.3%) compared to 2017. Due to a new cost-sharing agreement between the German TSOs, more redispatch costs can be charged to other TSOs. Thus redispatch revenues increased (up €10.2 million), even though total redispatch requirements were reduced by the expansion of the grid (Southwest Coupling line) plus efficient management. Furthermore, the new cost-sharing mechanism for reserve power plants generated revenues for the first time in 2018 (up €13.7 million).

The **settlement mechanism** includes both the annual offsetting of deficits and surpluses accounted for before 2018 (+€120.8 million) and the net surplus generated in 2018 between the costs allowed to be passed on in the tariffs and the actual costs (-€226.9 million). The adjustment for 2018 is strongly driven by the fact that actual redispatch costs were far below this year's revenue cap allowance (-€166.5 million). Furthermore, the grid revenues (horizontal and vertical) are based on an offshore OPEX allowance of 3.4% on invested capital. With the transition towards a cost-plus mechanism starting in 2019, there is a strong feeling that only incurred offshore costs will be accepted in 2018 (pass-on approach). The difference between the allowance in the revenues and the actual costs is to be paid back to the customer, resulting in the recognition of a liability for offshore costs (-€72.8 million).

EBITDA increased slightly by €2.6 million to €475.0 million (up 0.5%). The total investment remuneration decreased (down €25.9 million), as the higher onshore (up €17.5 million) and offshore (up €14.0 million) remuneration driven by the ongoing investment programme, was more than offset by the lower regulatory allowance for offshore OPEX (down €57.4 million). The regulatory revenues from the Base Year mechanism decreased (down €3.3 million) from the annual adjustment for inflation and efficiency targets linked to the application of the regulatory framework. OPEX and other costs slightly decreased with €2.4 million. The efficiency programme implemented in 2017 resulted in a further drop in several operational expenses, such as maintenance and insurance, while own-work-capitalised revenues increased due to a higher allocation of personnel costs to new investments. This was only partially offset by higher personnel costs, driven by both an increase in collectively agreed wages and additional staff requirements for the expanding investment programme.

EBIT (up 19.5%) was further impacted by the release of a provision for legal claim easements (up €72.1 million). This provision was established after German reunification to cover possible legal claims by landowners in Eastern Germany. Following a reassessment driven by a tax audit, part of the provision was released. This was partly offset by increased depreciations resulting from the commissioning of the Southwest Coupling line and the North Ring in the second half of 2017 and the partial commissioning of Ostwind 1 in 2018 (down €11.8 million). Considering revenues linked to the partial commissioning of the Ostwind project (€33.3 million) and a bonus for the efficient management of renewable energies (€0.1 million), partially offset by the regulatory settlement of previous years (-€2.8 million), the **EBIT** came in at €385.4 million.

The **net profit** increased to €237.9 million, of which €169.2 million (up 54.4%) was attributable to the owners of the Company as a result of the following:

1. Growing asset base leading to higher investment remuneration (up €31.5 million);
2. Lower Offshore OPEX remuneration (down €57.4 million);
3. Lower Base Year revenues (down €3.3 million);
4. Lower OPEX and other costs (up €2.4 million);
5. Release of provision (up €72.1 million);
6. Increased depreciation (down €11.8 million) driven by commissioning of investments;
7. Reduced net finance costs (up €7.4 million), mainly due to a reduction of interest on tax risk (up €3.8 million) and lower interest on the legal claim easement provision after the release (up €2.6 million);
8. Increased income tax expense (down €7.2 million)

Total assets increased by € 564.0 million to €6,752.1 million (up 9.1%), mainly driven by the investments made and a further increase of the cash position. 2018 showed a positive **free cash flow** of €278.7 million, of which €84.3 million generated by the EEG mechanism.

The ongoing investment programme has been financed by operating cash flow and working capital. No new long-term debt has been issued by Eurogrid GmbH in 2018. The **net financial debt** consequently decreased to €1,272.9 million compared to the end of 2017. It includes an EEG cash position of €859.4 million.

4.4. Non-regulated activities (incl. Nemo Link)

GRI 201-1 (Non-regulated activities)

The table below shows the 2018 consolidated results of the 'Non-regulated activities (incl. Nemo Link)' segment:

Other key figures (in million EUR) – Year ended 31 December	2018	2017 (restated *)	Difference (%)
Total revenues and other income	13.9	19.8	(29.8%)
Depreciation, amortisation, impairment and changes in provisions	(1.0)	(0.3)	233.3%
Results from operating activities	(9.3)	(1.6)	481.3%
Share of profit of equity-accounted investees (net of income tax)	0.3	(1.4)	n.m.
EBIT	(8.9)	(3.0)	196.7%
EBITDA	(7.9)	(2.6)	203.8%
Finance income	19.1	3.6	430.6%
Finance costs	(17.8)	(3.0)	493.3%
Income tax expenses	4.1	(2.5)	n.m.
Profit attributable to the owners of the Company	**(2.8)**	**(4.1)**	**(31.7%)**
Consolidated statement of financial position (in million EUR)	**31 December 2018**	**31 December 2017 (restated *)**	**Difference (%)**
Total assets	1,677.9	594.4	182.3%
Capital expenditure	0.0	0.0	n.r.
Net financial debt	507.6	171.4	196.1%

EBITDA (Earnings Before Interest and Taxes, Depreciations and Amortisations) = EBIT + depreciation/amortisation + changes in provisions
EBIT = result from operating activities and share of profit of equity-accounted investees (net of income tax)
Net financial debt = non-current and current loans and borrowings less cash and cash equivalents
* See Note 2.1 for details regarding restatement as a result of a change in accounting policy.

The **non-regulated revenues** decreased by 29.8% from 2017. The fall is mainly due to EGI revenues, which decreased from €13.2 million to €9.5 million, as fewer owner engineering services were delivered than in 2017. The 2018 sale of the Training and Research Centre for Power Systems Security (GridLab) to DNV GL also resulted in lower revenues (down €1.0 million).

An **operating loss (EBIT)** of €8.9 million was generated (up >100%) due to higher non-regulated costs and the lower contribution from EGI. This was partially offset by a limited contribution from Nemo Link, as it was not yet in operation in 2018. The main driver for the non-regulated costs was the acquisition of Eurogrid, which generated expenses of €3.3 million related to legal and advisory fees.

The **net finance income** increased to €1.3 million, primarily as a result of the acquisition of an additional stake in Eurogrid, which is considered to be non-regulated financing and therefore does not impact tariffs. The remeasurement to fair value of the Group's initial 60% shareholding in Eurogrid resulted in the recognition of a financial non-recurring gain of €9.2 million, partly offset by the financial costs of financing this transaction. First, a bridge loan of €968.1 million was taken out, which was successfully refinanced in August through the issue of a €300 million senior bond (coupon 1.50%) and a €700 million hybrid securities (coupon 2.75%). While the hybrid bond has no impact on profit (accrued dividends are directly accounted in equity), the costs for the bridge loan and the senior securities amount to €4.4 million of financial cost. In addition, the mid-swap rate for both the senior and hybrid securities was fully hedged. The unwinding of the hedge linked to the hybrid securities resulted in a non-recurring financial loss of €3.2 million

The **net loss** amounted to €3.5 million, of which €2.8 million (down 41.7%) was attributable to the owners of the Company, as a result of:

1. Lower result for **EGI** (down €0.5 million) due to write-offs of deferred tax assets recognised on the results of previous years;
2. Financing costs linked to the **acquisition of Eurogrid** (down €3.5 million), mainly consisting of financing expenses related to the bridge financing, the senior bond and the rating of the bond;
3. Higher result for **Nemo Link** (up €1.1 million) thanks to a small outperformance on the financing of the subsidiary and its first positive contribution as an associate;
4. The effect resulting from the Eurogrid acquisition, as the remeasurement to fair value of the Group's initial stake in Eurogrid (up €9.2 million) was partially offset by acquisition-related expenses and non-recurring financing and hedging costs (down €4.9 million).

Total **assets** increased by €1,083.5 million to €1,677.9 million, mainly as a result of the further investments in Nemo Link and the increased stake in Eurogrid. Goodwill of €703.3 million was recognised (see Note 7.1 for details) on this acquisition. Consequently, the **net financial debt** increased to €507.6 million and reflects the senior bond contracted to finance the additional 20% stake in Eurogrid. The issued hybrid securities has been qualified as equity under IFRS, considering the option to defer coupons at the issuer's discretion.

4.5. Reconciliation of information on reportable segments to IFRS amounts

Consolidated results (in million EUR) – Year ended 31 December	2018 Elia Transmission (Belgium) (a)	2018 50Hertz Transmission (Germany) (b)	2018 Non-regulated activities (incl. Nemo Link) (c)	2018 Consolidation entries and intersegment transactions (d)	2018 Elia Group (a)+(b)+(c)+(d)
Total revenues and other income	959.4	1,364.9	13.9	(406.4)	1,931.8
Depreciation, amortisation, impairment and changes in provisions	(140.2)	(89.6)	(1.0)	(17.1)	(247.9)
Results from operating activities	227.1	385.4	(9.3)	(166.2)	437.0
Share of profit of equity-accounted investees, net of tax	1.8	0.0	0.3	63.5	65.6
EBIT	228.9	385.4	(8.9)	(102.8)	502.6
EBITDA	369.1	475.0	(7.9)	(85.7)	750.5
Finance income	0.6	2.5	19.1	(0.3)	21.9
Finance costs	(66.0)	(48.1)	(17.8)	16.7	(115.2)
Income tax expense	(48.6)	(101.9)	4.1	44.2	(102.2)
Profit attributable to the owners of the Company	**114.9**	**169.2**	**(2.8)**	**0.1**	**281.4**
Consolidated statement of financial position (in million EUR)	**31 Dec 2018**	**31 Dec 2018**	**31 Dec 2018**	**31 Dec 2018**	**31 Dec 2018**
Total assets	5,909.2	6,752.1	1,677.9	(584.9)	13,754.3
Capital expenditure	600.7	511.0	0.0	(20.8)	1,090.9
Net financial debt	2,825.1	1,272.9	507.6	0.0	4,605.6

Consolidated results (in million EUR) – Year ended 31 December *	2017 Elia Transmission (Belgium) (a)	2017 50Hertz Transmission (Germany) (b)	2017 Non-regulated activities (incl. Nemo Link) (c)	2017 Consolidation entries and intersegment transactions (d)	2017 Elia Group (a)+(b)+(c)+(d)
Total revenues and other income	851.3	1,330.2	19.8	(1,334.2)	867.1
Depreciation, amortisation, impairment and changes in provisions	(130.8)	(149.9)	(0.3)	150.2	(130.8)
Results from operating activities	217.0	322.6	(1.6)	(322.5)	215.5
Share of profit of equity-accounted investees, net of tax	2.0	0.0	(1.4)	108.5	109.1
EBIT	218.9	322.6	(3.0)	(213.9)	324.6
EBITDA	349.7	472.4	(2.6)	(364.1)	455.4
Finance income	1.9	1.9	3.6	(1.9)	5.5
Finance costs	(79.0)	(56.2)	(3.0)	56.3	(81.9)
Income tax expense	(38.8)	(85.6)	(2.5)	87.3	(39.6)
Profit attributable to the owners of the Company	**103.0**	**109.6**	**(4.0)**	**0.0**	**208.6**
Consolidated statement of financial position (in million EUR)	**31 Dec 2017**	**31 Dec 2017**	**31 Dec 2017**	**31 Dec 2017**	**31 Dec 2017**
Total assets	5,449.0	6,188.1	594.4	(5,649.2)	6,582.3
Capital expenditure	388.1	478.1	0.0	(478.1)	388.1
Net financial debt	2,511.9	1,442.3	171.4	(1,436.5)	2,689.1

* See Note 2.1 for details regarding restatement as a result of a change in accounting policy.

There are no significant intersegment transactions.

The Group has no concentration of customers in either of the operating segments.

5. Items in the consolidated statement of profit or loss and other comprehensive income

During the financial year, Elia obtained full control over Eurogrid by acquiring an additional 20% stake in Eurogrid International, resulting in a change of consolidation method from equity pickup to full consolidation method.
There were no changes in the basis of preparation and therefore no restatements of figures from previous years were required.

5.1. Revenue and other income

(in million EUR)	2018	2017*
Grid revenue	**1,811.7**	**790.0**
Transfers of assets from customers	2.6	1.7
Other revenue	8.5	16.4
Other income:	**109.0**	**59.0**
Services and technical expertise	1.6	(0.3)
Own production	53.9	25.5
Optimal use of assets	16.3	14.3
Other	36.8	18.5
Gain on sale PPE	0.5	1.0
Total revenue	**1,931.8**	**867.1**

** See Note 2.1 for details regarding restatement as a result of a change in accounting policy.*

See the segment reports, which contain a detailed analysis of the Group's recognised revenues at segment level. The Elia Transmission (Belgium) segment reported revenues of €959.4 million (Note 4.2), the 50Hertz Transmission (Germany) segment reported revenues of €1,364.9 million (Note 4.3) and the 'Non-regulated activities (incl. Nemo Link)' segment reported revenues of €13.9 million (Note 4.4). The aforementioned reported revenues of €1,931.8 million have been corrected for the effect of inter-segment revenues, for an amount of €3.8 million, and for German segment revenues which were recognised in the period from January to April (when equity accounting applied), for an amount of €402.6 million.

The Group's own production relates to time of own personnel and who have worked on investment projects.

The Group has recognised €11.5 million of revenue in the reporting period that was included in the contract liability balance at the beginning of the period. The Group did not recognise any substantial revenues in the reporting period where performance obligations were in previous periods.

5.2. Operating expenses

COST OF MATERIALS, SERVICES AND OTHER GOODS

(in million EUR)	2018	2017
Raw materials, consumables and goods for resale	41.5	9.6
Purchase of ancillary services	500.2	140.2
Services and other goods (excl. purchase of ancillary services)	445.5	204.2
Total	**987.2**	**354.0**

The Group's costs for 'Raw materials, consumables and goods for resale' were relatively low at the end of financial year 2017 and were attributable to Elia Transmission (Belgium) for an amount of €5.3 million and EGI for an amount of €4.3 million. Whereas costs attributable to Elia Transmission (Belgium) remained stable in 2018 (€5.6 million), EGI's raw material costs have reduced significantly in the year to €0.5million, mainly due to a drop in realised EPC contracts. In 2018, 50Hertz Transmission (Germany) has contributed to these costs in the amount of €35.4 million due to raw material costs of €54.2 million for the full year (of which the four first months have been reversed). Raw material costs for the German segment remained more or less in line with financial year 2017, when the cost base was € 56.8 million.

'Purchase of ancillary services' includes the costs for services which enable the Group to balance generation with demand, maintain constant voltage levels and manage congestion on its grids. The cost incurred in 2018 by Elia Transmission (Belgium) increased to €199.2 million (from €140.2 million in 2017) because of the unexpected unavailability of some nuclear units in the last quarter of 2018, which caused very high reservation prices on the market. 50Hertz Transmission (Germany) incurred costs of €296.6 million, corresponding to all costs incurred from the date of acquisition to the end of 2018.

'Services and other goods' relates to maintenance of the grid, services provided by third parties, insurance and consultancy, and others. The increase from the previous year is mainly driven by 50Hertz Transmission (Germany)'s contribution in the year for an amount of €222.4 million.

PERSONNEL EXPENSES

GRI 201-1 (Payments to government: social security contributions)

(in million EUR)	2018	2017
Salaries and wages	159.5	101.6
Social security contributions	36.1	26.2
Pension costs	17.0	7.2
Other personnel expenses	4.8	9.9
Share-based payment	1.1	0.1
Employee benefits (excl. pensions)	10.8	2.2
Total	**229.3**	**147.2**

In December 2018, Elia Group gave its employees in Belgium the chance to subscribe to an Elia System Operator SA capital increase. The capital increase resulted in the creation of 114,039 additional shares without nominal value. The Group's employees were granted a 16.66% reduction on the quoted share price, which resulted in a €1.1 million reduction overall. The transaction resulted in a €2.8 million capital increase and a €2.5 million increase in the share premium.

Total 2018 personnel expenses for the Belgian and non-regulated activities amounted to €157.7 million (up from €147.2 million the previous year) due to a higher number of FTEs (1,390.6) than in 2017 (1,332.2). 50Hertz Transmission (Germany) accounted for €71.6 million of the Group's personnel expenses for 2018.

For more information about pension costs and employee benefits, see Note 6.13, 'Employee benefits'
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DEPRECIATION, AMORTISATION, IMPAIRMENT AND CHANGES IN PROVISIONS

(in million EUR)	2018	2017
Amortisation of intangible assets	16.5	8.0
Depreciation of property, plant and equipment	233.1	123.4
Total depreciation and amortisation	249.5	**131.3**
Impairment of inventories and trade receivables	2.8	(0.3)
Total impairment	**2.8**	**(0.3)**
Other provisions	(3.1)	1.3
Environmental provisions	(1.3)	(1.6)
Changes in provisions	**(4.4)**	**(0.4)**
Total	**247.9**	**130.8**

The amount of impairment on trade receivables is explained in Note 8.1, 'Financial risk and derivative management'.

A detailed description is provided in other sections for 'Intangible assets' (see Note 6.2), 'Property, plant and equipment' (see Note 6.1) and 'Provisions' (see Note 6.14).

OTHER EXPENSES

GRI 201-1 (Payments to government: taxes other than income tax)

(in million EUR)	2018	2017
Taxes other than income tax	13.9	11.9
Loss on disposal/sale of property, plant and equipment	13.5	7.5
Impairment on receivables	0.4	0.0
Other	2.6	0.3
Other operating expenses	**30.4**	**19.6**

Taxes other than income tax mainly consist of property taxes.

Losses on disposal for property, plant and equipment total €11.2 million for Elia Transmission (Belgium), compared with €7.5 million the previous year, and €2.2 million for 50Hertz Transmission (Germany).

50Hertz Transmission (Germany)'s total share of the Group's other expenses in 2018was €6.6 million.

5.3. Net finance costs

(in million EUR)	2018	2017
Finance income	**21.9**	**5.5**
Interest income on cash and cash equivalents and granted loans	7.1	3.6
Other financial income	14.8	1.9
Finance costs	**(115.2)**	**(81.9)**
Interest expense on eurobonds and other bank borrowings	(95.8)	(68.1)
Interest expense on derivatives	(4.4)	(9.3)
Other financial costs	(15.0)	(4.5)
Net finance costs	**(93.2)**	**(76.5)**

Finance income has increased from €5.5 million in 2017 to €21.9 million in 2018. 50Hertz Transmission (Germany)'s contribution to finance income amounts to €2.2 million for 2018. Interest income includes €6.3 million (2017: €3.6 million) of interest from a loan agreement between Elia System Operator and Nemo Link Ltd. See Note 6.4.1 for more details. Other financial income also includes a €9.2 million remeasurement gain to fair value of the Group's initial 60% shareholding in Eurogrid. See Note 4.4.

The interest expenses on eurobonds and other bank borrowings increased, due to a number of factors. Elia Transmission (Belgium) incurred a net €67.6 million interest expense on borrowings in the year, which is comparable with the previous year. The slightly increased interest paid on borrowings is mainly due to an increased nominal amount of outstanding debt, which was driven by the €300 million senior bond issued in September 2018, the €100 million EIB loan, and the €210 million dedicated loan taken out in December 2018. This slight increase is, however, offset by the higher level of capitalised borrowing costs in the year, at €9.0 million (2017: €8.3 million) the rise in capitalised borrowing costs being due to the roll-out of a number of larger projects. 50Hertz Transmission (Germany)'s share of interest expenses on borrowings amounted to €28.2 million.

The interest expense on derivatives decreased significantly due to a number of interest-rate swaps which ended in financial year 2017 and were partially replaced in 2018 with interest-rate swaps at low market interest rates.

Other financial costs have increased due to a number of one-off financial costs that arose in connection with the acquisition of the 20% stake in 50 Hertz Transmission (Germany).

For more details of net debt and loans, see Note 6.12.

5.4. Income taxes

GRI 201-1 (Payments to government by country: corporate income taxes)

RECOGNISED IN PROFIT OR LOSS

The consolidated income statement includes the following taxes:

(in million EUR)	2018	2017 (restated *)
Current year	82.6	28.5
Adjustments for prior years	23.2	0.7
Total current income tax expenses	**105.9**	**29.2**
Origination and reversal of temporary differences	(3.7)	10.4
Total deferred taxes	**(3.7)**	**10.4**
Total income taxes recognised in profit and loss	**102.2**	**39.6**

* See Note 2.1 for details regarding restatement as a result of a change in accounting policy.

Total income tax expenses were higher in 2018 than in 2017. The full consolidation of 50Hertz Transmission (Germany) in the last eight months of 2018 resulted in a €57.8 million increase in total income tax. The remaining increase in tax expenses is driven, among other factors, by a significant limitation of the effects of the Notional Interest Deduction (NID) in 2018. This had a substantial positive tax effect in 2017.

RECONCILIATION OF THE EFFECTIVE TAX RATE

The tax on the Group's profit (loss) before tax differs from the theoretical amount that would arise using the Belgian statutory tax rate applicable to profits (losses) of the consolidated companies:

(in million EUR)	2018	2017 (restated *)
Profit before income tax	409.3	268.2
Income tax expense	**102.2**	**39.1**
Income tax, using the domestic corporate income tax rate	121.0	91.2
Domestic corporate income tax	29.58%	33.99%
Effect of the foreign tax rate**	(0.1)	(0.2)
Share of profit of equity-accounted investees	(19.4)	(37.0)
Non-deductible expenses	5.3	2.6
Adjustments for prior years (net of deferred tax impact)	0.5	0.7
Tax incentives (notional interest deduction)	0.0	(13.1)
Tax credit for R&D	(0.5)	(2.3)
Effect of NID carried forward on regulatory balance	0.0	7.9
Tax reform: deferred income tax adjustments	(0.4)	(12.4)
Other	(4.2)	1.3
Income tax expense	**102.2**	**39.6**

1 DTA = Deferred tax asset; NID = Notional Interest Deduction
* See Note 2.1 for details regarding restatement as a result of a change in accounting policy.
** The nominal tax rate in Germany amounts to 29.59%

The Belgian notional interest deduction (NID) had a considerable effect on the income tax for financial year 2017. Since all remaining stock in notional interest deduction was used in 2017, the positive effects of notional interest deduction were no longer felt in 2018.

Deferred income taxes are discussed further in Note 6.6.

5.5. Earnings per share (EPS)

BASIC EPS

Basic earnings per share are calculated by dividing the net profit attributable to the shareholders of the Company (€275.2 million) by the weighted average number of ordinary shares outstanding during the year.

Weighted average number of ordinary shares	2018	2017
Ordinary shares issued on 1 January	60,901,019	60,891,158
Impact of the shares issued in March 2017		7,646
Impact of the shares issued in December 2018	3,437	
Weighted average number of shares on 31 December	**60,904,456**	**60,898,804**

DILUTED EPS

Diluted earnings per share are determined by adjusting the profit or loss attributable to ordinary shareholders and the weighted average number of ordinary shares outstanding for the effects of all dilutive potential ordinary shares, which comprise share options and convertible bonds.

Diluted earnings per share are equal to basic earnings per share, since there are no share options or convertible bonds.

Share capital and reserves per share

Share capital and reserves per share totalled €44.9 per share on 31 December 2018, compared with a value of €42.1 per share at the end of 2017.

5.6. Other comprehensive income

Total comprehensive income includes both the result of the period recognised in the statement of profit or loss and other comprehensive income recognised in equity. 'Other comprehensive income' includes all changes in equity other than owner-related changes, which are reported in the statement of changes in equity.

Changes in fair value

Cash flow hedges

The negative effect in fair value of cash flow hedges was mainly due to the negative fair value at settlement date of the pre-hedge on the senior bond issued in September 2018 in connection with the acquisition of the 20% stake in 50Hertz. The hedging reserve is described in detail in Note 8.1.

Fair value on investments through OCI

Investments previously measured at amortised cost are measured through OCI with the adoption of IFRS 9 (to the extent that the investment is not categorised under IFRS 12). This had a positive effect of €2.7 million in OCI.

Remeasurements

The OCI on post-employment obligations had a limited impact of €0.8 million (€0.6 million net of tax). See Note 6.13 for more details. The effect in the previous year effect mainly resulted from experience adjustments.

6. Items in the consolidated statement of financial position

6.1. Property, plant and equipment

(in million EUR)	Land and buildings	Machinery and equipment	Furniture and vehicles	Other tangible assets	Assets under construction	Total
ACQUISITION VALUE						
Balance at 1 January 2017	199.8	4,904.2	162.2	14.8	448.9	5,729.9
Additions	3.5	46.3	8.8	0.1	318.6	377.3
Disposals	(0.3)	(43.2)	(1.7)	(0.2)	(0.1)	(45.6)
Transfers from one heading to another	2.9	357.9	0.0	4.6	(365.5)	0.0
Balance at 31 December 2017	**205.9**	**5,265.1**	**169.3**	**19.3**	**401.9**	**6,061.6**
Balance at 1 January 2018	205.9	5,265.1	169.3	19.3	401.9	6,061.6
Acquisition business combinations	207.0	2,713.3	68.6	0.0	1,504.4	4,493.4
Additions	6.1	162.5	20.1	0.1	841.4	1,030.1
Disposals	(4.1)	(68.6)	(6.3)	0.0	(22.2)	(101.1)
Transfers from one heading to another	2.7	1,087.1	10.4	5.7	(1,105.9)	0.0
Balance at 31 December 2018	**417.6**	**9,159.3**	**262.2**	**25.2**	**1,619.7**	**11,483.9**
DEPRECIATION AND IMPAIRMENT						
Balance at 1 January 2017	(22.8)	(2,613.7)	(125.7)	(11.3)	-	(2,773.4)
Depreciation	(1.9)	(110.8)	(8.6)	(2.1)	-	(123.5)
Disposals	0.1	35.6	1.7	0.2	-	37.6
Transfers from one heading to another	0.0	3.0	0.0	(3.0)	-	0.0
Balance at 31 December 2017	**(24.7)**	**(2,685.9)**	**(132.6)**	**(16.1)**	**-**	**(2,859.2)**
Balance at 1 January 2018	(24.7)	(2,685.9)	(132.6)	(16.1)	-	(2,859.2)
Depreciation	(4.4)	(207.2)	(21.2)	(0.9)	0.0	(233.7)
Disposals	2.8	56.4	6.0	0.0	0.0	65.2
Transfers from one heading to another	0.0	5.7	(0.3)	(5.3)	0.0	0.0
Balance at 31 December 2018	**(26.3)**	**(2,831.0)**	**(148.1)**	**(22.3)**	**0.0**	**(3,027.7)**
CARRYING AMOUNT						
Balance at 1 January 2017	177.0	2,290.5	36.5	3.5	448.9	2,956.5
Balance at 31 December 2017	181.2	2,579.3	36.7	3.2	401.9	3,202.4
Balance at 1 January 2018	181.2	2,579.3	36.7	3.2	401.9	3,202.4
Balance at 31 December 2018	391.3	6,328.3	114.1	2.9	1,619.7	8,456.2

The largest additions in Belgium relate to major interconnection projects such as Brabo (€47.2 million) and ALEGrO (€101.0 million). Major additions were also made in connection with upgrading the Mercator-Horta high-voltage line (€43.1 million), and €111.4 million was invested in the Modular Offshore Grid.

In Germany, a total of €219.5 million was invested in onshore projects, while offshore investments totalled €272.0 million. The most significant onshore investments were connected with the modernisation of the telecommunications network (€24.2 million), the reinforcement of high-voltage pylons to improve operational safety (€15.1 million), the restructuring and reinforcement of the overhead line from Wolmirstedt to Güstrow (€11.3 million), and the reinforcement of the overhead line from Wolmirstedt to Helmstedt (€10.3 million). Offshore investments were mainly made for the offshore grid connection of Ostwind 1 (€126.8 million), Ostwind 2 (€98.7 million) and the offshore interconnector project Kriegers Flak Combined Grid Solution (€43.8 million).

During 2018, €16.3 million of borrowing costs were capitalised on 2018 acquisitions. €8.8 million (€8.2 million in 2017), based on an average interest rate of 2.68% (3.21% in 2017), originates from the Elia Transmission segment. An amount of €7.5 million, based on an average interest rate of 1.25% comes from the 50Hertz Transmission segment.

Outstanding capital expenditure commitments are described in Note 8.2.

6.2. Intangible assets and goodwill

(in million EUR)	Goodwill	Development costs of software	Licences/ concessions	Total
ACQUISITION VALUE				
Balance at 1 January 2017	1,707.8	90.2	3.4	1,801.3
Additions	0.0	10.5	0.3	10.8
Disposals	0.0	0.0	(0.1)	(0.1)
Balance at 31 December 2017	**1,707.8**	**100.7**	**3.6**	**1,812.1**
Balance at 1 January 2018	1,707.8	100.7	3.6	1,812.1
Acquisition through business combinations	0.0	30.8	21.8	52.6
Additions	703.3	24.3	0.0	727.6
Disposals	0.0	(0.5)	0.0	(0.5)
Balance at 31 December 2018	2,411.1	155.3	25.4	2,591.8
DEPRECIATION AND IMPAIRMENT				
Balance at 1 January 2017	(0.0)	(63.3)	(2.2)	(65.5)
Amortisation	0.0	(7.6)	(0.4)	(8.0)
Balance at 31 December 2017	**(0.0)**	**(70.9)**	**(2.6)**	**(73.5)**
Balance at 1 January 2018	(0.0)	(70.9)	(2.6)	(73.5)
Amortisation	0.0	(15.1)	(1.3)	(16.4)
Disposals	0.0	0.4	0.0	0.4
Balance at 31 December 2018	**(0.0)**	**(85.7)**	**(3.9)**	**(89.5)**
CARRYING AMOUNT				
Balance at 1 January 2017	1,707.8	26.9	1.1	1,735.8
Balance at 31 December 2017	1,707.8	29.8	1.0	1,738.6
Balance at 1 January 2018	1,707.8	29.8	1.0	1,738.6
Balance at 31 December 2018	2,411.1	69.6	21.5	2,502.3

Software comprises both IT applications developed by the Company for operating the grid and software for the Group's normal business operations.

During 2018, €0.2 million in borrowing costs were capitalised on 2017 acquisitions (compared with €0.2 million in 2017 on that year's acquisitions), based on an average interest rate of 2.68% (3.21% in 2017).

The goodwill relates to the following business combinations and is allocated to the CGU Elia Transmission for the acquisition of Elia Asset and Elia Engineering and to the CGU 50Hertz Transmission for the acquisition of the 20% stake in Eurogrid International:

(in million EUR)	2018	2017
Acquisition Elia Asset - 2002	1,700.1	1,700.1
Acquisition Elia Engineering - 2004	7.7	7.7
Acquisition Eurogrid International – 2018 *	703.4	0.0
Total	**2,411.2**	**1,707.8**

*See Note 7.1 for a detailed description and calculation of the goodwill related to the acquisition of the 20% stake in Eurogrid International

IMPAIRMENT TEST FOR CASH-GENERATING UNITS CONTAINING GOODWILL

Acquisition of Elia Asset and Elia Engineering

In 2002, the acquisition of Elia Asset by the Company for €3,304.1 million resulted in a positive consolidation difference of €1,700.1 million. This positive consolidation difference was the result of the difference between the acquisition value of this entity and the carrying amount of its assets. This difference consists of various aspects such as the fact that (i) Elia was appointed as a TSO for a period of 20 years (ii) Elia had unique resources in Belgium as Elia owns the whole of the very-high-voltage grid and owns 94% of the high-voltage grid (or has the right to use this), and hence only Elia is entitled to put forward a development plan and (iii) Elia had the relevant TSO know-how.

At the date of acquisition, the description or the quantification in euros of these aspects could not be performed on an objective, transparent and reliable basis and therefore, the difference could not be allocated to specific assets and was considered unallocated. This difference has therefore been recognised as goodwill since the initial adoption of IFRS in 2005. The regulatory framework, in particular the offsetting in the tariffs of the decommissioning of fixed assets, applicable from 2008 onwards, did not have an impact on

this accounting treatment. The goodwill described above and the goodwill resulting from the acquisition of Elia Engineering in 2004 were allocated to the single cash-generating unit for the impairment test determined, since the income and expenses were generated by one activity, specifically 'regulated activity in Belgium', which will also be considered to be one cash-generating unit.

As a result, the Company assigned the carrying amount of the goodwill to one unit, the regulated activity in Belgium. Since 2004, annual impairment tests have been conducted and have not resulted in recognition of any impairment losses. Cash-generating units to which goodwill has been allocated are tested for impairment at least annually as the higher of their fair value less cost to sell or value in use, applying the assumptions below and using the following valuation methods.

The impairment test was conducted by an independent expert. This impairment test is based on a number of different valuation methods and which are subject to different assumptions. The most important valuation methods used in this impairment test are:

- Discounting of future cash flows (DCF-models): A number of different DCF-variants have been used throughout the impairment test which, amongst each other, predominately differ in the method used to determine the terminal value. Considering the particularities of the Group's business, preference is given to the Regulated Asset Base (RAB)-model as the basis for the estimation of the terminal value;
- Discounting of future dividends;
- Market valuations, which are based upon market multiples taken from comparable companies;
- Valuations which are based upon multiples derived from recent transactions.

Future cash flows and future dividend methods are based on the business plan for the period 2019-2028. The following overall key assumptions were used:

- a tax rate of 25% as from 2020;
- a perpetual growth rate of 1.5%;
- Market-risk premium of 5.5%.

Particularly referring to the above valuation methods, the following key assumptions were used:
1) DCF based models:

- Risk-free rate: 0.8%;
- Levered beta of 0.7;
- The levered beta calculated based on the target debt ratio of 60%;
- Cost of equity: 7.3%;
- Cost of debt pre-tax: 2.4%;
- WACC: 3.99%.

2) Discounting of future dividends:

- Dividends and anticipated capital increases are taken into accounting in this model;
- Cost of equity: 7.3%.

3) Market valuations:

- Observed Enterprise Value / EBIT: 15.6;
- Observed P/E: 12.8;
- Observed Enterprise Value / RAB: 1.5.

4) Valuations, based upon recent transactions

- Observed Enterprise Value / EBIT: 18.7.

The independent analysis and sensitivity analysis did not result in the identification of an impairment of goodwill in the financial year 2018. With regard to the assessment of the recoverable amount, management believes, based on the analysis of the external expert and on current knowledge, that no reasonably possible change in any of the above key assumptions would cause material impairment losses.

Acquisition of Eurogrid International
In April 2018, the acquisition of an extra 20% stake in Eurogrid International by the Company for €988.7 million resulted in a positive consolidation difference of €703.4 million. This positive consolidation difference was the result of the difference between the acquisition value of this entity and the carrying amount of its assets.

6.3. Non-current trade and other receivables

(in million EUR)	2018	2017
Loans to third parties	2.6	0.0
Loans to joint ventures	174.4	147.8
Total	**177.0**	**147.8**

As mentioned in Note 5.1, the Group has a 50% stake in Nemo Link Ltd. This company is financed by both shareholders through equity and loans. As a result, at 31 December 2018 a non-current receivable to the amount of €174.4 million is outstanding on Nemo Link Ltd. This is accounted for as an unsecured loan instrument with a fixed interest rate and a maturity of 25 years after the commercial operations date of the interconnector (see Note 6.4).

Besides the loan to Nemo Link, the Group has also a receivable outstanding to a third party for an amount of €2.6 million. This receivable was granted for the financing of a joint project with Elia.

See Note 8.1 for a detailed analysis of the incurred credit risk linked to these loans.

6.4. Equity-accounted investees

6.4.1. Joint ventures

Eurogrid International CVBA
In April 2018, the Group acquired an extra 20% stake and control in Eurogrid International CVBA. As a result, from the date of acquisition, Eurogrid International CVBA is no longer accounted for as a Joint Venture, but a fully consolidated entity. The share of profit of equity-accounted investees in the first four months of 2018 for Eurogrid International CVBA was €63.5 million. See Note 7.1.

Nemo Link Ltd
On 27 February 2015, Elia System Operator and National Grid signed a joint venture agreement to build the Nemo Link Interconnector between Belgium and the UK. This project consists of subsea and underground cables connected to a converter station and an electricity substation in each country, which will allow electricity to flow in either direction between the two countries and will give UK and Belgium improved reliability and access to electricity and sustainable generation. Each shareholder holds a 50% stake in Nemo Link Ltd, a UK company.

Both shareholders have provided funding to Nemo Link Ltd since 2016 via equity contributions and loans (divided on a 50/50 basis).

In 2018, Elia provided €59.5 million, bringing the Company's total funding to €290.7 million, of which 40% came via equity contributions and 60% via loans. The figures of this joint venture are incorporated into the 'Non regulated activities (Incl. NemoLink)'-segment. See Note 4.4.

The following table summarises the financial information of the joint venture, based on its IFRS financial statements and reconciliation with the carrying amount for the Group's interest in the consolidated financial statements.

(in million EUR)	2018	2017
Percentage ownership interest	**50.0%**	**50.0%**
Non-current assets	606.3	490.7
Current assets	35.5	63.7
Non-current liabilities	381.2	297.1
Current liabilities	27.4	72.3
Equity	233.2	185.0
Group's carrying amount for the interest	**116.6**	**92.5**
Revenues and other income	0.0	0.0
Depreciation and amortisation	0.0	0.0
Net finance result	0.6	(0.1)
Profit before income tax	0.6	(0.1)
Income tax	0.0	(2.6)
Profit for the year	0.6	(2.7)
Total comprehensive income for the year	0.6	(2.7)
Group's share of profit for the year	**0.3**	**(1.4)**
Dividends received by the Group	0.0	0.0

6.4.2. Associates

The Group has four associates, all of which are equity-accounted investees.

The Group has a 12.5% interest in Enervalis NV, a start-up that develops innovative software-as-a-service solutions that will allow market players to optimise their energy bills while helping to meet the growing need for flexibility in the electricity system. A representative of the Group has been appointed a member of Enervalis's Board of Directors. The Group therefore considers itself as having a significant influence and Enervalis is, as such, accounted for using the equity method.

The Group has a 20.5% interest in Ampacimon SA, a Belgian company working on developing innovative monitoring systems for TSOs and distribution system operators (DSOs) so that they can more quickly anticipate on changes in energy supply and demand.

Following the acquisition of a 20% stake in 50Hertz, the Group's interest in Coreso NV/SA increased to 22.2%. Coreso NV/SA is a company which provides coordination services aimed at facilitating the secure operation of the high-voltage electricity system in several European countries.

HGRT SAS is a French company with a 49.0% stake in Epex Spot, the exchange for power spot trading in Germany, France, Austria, Switzerland, Luxembourg and (through its 100% associate APX) the UK, Netherlands and Belgium. The Group itself holds a 17.0% stake in HGRT. As one of the founding partners of HGRT, the Group has a 'golden share', enabling the Group to have a minimum number of representatives on the Board of Directors. This constitutes a significant influence and therefore HGRT is accounted for using the equity method. In 2018, the Group received a dividend of €2.0 million from HGRT (€0.9 million in 2017).

None of these companies are listed on any public exchange.

The following table illustrates the summarised financial information of the Group's investment in these companies, based on their respective financial statements prepared in accordance with IFRS.

(in million EUR)	Enervalis		Ampacimon		Coreso		HGRT	
	2018	2017	2018	2017	2018	2017	2018	2017
Percentage ownership interest	**12.5%**	**12.5%**	**20.5%**	**20.5%**	**22.2%**	**20.6%**	**17.0%**	**17.0%**
Non-current assets	0.3	0.3	0.3	0.2	4.4	3.1	93.7	93.0
Current assets	1.4	1.4	2.2	5.8	2.2	2.5	6.3	7.2
Non-current liabilities	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0
Current liabilities	0.3	0.3	0.0	2.8	4.5	3.2	0.4	0.1
Equity	1.3	1.3	2.5	3.1	2.7	2.4	99.6	100.2
Group's carrying amount for the interest	**0.7**	**0.7**	**0.5**	**0.6**	**0.6**	**0.4**	**16.9**	**17.0**
Revenues and other income	0.0	0.8	0.0	2.6	13.7	10.5	0.0	0.0
Profit before income tax	0.0	(1.1)	(0.6)	0.7	0.6	0.5	10.8	11.0
Income-tax expense	0.0	0.0	0.0	(0.3)	(0.3)	(0.2)	0.1	(0.2)
Profit for the year	0.0	(1.1)	(0.6)	0.4	0.3	0.2	10.9	10.8
Total comprehensive income for the year	0.0	(1.1)	(0.6)	0.4	0.3	0.2	10.9	10.8
Group's share of profit for the year	**0.0**	**0.0**	**(0.1)**	**0.1**	**0.0**	**0.0**	**1.9**	**1.8**

6.5. Other financial assets

(in million EUR)	2018	2017
Immediately claimable deposits	7.0	7.1
Other shareholdings	27.7	0.2
Reimbursement rights	52.2	53.6
Total	86.9	**60.9**

Immediately claimable deposits are measured at fair value. The risk profile of these investments is discussed in Note 8.1.

As of 2018, 'Other shareholdings' predominantly consist of the shareholdings owned by 50Hertz Transmission, which explains the increase compared to 2017.

The reimbursement rights are linked to the obligations for (i) the retired employees falling under specific benefit schemes (Scheme B - unfunded plan) and for (ii) the medical plan and plan for tariff benefits for retired staff members. See Note 6.13: 'Employee benefits'. The reimbursement rights are recoverable through the regulated tariffs. The following principle applies: all incurred pension costs for 'Scheme B' retired employees and the costs linked to healthcare and tariff benefits of retired Elia staff members are defined by the regulator (CREG) as non-controllable expenses that are recoverable through the regulatory tariffs. The decrease in the carrying value of this asset is disclosed in Note 6.13: 'Employee benefits'.

6.6. Deferred tax assets and liabilities

RECOGNISED DEFERRED TAX ASSETS AND LIABILITIES

(in million EUR)	2018		2017 (restated) *	
	Assets	Liabilities	Assets	Liabilities
Property, plant and equipment	3.3	(157.4)	1.2	(10.1)
Intangible assets	0.0	(8.2)	0.0	(8.4)
Non-current trade and other receivables	1.7	0.0	0.0	0.0
Interest-bearing loans and other non-current financial liabilities	2.2	(4.0)	0.0	(1.2)
Employee benefits	26.2	(13.9)	7,5	0,0
Provisions	40.6	0.0	0.0	0.0
Deferred revenue	9.4	(2.9)	0.0	0.0
Regulatory liabilities	19.6	0.0	0.0	0.0
Deferred tax on investment grants	0.0	(1.1)	0.0	(1.2)
Losses carried forward	2.5	0.0	0.0	0.0
Other items	0.7	(9.0)	0.8	(7.3)
Tax asset/liability before offsetting	**106.3**	**(196.5)**	**9.6**	**(28.2)**
Offsetting of tax	(101.3)	101.3	(8.6)	8.6
Net tax asset/(liability)	**5.0**	**(95.2)**	**1.0**	**(19.6)**

*As a result of the adoption of IFRS 15, the opening balance of the deferred tax liability of PPE has been restated downwards by € 21.4 million. See note 2.1 for detailed information.

The changes in deferred tax assets and liabilities can be presented as follows:

CHANGES IN DEFERRED TAX ASSETS AND LIABILITIES RESULTING FROM MOVEMENTS IN TEMPORARY DIFFERENCES DURING THE FINANCIAL YEAR *

(in million EUR)	Opening balance	Business Combinations	Recognised in profit or loss	Recognised in OCI	Other	Closing balance
2017						
Property, plant and equipment *	(31.4)		1.6	20.9	0.0	(8.8)
Intangible assets	(9.2)		0.8			(8.4)
Interest-bearing loans and other non-current financial liabilities	1.7		0.3	(3.2)		(1.2)
Employee benefits	5.6		(0.3)	2.3		7.5
Notional interest deduction carried forward - previous	11.9		(11.9)			0.0
Deferred tax on investment grants					(1.2)	(1.2)
Other items	(6.5)		(0.1)			(6.5)
Total	**(27.9)**	**0.0**	**(9.5)**	**20.0**	**(1.2)**	**(18.6)**
2018						
Property, plant and equipment	(8.8)	(157.6)	12.4			(154.1)
Intangible assets	(8.4)		0.2			(8.2)
Non-current trade and other receivables	0.0	1.8	(0.1)			1.7
Interest-bearing loans and other non-current financial liabilities	(1.2)	(3.2)	0.4	2.2		(1.8)
Employee benefits	7.5	4.2	0.7	(0.2)		12.3
Provisions	0.0	54.4	(13.8)			40.6
Deferred revenue	0.0	6.3	0.2			6.5
Regulatory liabilities	0.0	18.1	1.5			19.6
Losses carried forward	0.0		2.5			2.5
Deferred tax on investment grants	(1.2)		0.1			(1.1)
Other items	(6.5)	0.5	(0.4)		(1.8)	8.2
Total	**(18.6)**	**(75.5)**	**3.7**	**2.0**	**(1.8)**	**(90.2)**

*As a result of the adoption of IFRS 15, the opening balance of the deferred tax liability of PPE has been restated downwards by € 21.4 million. See note 2.1 for detailed information.

The line 'Other items' contains an amount of €1.8 million in deferred tax on distribution of hybrid securities, which did not have an impact on OCI or profit and loss.

UNRECOGNISED DEFERRED TAX ASSETS OR LIABILITIES

As at 31 December 2018, there is an unrecognised deferred tax asset of € 0.5 million relating to tax losses carried forward originating from EGI NV.

6.7. Inventories

(in million EUR)	2018	2017
Raw materials and consumables	34.0	27.6
Write-downs	(14.8)	(14.0)
Total	**19.2**	**13.6**

The warehouse primarily stores replacement and spare parts for maintenance and repair work on the Group's high-voltage substations, overhead lines and underground cables. It also included work-in-progress balances.

The increase of inventories is due to the acquired inventory of 50Hertz Transmission.

Write-downs are recorded following the non-utilisation of stock items based on their underlying rotation. These were slightly higher than in 2017.

6.8. Current trade and other receivables, deferred charges and accrued revenues

(in million EUR)	2018	2017
Construction contracts in progress	3.6	3.9
Trade and other receivables and advance payments	417.9	227.2
Levies	38.9	20.6
VAT and other taxes	50.5	24.2
Other	48.0	5.2
Deferred charges and accrued revenues	20.5	9.5
Total	**579.4**	**290.6**

Trade receivables are non-interest-bearing and generally have payment terms of 15 to 30 days.

Construction contracts in progress decreased slightly from €3.9 million in the previous year to €3.6 million at year-end. Construction contracts in progress mainly arise from EGI's business.

The increase in levies is mainly due to:

- an increase of €27.2 million relating to Flemish green certificates; mainly due to the increased number of certificates sold to Elia by producers at the minimum guaranteed price in 2018;
- partly offset by the levies for strategic reserve, which decreased from a receivable position of €9.3 million to a payable position of €7.5 million. This was because lower costs were incurred for strategic reserve as no reserve had to be established for winter 2018/2019.

The Group's exposure to credit and currency risks, and impairment losses related to trade and other receivables are shown in Note 8.1.

At 31 December, the ageing analysis of trade and other receivables and advance payments is as follows:

(in million EUR)	2018	2017
Not past due	389.7	218.7
Past due 0-30 days	6.6	0.8
Past due 31-60 days	(0.6)	2.9
Past due 61 days - one year	23.6	2.8
More than one year	0.5	1.6
Total (excl. impairment)	**419.8**	**226.8**
Doubtful amounts	170.2	1.7
Amounts of write-offs	(169.8)	(1.3)
Provision for expected credit losses	(2.3)	0.0
Total	**417.9**	**227.2**

See Note 8.1 for a detailed analysis of the credit risk incurred in connection with these trade receivables.

6.9. Current tax assets and liabilities

(in million EUR)	2018	2017
Tax receivables	3.6	3.8
Tax liabilities	(93.1)	(2.9)
Net tax asset / (liability)	**(89.5)**	**0.9**

Tax receivables have remained in line with the previous year. The €3.6 million in tax receivables at 31 December 2018 mainly relates to 2018 advances on corporation tax to be recovered in the financial year 2019.

6.10. Cash and cash equivalents

(in million EUR)	2018	2017
Short-term deposits	1,356.2	55.2
Balance at bank	433.1	140.0
Total	**1,789.3**	**195.2**

Cash and cash equivalents have increased significantly as a result of the acquisition of 50Hertz Transmission (Germany). The cash held by those companies was previously accounted for using the equity method. The cash and cash equivalents held by 50Hertz Transmission (Germany) amounts to €1.590 million at the end of 2018.

The acquisition of an additional 20% stake in Eurogrid (see Note 7.1) and the expanded capital expenditure programme (see Note 6.1) were financed through the issuance of a hybrid securities (see Note 6.10.2) and additional loans (see Note 6.12), resulting in a cash position which remained stable in comparison with the previous year (i.e. not considering the effect of the additional cash obtained through 50Hertz (Transmission)).

Short-term deposits are invested for periods varying from a few days and a few weeks to several months (generally not exceeding three months), depending on immediate cash requirements, and earn interest in accordance with the interest rates for the short-term deposits. The interest rate of interest-bearing investments at the end of the reporting period varies from -0.4% to 1.0%.

Bank-account balances earn or pay interest in line with the variable rates of interest on the basis of daily bank deposit interest rates. The Group's interest-rate risk and the sensitivity analysis for financial assets and liabilities are discussed in Note 8.2.

The cash and cash equivalents disclosed above and in the statement of cash flows include €29.9 million held by Elia RE. These deposits are subject to regulatory restrictions and are therefore not directly available for general use by the other entities within the Group.

'Balance at bank' includes an amount of €0.1 million in restricted cash. This relates to a prepayment received on EU funding for a consortium, of which 50Hertz Transmission manages the syndicate account.

6.11. Shareholders' equity

6.11.1. Equity attributable to the owners of the Company

SHARE CAPITAL AND SHARE PREMIUM

Number of shares	2018	2017
Outstanding on 1 January	60,901,019	60,891,158
Issued against cash payment	114,039	9,861
Number of shares (end of period)	**61,015,058**	**60,901,019**

The extraordinary shareholders' meeting of 17 May 2016 decided to execute a capital increase in two steps/periods (one in 2016 for a maximum of €5.3 million and the other in 2017 for a maximum of €0.7 million) for a total maximum amount of €6.0 million for its Belgian employees. The second tranche of this capital increase (tax tranche) for the Group's Belgian employees was implemented in March 2017 and involved €0.4 million, consisting of a €0.3 million capital increase and a €0.1 million increase in share premium. As part of this second tranche, 9,861 new shares were issued.

The extraordinary shareholders' meeting of 15 May 2018 decided to mandate the executive committee to initiate a capital increase for an amount of €5.3 million for its Belgian employees.

In December 2018, the Elia Group gave its employees in Belgium the opportunity to subscribe to an Elia System Operator SA capital increase (tax and non-tax tranches) which resulted in a €3.8 million increase in the share capital (including the cost of the capital increase, amounting to €1.1 million) and a €2.5 million increase in the share premium. The number of shares outstanding rose by 114,039 shares without nominal value.

RESERVES

In line with Belgian legislation, 5% of the Company's statutory net profit must be transferred to the legal reserve each year until the legal reserve represents 10% of the capital. As at 31 December 2018 the Group's legal reserve amounts to €173.0 million and represents 10% of the capital.

The Board of Directors can propose the payout of a dividend to shareholders up to a maximum of the available reserves plus the profit carried forward from previous financial years of the Company, including the profit for the financial year ended 31 December 2018. Shareholders must approve the dividend payment at the Annual General Meeting of Shareholders.

HEDGING RESERVE

The hedging reserve comprises the effective portion of the cumulative net change in fair value of cash-flow hedging instruments with regard to hedged transactions that have not yet occurred.

DIVIDEND

GRI 201-1 (Payments to providers of capital)

After the reporting date, the Board of Directors will put forward the dividend proposal indicated below.

Dividend	2018	2017
Per ordinary share entitled to dividend	1.66	1.62

At the General Meeting of Shareholders on 15 May 2018, the Board of Directors proposed the payout of a gross dividend of €1.62 per share, which yields a net dividend of €1.134 per share, yielding a total amount of €98.7 million.

The Board of Directors' meeting of 21 February 2019 proposed a gross dividend of €1.66 per share. This dividend is subject to approval by shareholders at the Annual General Meeting on 21 May 2019 and is not included as a liability in the consolidated financial statements of the Group.

The total dividend, calculated based on the number of shares outstanding on 21 February 2019, corresponds to a total of €101.3 million.

6.11.2. Hybrid securities

GRI 201-1 (Payments to providers of capital)

In September 2018, the Group issued hybrid securities for the financing of the additional 20% stake in 50Hertz Transmission (Germany). The issue resulted in an increase in the Group's equity for an amount of € 700 million.

The hybrid securities bear an optional, cumulative coupon of 2.75%, payable at the Group's discretion annually on 5 December of each year, starting from 5 December 2019. As at 31 December 2018, the unpaid cumulative dividend amounts to € 6.2 million, relating to the period 5 September 2018 to 31 December 2018.The hybrid securities have an initial call date in December 2023 with a reset every five years thereafter.

The hybrid securities have received an instrument rating of BBB- from S&P. The hybrid securities are structured as perpetual instruments, have junior ranking to all the senior debt and will be recorded as equity in the Group's accounts pursuant to IFRS.

(in million EUR)	2018	2017
Non-current borrowings	5,773.8	2,834.7
Subtotal non-current borrowings	**5,773.8**	**2,834.7**
Current borrowings	549.9	0,0
Accrued interest	71.1	49.5
Subtotal current loans and borrowings	**621.1**	**49.5**
Total	**6,394.9**	**2,884.2**

The tables below disclose the changes in the Group's liabilities arising from financing activities, including both changes arising from cash flows and non-cash changes.

(in million EUR)	Current interest-bearing loans and borrowings	Non-current interest-bearing loans and borrowings	Total
Balance 1 January 2017	147.5	2,586.4	2,733.9
Cash flow: interest paid	(88.4)	0.0	(88.4)
Cash flow: repayment of borrowings	(100.0)	0.0	(100.0)
Cash flow: proceeds from withdrawal borrowings	0.0	247.4	247.4
Interest accruals	90.4	0.0	90.4
Other	0.0	0.9	0.9
Balance 31 December 2017	**49.5**	**2,834.7**	**2,884.2**
Balance 1 January 2018	**49.5**	**2,834.7**	**2,884.2**
Acquisition through business combination	28.5	2,829.9	2,858.4
Cash flow: interest paid	(141.8)	0.0	(141.8)
Cash flow: repayment of borrowings	0.0	0.0	0.0
Cash flow: proceeds from withdrawal borrowings	50.0	606.9	656.9
Interest accruals	135.0	0.0	135.0
Other	499.9	(497.7)	2.3
Balance 31 December 2018	**621.1**	**5,773.8**	**6,394.9**

The net increase in interest-bearing loans and borrowings is predominantly explained by the issuance of a new €300-million senior bond in September 2018 as part of the financing of the acquisition of Eurogrid, the issuance of a dedicated amortised term loan of €210 million for the financing of the investment in Nemo Link, and the use of the €100 million credit line with the European Investment Bank.

'Other' in the financial year 2018 mainly relates to reclassifications of long-term debt to short-term debt in accordance with when instruments become due.

Information concerning the terms and conditions of the outstanding interest-bearing loans and borrowings is given below:

(in million EUR)	Maturity	Amount	Interest rate before hedging	Interest rate after hedging	Current proportion - fixed	Current proportion - variable
Eurobond issues 2004/15 years	2019	499.9	5.25%	5.25%	100.00%	0.00%
Eurobond issues 2013/15 years	2028	547.6	3.25%	3.25%	100.00%	0.00%
Eurobond issues 2013/20 years	2033	199.4	3.50%	3.50%	100.00%	0.00%
Eurobond issues 2014/15 years	2029	346.8	3.00%	3.00%	100.00%	0.00%
Eurobond issues 2015/8.5 years	2024	498.7	1.38%	1.38%	100.00%	0.00%
Eurobond issues 2017/10 years	2027	247.7	1.38%	1.38%	100.00%	0.00%
Senior bond 2018/10 years	2028	297.3	1.50%	1.50%	100.00%	0.00%
Shareholders' loan	2022	42.1	0.89%	0.89%	60.51%	39.49%
Other loans	2022	453.7	0.89%	0.89%	60.51%	39.49%
Amortized term loan	2033	209.7	1.80%	1.80%	100.00%	0.00%
European Investment Bank	2025	100.0	1.08%	1.08%	100.00%	0.00%
Dematerialised treasury notes	2019	50.0	(0.23%)	(0.23%)	100.00%	0.00%
Bond as part of Euro Medium Term Note program 2010	2020	499.1	3.88%	3.875%	100.00%	0.00%
Bond as part of Debt Issuance Programme 2015	2025	497.5	1.88%	1.875%	100.00%	0.00%
Bond as part of Debt Issuance Programme 2015	2023	748.4	1.62%	1.625%	100.00%	0.00%
Bond as part of Debt Issuance Programme 2015	2030	139.1	2.63%	2.625%	100.00%	0.00%
Bond as part of Debt Issuance Programme 2016	2028	746.7	1.50%	1.500%	100.00%	0.00%
Registered bond 2014	2044	50.0	3.00%	3.000%	100.00%	0.00%
Unsecured bank loan	2026	150.0	0.90%	0.900%	100.00%	0.00%
Total		**6,323.8**			**92.16%**	**7.84%**

The above €6,323.8 million is to be increased with €71.1 million of interest accruals to reconstitute the overall debt of €6,394.9 million.

The following covenants are required for the Eurobonds issued under the €3-billion EMTN programme and the back-up facilities:

- The company will not grant any security interest (i.e. any mortgage, charge, pledge, lien or other form of encumbrance or security interest; a personal guarantee or suretyship does not constitute a 'security interest') to secure any relevant debt of any person or to secure any guarantee of or indemnity in respect of any relevant debt of any person.
- The Company shall ensure that none of its material subsidiaries grant any security interest to secure any relevant debt of any person or to secure any guarantee of or indemnity in respect of any relevant debt of any person.
- The Company will and shall ensure that its material subsidiaries will ensure that no other person grants any security interest to secure any of the company's, or any of its material subsidiaries', relevant debt or to secure any guarantee of or indemnity in respect of any of the Issuer's, or any of its material subsidiaries', relevant debt.
- The Company will retain at least a 75% participation in Elia Asset SA/NV.
- The Company will keep its licence as a transmission system operator.

Information concerning the maturity profile of the Group's financial liabilities based on contractual undiscounted payments is given in Note 8.1 ‘Liquidity risk’.

6.13. Employee benefits

The Group has various legal and constructive defined benefit obligations linked to its Belgian and German operations.

The total net liability for employee-benefit obligations is as follows:

(in million EUR)	2018			2017		
	Belgium	Germany	Total	Belgium	Germany	Total
Defined-benefit plans	20.3	20.6	40.8	21.2	n.r.	21.2
Post-employment benefits other than pensions	62.2	2.4	64.6	63.1	n.r.	63.1
Total provisions for employee benefits	**82.5**	**22.9**	**105.4**	**84.3**	n.r.	**84.3**

Of the €105.4 million in employee benefit provisions recognised at the end of financial year 2018, €104.0 million is presented in the long term and €1.4 million in the short term (Note 6.14).

BELGIUM

DEFINED-CONTRIBUTION PLANS

Employees remunerated based on a salary scale and recruited after 1 June 2002, as well as management staff recruited after 1 May 1999 are covered by two defined-contribution pension plans (Powerbel and Enerbel):

The Enerbel plan is a plan attributed to salaried employees hired after 1 June 2002, to which the employee and the employer contribute based on predefined formula.

The Powerbel plan is a plan for managers hired after 1 May 1999. The contributions of the employee and employer are based on a fixed percentage of the employee's salary.

The new law on occupational pension plans, published at the end of 2015, made various changes to the guaranteed return on defined-contribution plans. For payments made after 1 January 2016, the law requires employers to guarantee an average annual return of at least 1.75% (up to 3.75% depending on who contributes) over the course of the career.

For insured plans the minimum guaranteed return until 31 December 2015 still needs to be equivalent to at least 3.25% for the employer's contribution and 3.75% for the employee's contribution, with any shortfall being covered by the employer.

As a result of the above change and as mentioned in the accounting policies, all defined-contribution pension plans under the Belgian pension legislation are classified as defined-benefit plans for accounting purposes due to the legal minimum return to be guaranteed by the employer, which represents a plan amendment.

Elia Transmission Belgium has transferred certain acquired reserves guaranteed by the insurers to 'Cash balance – best off' plans since 2016. The main objective of these plans is to guarantee for every subscriber a minimum guaranteed return of 3.25% on the acquired reserves until retirement age.

Both employee' and employer' contributions are paid on a monthly basis for the base plans. The employee' contribution is deducted from the salary and paid to the insurer by the employer. The amount of future cash flows depends on wage growth.

DEFINED-BENEFIT PLANS

For a closed population, collective agreements in the electricity and gas industries provide 'pension supplements' based on the annual salary and an employee's career within a company (partially revertible to the inheritor in case of early death of the employee).The benefits granted are linked to Elia's operating result. There is no external pension fund or group insurance for these liabilities, which means that no reserves are constituted with third parties. The obligations are classified as a defined benefit.

The collective agreement determines that active staff hired between 1 January 1993 and 31 December 2001 and all managerial/executive staff hired prior to 1 May 1999 will be granted the same guarantees via a defined-benefit pension scheme (Elgabel and Pensiobel – closed plans). Obligations under these defined-benefit pension plans are funded by a number of pension funds for the electricity and gas industries and by insurance companies.

As mentioned above, Elia Transmission Belgium has transferred certain acquired reserves guaranteed by the insurers to 'Cash balance – best off' plans since 2016. As this guarantee is an obligation by the employer, these plans represent defined-benefit plans.

Both employees' and employers' contributions are paid on a monthly basis for the base plans. The employee's contribution is deducted from the salary and paid to the insurer by the employer.

OTHER PERSONNEL OBLIGATIONS

Elia Transmission (Belgium) has also granted staff certain early-retirement schemes and other post-employment benefits such as reimbursement of medical expenses and a contribution to energy prices, as well as other long-term benefits (seniority payments). Not all of these benefits are funded and, in accordance with IAS 19, these post-employment benefits are classified as defined-benefit plans.

GERMANY

DEFINED-CONTRIBUTION PLANS

In the case of externally financed defined contribution plans, 50Hertz Transmission (Germany)'s obligation is limited to paying the agreed contributions. For those defined contribution plans recognized in the form of direct guarantees, there are pledged congruent employer's liability insurance policies in place.

- **Pension obligations for executives (agreement with staff representatives as from 2003):** individual contractual pension obligations based on an agreement with representatives;
- **Pension obligations for executives (agreement with staff representatives as from 19 August 2008):** individual contractual pension obligations relating to a company pension plan with the Vattenfall Europe Group;
- **Collective bargaining agreement on the company pension scheme:** obligations based on the collective bargaining agreement on 50Hertz Transmission's company pension scheme, concluded on 28 November 2007
- **Direct insurance:** direct insurance policies for all former employees who worked at Vereinigte Energiewerke AG (VEAG) from 1993 to 31 December 2004, with the exception of managers;
- **Individual commitments:** individual commitments which are financed exclusively by external pension funds (welfare fund and pension fund).

DEFINED-BENEFIT PLANS

Defined benefit plans entitle employees to make direct pension claims against 50Hertz Transmission. Provisions for these are recognised in the statement of financial position. If plan assets are created for the sole purpose of fulfilling pension obligations, the amount is offset against the present value of the obligation. The following defined benefit plans exist in Germany:

- Group works agreement on the company pension scheme

In accordance with the group works agreement on the company pension scheme, employees are granted a company pension plan on the basis of a defined contribution plan (effective 1 January 2007). This agreement applies to all employees within the meaning of Sec. 5 (1) of the German Work Constitution Act (BetrVG) and came into effect at the Company on 1 January 2007. Participation in the scheme is voluntary. The scheme grants pension benefits upon reaching the statutory retirement age, upon taking early retirement from statutory pension insurance, and in the event of occupational disability as well as in the event of death. Current pension benefits are increased by 1% p.a., so the scheme is classified as a defined benefit plan.

- TVV Energie

This pension plan relates to direct guarantees resulting from a collective bargaining agreement from 16 October 1992. It was closed to new hires on 1 January 1993. This contribution plan applies to employees who worked at Vereinigte Energiewerke AG until 30 November 2001 and whose vested benefits were allocated to Vattenfall Europe Transmission GmbH (now 50Hertz Transmission GmbH). The scheme covers pension obligations, based on years of service and remuneration level and grants retirement and disability pensions, but no pension for surviving dependants. It is not possible to index current post-employment benefits falling due for the first time after 1 January 1993.

OTHER PERSONNEL OBLIGATIONS

50Hertz Transmission also has following obligations, which are listed under 'Other personnel obligations':

- Obligations for long-service benefits;
- Obligations from German phased retirement schemes;
- Obligations for working lifetime accounts.

Not all of these benefits are funded and, in accordance with IAS 19, these post-employment benefits are classified as defined-benefit plans.

EMPLOYEE BENEFIT OBLIGATIONS AT GROUP LEVEL

The Group's net liability for employee benefit obligations is as follows:

(in million EUR)	Pensions		Other	
	2018	2017	2018	2017
Present value of funded defined-benefit obligation	(247.8)	(224.3)	(85.8)	(63.7)
Fair value of plan assets	207.0	203.1	21.2	0.6
Net employee benefit liability	**(40.8)**	**(21.2)**	**(64.6)**	**(63.1)**

Movement in the present value of the defined benefit obligation (in million EUR)	Pensions		Other	
	2018	2017	2018	2017
At the beginning of the period	**(224.3)**	**(192.1)**	**(63.7)**	**(63.6)**
Acquisition through business combinations	(19.0)	0.0	(17.1)	0.0
Current service cost	(9.1)	(6.9)	(4.5)	(1.7)
Interest cost/income	(3.2)	(3.2)	(1.2)	(1.0)
Contributions from plan participants	0.3	(1.2)	2.2	0.0
Cost of early retirement	(0.1)	0.1	0.0	0.0
Including remeasurement gains/(losses) in OCI and in Statement of profit or loss, arising from				
Changes in demographic assumptions	(0.5)	1.7	0.0	0.7
Changes in financial assumptions	2.2	(0.7)	0.9	(0.6)
Changes from experience adjustments	6.4	(16.5)	0.6	(0.2)
Taxes on contributions paid during the year	(0.7)	1.2	(0.0)	0.0
Past service cost	0.0	0.0	0.0	0.0
Payments from the plan	15.1	11.8	0.2	2.7
Settlements	0.0	0.0	0.0	0.0
Transfers	(14.9)	(18.5)	(3.2)	0.0
At the end of the period	**(247.8)**	**(224.3)**	**(85.8)**	**(63.7)**

Movements in the fair value of the plan assets (in million EUR)	Pensions		Other	
	2018	2017	2018	2017
At the beginning of the period	**203.1**	**179.9**	**0.6**	**0.6**
Acquisition through business combinations	0.1	0.0	14.8	0.0
Interest income	3.1	2.8	0.0	0.0
Remeasurement gains/losses in OCI arising from:			0.0	
Return of plan assets (excluding interest income on plan assets)	(10.1)	2.4	(0.2)	(0.0)
Contributions from employer	11.1	9.9	5.3	1.1
Contributions from plan participants	1.3	1.2	0.0	0.0
Benefit payments	(16.3)	(11.8)	(2.5)	(1.1)
Transfers	14.9	18.5	3.2	0.0
At the end of the period	**207.0**	**203.1**	**21.2**	**0.6**

Amounts recognised in Profit and Loss or OCI (in million EUR)	Pensions		Other	
	2018	2017	2018	2017
Service cost				
Current service cost	(9.1)	(6.9)	(4.5)	(1.7)
Cost of early retirement	(0.1)	0.1	0.0	0.0
Past service cost	0.0	0.0	0.0	0.0
Settlements	0.0	0.0	0.1	0.0
Actuarial gains/(losses) on defined benefit obligation	0.0	0.0	0.8	0.5
Net interest on the net defined benefit liability/(asset)	**(0.1)**	**(0.4)**	**(1.2)**	**(1.0)**
Interest cost on defined benefit obligation	(3.2)	(3.2)	(1.2)	(1.0)
Interest income on plan assets	3.1	2.8	0.0	0.0
Other	**(0.2)**	0.0	**(0.3)**	0.0
Defined benefit costs recognised in profit or loss	**(9.5)**	**(7.2)**	**(5.0)**	**(2.2)**
Actuarial gains(losses) on defined obligation arising from:				
1/ Changes in demografic assumptions	(0.5)	1.7	0.0	0.2
2/ Changes in financial assumptions	2.2	(0.7)	0.7	0.2
3/ Changes from experience adjustments	6.4	(16.5)	0.0	(1.0)
Return on plan assets (excluding interest income on plan assets)	(10.1)	2.4	(0.2)	0.0
Remeasurements of net defined-benefit(liability)/asset recognised in Other Comprehensive Income (OCI)	**(2.0)**	**(13.1)**	**0.5**	**(0.6)**
Total	**(11.6)**	**(20.3)**	**(4.5)**	**(2.8)**

(in million EUR)	2018	2017
Breakdown of defined-benefit obligation by type of plan participants	**(333.6)**	**(288.0)**
Active plan participants	(251.8)	(215.5)
Terminated plan participants with def.-benefit entitlements	(15.1)	(10.9)
Retired plan participants and beneficiaries	(66.7)	(61.6)
Breakdown of defined-benefit obligation by type of benefits	**(333.6)**	**(288.0)**
Retirement and death benefits	(253.7)	(224.3)
Other post-employment benefits (medical and tariff reductions)	(65.0)	(45.0)
Seniority payments	(14.8)	(18.7)

When determining the appropriate discount rate, the Group considers the interest rates of corporate bonds in currencies consistent with the currencies of the post-employment benefit obligation with at least an 'AA' rating or above, as set by an internationally acknowledged rating agency, and extrapolated as needed along the yield curve to correspond with the expected term of the defined-benefit obligation.

A stress test is performed annually. This test verifies that the minimum funding requirements are covered to deal with 'shocks' with probabilities of occurrence of 0.5%.

The members (mostly) contribute to the financing of the retirement benefits by paying a personal contribution.

The annual balance of the defined-benefit lump sum is financed by the employer through a recurrent allowance expressed as a percentage of the total payroll of the participants. This percentage is defined by the aggregate cost method and is reviewed annually. This method of financing involves smoothing future costs over the remaining period of the plan. The costs are estimated on a projected basis (taking into account salary growth and inflation). The assumptions related to salary increase, inflation, employee turnover and age term are defined on the basis of historical data from the Company. The mortality tables used are the ones corresponding to the observed experience within the financing vehicle and take into consideration expected changes in mortality. The Group calculates the net interest on the net defined-benefit liability (asset) using the same high-quality bond discount rate (see above) used to measure the defined-benefit obligation (net interest approach). These assumptions are challenged on a regular basis.
Exceptional events (such as modification of the plan, change of assumptions and overly short coverage terms) can eventually lead to outstanding payments from the sponsor.

The defined-benefit plans expose the Company to actuarial risks such as investment risk, interest-rate risk, longevity risk and salary risk.

Investment risk

The present value of the defined-benefit plan liability is calculated using a discount rate determined based on high-quality corporate bonds. The difference between the actual return on assets and the interest income on plan assets is included in the remeasurements component (OCI). Currently the plan has a relatively balanced range of investments, as shown below:

Fair value of the plan assets per major category	2018	2017
Investments quoted in an active market	**73.54%**	**80.74%**
Shares - Eurozone	14.40%	15.35%
Shares - outside Eurozone	19.34%	20.90%
Government bonds - Eurozone	0.96%	5.10%
Other bonds - Eurozone	25.67%	31.25%
Other bonds – outside Eurozone	13.17%	8.14%
Unquoted investments	**26.46%**	**19.26%**
Qualifying insurance contracts	7.72%	0.00%
Property	2.54%	3.77%
Cash and cash equivalents	3.01%	1.04%
Other	13.19%	14.44%
Total (in %)	**100.00%**	**100.00%**

Due to the long-term nature of the plan liabilities, it is considered appropriate that a reasonable portion of the plan assets be invested in equity securities to leverage the return generated by the fund. In Germany, all plan assets are invested in insurance agreements.

Interest risk

A decrease in the bond interest rate will increase the plan liability. However, this will be partially offset by an increase in the return on the plan's debt investments, of which approximately 95% is now invested in pension funds with an expected return of 3.3%.

Longevity risk
The present value of the defined-benefit plan liability is calculated based on the best estimate of the mortality of plan participants both during and after their employment. An increase in the life expectancy of the plan participants will increase the plan's liability. The prospective mortality tables from the IA/BE have been used in Belgium and the 2005G Heubeck tables in Germany.

Salary risk

The present value of the defined-benefit plan liability is calculated based on the future salaries of plan participants. As such, an increase in the salary of the plan participants will increase the plan's liability.

ACTUARIAL ASSUMPTIONS

(in % and years)	2018 Belgium	2017 Belgium	2018 Germany
Discount rate			
- Pensions - defined-benefit plans and cash balance - best off plans	1.39%	1.31%	2.00%
- Pensions - defined-contribution plans	1.72% to 1.79%	1.77% to 1.87%	-
- Other	1.80%	1.72%	2.00%
Expected average salary increase (excluding inflation)	1.00%	1.00%	1.75%
Expected inflation	1.75%	1.75%	2.00%
Expected increase in health benefits (including inflation)	2.75%	2.75%	2.25%
Expected increase in tariff advantages	1.75%	1.75%	-
Average assumed retirement age			
- Employee	63	63	65
- Manager	65	65	65
Life expectancy in years of a pensioner retiring at age 65 at closing date:*			
Life expectancy for a 65 year old male	19.9	19.9	20.1
Life expectancy for a 65 year old female	23.6	24.0	23.6

*Mortality tables used: IABE in Belgium, 2005G Heubeck in Germany

(in years)	2018 Belgium	2017 Belgium	2018 Germany
Weighted average duration of the defined-benefit obligation	8.95	9.58	23.90
Weighted average duration of the defined-contribution plans	16.82	18.43	n.r.
Weighted average duration of the post-employment benefits other than pensions	13.47	14.03	12.47

In Germany, the liability of the defined-contribution plans is completely covered by the plan assets. Therefore, no weighted average duration is necessary and thus not calculated.

The actual return on plan assets in % for 2018 was in the range of -2.49% to -7.75% (compared with a range of 3.31% to 5.86% in 2017).

Below is an overview of the expected cash outflows for the DB plans:

Future expected cash outflows (per bucket)	< 12 months	1-5 years	6-10 years
- Pensions	(0.9)	(6.0)	(6.4)
- Other	(4.4)	(15.7)	(13.8)
Total (in million EUR)	**(5.4)**	**(21.7)**	**(20.2)**

There is a certain degree of uncertainty linked to the above expected cash outflows which can be explained by the following factors:

- Differences between assumptions and actual data can occur, e.g. retirement age and future salary increase;
- The expected cash outflows shown above are based on a closed population and therefore do not incorporate future new hires;
- Future premiums are calculated based on the last known aggregate cost rate, which is reviewed on an annual basis and varies depending on the return on plan assets, the actual salary increase as opposed to the assumptions, and unexpected changes in the population.

SENSITIVITY ANALYSIS

Effect on defined benefit obligation (in million EUR)	Belgium Increase (+) / decrease	Germany Increase (+) / decrease
Impact on the net defined-benefit obligation of an increase in:		
Discount rate (0.5% movement)	12.6	4.9
Average salary increase - excl. inflation (0.5% movement)	(8.3)	(0.2)
Inflation (0.25% movement)	(4.8)	(0.3)
Increase in healthcare benefits (1.0% movement)	(4.4)	n.r.
Increase in tariff advantages (0.5% movement)	(1.6)	n.r.
Life expectancy of pensions (1 year)	(3.1)	(1.0)

REMEASUREMENTS OF POST-EMPLOYMENT BENEFIT OBLIGATIONS

(in million EUR)	2018	2017
Cumulative amount at 1 January	(22.1)	(11.8)
Acquisition through business combinations	(0.7)	0.0
Recognised in the period	0.6	(10.3)
Cumulative amount at 31 December	**(22.1)**	**(22.1)**

The above remeasurements of post-employment benefits include 50Hertz Transmission (Germany). The cumulative amount includes a net €3.1 million cumulative remeasurement for 50Hertz Transmission (Germany).

REIMBURSEMENT RIGHTS (BELGIUM)

As described in Note 6.5, a non-current asset (within other financial assets) is recognised as reimbursement rights linked to the defined-benefit obligation for the population benefitting from the interest scheme and medical plan liabilities and tariff benefits for the retired Elia population. Each change in these liabilities equally affects the corresponding reimbursement rights under non-current other financial assets.

The change in reimbursement rights is presented below:

Movement in the present value of reimbursement rights	Pensions		Other	
(in million EUR)	2018	2017	2018	2017
At the beginning of the period	**(28.0)**	(31.8)	**(25.6)**	(26.3)
Current service cost	3.3	3.7	1.2	1.6
Interest cost/income	(0.3)	(0.4)	(0.5)	(0.5)
Actuarial gains(/losses) on defined obligation arising from:				
1) Changes in demographic assumptions	0.0	0.0	0.0	0.0
2) Changes in financial assumptions	0.2	(0.1)	0.4	0.1
3) Changes from experience adjustments	(0.3)	0.2	(2.6)	(0.5)
Taxes on contributions paid during the year	0.0	0.5	0.0	0.0
At the end of the period	**(25.1)**	**(28.0)**	**(27.1)**	**(25.6)**

6.14. Provisions

(in million EUR)	Environment	Elia Re	Easement provision	Dismantling obligations	Employee benefits	Other	Total
Balance at 1 January 2017	16.2	7.1				2.5	25.8
Increase in provisions	3.0	1.6				0.3	4.3
Reversals of provisions	(4.0)	0.0				(0.1)	(4.1)
Utilisation of provisions	(0.6)	(0.6)				(0.1)	(0.7)
Balance at 31 December 2017	**14.6**	**8.1**				**2.6**	**25.3**
Long-term portion	10.1	8.1				2.6	20.8
Short-term portion	4.5	0.0				0.0	4.5
Balance at 1 January 2018	14.6	8.1	0.0	0.0	0.0	2.6	25.3
Acquisition through business combinations	3.4	0	15.0	66.8	1.5	4.8	91.6
Increase in provisions	0.7	1.3	0.0	2.4	0.0	0.3	4.7
Reversals of provisions	(0.7)	(1.3)	(2.9)	0.0	(0.1)	(0.3)	(5.3)
Utilisation of provisions	(2.3)	(0.1)	(0.1)	0.0	0.0	(0.2)	(2.7)
Discounting of provisions	(0.3)	0.0	(0.1)	0.3	0.0	0.0	(0.1)
Balance at 31 December 2018	**15.3**	**8.0**	**12.0**	**69.5**	**1.4**	**7.2**	**113.4**
Long-term portion	10.8	8.0	6.0	69.5	0.0	2.6	96.9
Short-term portion	4.5	0.0	6.0	0.0	1.4	4.5	16.5

The Group has recognised provisions for the following:

Environment: The environmental provision provides for existing exposure with respect to land decontamination. The €15.3 million provision mainly relates to the Belgian segment, with only a €2.0 million provision relating to the German segment. This explains the limited increase in provision from €14.6 million at the end of 2017 to €15.3 million as at 31 December 2018.

More specifically for the Belgian segment, Elia has conducted soil surveys on over 200 sites in Flanders in accordance with contractual agreements and Flemish legislation. Significant soil contamination was found on a number of sites, with this being mainly attributable to historical pollution arising from earlier or nearby industrial activities (gas plants, incinerators, chemicals, etc.). In the Brussels-Capital Region and Walloon Region, Elia also carried out analyses and studies to detect contamination at a number of substations and a number of plots occupied by pylons for overhead power lines. Based on the analyses and studies it conducted, Elia has made provisions for possible future soil remediation costs in line with the relevant legislation.

Environmental provisions are recognised and measured based on an expert appraisal bearing in mind BATNEEC (Best Available Techniques Not Entailing Excessive Costs) as well as on the circumstances known at the end of the reporting period. The timing of the settlement is unclear but for the premises where utilisations occur, the underlying provision is classified as a short-term provision.

Elia Re: An amount of €8.0 million is included at year-end for Elia Re, a captive reinsurance company. €3.5 million of this is linked to claims for overhead facilities, €3.2 million to electrical facilities and €1.3 million to liability cases (as opposed to €3.8 million for overhead facilities, €2.9 million for electrical facilities and €1.4 million for liability cases in 2017). The expected timing of the related cash outflow depends on the progress and duration of the respective procedures.

Easement provisions: The easement provision relates to payments likely to be made to landowners as a compensation for overland lines crossing their property. These easement rights are recognised within the German segment for overland lines built by the former owners of 50Hertz Transmission, with exposure resulting from section 9 of the German Land Register Amendment Act (GBBerG.). The estimates are based on the value of claims filed or on the estimated amount of the risk exposure. The expected timing of the related cash outflow depends on the progress and duration of the claim filed.

Dismantling provisions: As part of the Group's CAPEX program, the Group is exposed to decommissioning obligations; most of which are related to offshore projects. These provisions take into account the effect of discounting and the expected cost of dismantling and removing the equipment from sites or from the sea. The carrying amount of the provision as at 31 December 2018 was €69.5 million and fully relates to the German segment. The Group has applied a case-by-case approach to estimate the cash outflow needed to settle the liability.

Employee benefits: See Note 6.13, for more details of these short term employee benefits.

'**Other**' consists of various provisions for litigation to cover likely payment where legal proceedings have been instituted against the Group by a third party or where the Group is involved in legal proceedings. These estimates are based on the value of claims filed or on the estimated level of risk exposure. The expected timing of the related cash outflow depends on the progress and duration of the associated proceedings.

6.15. Other non-current liabilities

(in million EUR)	2018	2017 (restated *)
Investment grants	85.8	3.8
Non-current deferred income	129.8	84.6
Other	0.6	0.0
Total	**216.2**	**88.5**

* See Note 2.1 for details regarding restatement as a result of a change in accounting policy.

€82.1 million of the investment grants relates to 50Hertz Transmission (Germany). These are released in profit and loss when entitlement to the grants is acquired. The amount has increased from €10.0 million at the end of 2017 for the investment grants received for the Southwest Coupling line.

The increase in other non-current liabilities is mainly due to the acquisition of a 20% stake in 50Hertz. The deferred income relates to received customer contributions, which are recognised in profit or loss in accordance with the useful life of the respective asset. The liability arose as part of the adoption of IFRS15 which is further detailed in Note 2.1. At the end of 2018, a liability of €87.4 million was recognised within Elia Transmission (Belgium) and a liability of €42.3 million was recognised within 50Hertz Transmission (Germany).

6.16. Trade and other payables

(in million EUR)	2018	2017
Trade debts	602.4	220.8
VAT and other taxes	19.4	8.9
Remuneration and social security	31.3	28.1
Dividends	1.2	1.2
Levies	1,137.7	108.0
Other	137.9	11.1
Accrued liabilities	59.2	0.4
Total	**1,989.1**	**378.5**

The amount for levies can be split between levies related to 50Hertz Transmission (€1,029.2 million) and levies related to Elia Transmission (€108.5 million).

The levies for Elia Transmission are stable compared to previous year (increase of €0.5 million). These levies include federal levies, which total €43.4 million at 31 December 2018 and have remained unchanged from 2017. Levies for the Walloon government have decreased slightly to €45.9 million, from €49.1 million at the end of 2017. The remaining balance consists of federal green certificates (€11.4 million) and strategic reserves (€7.6 million).

The levies for 50Hertz Transmission consist mainly of EEG (€865.5 million), KWK (€31.6 million), §19 StromNEV (€96.3 million) and Offshore contributions (€33.7 million).

6.17. Accruals and deferred income

(in million EUR)	2018	2017
Accruals and deferred income	19.3	8.5
Settlement mechanism Belgian regulatory framework	532.9	526.1
Settlement mechanism German regulatory framework	444.5	0.0
Total	**996.7**	**534.6**

The settlement mechanism is described in Note 9. The amounts linked to the settlement mechanism are detailed in Note 4.

The settlement mechanism at 31 December 2018 is set out in the table below:

(in million EUR)	Belgian regulatory framework	German regulatory framework
To be refunded to the tariffs in the current regulatory period	110.5	0.0
To be refunded to the tariffs in the next regulatory period	422.4	444.5
Settlement mechanism	**532.9**	**444.5**

As the current German regulatory framework comes to an end in 2018, all amounts to be refunded are for the next regulatory period.

The Group operates in a regulated environment in which tariffs are meant to make it possible to realise total revenue consisting of:

1. a reasonable return on invested capital;
2. all reasonable costs which are incurred by the Group.

Since the tariffs are based on estimates, there is always a difference between the tariffs that are actually charged and the tariffs that should have been charged to cover all reasonable costs of the system operator and to provide shareholders with a reasonable profit margin on their investment.

If the applied tariffs result in a surplus or a deficit at the end of the year, this means that the tariffs charged to consumers/the general public could have been respectively lower or higher (and vice versa). A surplus or deficit arising from the settlement mechanism is therefore not reported in profit or loss, or as an item under equity.

On a cumulative basis, it could be argued that the public has made an advance payment (= surplus) for its future use of the grid. As such, the surplus (deficit) is not a commission for a future loss (recovery) of income but instead a deferred/accrued revenue for (with regard to) consumers. On the basis of the regulatory framework, the Group believes that the surplus (deficit) does not represent an item of revenue (cost). Consequently, these amounts are netted and reported under 'Accruals and deferred income'. These surpluses or deficits are verified and approved by the regulator in the next accounting year.

See Note 9.1 for more details.

6.18. Financial instruments – fair values

The following table shows the carrying amounts and fair values of financial assets and liabilities, including their levels in the fair-value hierarchy.

(in million EUR)	Carrying amount					Fair value			
	Fair Value through P&L	Fair Value through OCI	Amortised Cost	Other financial liabilities	Total	Level 1	Level 2	Level 3	Total
31 December 2017									
Other financial assets	7.3				7.3	7.1		0.2	7.3
Trade and other receivables			428.9	0.0	428.9				0.0
Cash and cash equivalents			195.2	0.0	195.2				0.0
Interest-rate swaps used for hedging		0.0			0.0		0.0		0.0
Unsecured financial bank loans and other loans				(545.3)	(545.3)		(545.3)		(545.3)
Unsecured bond issues				(2,338.9)	(2,338.9)		(2,621.2)		(2,621.2)
Trade and other payables				(378.5)	(378.5)				
Total	**7.3**	**0.0**	**624.1**	**(3,262.7)**	**(2,631.3)**	n.r	n.r	n.r	n.r
31 December 2018									
Other financial assets	7.0	27.7			34.7	7.0		27.7	34.7
Trade and other receivables			736.0		736.0				
Cash and cash equivalents			1,789.3		1,789.3				
Foreign-currency rate swaps used for hedging		2.9			2.9		2.9		2.9
Unsecured financial bank loans and other loans				(1,076.9)	(1,076.9)		(1,076.9)		(1,076.9)
Unsecured bond issues				(5,318.0)	(5,318.0)		(5,603.1)		(5,603.1)
Trade and other payables				(1,989.0)	(1,989.0)				
Total	**7.0**	**30.6**	**2,525.3**	**(8,383.9)**	**(5,821.0)**	n.r	n.r	n.r	n.r

The above tables do not include fair-value information for financial assets and liabilities not measured at fair value, such as cash and cash equivalents, trade and other receivables, and trade and other payables, as their carrying amount is a reasonable approximation of fair value.

Fair value is the amount for which an asset could be exchanged or a liability settled in an arm's-length transaction. IFRS 7 requires, for financial instruments that are measured in the balance sheet at fair value, the disclosure of fair-value measurements by level in the following fair value measurement hierarchy:

Level 1: The fair value of a financial instrument that is traded in an active market is measured based on quoted (unadjusted) prices for identical assets or liabilities. A market is considered active if quoted prices are readily and regularly available from an exchange, dealer, broker, industry group, pricing service or regulatory agency, and those prices represent actual and regularly occurring market transactions on an arm's-length basis.
Level 2: The fair value of financial instruments that are not traded in an active market is determined using valuation techniques. These maximise the use of observable market data where it is available and rely as little as possible on entity-specific estimates. If all significant inputs required to assess the fair value of an instrument are observable, either directly (i.e. as prices) or indirectly (i.e. derived from prices), the instrument is included in level 2.
Level 3: If one or more of the significant inputs used in applying the valuation technique is not based on observable market data, the financial instrument is included in level 3. The fair value amount included under 'Other financial assets' has been determined by referring to either (i) recent transaction prices, known by the Group, for similar financial assets or (ii) are based upon valuation reports issued by third parties.

The fair value of the financial assets and liabilities, other than those presented in the above table, approximates to their carrying amounts largely due to the short-term maturities of these instruments.

FAIR-VALUE HIERARCHY

The fair value of 'sicavs' falls into level 1, i.e. valuation is based on the (unadjusted) listed market price on an active market for identical instruments.

The fair value of interest-rate swaps, loans and bond issues falls into level 2, which entails valuation being based on input from other prices than the stated prices, where these other prices can be observed for assets or liabilities. This category includes instruments valued on the basis of listed market prices on active markets for such instruments; listed prices for identical or similar instruments on markets that are deemed less than active; or other valuation techniques arising directly or indirectly from observable market data.

ESTIMATE OF FAIR VALUE

Derivatives

Brokers' statements are used for valuations of the interest-rate and foreign-currency rate swaps. The statements are controlled using valuation models or techniques based on discounted cash flows. The models incorporate various inputs including the credit quality of counterparties and interest-rate curves at the end of the reporting period. As at 31 December 2018, the counterparty risk is considered close to zero as a result of the negative market value of the IRS. The Group's own non-performance risk has been estimated to be close to zero as well.

Interest-bearing loans

The fair value is calculated on the basis of the discounted future redemptions and interest payments.

7. Group structure

7.1. Business combinations and acquisition of non-controlling interests

On 26 April 2018, the Group completed the acquisition of an additional 20% stake in Eurogrid International SCRL ('Eurogrid'), the holding company which holds the 50Hertz Transmission (Germany) segment. Following this transaction, Elia owns 80% of Eurogrid and has full control over 50Hertz Transmission (Germany).

The acquisition resulted from Elia's decision to exercise its pre-emption right after the IFM Global Infrastructure Fund, a fund advised by IFM Investors Pty Ltd, stated that it intended to sell half of its 40% shareholding in Eurogrid on February 2, 2018. Through the acquisition, the Group acquired an additional 20% stake in Eurogrid. The finalisation of this acquisition is a major step forward in realising Elia Group's growth strategy. It will allow further strengthening of the cooperation between Elia and 50Hertz, and underscores Elia's ambition to be one of the leading transmission system operators in Europe. The transaction enhances the Group's profile and resources, enabling it to realise a reliable, sustainable, affordable and integrated power system and will not negatively affect the tariffs for the end consumer, which are regulated in the respective countries.

On closing date of this transaction (i.e. 26 April 2018), Elia obtained control over 50Hertz Transmission (Germany) and, as such, its financials have been consolidated in full in the Elia Group's accounts from that date. The transaction was initially financed using a bridge loan, which is replaced by a hybrid securities (€700 million) and a senior bond (€300 million) in September 2018.

Assets acquired and liabilities assumed

The table below summarises the recognised amounts of assets and liabilities assumed at the date of acquisition.

(in € million)	Fair value recognised on acquisition
Intangible assets	52.6
Property, plant and equipment	4,493.4
Other non-current assets	45.6
Trade and other receivables (current)	220.5
Cash and cash equivalents	1,902.9
Other current assets	22.4
Long-term borrowings	(2,829.9)
Provisions for liabilities and charges	(43.6)
Deferred tax liabilities	(96.3)
Other non-current liabilities	(73.7)
Trade and other payables	(1,612.1)
Income tax payable	(105.0)
Regulatory liability	(421.3)
Other current liabilities	(82.5)
Total identifiable net assets acquired	**1,472.9**

Trade receivables include a €89.9 million allowance for doubtful receivables.

The valuation methods used for measuring the fair value of material assets were as follows:

Assets acquired	Valuation conclusion
Property, plant and equipment	The vast majority of all property, plant and equipment are held by the entity 50Hertz Transmission - the TSO for the region - for an indefinite period. The fair value of property, plant and equipment was considered to be very close to its book value for the following reasons: • Due to the very specific nature of the assets, no market exists or is available in which the assets could be traded. Hence, it is not possible to reliably estimate the value for which knowledgeable parties would trade these assets. The Group is therefore of the opinion that there is no better estimate of the assets' fair value than their existing book value. • The value of the Company is mainly driven by an 'expected increase' in the RAB value (Regulated Asset Base). These expected increases are mainly driven by future cash outflows. It would therefore be inappropriate to (already) assume uplifts in the value of assets, considering that this value will only be realised through a continued capital programme to be carried out in the future. • The useful lives of the fixed assets are chosen so as to obtain the best possible match with the actual depreciation of each asset. Depreciation of property, plant and equipment is calculated based on the useful lives recognised by the Federal Network Agency for regulatory purposes; it believes that these values represent the best possible approximation of actual events in terms of economic utilisation. Considering this, the Group considers that the book value of 50Hertz Transmission (Germany)'s property, plant and equipment is the best estimation of the fair value.
Trade and other receivables	The fair value is determined by considering open outstanding receivables, minus adjustments for non-collectability.
Cash and cash equivalents	The book value of cash and cash equivalents was considered equal to their fair value, so no adjustments to the book value needed to be made.
Loans and borrowings	Eurobonds are valued at amortised cost, which at the date of acquisition give a very close approximation of their fair value.
Trade and other payables	The fair value is determined by considering open outstanding payables.

Goodwill arising from the acquisition

The above fair values were measured on a provisional basis. If new information is obtained within one year of the acquisition date about facts and circumstances that existed at the acquisition date and resulting in adjustments to the above amounts or about any additional provisions that existed on the acquisition date, then the accounting for the acquisition will be revised.

Based on the preliminary fair value exercise mentioned above, goodwill arising from this acquisition was recognised as follows:

(in € million)	
Fair value of the identified net assets acquired	1,472.9
Consideration transferred	(988.7)
Non-controlling interest, based on proportionate interest in the recognised amounts of the assets and liabilities of 50Hertz Transmission (Germany)	(294.6)
Fair value of the pre-existing interests in 50Hertz Transmission (Germany)	(892.9)
Goodwill	**703.4**

The remeasurement to fair value of the Group's existing 60% interest in 50Hertz Transmission (Germany) resulted in a gain of €9.2 million (€892.9 million less the €883.7 million carrying amount of the equity-accounted investee at acquisition date). This amount has been included in 'Finance income'.

The provisional goodwill is mainly attributable to the skills and technical expertise of 50Hertz Transmission (Germany)'s work force and the synergies expected to be achieved from further integrating the German segment in to the Group's activities. The Group will continue to assess such expertise and synergies in 2019, so to assure that the amount of goodwill recognised is appropriate,

None of the goodwill recognised is expected to be deductible for tax purposes.

In case the acquisition would have happened on 1 January 2018, the Group's net profit would be €42.3 million higher. This €42.3 million profit relates to 40% of Eurogrid International's profits as realised from 1 January 2018 to 26 April 2018 (with half of it to be allocated to non-controlling interests).

Purchase consideration

The following table summarises the acquisition fair value of each major class of consideration transferred for the additional 20% stake in 50Hertz Transmission (Germany):

(in € million)	
Cash – base consideration	956.5
Interest – ticker fee	12.2
Dividend mechanism in favour of IFM	20.0
Total consideration transferred	**988.7**

The €12.2 million in interest is an integral component of the consideration transferred for the acquisition in 50Hertz Transmission (Germany). As part of the share purchase agreement, 4% interest is due on the base consideration from 31 December 2017 up to the date of closing.

The dividend mechanism grants IFM rights to consideration as a way to compensate for the reduced dividend over financial year 2017 to be paid out in 2018, as the share transfer took place before the annual dividend was paid.

The Group incurred acquisition related costs of €3.6 million, mainly relating to legal fees and advisory fees. These costs were recorded as follows: €2.6 million in 'Services and other goods', €0.5 million in 'Personnel expenses' and €0.5 million in 'Finance costs'.

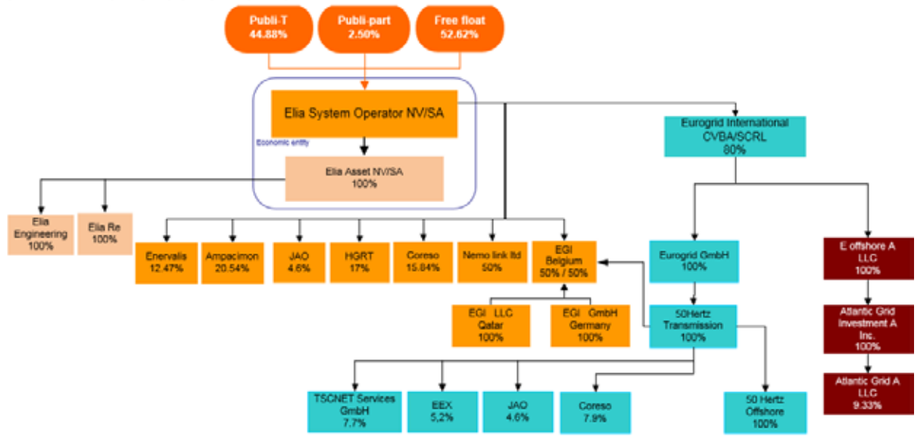
Contingent consideration

No contingent consideration has been agreed in the purchase agreement

7.2. Subsidiaries, joint ventures and associates

GRI 102-45

OVERVIEW OF GROUP STRUCTURE



SUBSIDIARIES

Elia System Operator NV/SA has direct and indirect control of the subsidiaries listed below.

All the entities keep their accounts in euros (except E-Offshore A LLC, Atlantic Grid Investment A Inc. and Atlantic Grid A LLC, whose accounts are held in US dollars) and have the same reporting date as Elia System Operator NV/SA (except Eurogrid International CVBA/SCRL).

On 31 August 2018, the participating interest in GridLab GmbH was sold to DNV GL Energy Advisory GmbH for a total purchase price of €200,000. GridLab is included in the German segment up to the transaction's closing date.

Name	Country of	Headquarters	Stake %	
			2018	2017
Elia Asset NV/SA	Belgium	Bd de l'Empereur 20, 1000 Brussels	99.99	99.99
Elia Engineering NV/SA	Belgium	Bd de l'Empereur 20, 1000 Brussels	100.00	100.00
Elia Re SA	Luxembourg	Rue de Merl 65, 2146 Luxembourg	100.00	100.00
Elia Grid International NV/SA	Belgium	Bd de l'Empereur 20, 1000 Bussels	90.00	80.00
Elia Grid International GmBH	Germany	Heidestraße 2, 10557 Berlin	90.00	80.00
Elia Grid International LLC	Qatar	Office 905, 9th Floor, Al Fardan Office Tower, Westbay - Doha	90.00	-
Eurogrid International CVBA/SCRL *	Belgium	Bd de l'Empereur 20, 1000 Brussels	80.00	60.00
Eurogrid GmbH *	Germany	Heidestraße 2, 10557 Berlin	80.00	60.00
50Hertz Transmission GmbH *	Germany	Heidestraße 2, 10557 Berlin	80.00	60.00
50Hertz Offshore GmbH *	Germany	Heidestraße 2, 10557 Berlin	80.00	60.00
E-Offshore A LLC *	U.S.	874, Walker Road, Suite C, 19904 Dover, Delaware	80.00	60.00
Atlantic Grid Investment A Inc *	U.S.	1209 Orange Street, 19801 Wilmington, Delaware	80.00	60.00
Joint arrangements				
Gridlab GmbH	Germany	Mittelstraße 7, 12529 Schönefeld	-	60.00
Nemo Link Ltd.	United Kingdom	Strand 1-3, London WC2N 5EH	50.00	50.00
Associated companies accounted for				
H.G.R.T S.A.S.	France	1 Terrasse Bellini, 92919 La Défense Cedex	17.00	17.00
Coreso NV/SA	Belgium	Avenue de Cortenbergh 71, 1000 Brussels	22.16	20.58
Ampacimon SA	Belgium	Rue de Wallonie 11, 4460 Grâce-Hollogne	20.54	20.54
Enervalis NV	Belgium	Centrum-Zuid 1111, 3530 Houthalen-Helchteren	12.47	12.47
Other shareholdings				
JAO SA	Luxembourg	2, Rue de Bitbourg, 1273 Luxembourg Hamm	8.28	8.00
Atlantic Grid A LLC	U.S.	4445, Willard Av, Suite 1050, 20815 Chevy Chase,	7.46	5.86
European Energy Exchange (EEX)	Germany	Augustusplatz 9, 04109 Leipzig	4.16	4.32
TSCNET Services GmbH	Germany	Dingolfinger Strasse 3, 81673 Munich	6.16	4.62

8. Other notes

8.1. Financial risk and derivative management

PRINCIPLES OF FINANCIAL RISK MANAGEMENT

The Group aims to identify each risk and set out strategies to control the economic impact on the Group's results.
The Risk Management Department defines the risk-management strategy, monitors the risk analysis and reports to management and the Audit Committee. The financial risk policy is implemented by determining appropriate policies and setting up effective control and reporting procedures. Selected derivative hedging instruments are used depending on the assessment of the risk involved. Derivatives are used exclusively as hedging instruments. The regulatory framework in which the Group operates significantly restricts their effects on profit or loss (see the section 'Regulatory framework and tariffs'). The major impact of increased interest rates, credit risk, etc. can be settled in the tariffs, in accordance with the applicable legislation.

CREDIT RISK

Credit risk encompasses all forms of counterparty exposure, i.e. where counterparties may default on their obligations to the Company in relation to lending, hedging, settlement and other financial activities. The Company is exposed to credit risk from its operating activities and treasury activities. As regards its operating activities, the Group has a credit policy in place, which takes into account customer's risk profiles. The exposure to credit risk is monitored on an ongoing basis, resulting in a request to issue bank guaranties from the counterparty for some major contracts.

At the end of the reporting period there were no significant concentrations of credit risks. The maximum credit risk is the carrying amount for each financial asset, including derivative financial instruments.

(in million EUR)	2018	2017
Loans and receivables – long term	177.0	147.8
Loans and receivables – short term	558.9	281.1
Cash and cash equivalents	1,789.3	195.2
Immediately claimable deposits	7.1	7.1
Interest-rate swaps used for hedging:		
Liabilities	(2.9)	-
Total	**2,529.5**	**631.2**

The movement in the allowance for impairment in respect of loans and receivables during the year was as follows:

(in million EUR)	Bad debtors	Impairment losses	Remaining balance
Opening balance	1.3	(1.1)	0.2
Changes during the year	0.4	(0.2)	0.2
Balance at 31 December 2017	**1.7**	**(1.3)**	**0.4**
Opening balance	1.7	(1.3)	0.4
Changes during the year	168.6	(168.5)	0.1
Balance at 31 December 2018	**170.3**	**(169.8)**	**0.5**

The Group believes that the unimpaired amounts overdue by more than 30 days are still collectible, based on historical payment behaviour and extensive analysis of customer credit risk, including underlying customers' credit ratings, when available. The credit quality of trade and other receivables is assessed based on a credit policy.

IFRS 9 requires the Group to impair financial assets based on a forward-looking expected credit loss (ECL) approach.

The Group applies the IFRS 9 simplified approach to measuring expected credit losses which uses a lifetime expected credit loss allowance for all trade receivables.

An impairment analysis is performed at each reporting date using a provision matrix to measure expected credit losses. The provision rates are based on days past due for all customers. No segmentation of customers is performed as all customers show similar loss patterns. Intercompany trade receivables are excluded as there is no credit risk. In addition, trade receivables connected with a pending commercial dispute are excluded to avoid double provisioning (provision for risks and charges).

The provision rates are based on the payment profiles of sales over a period of 36 months before 31 December 2018 or 1 January 2018 respectively and the corresponding historical credit losses experienced within this period. As the sales and payment profile of the Group's customers has remained very stable over the years, the Group considers the historical credit losses to be a good proxy for future (expected) credit losses.

Subsequently, a loss given default is calculated as the percentage of the amount of trade receivables that is not covered by a bank guarantee. This percentage is multiplied by the outstanding trade receivables.

On that basis, the loss allowance as at 31 December 2018 and 1 January 2018 (on adoption of IFRS 9) was determined as follows for trade receivables:

1 January 2018	Not past due	0-30 days past due	31-60 days past due	61 days - 1 year past due	1 year - 2 years	> 2 year	Total
Expected loss rate	0.0%	0.2%	0.4%	2.8%	35.2%	100.0%	
Carrying amount - trade receivables	131.9	7.8	7.8	3.2	0.3	0.0	151.1
Loss given default	97.2%	97.2%	97.2%	97.2%	97.2%	97.2%	
Loss allowance	**0.0**	**0.0**	**0.0**	**0.1**	**0.1**	**0.0**	**0.3**

31 December 2018	Not past due	0-30 days past due	31-60 days past due	61 days - 1 year past due	1 year - 2 years	> 2 year	Total
Expected loss rate	0.0%	1.4%	6.0%	10.8%	72.2%	100.0%	
Carrying amount - trade receivables	406.7	3.6	0.5	20.8	0.3	0.2	432.2
Loss given default	91.2%	83.3%	78.8%	78.0%	86.1%	78.0%	
Loss allowance	0.1	0.1	0.0	1.7	0.2	0.2	2.3

The carrying amount of trade receivables presented in the tables above only includes the receivables which are subject to impairment. The overall outstanding receivables have been adjusted for, amongst others, recoverable VAT upon debtor insolvency and invoices yet to be issued.

CURRENCY RISK

The Group is not exposed to any significant currency risk, either from transactions or from exchanging foreign currencies into euro, since it has no foreign investments or activities and less than 1% of its costs are expressed in currencies other than the euro.

LIQUIDITY RISK

Liquidity risk is the risk that the Group may be unable to meet its financial obligations. The Group limits this risk by constantly monitoring cash flows and ensuring that there are always sufficient credit-line facilities available.

The Group's objective is to maintain a balance between continuity of funding and flexibility through the use of bank loans, confirmed and unconfirmed credit facilities, commercial paper programmes, etc. For medium- to long-term funding, the Group uses bonds. The maturity profile of the debt portfolio is spread over several years. The Group Treasury frequently assesses its funding resources taking into account its own credit rating and general market conditions.

Bond issuances realised in 2013, 2014, 2015, 2017 and 2018 and loan contracts signed with EIB and other banks in 2018, proves that the Group has access to different sources of funding.

(in million EUR)	Face Value	Closing balance	Expec-ted cash out-flows	6 months or less	6-12 months	1-2 years	2-5 years	> 5 years
Non-derivative financial liabilities	**3,273.8**	**3,262.7**	**(3,814.7)**	**(452.6)**	**(2.2)**	**(576.4)**	**(644.8)**	**(2,138.7)**
Unsecured bond issues	2,350.0	2,338.9	(2,919.6)	(71.9)	0.0	(571.9)	(137.1)	(2,138.7)
Unsecured financial bank loans and interest	545.3	545.3	(566.1)	(51.7)	(2.2)	(4.4)	(507.8)	0.0
Trade and other payables	378.5	378.5	(378.5)	(378.5)				
Derivative financial liabilities	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**
Interest-rate swaps used for hedging	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total at 31 December 2017	**3,273.8**	**3,262.7**	**(3,864.2)**	**(502.1)**	**(2.2)**	**(576.4)**	**(644.8)**	**(2,138.7)**
Non-derivative financial liabilities	**8,406.0**	**8,384.0**	**(9,372.5)**	**(2,709.8)**	**(45.6)**	**(619.0)**	**(1,537.7)**	**(4,460.4)**
Unsecured bond issues	5,340.0	5,318.0	(6,212.1)	(592.5)	(41.2)	(607.6)	(1,014.6)	(3,956.2)
Unsecured financial bank loans and interest	1,076.9	1,076.9	(1,171.3)	(128.2)	(4.4)	(11.4)	(523.1)	(504.2)
Trade and other payables	1,989.1	1,989.1	(1,989.1)	(1,989.1)	0.0	0.0	0.0	0.0
Derivative financial liabilities	n.r.	2.9	(2.9)	(0.3)	(0.3)	(0.6)	(1.7)	0.0
Interest-rate swaps used for hedging	n.r.	2.9	(2.9)	(0.3)	(0.3)	(0.6)	(1.7)	0.0
Total at 31 December 2018	**8,406.0**	**8,386.9**	**(9,375.4)**	**(2,710.1)**	**(45.9)**	**(619.6)**	**(1,539.4)**	**(4,460.4)**

In 2018, Elia Transmission Belgium issued a 10-year senior bond of €300 million. In addition, an EIB-loan and a dedicated loan were signed for a value of €100 million and €210 million, respectively.

Details of the used and unused back-up credit facilities are set out below:

(in million EUR)	Maturity	Available amount	Average basic interest	Amount used	Amount not used
Confirmed credit line	08/07/2021	110.0	Euribor + 0.30%	0.0	110.0
Confirmed credit line	08/07/2021	110.0	Euribor + 0.30%	0.0	110.0
Confirmed credit line	08/07/2021	110.0	Euribor + 0.30%	0.0	110.0
Confirmed credit line	08/07/2021	110.0	Euribor + 0.30%	0.0	110.0
Confirmed credit line	08/07/2021	110.0	Euribor + 0.30%	0.0	110.0
Confirmed credit line	08/07/2021	100.0	Euribor + 0.30%	0.0	100.0
Belgian dematerialised treasury notes	unlimited	350.0	Euribor + margin when concluding deal	50.0	300.0
Straight Loan EGI	unlimited	2.5	Eurribor + 0.75%	0.0	2.5
Confirmed credit line	24/03/2022	750.0	Euribor + 0,275%	0.0	750.0
Confirmed credit line	unlimited	150.0	av. 1M-Euribor +0.275%	0.0	150.0
Confirmed credit line	14/12/2026	150.0	0.90%	150.0	0.0
Total		**2,052.5**		**200.0**	**1,852.5**

INTEREST-RATE RISK

Interest rate risk is the risk that the fair value or future cash flows of a financial instrument will fluctuate because of changes in market interest rates. The Group's exposure to the risk of changes in market interest rates relates primarily to its long-term debt obligations with floating interest rates.
The Group manages its interest rate risk by having a balanced portfolio of fixed- and variable-rate loans and borrowings. To manage this, the Group could engage in interest-rate swaps, which would entail the Group agreeing to exchange, at specified intervals, the difference between fixed- and variable-rate interest amounts calculated based on an agreed notional principal amount. These swaps are allocated to hedge underlying debt obligations. As at 31 December 2017, the Group had no interest-rate swaps outstanding. As at 31 December 2018, interest-rate swaps were outstanding to cover a nominal debt amount of € 300 million.

The table (see Note 6.12) shows the average interest rate.

SENSITIVITY ANALYSIS

Changes in interest rates will not affect the consolidated result in the short or long term as the Group operates within a regulatory framework where the consequences of fluctuations in financial expenses are mainly recovered in tariffs, except for the items which are directly recognised through OCI.

FAIR VALUE SENSITIVITY ANALYSIS FOR INTEREST RATE SWAPS

A change of 100 basis points in interest rates would have increased (decreased) other comprehensive income by the amounts shown below:

(in million EUR)	100 bp increase	100 bp decrease
Interest rate swaps - Impact in equity	10.3	(10.3)

HEDGING ACTIVITIES AND DERIVATIVES

The Group is exposed to certain risks relating to its ongoing business operations. The primary risk managed using derivative instruments is interest rate risk.

All financial derivatives entered into by the Group relate to an underlying transaction or forecast exposure, depending on the expected impact on the income statement, and if the IFRS 9 criteria are met, the Group decides on a case-by-case basis whether hedge accounting will be applied.

Derivatives not designated as hedging instruments

In June 2018, the Group entered into a pre-hedge interest rate swap to hedge the interest rate risk relating to the emission of the hybrid security. Under IFRS 9, a condition to apply hedge accounting is that the hedged transaction could affect profit or loss. As the dividends of the hybrid security will never affect profit and loss, the Group could not apply hedge accounting on the derivative, resulting in a profit or loss impact, upon settlement of the derivative in September of €3.3mio upon unwinding of the instrument.

Derivatives designated as hedging instruments

The Group decided to hedge the interest rate risk In the context of the acquisition of a 20% stake in 50Hertz Transmission (Germany) for which a bridge loan was initially put in place. To cover the potential exposure to the interest rate risk, the Group entered into a pre-hedge interest rate swap agreement in June 2018 in order to lock in interest market rates at the moment of the issuance of the € 300 million senior bond. The Group applied hedge accounting as the derivative transaction met the requirements under IFRS 9. With the settlement of the transaction in September, the portion of the gain or loss on the derivative was recognised within hedging reserves and had an impact of €5.7million.

These hedging reserves will be recycled into profit and loss over the lifetime of the underlying hedged instrument, i.e. the senior bond with 10-year maturity.

For a loan of €496 million, the interest rate is variable and Elia had covered the risk by entering into interest rate swaps. As the swaps came to maturity at the end of 2017, the Group contracted three interest-rate swaps with a total nominal amount of €300.0 million. All

three interest-rate swaps are designated as cash flow hedges under IFRS 9. The negative net fair value of these interest rate swaps at 31 December 2018 is €2.9 million.

CAPITAL RISK MANAGEMENT

The purpose of the Group's capital-structure management is to maintain the debt and equity ratios related to the regulated activities as close as possible to the recommended level set by the relevant regulatory frameworks.

The Company's dividend guidelines involve optimising dividend payments while bearing in mind that self-financing capacity is needed to carry out its legal mission as transmission system operator, finance future CAPEX projects and, more generally, implement the Group's strategy.

The Company offers the employees the opportunity to subscribe to capital increases that are exclusively reserved for them.

8.2. Commitment and contingencies

OPERATING LEASE COMMITMENTS – GROUP AS A LESSEE

The Group has entered into agreements to obtain passage rights for both underground and above-ground cables. These rights are often obtained in the form of usufruct rights or concessions. The terms and conditions of these contracts vary depending on the counterparty as well as when the contract was entered into.

The Group has also entered into commercial leases on motor vehicles, IT equipment and office buildings. The leases related to cars and IT equipment have an average term of three years. The contracts regarding the buildings have a normal term of nine years, with the option of renewing the lease after that. Renewals are decided on by the specific entity that holds the lease. Normal conditions for renewal of lease contracts are applicable.

Future minimum rental payables under non-cancellable operating leases are as follows:

(in million EUR)	< 1 year	1–5 years	> 5 years
Use of land	0.5	1.9	7.2
Buildings	2.4	0.6	0.0
Cars, IT equipment and others	7.3	10.9	0.0
Balance at 31 December 2017	**10.2**	**13.4**	**7.2**
Use of land	0.3	0.9	5.1
Buildings	3.6	6.5	10.0
Cars, IT equipment and others	12.1	15.2	0.1
Balance at 31 December 2018	**15.9**	**22.6**	**15.2**

The following expenses related to these lease contracts were recognised in the profit or loss:

(in million EUR)	2018	2017
Use of land	0.3	1.7
Buildings	4.4	2.5
Cars, IT equipment and others	11.9	6.4
Total	**16.6**	**10.6**

OPERATING LEASE COMMITMENTS – GROUP AS A LESSOR

The Group has entered into commercial property leases on certain items of property, plant and equipment, mainly consisting of optimising the use of sites and high-voltage pylons.
Future minimum rental receivables are as follows:

(in million EUR)	< 1 year	1–5 years	> 5 years
Telecom	14.4	6.5	0.0
Land and buildings	0.6	0.2	0.0
Balance at 31 December 2017	**15.0**	**6.7**	**0.0**
Telecom	15.9	6.4	4.3
Land and buildings	0.3	0.0	0.0
Balance at 31 December 2018	**16.2**	**6.4**	**4.3**

The following revenue related to these lease contracts was recognised in the income statement:

(in million EUR)	2018	2017
Telecom	16.7	14.3
Land and buildings	1.0	0.6
Total	**17.7**	**14.9**

CONTINGENT RENTS, PURCHASE OPTIONS AND RESTRICTIONS

The Group has no contracts which include contingent rental payments, and no purchase options were agreed in the significant lease contracts. Furthermore, these significant lease contracts do not include any escalation clauses or restrictions that are significant to the use of the respective asset.

CAPITAL-EXPENDITURE COMMITMENT

As at 31 December 2018, the Group had a commitment of €1,586.8 million relating to the purchase contracts for the installation of property, plant and equipment for further grid extensions.

OTHER CONTINGENCIES AND COMMITMENTS

As at 31 December 2018, the Group had a commitment of €147.4 million relating to purchase contracts for general expenses, maintenance and repair costs.

Elia System Operator also provided a parent-company guarantee in the amount of €113.7 million to its joint venture Nemo Link Ltd; this related to the EPC contracts and was granted so that Nemo Link Ltd could build the relevant interconnector.

Having received approval from the Walloon government and from the CREG, on 22 June 2015 Elia entered into an agreement with Solar Chest for the sale of Walloon green certificates with a total value of €275 million, of which €221 million was settled in 2015 and a total of €48 million was settled in 2016. Solar Chest's mission is to buy, hold and sell Walloon green certificates for periods of five, six and seven years. At the end of each period (30 June 2020, 30 June 2021 and 30 June 2022 respectively), any unsold certificates will be bought back by Elia. CREG confirmed and guaranteed to Elia that at the end of each reservation period, the cost and any expense for repurchase of non-marketable certificates may be recovered fully through the tariffs for levies, and as a consequence the potential repurchase by Elia will have no impact on the Company's financial performance.

In September 2017, Elia sold 2.8 million green certificates to the Walloon Region (i.e. the Walloon Agency for Air and Climate, or AwAC) leading to a net cash inflow of €176.2 million. This was a result of the Decree of 29 June 2017 amending the Decree of 12 April 2011 relating to the organisation of the regional electricity market and the Decree of 5 March 2008 relating to the creation of the Walloon Agency for Air and Climate. The green certificates transferred by Elia can be gradually resold by AwAC as from 2022, taking into account the market conditions that exist for green certificates at that time. The legislation also envisages the green certificates being held by the AwAC for a period of up to nine years, after which Elia is required to buy back any unsold certificates. These repurchase commitments will have no impact on Elia's financial performance, as the cost and expense for the repurchase will be fully recovered through the tariffs for levies.

In November 2018, Elia sold another €0.7 million in green certificates to the Walloon Region (i.e. the Walloon Agency for Air and Climate, or AwAC) which resulted in a net cash inflow of €43.3 million. Similarly as for the transaction in September 2017, Elia might be required to buy back a portion of the certificates sold as from 2023. Any repurchase will be covered through the tariffs for levies.

8.3. Related parties

CONTROLLING ENTITIES

The core shareholder of Elia System Operator is Publi-T and remained unchanged from 2017. Other than the yearly dividend payment, no transactions occurred with the core shareholder in 2018.

TRANSACTIONS WITH KEY MANAGEMENT PERSONNEL

Key management personnel include Elia's Board of Directors and Elia's Management Committee. Both Elia's Board of Directors and Elia's Management Committee have a significant influence across the entire Elia Group.

At 50Hertz Transmission (Germany), key management personnel include Eurogrid International CVBA's Board of Directors, who are responsible for monitoring the activities of 50Hertz Transmission (Germany). Key management personnel also include the Board of Management of 50Hertz Transmission and the Supervisory Board, which was established in the German segment.

The members of Elia's Board of Directors are not employees of the Group. The remuneration for their mandate is detailed in the Corporate Governance Statement forming part of this annual report. Eurogrid International CVBA's Board of Directors are not remunerated.

The other members of key management personnel are hired as employees. The components of their remuneration are detailed below.

Key management personnel did not receive stock options, special loans or other advances from the Group during the year.

(in million EUR)	2018	2017
Short-term employee benefits	**4.8**	**2.6**
Basic remuneration	4.1	1.8
Variable remuneration	0.7	0.8
Post-employment benefits	**0.7**	**0.4**
Other variable remuneration	**1.2**	**0.7**
Total gross remuneration	**6.7**	**3.7**
Number of persons (in units)	12	8
Average gross remuneration per person	0.6	0.5
Number of shares (in units)	**24,331**	**20,005**

In addition, Elia's Management Committee also assessed whether transactions occurred with entities in which they or members of the Board of Directors exercise a significant influence (e.g. positions as CEO, CFO, vice-presidents of the Management Committee, etc.).

There were some significant transactions in 2018 with various distribution system operators. The total value of realised sales came to €54.3 million, while the total value of expenses amounted to €4.8 million. As at 31 December 2018, there was an outstanding trade-receivable position of €4.5 million and an outstanding trade-debt position of €0.2 million.

TRANSACTIONS WITH JOINT VENTURES AND ASSOCIATED COMPANIES

Transactions between the Company and subsidiaries that are related parties were eliminated during consolidation and therefore are not recognised in this note.

There were no transactions with E-Offshore, Atlantic Grid Investment or Enervalis in the financial year 2018.

Transactions with joint ventures and associated companies were not eliminated, and therefore details of transactions with other related parties are shown below:

(in million EUR)	2018	2017
Transactions with joint ventures and associated companies	**6.5**	**23.2**
Sales of goods	2.5	33.3
Purchases of goods	(2.5)	(14.7)
Interest and similar revenue	6.5	4.6
Outstanding balances with joint ventures and associated companies	**196.6**	**134.9**
Long-term debtors	174.7	147.7
Trade debtors	10.5	4.2
Trade debts	(0.2)	(11.7)
Accruals and deferred income	(11.6)	(5.3)

Prior to the acquisition of the additional 20% stake in 50Hertz Transmission (Germany) (see Note 7.1), all transactions with the companies making up the German segment were disclosed in this Note. As the additional 20% stake gave the Elia Group control over this segment, the entities within the 50Hertz Transmission (Germany) segment are now subsidiaries and are thus no longer included.

'Long-term debtors' and 'Accruals and deferred income' relate to shareholder funding provided by Elia System Operator for its joint venture Nemo Link Limited. The increase in these items compared to last year can be ascribed to the additional funding contracted during the year. See also Note 8.2, which details the guarantees issued by Elia System Operator for its joint venture Nemo Link Ltd

The significant increase in long-term debtors is a result of the funding provided to Nemo Link in 2018 – see Note 6.3 for more details.

The Group also has an outstanding loan with its shareholder PubliPart for an amount of €42.1 million. We refer to Note 6.12 for more details.

8.4. Subsequent events

With regard to the Belgian new tariff methodology applicable for the period 2020-2023, Elia lodged in 2018 and appeal against a new provision defining the impact on regulated tariffs of loans contracted to finance non-regulated activities. According to this provision, the financing of non-regulated activities is valorised on terms equivalent to a financing that would be fully ensured by equity. On January 10, Elia received a copy of the judgment of the 'Markets Court', which declares its appeal admissible but unfounded. The subject matter of this judgment is limited to this provision of the tariff methodology 2020-2023 which remains in force as approved and published on 28 June 2018 and thus applicable from 2020. Based on a detailed analysis of this judgement, Elia remains convinced that this judgement has no significant impact on our current investments in non-regulated activities. Should elements arise in the future that would lead to substantially different consequences, then Elia will analyse them and take a position in due time, including possible legal and other mitigating remedies.

8.5. Miscellaneous

Impact of the United Kingdom leaving the European Union

The Group has conducted an analysis of the potential impact on the Group's financial statements in the event of a hard or a soft Brexit. The most significant risk identified related to its joint venture Nemo Link Ltd.

The Group's analysis concluded that Nemo Link Ltd is prepared for both a soft and a hard Brexit scenario. A soft Brexit would see the UK remain in the Internal Energy Market (IEM), whereas a hard Brexit would see it leave the IEM.

The Group has successfully completed a consultation resulting in the approval by both regulators of the IEM access rules have been approved by both regulators for the event that a soft Brexit occurs. Similarly, non-IEM access rules have been sent out for consultation for the event that a hard Brexit occurs.

From the all feedback obtained and the analysis performed, the overall conclusion is that Nemo Link would remain operational under both a soft and a hard Brexit. Profitability on the investment would also remain largely unaffected due to the cap and floor mechanism (see Note 9.3), which provides certainty regarding the company's cash flows over a 25-year span.

Other than the risk identified above, the Group expects Brexit to have a very limited effect on the consolidated financial statements.

8.6. Services provided by the auditors

The General Meeting of Shareholders appointed as joint auditors KPMG Bedrijfsrevisoren BCVBA (represented by Mr. Alexis Palm) and Ernst & Young Bedrijfsrevisoren BCVBA (represented by Mr. Patrick Rottiers) for the audit of the consolidated financial statements of Elia System Operator NV/SA and the audit of the statutory financial statements of Elia System Operator NV/SA, Elia Asset NV/SA, Elia Engineering NV/SA, Elia Grid International NV/SA and Eurogrid International CVBA.

50Hertz Transmission (Germany) appointed Ernst & Young GmbH for the audit of the consolidated financial statements of Eurogrid GmbH and the statutory financial statements of 50Hertz Transmission GmbH and 50Hertz Offshore GmbH. KPMG GmbH was appointed for the audit of Elia Grid International GmbH.

The following table sets out the fees of the joint auditors and their associated companies in connection with services delivered with respect to the financial year 2018:

in EUR	Belgium	Germany	Total
Statutory audit	169,692	239,000	408,692
Audit related	65,771	26,000	91,771
Income tax	2,220	75,375	77,595
Indirect tax	17,062	0	17,062
Other advisory	85,700	0	85,700
Total	**340,445**	**340,375**	**680,820**

REGULATORY FRAMEWORK AND TARIFFS

1. Regulatory framework in Belgium

1.1. Federal legislation

The Electricity Act, which forms the general basis, lays down the core principles of the regulatory framework governing Elia's activities as a transmission system operator in Belgium.

This Act was heavily amended on 8 January 2012 by the transposition at federal level of the 3rd package of European directives. These changes ensure that the Electricity Act:

- sets out the unbundling of transmission operations from generation, distribution and supply activities;
- sets out in greater detail the rules for operating and accessing the transmission system;
- redefines the transmission system operator's legal mission, mainly by expanding it to the offshore areas over which Belgium has jurisdiction; and
- strengthens the role of the regulatory authority, particularly as regards determining transmission tariffs.

A number of royal decrees provide more details of the regulatory framework applying to the transmission system operator, particularly the Royal Decree on the Federal Grid Code. Similarly, the decisions passed by the Commission for Electricity and Gas Regulation (CREG) supplement these provisions to form the regulatory framework within which Elia operates at the federal level.

1.2. Regional legislation

Belgium's three regions are primarily responsible for the local transmission of electricity through grids with a voltage of 70 kV or less on their respective territory. The regional regulators are in charge of the non-tariff aspects of local transmission-system regulation, while setting and monitoring tariffs falls under federal jurisdiction.

The Flemish Region, the Brussels-Capital Region and the Walloon Region have also transposed into their legislative framework the provisions of the 3rd European package applying to them. The regional decrees have been complemented by various other rules and regulations on matters such as public service obligations, renewable energy and authorisation procedures for suppliers.

1.3. Regulatory agencies

As required by EU law, the Belgian electricity market is monitored and controlled by independent regulators.

FEDERAL REGULATOR

CREG is the federal regulator, and its powers with regard to Elia include:
approving the standardised terms in the three main contracts used by the company at the federal level: the connection contract, the access contract and the ARP contract;
approving the capacity allocation system at the borders between Belgium and neighbouring countries;
approving the appointment of the independent members of the Board of Directors;
determining the tariff methodology to be observed by the grid operator when calculating the various tariffs applying to grid users;
certifying that the grid operator actually owns the infrastructure it operates and that it meets the regulatory requirements for independence from generators and suppliers.

REGIONAL REGULATORS

Operation of electricity grids with voltages of 70 kV and less falls under the jurisdiction of the respective regional regulators. Each of them may require any operator (including Elia if it operates such grids) to abide by any specific provision of the regional electricity rules on pain of administrative fines or other sanctions. However, the regional regulators do not have the power to set tariffs for electricity transmission systems, as tariff setting falls within the exclusive remit of CREG for these grids.

1.4. Tariff setting

TARIFF REGULATIONS

On 18 December 2014, CREG adopted a decree setting out the calculation methods used to establish tariffs applying to users of electricity grids performing a transmission function. Elia used this methodology as a basis for its tariff proposal for 2016-2019, which was submitted on 30 June 2015. This tariff proposal, adjusted following the discussions between Elia and CREG in the course of the second half of 2015, was approved by the regulator on 3 December 2015.

TARIFF REGULATIONS APPLYING IN BELGIUM

As the operator of grids performing a transmission function (covering the transmission grid and the local and regional transmission grids in Belgium), Elia makes most of its income from the regulated tariffs charged for use of these grids (tariff income), which are approved in advance by CREG. As of 1 January 2008, the prevailing tariff regulation mechanisms have provided for approved tariffs being set for four-year periods, barring specific circumstances. 2017 was therefore the second year of the third four-year regulatory period.

The tariff mechanism is based on amounts recognised in accordance with Belgian accounting regulations (BE GAAP). The tariffs are based on budgeted costs minus a number of sources of non-tariff income. These costs are then divided based on an estimate of the volumes of electricity taken off the grid and, in the case of some costs, based on estimated volumes of electricity injected into the grid, in accordance with the terms of the tariff methodology drawn up by CREG.

The costs taken into account include the forecast value of the authorised remuneration of the invested capital, an estimate of the amounts allocated to Elia in the form of performance incentives and the predicted values of various cost categories. These costs are subdivided into three groups: controllable costs, for which Elia is offered a financial incentive to improve its efficiency levels; non-controllable costs, over which Elia has no influence and for which the deviations from the budget are completely allocated to the calculation of future tariffs; and influenceable costs, to which a hybrid rule applies (see the information provided below with regard to controllable and non-controllable costs and income and influenceable costs).

FAIR REMUNERATION

Fair remuneration is the return on capital invested in the grid. It is based on the average annual value of the regulated asset base (RAB), calculated annually, taking into account new investments, depreciations and changes in working capital.

In this context, fair remuneration is calculated based on a formula that allocates a different return to equity accounting for up to 33% of the RAB (Part A) and to equity exceeding this ratio (Part B).
This formula is as follows:

Fair remuneration = A + B where:

- A = [33% x average RAB of the year n x [(OLO n) + (beta x risk premium)] x illiquidity premium]; plus
- B = [(S – 33%) x average RAB x (OLO n + 70 base points)]; where:
- OLO n is the interest rate for Belgian 10-year linear bonds for the year in question;
- S = consolidated capital and reserves/average RAB, in accordance with Belgian accounting standards (BE GAAP);
- beta (β) is calculated based on Elia share prices, compared with the BEL 20 index, over a three-year period; the value of beta cannot be lower than 0.53:
- the risk premium is fixed at 3.5%;
- the illiquidity premium is fixed at 1.10.

PART A

The rate of remuneration (in %) as set by CREG for year 'n' is equal to the sum of the risk-free rate, i.e. the average rate of Belgian 10-year linear bonds and a premium for share-market risk, weighted using the applicable beta factor.

The reference ratio of 33% is applied to Elia's average regulated asset base (RAB) to calculate Elia's reference equity.

By means of this ratio, CREG encourages the proportional share between equity and regulated asset base to be as close as possible to 33%. As a consequence, Part B (applicable to the reference equity exceeding 33% of the RAB) is remunerated at a lower rate.

PART B

If the actual proportional share of Elia's actual equity exceeds the reference ratio, the surplus amount is balanced out with a rate of remuneration calculated as follows: [(OLO n + 70 base points)].

The Electricity Act also provides for the possibility of the regulator setting higher remuneration rates for capital that is invested to finance projects of national or European interest (see 'Other incentives' below).

Non-controllable costs and revenues

This category of costs and revenues over which Elia has no direct control is not subject to the incentive mechanisms offered by CREG, and is allocated in its entirety to the calculation of the revenue to be covered by tariffs. The tariffs are set on the basis of the forecast values of these costs, and the difference from the actual values is allocated ex post to the tariff calculation for the subsequent period.

The main non-controllable costs are: depreciation of tangible fixed assets, ancillary services (except for the reservation costs of ancillary services excluding black start, which are referred to as 'influenceable costs'), costs related to line relocation imposed by a public authority, and taxes. They also include financial charges to which the embedded debt principle applies. As a consequence, all actual and reasonable financial costs related to debt financing are included in the tariffs.
Some revenues are also non-controllable. These include cross-border congestion revenues and financial revenues.

Controllable costs and revenues

The costs and revenues over which Elia has direct control are subject to incentive regulation mechanisms, meaning that Elia is encouraged to reduce these costs and increase these revenues. Therefore, Elia's efficiency efforts (and conversely any inefficiency) are divided equally between Elia profits and future tariffs (50% each).

Influenceable costs

The reservation costs of ancillary services, except for black start, are categorised as 'influenceable costs', meaning that Elia's profits are partially affected (to the tune of 15%) by increases and reductions in these costs, within certain limits (ranging from -€2 million to €6 million).

Other incentives

- *Market integration:* This incentive consists of three components: (i) enhancement of Belgium's import capacity; (ii) increase of social welfare generated by regional market coupling: both elements only have a positive impact on the net profit, with a maximum of €6 million for import capacity and a maximum of €11 million for social welfare (pre-tax). (iii) the profit (dividends and capital gains) resulting from Elia's financial participation in various other companies contributing to market integration (CASC, Coreso, HGRT, APX-ENDEX) - This is shared between Elia (60%) and future tariffs reductions (40%).

- *Investment programme:* This incentive is related to three objectives: (i) Elia's ex ante/ex post justification of the costs involved in each investment (this objective makes a contribution of up to €2.5 million to pre-tax profits); (ii) adherence to the planned dates for commissioning of the Stevin, Brabo, ALEGrO and fourth phase-shifting transformer (PST) projects (€1 million pre-tax per project commissioned on time); and (iii) production of a list of selected strategic projects, especially investments aimed at consolidating European integration (the "mark-up' incentive). The mark-up is calculated based on the actual cumulative amounts spent, whereby it must however be borne in mind that there are annual and project caps on amounts invested and that the incentive is calculated on the basis of the actual amounts invested. The mark-up applies in full when the OLO rate is 0.5% or less. It is reduced if the OLO rate is greater than 0.5% and decreases to 0 for an OLO rate of 2.16% or more. It should be noted that 10% of the mark-up amount obtained for each project must be repaid if the project is not completed by the stipulated deadlines or if the availability levels provided by the project after commissioning are unsatisfactory.

- *Continuity of supply*: Elia is entitled to an incentive calculated based on the Average Interruption Time (AIT) measured in the course of a year. The allocated sum is capped at €2 million (pre-tax).

- *Innovation:* This incentive is calculated based on the total costs incurred in obtaining innovation subsidies, up to a maximum sum corresponding to 50% of the amount of subsidies received or €1 million (pre-tax).

- *Discretionary incentive:* Each year, CREG sets the objectives Elia is expected to meet to receive this incentive. These mainly relate to the implementation of projects and mechanisms aimed at balancing supply and demand on the electricity market. This incentive contributes to the profit to the tune of up to €2 million (pre-tax).

Regulatory framework for the Modular Offshore Grid

The CREG approved 29th March 2018 the tariff methodology to include specific rules applicable to the investment in the Modular Offshore Grid. The main features are (i) a specific premium risk to be applied to this investment, (ii) the depreciation rate applicable to MOG assets, (iii) certain costs specific to the MOG being classified differently to the costs for onshore activities, (iv) the setting of the level of the costs will be defined based on the characteristics of the MOG assets and finally (v) dedicated incentives relative to management and operation of the offshore assets.

Settlement mechanism: deviations from budgeted values

The actual volumes of electricity transmitted may differ from the forecast volumes. If the transmitted volumes are higher (or lower) than those forecast, the deviation is booked to an accrual account during the year in which it occurs and this deviation from budgeted values creates a regulatory debt (or a regulatory receivable) which will be used to calculate the tariffs for the subsequent tariff period. Regardless of deviations between the forecast parameters for tariffs setting (Fair remuneration, Non-controllable elements, Controllable elements, Influencable costs, Incentive components, Cost and revenue allocation between regulated and non-regulated activities) and effective incurred costs or revenues related to these parameters, the CREG takes the final decision as to whether the incurred costs/revenue are deemed reasonable to be borne by the tariffs. This decision may result in the rejection of elements incurred and, in the event that such elements incurred are rejected, the amount will not be taken into account for the setting of tariffs for the next period. Despite the fact that Elia can ask for a judicial review of any such decision, if this judicial review were to be unsuccessful, a rejection may well have an overall negative impact Elia's financials.

Cost and revenue allocation between regulated and non-regulated activities

The tariff methodology for 2016-2019 features a mechanism enabling Elia to develop activities outside the Belgian regulated perimeter and whose costs are not covered by grid tariffs in Belgium. This methodology establishes a mechanism to ensure that the impact on Belgian grid users of Elia's financial participation in other companies which CREG does not consider part of the RAB (such as stakes in regulated or non-regulated activities outside Belgium, for example its shareholding in 50Hertz or EGI) is neutral.

2. Regulatory framework in Germany

2.1. Relevant legislation

The German legal framework is laid down in various pieces of legislation. The key law is the German Energy Act (*Energiewirtschaftsgesetz* – EnWG), which defines the overall legal framework for the gas and electricity supply industry in Germany. The EnWG is supported by a number of laws, ordinances and regulatory decisions, which provide detailed rules on the current system of incentive regulation, accounting methods and grid access arrangements, including:

- the Ordinance on Electricity Network Tariffs (*Verordnung über die Entgelte für den Zugang zu Elektrizitätsversorgungsnetzen* (*Stromnetzentgeltverordnung* – StromNEV)), which establishes, inter alia, principles and methods for the grid-tariff calculations and other obligations applying to grid operators;

- the Ordinance on Electricity Network Access (*Verordnung über den Zugang zu Elektrizitätsversorgungsnetzen (Stromnetzzugangsverordnung* – StromNZV), which, inter alia, sets out further detail of how to grant access to the transmission systems (and other types of grids) by way of establishing the balancing amount system (*Bilanzkreissystem*), the scheduling of electricity deliveries, control energy and other general obligations, e.g. congestion management (*Engpassmanagement*), publication obligations, metering, minimum requirements for various types of contracts and the duty of certain system operators to manage the balancing amount system for renewable energy;

- the Ordinance on Incentive Regulation (*Verordnung über die Anreizregulierung der Energieversorgungsnetze (Anreizregulierungsverordnung* – ARegV)), which sets out the basic rules for incentive regulation for TSOs and other system operators (as set out in more detail below). It also describes in general terms how to benchmark efficiency, which costs are included in the efficiency benchmarking, how to determine inefficiency and how this translates into yearly targets for efficiency growth.

2.2. Regulatory agencies in Germany

The regulatory agencies for the energy sector in Germany are the Bundesnetzagentur (BNetzA, or Federal Network Agency) in Bonn for grids to which over 100,000 grid users are directly or indirectly connected and the specific regulatory authorities in the various federal states for grids to which fewer than 100,000 grid users are directly or indirectly connected. The regulatory agencies are, inter alia, in charge of ensuring non-discriminatory third-party access to grids and monitoring the grid-use tariffs levied by the TSOs. 50Hertz Transmission and 50Hertz Offshore are subject to the authority of the Federal Network Agency.

2.3. Tariff setting in Germany

The current regulation mechanism is established in Germany by the ARegV. Under the ARegV, grid tariffs are defined to generate a pre-defined 'revenue cap' as determined by the Federal Network Agency for each TSO and for each regulatory period. The revenue cap is principally based on the costs of a base year, and is fixed for the entire regulatory period, except when it is adjusted to account for specific cases provided for in the ARegV. The grid operators are not allowed to retain revenue in excess of their individually determined revenue cap. Each regulatory period lasts five years, with the second regulatory period starting on 1 January 2014 and ending on 31 December 2018. Tariffs are public and cannot be the subject of negotiations with customers. Only certain customers (under certain set circumstances laid down in the relevant legislation) are allowed to agree to individual tariffs under Article 19 of the StromNEV (for example, in the case of sole use of a grid asset). The Federal Network Agency has to approve such individual tariffs.

For the purposes of the revenue cap, the costs incurred by a grid operator fall into two categories as follows:

- Permanently non-influenceable costs (PNIC): These costs are fully integrated into the 'revenue cap' and are fully recovered by the grid tariffs, albeit usually with a two-year time lag. They include return on equity, imputed trade tax, cost of debt, depreciation and operational costs (currently at a fixed rate of 0.8% of the capitalised investment costs of the respective onshore investments) for what are called investment measures. The cost of debt related to investment measures is currently capped at the lower value of the actual cost of debt and the cost of debt as calculated in accordance with published Federal Network Agency guidelines. Since 2012, the costs associated with these investment measures have been based on forecast values. The differences between the forecast values and the actual values are reflected in the regulatory account. In addition, Permanently non-influenceable costs include costs relating to ancillary services, grid losses and redispatch costs, as well as European initiatives and income from auctions. These costs and income are included in the revenue cap based on a procedural regulation mechanism set by the Federal Network Agency in accordance with Article 11(2) of the ARegV (FSV). The regulation process relating to ancillary services and grid losses costs gives the system operator an incentive to outperform the planned costs through bonus/malus mechanisms. Since the revision of the ARegV in 2016, also costs for the curtailment of renewable energy sources to relieve grid congestion are based on forecast values. Moreover, costs resulting from European projects of common interest (PCI) where a cost contribution of Germany has been decided can be included as PNIC, albeit with a two-year time lag.

- Temporary non-influenceable costs (TNIC) and influenceable costs (IC): These costs include return on equity, depreciation, cost of debt, imputed trade tax and other operational expenses and are subject to an incentive mechanism as set by the Federal Network Agency, which features an efficiency factor (only applicable to IC), a productivity improvement factor and an inflation factor (applicable to both TNIC and IC) over a five-year period. In addition, the current incentive mechanism provides for the use of a quality factor, but the criteria and implementation mechanism for this factor for TSOs are yet to be defined by the Federal Network Agency. The various defined factors give the TSOs the medium-term objective of eliminating what are deemed to be inefficient costs. As regards the cost of debt, the permitted cost of debt related to influenceable costs needs to be shown to be marketable;

As for return on equity, the relevant laws and regulations set out the provisions relating to the permitted return on equity, which is included in the TNIC/IC for assets belonging to the regulatory asset base and the PNIC for assets approved in investment budgets. For the second regulatory period (2014-2018), the return on equity is set at 7.14% for investments made before 2006 and 9.05% for investments made since 2006, based on 40% of the total asset value being regarded as 'financed by equity' with the remainder being treated as 'quasi-debt'. In 2016, the BNetzA determined the return on equity applicable for the third regulatory period (2019-2023); the values were significantly down from the second regulatory period, namely to 5.12% for investments made before 2006 and 6.91% for investments made since 2016. The return on equity is calculated before corporate tax and after imputed trade tax.

Separately from the revenue cap, 50Hertz is compensated for costs incurred related to its renewable energy obligations, including EEG and CHP/KWKG obligations and offshore liabilities. For this purpose, various surcharges have been implemented that are subject to specific regulatory mechanisms aimed at a balanced treatment of costs and income.

CHANGES IN TARIFF REGULATIONS

In 2016, a revision of the ARegV entered into force implementing various relevant changes, especially regarding the regulatory system for distribution system operators. However, TSOs are also affected as the revised ARegV changes several aspects relevant to PNIC such as the methodology for determining replacement portions in new investment measures (the status quo will be preserved for investment measures that have already been approved or applied for), the consideration of costs from the curtailment of renewable energy sources based on forecast values, and the consideration of PCI costs. Moreover, the revised ARegV substantiates the methodologies that can be applied to measure the individual efficiency of the four German TSOs, only allowing an international benchmark or a relative reference grid analysis to be used for this purpose.

As at 31 December 2018, 50Hertz had obtained approval for 94 of the 127 active investment-measure requests made since 2008.

Based on the total investment-budget request volume of €15 billion, the approved investment budget for the same date amounts to €10.4 billon.

TARIFFS

Grid access tariffs were calculated based on the respective revenue cap and published on 11 December 2018 for 2019. They have decreased by an average of 23% from 2018. One key driver for lowering the tariffs was the removal of the offshore costs into a new offshore surcharge (see section below). Furthermore, 50Hertz has actively and successfully proceeded with its grid extension projects; the commissioning of new lines made it possible to lower costs for redispatch and for curtailment of renewables and thus offset for the persistently high costs of grid expansion and allow a decrease in tariffs.

In recent years, the grid access tariffs of the four German TSOs have developed differently. This has mainly been driven by the different volumes of renewable energies installed in the control areas, leading to significantly higher tariffs in those control areas with higher levels of renewable energies. In July 2017, the Act for Modernisation of Grid Tariffs (*Netzentgeltmodernisierungsgesetz* – NEMoG) came into force. The NEMoG envisages the gradual harmonisation of the grid access tariffs of the four German TSOs as of 2019, culminating in uniform transmission tariffs in 2023. Moreover, the NEMoG eliminates 'avoided grid fees' (vNNE) for volatile RES generation and creates a new system for offshore grid connections, shifting the related costs from the tariffs to a surcharge from 2019.

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3. Regulatory framework for NemoLink Interconnector

The key features of the NemoLink Ltd. regulatory framework can be summarised as follows:

- A specific regulatory framework will be applicable to the Nemo Link interconnector from the date of operation. The framework is part of the new tariff methodology issued on 18 December 2014 by the CREG. The cap and floor regime is a revenue-based regime with a term of 25 years. The national regulators of the UK and Belgium (OFGEM and the CREG respectively) will determine the levels of the cap and floor ex-ante and these will remain largely fixed for the duration of the regime. Consequently, investors will have certainty about the regulatory framework during the lifetime of the interconnector.

- Once the interconnector becomes operational, the cap and floor regime will start. Every five years the regulators will assess the cumulative interconnector revenues (net of any market-related costs) over the period against the cumulative cap and floor levels to determine whether the cap or floor is triggered. Any revenue earned above the cap would be returned to the TSO in the UK (National Electricity Transmission System Operator or 'NETSO') and to the TSO in Belgium on a 50/50 basis. The TSOs would then reduce the grid charges for grid users in their respective countries. If revenue falls below the floor then the interconnector owners would be compensated by the TSOs. The TSOs will in turn recover the costs through grid charges. National Grid performs the NETSO role in the UK and the Issuer, the Belgian TSO, in Belgium.

- Each five-year period will be considered separately. Cap and floor adjustments in one period will not affect the adjustments for future periods, and total revenue earned in one period will not be taken into account in future periods.

- The high-level tariff design is as follows:

Regime length	25 years
Cap and floor levels	Levels are set at the start of the regime and remain fixed in real terms for 25 years from the start of operation. Based on applying mechanistic parameters to cost-efficiency: a cost of debt benchmark will be applied to costs to deliver the floor, and an equity return benchmark to deliver the cap.
Assessment period (assessing whether interconnector revenues are above/below the cap/floor)	Every five years, with within-period adjustments if needed and justified by the operator. Within-period adjustments will let operators recover revenue during the assessment period if revenue is below the floor (or above the cap) but will still be subject to true-up at the end of the five-year assessment period.
Mechanism	If revenue is between the cap and floor, no adjustment is made. Revenue above the cap is returned to end customers and any shortfall of revenue below the floor requires payment from grid users (via grid charges).

The cap and floor levels for Nemo Link will be decided when final project costs are known and will then be set for the length of the regime.

JOINT AUDITORS' REPORT ON THE CONSOLIDATED FINANCIAL STATEMENTS

KPMG Bedrijfsrevisoren CVBA
Luchthaven Brussel Nationaal 1K
1930 Zaventem
Belgium

Ernst & Young Bedrijfsrevisoren CVBA
De Kleetlaan 2
1831 Diegem
Belgium

Joint auditors' report to the general meeting of Elia System Operator NV/SA for the year ended 31 December 2018

As required by law, we report to you as joint statutory auditors of Elia System Operator NV/SA (the "Company") and its subsidiaries (together the "Group"). This report includes our opinion on the consolidated statement of the financial position as at 31 December 2018, the consolidated statement of profit or loss, the consolidated statement of profit or loss and comprehensive income, the consolidated statement of changes in equity and the consolidated statement of cash flows for the year ended 31 December 2018 and the notes (all elements together the "Consolidated Financial Statements") and includes as well our report on other legal and regulatory requirements. These two reports are considered as one report and are inseparable.

We have been appointed as joint statutory auditors by the shareholders meeting of 16 May 2017, in accordance with the proposition by the Board of Directors following recommendation of the Audit Committee and on recommendation of the workers council. Our mandate expires at the shareholders meeting that will deliberate on the annual accounts for the year ending 31 December 2019. We performed the audit of the Consolidated Financial Statements of the Group during respectively 18 consecutive years for KPMG Bedrijfsrevisoren CVBA and 17 consecutive years for Ernst & Young Bedrijfsrevisoren CVBA.

Report on the audit of the Consolidated Financial Statements

Unqualified opinion

We have audited the Consolidated Financial Statements of Elia System Operator NV/SA, which consists of the consolidated statement of the financial position as at 31 December 2018, the consolidated statement of profit or loss, the consolidated statement of profit or loss and comprehensive income, the consolidated statement of changes in equity and the consolidated statement of cash flows for the year ended 31 December 2018 and the notes, which show a consolidated balance sheet total of € 13,754.3 million and of which the consolidated income statement shows a profit for the year of € 307.1 million.

In our opinion the Consolidated Financial Statements of the Group give a true and fair view of the consolidated net equity and financial position as at 31 December 2018, as well as its consolidated results and its consolidated cash flows for the year then ended in accordance with the International Financial Reporting Standards as adopted by the European Union ("IFRS") and with applicable legal and regulatory requirements in Belgium.

Basis for the unqualified opinion

We conducted our audit in accordance with International Standards on Auditing ("ISAs"). Our responsibilities under those standards are further described in the "Our responsibilities for the audit of the consolidated financial statements" section of our report.

We have complied with all ethical requirements that are relevant to our audit of the Consolidated Financial Statements in Belgium, including those with respect to independence.

We have obtained from the Board of Directors and the officials of the Company the explanations and information necessary for the performance of our audit and we believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our opinion.

Key audit matters

Key audit matters are those matters that, in our professional judgment, were of most significance in our audit of the Consolidated Financial Statements of the current reporting period.

These matters were addressed in the context of our audit of the Consolidated Financial Statements as a whole and in forming our opinion thereon, and consequently we do not provide a separate opinion on these matters.

Calculation of net result

Description

As described in the notes 6.17 'Accruals and deferred income', 9.1.4 'Tariff Setting' and 9.2.3 'Tariff Setting in Germany' of the Consolidated Financial Statements, the net result of the Belgian and the German segments is determined by applying calculation methods set respectively by the Belgian federal regulator, the Commission for Electricity and Gas Regulation (the

"CREG") and the German federal regulator, the Federal Network Agency (the "BNetzA") (together the "Tariff Mechanisms").

Those tariff mechanisms are based on calculation methods that are complex and require the use of parameters (average interest rate on governmental bonds, the Beta of Elia's share, return on equity, ...), accounting data of the regulated activities (the Regulated Asset Base, the regulated equity, capital expenditure ("CAPEX"), subsidies received) and external operating data (such as hourly import capacity, consumer and producer surpluses).

Both Tariff Mechanisms make a distinction between income and expenses based on the control that the Group has over the expenses and income in each segment. The first type are the non-controllable elements for which deviations are fully passed on to future tariffs. The second type are the controllable elements that the Group can control, and for which under-and overspending is (partly) attributable to the shareholders.

Therefore, the calculation methods of the Group's net result are complex and require judgement from management, more particularly related to the use of correct accounting data, operating data, and parameters imposed by the regulators. The use of incorrect accounting and operating data, and deviations in used assumptions, can have a material impact on the Group's net result.

How the matter was addressed in our audit

Amongst others, we have performed the following procedures:

- Assessing the design and evaluating the operating effectiveness of key controls relating to the calculation of the net result, including those related to the completeness and accuracy of the underlying data used in the calculation, including management review controls;
- Evaluating the adequate and consistent classification of income and expenses by nature (controllable and non-controllable) as described in the Tariff Mechanisms;
- Performing independent mathematical recalculations of the regulated results based on underlying internal documentation and external information, and taking into account the formulas as described in the Tariff Mechanisms;
- Reading and evaluating the accounting implications of communications and decisions taken by the CREG and the BNetzA;
- Assessing the adequacy of notes 6.17, 9.1.4 and 9.2.3 of the Consolidated Financial Statements.

Capitalization of property, plant and equipment

Description

Given the current evolution in the electricity environment towards green energy production, Elia has very significant investment projects ongoing to connect these new productions sites on Elia's network. The timely and on-budget progress of these investment projects is one of the key performance goals for management as set by the Board of Directors. The progress of these network projects is equally a key performance indicator for investors as a key driver of their return on investment is the maintenance and expansion of the network. It is also an important quantitative and qualitative measure for the regulators. This is further explained and evidenced in Note 6.1 'PPE' of the Consolidated Financial Statements and in Note 4 'Segment reporting.

These assets are classified as Property, Plant and Equipment ("PP&E"), with a total capital expenditure of € 1,030.1 million in 2018 and a net book value of € 8,456.2 million as at 31 December 2018 or 61.5% of total balance sheet.

Elia's accounting policies describe that all maintenance expenses are considered to be operating expenses ("OPEX") and all new project or replacement investments are considered CAPEX. As network projects can include both maintenance and investments, the classification as either OPEX or CAPEX requires judgement from management. Given this judgement, the importance of the amount of PP&E on the total balance sheet, and its relevance to the users of the financial statements as well as the prominence in Elia's communication in its press releases and in investor's' presentations on the progress on new projects, this matter is considered a key audit matter.

How the matter was addressed in our audit

Amongst others, we have performed the following procedures:

- Assessing the design and evaluating the operating effectiveness of key controls, including management review controls, over the appropriate authorization of capitalization, the compliance of capitalization criteria used with the accounting policies, the correct classification of expenditures either as CAPEX or as OPEX as well as relevant IT application controls with the support of our IT specialists;
- Performing substantive analytical procedures on CAPEX and OPEX by comparing current year figures with the budgeted figures as approved by the regulator at the level of asset classes and projects;
- Testing a selection of additions to PP&E, including those under construction, and assessing whether the expenditure met the criteria for capitalization under IFRS as adopted by the European Union and the

Group's accounting policies and whether the CAPEX were allocated to the correct projects, including the assessment of management judgement in case of a project including both maintenance and investments;

- We have assessed the adequacy of note 4 and 6.1 of the Consolidated Financial Statements.

Responsibilities of the Board of Directors for the preparation of the Consolidated Financial Statements

The Board of Directors is responsible for the preparation of the Consolidated Financial Statements that give a true and fair view in accordance with IFRS and with applicable legal and regulatory requirements in Belgium as well as internal controls relevant to the preparation of the Consolidated Financial Statements that are free from material misstatement, whether due to fraud or error.

As part of the preparation of the Consolidated Financial Statements, the Board of Directors is responsible for assessing the Company s ability to continue as a going concern, and provide, if applicable, information on matters impacting going concern, The Board of Directors should prepare the financial statements using the going concern basis of accounting, unless the Board of Directors either intends to liquidate the Company or to cease business operations, or has no realistic alternative but to do so.

Our responsibilities for the audit of the Consolidated Financial Statements

Our objectives are to obtain reasonable assurance about whether the Consolidated Financial Statements are free from material misstatement, whether due to fraud or error, to express an opinion on these Consolidated Financial Statements based on our audit. Reasonable assurance is a high level of assurance, but not a guarantee that an audit conducted in accordance with the ISAs will always detect a material misstatement when it exists. Misstatements can arise from fraud or error and considered material if, individually or in the aggregate, they could reasonably be expected to influence the economic decisions of users taken on the basis of these Consolidated Financial Statements.

As part of an audit, in accordance with ISAs, we exercise professional judgment and we maintain professional scepticism throughout the audit. We also perform the following tasks:

- Identification and assessment of the risks of material misstatement of the Consolidated Financial Statements, whether due to fraud or error, the planning and execution of audit procedures to respond to these risks and obtain audit evidence which is sufficient and appropriate to provide a basis for our opinion. The risk of not detecting material misstatements is larger when these misstatements are due to fraud, since fraud may involve collusion, forgery, intentional omissions, misrepresentations, or the override of internal control;
- Obtaining insight in the system of internal controls that are relevant for the audit and with the objective to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the Group's internal control;
- Evaluating the selected and applied accounting policies, and evaluating the reasonability of the accounting estimates and related disclosures made by the Board of Directors as well as the underlying information given by the Board of Directors;
- Conclude on the appropriateness of Board of Director's use of the going-concern basis of accounting, and based on the audit evidence obtained, whether a material uncertainty exists related to event or conditions that may cast significant doubt on the Company or Group's ability to continue as a going concern. If we conclude that a material uncertainty exists, we are required to draw attention in our auditor's report to the related disclosures in the Consolidated Financial Statements or, if such disclosures are inadequate, to modify our opinion. Our conclusions are based on audit evidence obtained up to the date of the auditor's report. However, future events or conditions may cause the Company or Group to cease to continue as a going-concern;
- Evaluating the overall presentation, structure and content of the Consolidated Financial Statements, and of whether these financial statements reflect the underlying transactions and events in a true and fair view; and
- Obtain sufficient appropriate audit evidence regarding the financial information of the entities or business activities within the Group to express an opinion on the consolidated financial statements. We are responsible for the direction, supervision and performance of the group audit. We remain solely responsible for our audit opinion.

We communicate with the Audit Committee within the Board of Directors regarding, among other matters, the planned scope and timing of the audit and significant audit findings, including any significant deficiencies in internal control that we identify during our audit.

We provide the Audit Committee within the Board of Directors with a statement that we have complied with relevant ethical requirements regarding independence, and to communicate with them all relationships and other matters that may reasonably be thought to bear on our independence, and where applicable, related safeguards.

From the matters communicated with the Audit Committee within the Board of Directors, we determine

Audit report dated 5 April 2019 on the Consolidated Financial Statements
of Elia System Operator as of and
for the year ended 31 December 2018 (continued)

those matters that were of most significance in the audit of the Consolidated Financial Statements of the current period and are therefore the key audit matters. We describe these matters in our report, unless the law or regulations prohibit this.

Report on other legal and regulatory requirements

Responsibilities of the Board of Directors

The Board of Directors is responsible for the preparation and the content of the Board of Director's report and other information included in the annual report, the compliance with the legal and regulatory requirements regarding bookkeeping, as well as compliance with the Belgian Companies Code and with the Company's by-laws.

Responsibilities of the joint auditors

In the context of our mandate and in accordance with the additional standard to the ISA's applicable in Belgium, it is our responsibility to verify, in all material respects, the Board of Director's report and other information included in the annual report, as

Aspects relating to Board of Director's report and other information included in the annual report

In our opinion, based on specific work performed on the Board of Director's report, the Board of Director's report is consistent with the Consolidated Financial Statements for the same financial year and has been prepared in accordance with article 119 of the Belgian Companies Code.

In the context of our audit of the Consolidated Financial Statements, we are also responsible to consider whether, based on the information that we became aware of during the performance of our audit, the Board of Director's report and other information included in the annual report, being:

- Key figures 2018 (pg 18-19) included in the Activity report
- Management discussion (pg 112-119) included in the Activity report

contain material misstatements, or information that is incorrectly stated or misleading. In the context of the procedures carried out, we did not identify any material misstatements that we have to report to you. In addition, we do not express any form of reasonable assurance regarding the individual elements included in the annual report.

The non-financial information required by article 119 §2 of the Companies' Code has been included in the board of directors' s annual report on the consolidated financial statements, which is included in the chapter Sustainability reporting of the annual report. The Group has prepared this non-financial information based on the Global Reporting Initiative Standards ("GRI"). However, we do not comment on whether this non-financial information has been prepared, in all material respects, in accordance with the mentioned GRI. In addition, we do not express any form of assurance regarding the individual elements included in this non-financial information.

Independence matters

We have not performed any services that are not compatible with the audit of the Consolidated Financial Statements and we have remained independent of the Company and the Group during the course of our mandate.

The fees for additional services that are compatible with the audit of the Consolidated Financial Statements intended by article 134 of the Belgian Companies Code have been correctly disclosed and detailed in the disclosures to the Consolidated Financial Statements.

Other communications

- This report is consistent with our additional report to the Audit Committee as specified in article 11 of the regulation (EU) nr. 537/2014.

Brussels, 5 April 2019

The joint statutory auditors

Ernst & Young Bedrijfsrevisoren CVBA
Represented by

Patrick Rottiers
Partner*
*Acting on behalf of a BVBA

KPMG Bedrijfsrevisoren CVBA
Represented by

Alexis Palm
Partner

INFORMATION ABOUT THE PARENT COMPANY

Extracts from the statutory annual accounts of Elia System Operator NV/SA, drawn up in accordance with Belgian accounting standards, are given hereafter in abbreviated form.

Pursuant to Belgian company legislation, the full financial statements, the annual report and the joint auditors' report are filed with the National Bank of Belgium.

These documents will also be published on the Elia website and can be obtained on request from Elia System Operator NV/SA, Boulevard de l'Empereur 20, 1000 Brussels, Belgium. The joint auditors issued an unqualified opinion.

Statement of financial position after distribution of profits

ASSETS (in million EUR)	2018	2017
FIXED ASSETS	4,690.3	3,677.8
Financial fixed assets	4,690.3	3,677.8
Affiliated companies	4,560.9	3,572.3
Participating interests	4,560.9	3,572.3
Other enterprises linked by participating interests	129.4	105.6
Participating interests	129.2	105.4
Other participating interests	0.2	0.2
CURRENT ASSETS	2,397.2	1,893.9
Amounts receivable after more than one year	174.9	147.8
Trade receivables	0.0	8.8
Other amounts receivable	174.9	139.0
Inventories and contracts in progress	6.9	4.9
Contracts in progress	6.9	4.9
Amounts receivable within one year	2,052.0	1,585.3
Trade debtors	221.4	215.6
Other amounts receivable	1,830.6	1,369.8
Investments	0.0	30.0
Other term deposits	0.0	30.0
Cash at bank and in hand	143.1	117.9
Deferred charges and accrued income	20.4	8.0
TOTAL ASSETS	**7,087.5**	**5,571.7**

EQUITY AND LIABILITIES (in million EUR)	2018	2017
CAPITAL AND RESERVES	1,868.3	1,762.8
Capital	1,521.8	1,519.0
Issued capital	1,521.8	1,519.0
Share premium account	14.3	11.9
Reserves	175.4	174.7
Legal reserve	173.0	173.0
Untaxed reserve	2.4	1.6
Profit carried forward	156.7	57.2
PROVISIONS, DEFERRED TAXES	0.4	0.4
Provisions for risks and charges	0.4	0.4
Other risks and charges	0.4	0.4
LIABILITIES	5,218.8	3,808.5
Amounts payable after one year	3,648.1	2,839.2
Financial debts	3,648.1	2,839.2
Subordinated debentures	699.9	0.0
Unsubordinated debentures	2,142.3	2,343.4
Credit institutions	310.0	0.0
Other loans	495.8	495.8
Amounts payable within one year	875.1	391.9
Current portion of amounts payable after more than one year	500.0	0.0
Financial debts	50.0	0.0
Credit institutions	50.0	0.0
Other loans	8.3	4.3
Trade debts	252.3	186.4
Suppliers	242.9	179.3
Advances received on contracts in progress	9.4	7.1
Amounts payable regarding taxes, remuneration and social security costs	9.2	8.7
Taxes	0.6	0.7
Remuneration and social security	8.6	8.0
Other amounts payable	156.7	192.5
Accrued charges and deferred income	594.3	577.4
TOTAL EQUITY AND LIABILITIES	**7,087.5**	**5,571.7**

Income statement

(in million EUR)	2018	2017
OPERATING INCOME	**922.7**	**799.4**
Turnover	908.0	792.2
Increase/(decrease) in inventories of finished goods, works and contracts in progress	2.0	(0.9)
Other operating income	12.7	8.1
OPERATING CHARGES	**(840.0)**	**(704.7)**
Services and other goods	(798.7)	(666.5)
Remuneration, social security costs and pensions	(41.2)	(38.1)
Amounts written off stocks, contracts in progress and trade debtors: appropriations/(write-backs)	(0.1)	(0.2)
Provisions for liabilities and charges: appropriations/(uses and write-backs)	0.0	0.0
Other operating charges	(0.0)	(0.0)
OPERATING PROFIT	**82.7**	**94.8**
Financial income	**221.9**	**98.0**
Income from financial fixed assets	212.3	90.4
Income from current assets	9.6	7.6
Non-recurring financial income	0.0	0.0
Financial charges	**(102.5)**	**(88.9)**
Debt charges	(93.8)	(86.7)
Other financial charges	(8.7)	(2.2)
Non-recurring financial charges	0.0	0.0
PROFIT FOR THE PERIOD BEFORE TAXES	**202.2**	**103.8**
Income taxes	**(0.6)**	**(6.9)**
Income taxes	(0.6)	(6.9)
PROFIT FOR THE PERIOD	**201.6**	**96.9**
Transfer to untaxed reserves	(0.7)	(0.8)
PROFIT FOR THE PERIOD AVAILABLE FOR APPROPRIATION	**200.9**	**96.1**

Reporting parameters

Registered office

This report is limited to Elia System Operator and Elia Asset, which operate as a single economic entity under the names Elia and 50Hertz Transmission.

The registered office of Elia System Operator and Elia Asset is located at
Boulevard de l'Empereur 20
1000 Brussels, Belgium

The registered office of 50Hertz GmbH is established at
Heidestraße 2
D-10557 Berlin, Germany

The registered office of Eurogrid International is located at
Rue Joseph Stevens, 7
1000 Brussels, Belgium

The registered office of Elia Grid International is located at
Rue Joseph Stevens, 7
1000 Brussels, Belgium

Reporting period

This annual report covers the period from 1 January 2018 to 31 December 2018.

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Ce document est également disponible en français.
Dit document is ook beschikbaar in het Nederlands.

We would like to thank everyone who contributed to this annual report.

Scan the QR code to visit our download centre.

Cover picture: inauguration event at the Nemo Link converter station in Bruges.

On December 5th 2018, Elia and National Grid inaugurated the first submarine electricity interconnector between Belgium and the United Kingdom. The commissioning of Nemo Link facilitates the integration of renewable energies while offering additional security of supply and lower priced electricity. The inauguration of the Nemo Link interconnector marked the culmination of an enormous project that took nearly 10 years to complete. Connecting the Richborough and Herdersbrug (see cover picture) converter stations via a 140 km cable, was an extremely complex undertaking that entailed many technical challenges. It never could have succeeded without the determined efforts of the men and women who worked together to overcome all of these difficulties.

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Time to accelerate

Sustainability Report 2018

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Regulated information, published on 12 April 2019 after trading hours.

1. Elia Group

1.1. Introduction

Elia Group has the ambition to act in the interest of society for all of its activities. Therefore, the careful preparation of the annual Sustainability Report is important. For the first time, we present a report integrating the information of both Elia and 50Hertz.

This Sustainability Report is a tool for managing Elia Group's CSR performance and for integrating sustainability into our strategy.

50Hertz started in 2016 with the German sustainability codex (DNK) based on GRI standards.

Elia followed in 2017 using the following international sustainability standards to identify a number of relevant topics on which to build a robust sustainability programme:

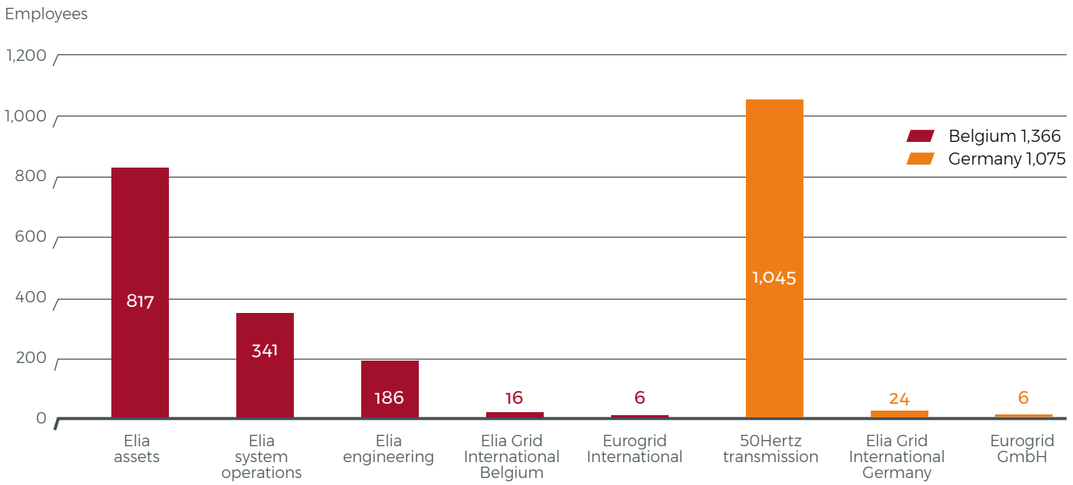
- Global Reporting Initiative (GRI) - sector supplement Electric Utilities
- Sustainability Accounting Standards Board (SASB) - Infrastructure Standards - Electric Utilities
- ISO 26000 standards

In 2018, we progressed in the alignment of reporting methods between Elia and 50Hertz, following the same structure and GRI disclosures.

Some differences persist and in the next reporting phase, we plan to further align our sustainability reporting and to work on joint initiatives. More information on Elia Group can be found in the Activity Report 2018 on pages 6 - 14.

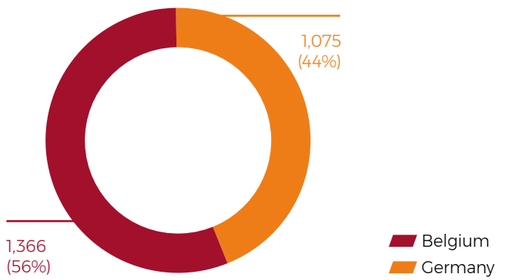
1.2. Elia Group companies GRI 102-1, GRI 102-7

1.2.1. Breakdown by company and number of employees



Any reference hereunder to Elia, includes the following companies: Elia Assets (EA), Elia System Operator (ESO) and Elia Engineering (EE).

1.2.2. Breakdown by country



When analysing the split of employees between Germany and Belgium within Elia Group, we note that Belgium represents 56% of the Elia Group workforce, while Germany represents 44%.

1.2.3. Breakdown by responsibility level and gender GRI 405-1

		2016		2017		2018	
		Men	Women	Men	Women	Men	Women
Total number of employees in Belgium split per level	Director	4	3	5	3	5	3
	Senior Manager	25	5	28	5	25	4
	Direct leaders	352	89	405	105	423	117
	White collars	643	131	656	143	652	137
	Blue collars	0	0	0	0	0	0
	Total number of Belgian employees	**1,024**	**228**	**1,094**	**256**	**1,105**	**261**
Total number of employees in Germany split per level	Director	7	0	6	0	6	0
	Senior Manager	35	5	34	6	36	4
	Direct leaders	73	14	78	15	66	14
	White collars	663	196	699	197	725	224
	Blue collars	0	0	0	0	0	0
	Total number of German employees	**778**	**215**	**817**	**218**	**833**	**242**

GRI 102-41

Overall, we can see that 22% of German and 19% of Belgian employees are female. For direct leaders and above, 15% of German and 21% of Belgian leaders are female.

In 2018, 81.2% of German employees and all Belgian employees were covered by collective bargaining agreements.

Note that all technicians in Belgium and Germany are considered white-collar workers. Consequently, there are no blue-collar workers.

2. Elia in Belgium

2.1. Sustainability management

2.1.1. Business model

GRI 102-46, SDG 9, GRI 102-2, GRI 102-6

Elia is Belgium's high-voltage transmission system operator (30 kV to 400 kV), operating more than 8,600 km of lines and underground cables throughout Belgium. Elia covers 11,267,910 inhabitants and has several consumers directly connected to its network, which are mostly large industrial companies.

Elia is a regulated company. Its public mission and responsibilities are an integral part of the legislation governing the electricity market (see link hereunder). Furthermore, it's controlled by the CREG*, the federal regulator for the electricity market with regard to its very high voltage grid (110 kV -400 kV) and tariffs, and by the VREG*, CWAPE* and BRUGEL*, the regional regulators for the electricity market with regard to its high voltage grid (30 kV-70 kV).

Elia has a 'natural monopoly' of the grid in Belgium, including the offshore grid. Elia's main responsibilities concern the development and maintenance of the grid, the management of the balance between the consumption and generation of energy and the facilitation of access to the market. Elia also develops innovative solutions in order to integrate renewables into the system, to balance the network and to put the consumer really at the centre of the future energy system.

All the products and services are set out in detail in product sheets, which are available online or can be ordered as a hard copy on the 'Product sheets' page.

Please consult our website for a detailed overview of Elia's legal framework.

Scan the code to access the product sheets on our website.

2.1.2. Location of headquarters and operations in Belgium

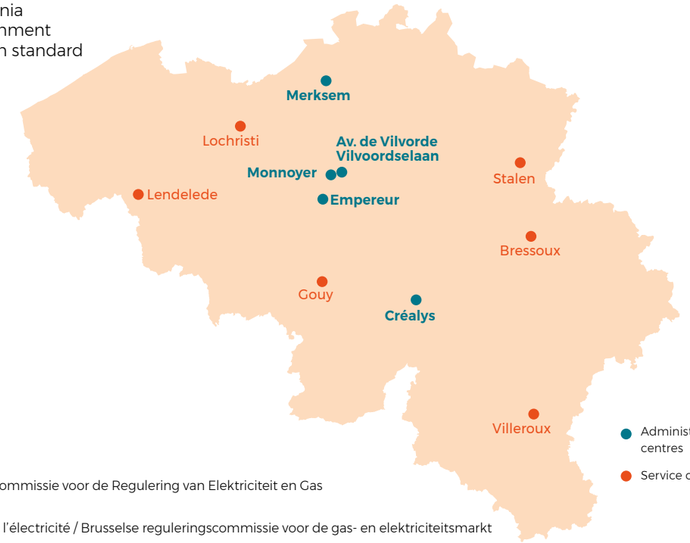
GRI 102-3, GRI 102-4

All the headquarters of Elia are located in Brussels.

To cover its activities in the entire country, Elia has several administrative centres and service centres in Belgium.

Our Monnoyer site in Brussels is Breeam certified and the BREAAM certification of our Crealys site in Wallonia is ongoing. BREEAM (Building Research Establishment Environmental Assessment Method) is the British standard for sustainable buildings.

More information about our offices can be found on our website.



* CREG: Commission de Régulation de l'Électricité et du Gaz/ Commissie voor de Regulering van Elektriciteit en Gas
VREG: Vlaamse Regulator van de Elektriciteits- en Gasmarkt
CWAPE: Commission wallonne pour l'Energie
BRUGEL: Régulateur bruxellois pour les marchés du gaz et de l'électricité / Brusselse reguleringscommissie voor de gas- en elektriciteitsmarkt

2.1.3. Roles and responsibilities

GRI 102-19, GRI 102-20

Top down

Safety is the priority of the Elia approach to sustainability. The head of the Health and Safety department is Stéphane Otto, who reports directly to the CEO. More information on actions and results can be found in the Safety section.

The Chief Community Relations Officer, Ilse Tant, reporting to the CEO, sits within the Executive Committee and bears the responsibility for sustainable and climate-related issues and the overall sustainability vision of the company. Key responsibilities are the facilitation of the decarbonisation of the energy grid by aligning the interests of the company and its stakeholders. All climate related reporting and sustainable communication to external stakeholders is coordinated by the Community Relations department.

Within the Community Relations department, the sustainability responsibility lies within the Environment & CSR department. Its role is to define standards, policies and best practices and to develop supporting tools in different areas: environment, corporate social responsibility and public acceptance. Regular structural consultation between all levels of the organisation on environmental issues ensures that the departments work closely with each other to implement the environmental policy and to meet Elia's environmental objectives.

The Sustainability Manager, Igor Lefebvre, heads the Environment & CSR department and reports to the Chief Community Relations Officer on a monthly basis about the progress of the projects, including the progress made on climate-related challenges. The Environment & CSR department has direct responsibility for the environmental performance, including carbon emissions.

Bottom up

A network of ambassadors was created at Elia during the summer of 2018. Developed at the initiative of passionate colleagues, the group shares ideas, tips and tricks, successes and events, and organises workshops within the company through a cooperative process. Ideas are also shared via the intranet, allowing other interested colleagues to participate. Two workshops were held in 2018 and lots of ideas and the first concrete project were the result. A real sustainability dynamic has been created within the company.

2.1.4. Membership of associations and external initiatives

GRI 102-13

International level

Elia belongs to associations regrouping transmission system operators (TSOs) such as CORESO and ENTSO-E at European level and GO15 and CIGRE at international level.

Elia Group is an active member of a number of other associations and gladly makes its expertise available to develop the energy system of the future.

These associations include the following:

RENEWABLES GRID INITIATIVE

Elia has been a member of the Renewables Grid Initiative (RGI), a coalition of environmental organisations (such as the WWF and Birdlife) and system operators, for several years. Their shared aim is to generate consensus around the grid expansion needed to integrate renewables, while respecting biodiversity and the environment. In 2018, the RGI activities focused on the integration of a high proportion of renewables into the grid and how this affects the TSOs. Belgian NGOs were present at some of these workshops and this clearly improved their understanding of grid development issues. In addition, RGI continued to serve as a knowledge exchange organisation for its members. RGI held several webinars (e.g. on community compensation) and started to draft a common vision on the undergrounding of 400kV connections.

ENERGY WEB FOUNDATION

The Energy Web Foundation (EWF) is a global non-profit organisation focused on accelerating blockchain technology across the energy sector.

The growth in renewable energy generation is making it increasingly difficult for TSOs to guarantee that generation and consumption are balanced at all times. Power generation from renewables fluctuates constantly, so flexible reserves that can be activated swiftly (like batteries, demand management via heat pumps, etc.) are needed to ensure a steady balance. Elia is exploring the opportunities offered by blockchain technology as a payment system to address the business side of such complex, rapid transactions.

Elia Belgium, SettleMint and Actility launched one of Europe's first blockchain pilot projects in the energy sector in 2018.

Belgian level

Elia is a member of The Shift where some 350 companies, NGOs and other organisations meet to co-create sustainable business models.

Elia is also a member of several professional federations and local associations.

The following table gives an overview of our memberships at international and Belgian level:

	Energy	Climate	Environment	Human Rights
WORLD ENERGY COUNCIL	✓			
Conference Internationale des Grands Réseaux Electriques (CIGRE)	✓			
Go15	✓			
Centre on Regulation in Europe	✓			
European Network of Transmission System Operators for Electricity (ENTSO-E)	✓		✓	
Coordination of Electrical System Operators	✓			
Renewables Grid Initiative	✓	✓	✓	
Energy Web Foundation	✓	✓		
The Shift	✓	✓	✓	✓
Synergrid	✓			
Osiris	✓			
Conseil des Gestionnaires des Réseaux de Bruxelles	✓			
Vlaamse Raad van Netwerkbeheerders	✓			
Powalco	✓			
Brussels Enterprises Commerce and Industry	✓		✓	
Fédération des Entreprises de Belgique	✓		✓	
Union Wallonne des Entreprises	✓		✓	
Vlaams Netwerk van Ondernemingen	✓		✓	
AGORIA	✓		✓	
Communauté Portuaire Bruxelloise	✓		✓	
COGEN Vlaanderen	✓	✓	✓	

2.1.5. Values, principles, standards and codes of conduct

GRI 102-16

Our vision, strategy and the 6 building blocks are described in the Activity Report 2018 on pages 14-15. Here we briefly describe our main values. They reflect fundamental principles that are deeply rooted within Elia.

Safety always comes first

Safety always comes first, everywhere and for everyone! As a company, we constantly invest in safety and expect our staff (both in the field and at administrative sites), our subcontractors, our colleagues - the distribution system operators - and all others to work safely and responsibly at all times.

Serving the community

Elia wants to play its central role in the sector to the full and create value for society. Elia's employees keep that aim in mind in everything they do, constantly asking themselves what the society wants, and how they can help make improvements.

Targeting performance

Elia's employees strive for maximum efficiency and quality so as to attain or, better yet, surpass their targets. They are results-oriented and deliver projects and services on time.

In a changing energy sector, four 'revamped' aspirational values are the additional key to achieving Elia's strategy. They are reflected in the behaviour and attitude of our staff.

We are entrepreneurial

Our staff work proactively and take initiatives with a view to improving how they work and exploring new ways of doing things.

We collaborate

Elia values collaboration, both within the company and with external partners. Our staff share their expertise and their information and question each other, thus enabling their ideas to mature. They seek fruitful collaborations and win-win partnerships.

We are accountable

All of our staff take full responsibility for their projects and tasks. They achieve their motivating, ambitious targets and work hard on their projects until they are completed.

We are agile

In a world of constant change, our staff embrace new developments, are proactive and persevere.

GRI 102-17, GRI 205-1

Those values are also the basis of our Ethical Code underlying all the activities of Elia System Operator, Elia Asset and Elia Engineering.

Elia's integrity and ethics are a crucial aspect of our internal control environment. The Management Committee and management regularly communicate about these principles in order to clarify the mutual rights and obligations of the company and its employees. These rules are disseminated to all new employees, and compliance with them is formally included in employment contracts. The Code of Conduct also helps to prevent employees from breaching any Belgian legislation on the use of privileged information or market manipulation and suspicious activities. Management consistently ensures that employees comply with internal values and procedures and – where applicable – take any actions deemed necessary, as laid down in the company regulations and employment contracts.

The Ethical Code defines what Elia regards as correct ethical conduct and sets out the policy and a number of principles on the avoidance of conflicts of interests. Acting honestly and independently with respect to all stakeholders is a key guiding principle for all of our employees. Elia's Ethical Code expressly states that the Group prohibits bribery in any form, misuse of prior knowledge and market manipulation. This is confirmed by the Elia Code of Conduct. Elia and its employees do not use gifts or entertainment to gain competitive advantage. Facilitation payments are not permitted by Elia. Disguising gifts or entertainment as charitable donations is also a violation of the Ethical Code.

Moreover, the Ethical Code prohibits all forms of racism and discrimination, promotes equal opportunities for all employees, and ensures the protection and confidential use of IT systems. All parties involved in procurement must abide by Elia's code of Purchasing Ethics and all associated regulations. Elia's code of Purchasing Ethics is published internally and externally and is based on four pillars: confidentiality, non-discriminatory treatment of suppliers, transparency, and avoidance of conflicts of interest. The management of the employees involved in the procurement and payment processes regularly provides opportunities for training and awareness-raising on these topics.

By virtue of its legal status as a power transmission system operator, Elia is subject to a large number of statutory and regulatory rules setting out three fundamental principles: non-discriminatory conduct, confidential processing of information, and transparency towards all electricity market players as regards non-confidential market information. With a view to meeting these specific obligations, Elia has drawn up an Engagement Programme, which has been approved by the Corporate Governance Committee. The Compliance Officer reports annually to the relevant regulatory bodies in this regard.

Any violations of these codes can be reported to the Compliance Officer, who handles them objectively and confidentially. The Compliance Officer declares that no such violations were reported by internal employees or external stakeholders in 2018.

Internal Audit's annual programme includes a number of actions and verification audits designed to act as specific safeguards against fraud. Any findings are systematically reported to the Audit Committee. In 2018, no relevant findings relating to fraud were reported in the specific audit reviews of the fraud risks in the financial and purchasing processes.

GRI 419-1

Moreover, during the reporting year the company did not receive any significant fines or non-monetary sanctions for non-compliance with laws and/or regulations in the social and economic area.

2.1.6. Anti-corruption

GRI 205-2

The Ethical Code sets out Elia's understanding of correct ethical conduct and makes it clear that the Company complies with the law and does not tolerate corruption. These principles flow into organisational measures that are binding for the whole Company.

Since 2018, Elia has had a policy in place that regulates the external reporting point for business integrity breaches. In the case internal staff and external stakeholders anonymously report suspected integrity violations, an internal committee is convened immediately to deal with the case in hand and take further internal action if necessary. The committee reports to the management of Elia annually and on an ad hoc basis as required.

In 2018, the external reporting point did not receive any tip-offs about corruption. Elia also regularly provides all employees involved in the procurement process and financial process with training on the basics of procurement, anti-corruption and compliant behaviour.

2.1.7. Risk management

GRI 102-30, GRI 201-2

As part of its systematic risk management, Elia regularly surveys and assesses the following risk areas:

- Health and Safety
- Profit and loss (not recoverable loss)
- Cash Flow
- Reputation
- Continuity of supply

Elia aims to avoid risks to the Company's continued existence, to reduce risk positions as much as possible where feasible and to optimise the opportunity/risk profile. Risk guidelines set down how risks are systematically identified, recorded, assessed and monitored on a quarterly basis.

Risk workshops are held on a regular basis with the risk owners (mostly the department heads) and the corporate risk manager meets with the management to discuss the most significant risks and risk-related issues. In the area of CSR, for example, these are occupational safety, and new requirements from environmental legislation. Additionally, the risks assessed and monitored will be extended related to risk based on climate change.

2.1.8. Security

Critical infrastructure

A completely new security policy for high-voltage substations has been devised and validated by the Elia Executive Committee. We want to significantly boost the security of our high-voltage substations. First of all, we wish to pay extra attention to our critical infrastructure, in regard to which we will strive to limit all potential threat scenarios as far as possible. Secondly, in the next few years we will equip other crucial, security-sensitive high-voltage substations with a security concept. Lastly, Elia will also introduce an online access control system at all of its sites with a view to monitoring, in real time, access to high-voltage substations. This new policy shall apply from January 2019 to 2024.

Elia Security has also drafted the beginnings of a framework for a public-private partnership. This involves the confidential exchange of information with a range of public stakeholders (e.g. police forces, intelligence agencies, FPS Interior). The potential expansion of the legal framework on the screening of persons is vital here. Elia wholly intends to apply this framework in its most sensitive infrastructure, primarily the control centres.

Elia's special focus on innovation allows it to respond to new (future) security challenges and the new methods adopted by criminals. Following analysis, a specific derogation has been proposed concerning the use of drones that can patrol high-voltage lines outside the field of vision. The initial test flights are scheduled for 2019, provided that the derogation is approved.

IT

The further reinforcement of the robustness, security and protection of our IT and network systems is a key recurring component in preserving the confidentiality of critical data. A number of tangible measures implemented in 2018 in this field are listed below:

- Elia's external perimeter (Elia's public IP addresses) undergo an external scan every month with a view to assessing any vulnerabilities in the internet applications to potential cyber risks.
- At Internal Audit's request, in 2018 an external review was conducted into the operation of IT security and the application of security concepts within the server team, end user devices team and network team.
- A project has been rolled out to implement the GDPR and the necessary initiatives have been taken to provide even better protection for personal data as per this new legal framework.

Best practices and information are exchanged at a national level in the utility sector (Synergrid), as well as on a European level (ENTSO-E). We evaluate the threat landscape and evolutions to be able to put the right risk mitigation measures into action.

2.1.9. Materiality matrix

GRI 102-15

The materiality matrix determines the relevant sustainability topics for the Elia management and stakeholders and was prepared with the department heads from Elia Belgium and with input from 50Hertz.

In addition, the topics brought up in the existing stakeholder channels were mapped with this materiality matrix to cross-check it and make sure it is complete.

In a subsequent phase, this materiality matrix will be used as a basis for engaging with external stakeholders.

Thirty-one topics around six sustainability enablers

We listed 31 topics, and we clustered them around the following sustainability enablers: Transmission Services, Organisational Structure, Employees, Environment, Fair Operating Practices and Community Involvement.

TRANSMISSION SERVICES

1. Availability, Reliability and Future power system
2. Demand-side Management
3. Research and Development
4. Systemic risk management (Disaster/ Emergency planning and response)

ENVIRONMENT

17. Environmental Management System
18. Waste and Hazardous Materials Management
19. Air pollution
20. Greenhouse Gas emissions
21. Energy Resource planning
22. Sustainable products & services
23. Biodiversity impacts
24. Protecting consumers' health and safety

ORGANISATIONAL GOVERNANCE

5. Organisational Structure & decision making
6. Board Independence
7. Business ethics

FAIR OPERATING PRACTICES

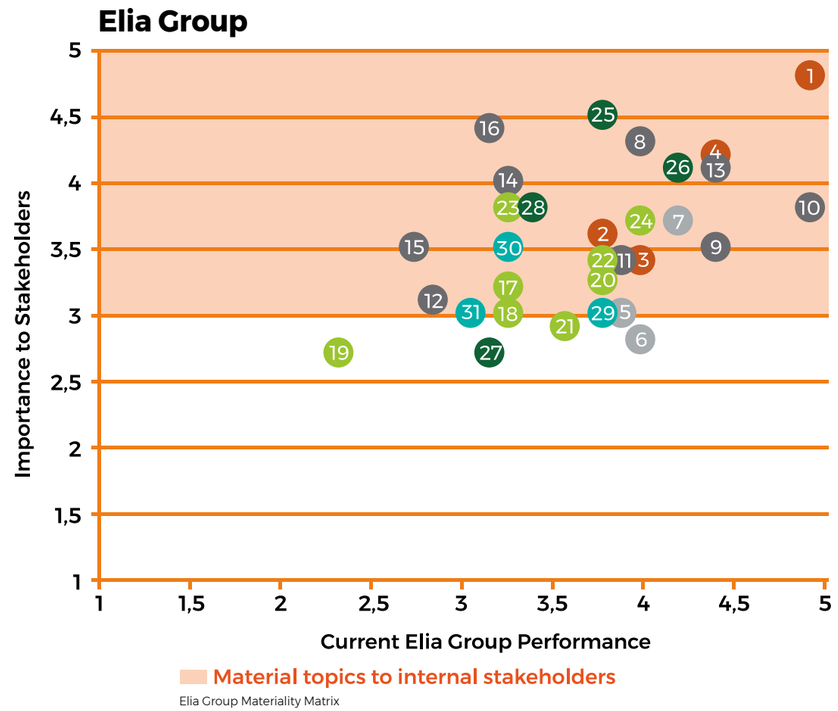
25. Corruption and Bribery
26. Legal & regulatory environment
27. Promoting social responsibility in the value chain/Supply chain
28. Respect for property rights

EMPLOYEES

8. Conditions of work and social protection
9. Social dialogue and stakeholder relations
10. Employee Health, safety and wellbeing at work
11. Human development and training in the workplace
12. Diversity
13. Accident & Incident Management
14. Discrimination and vulnerable groups
15. Economic, social and cultural rights
16. Fundamental principles and rights at work

COMMUNITY INVOLVEMENT

29. Community involvement (including education and culture)
30. Employment creation and skills development
31. Technology development impacting community



Elia Group Materiality Matrix

The results of the materiality matrix are summarised in Elia Group Materiality Matrix. The importance of the material topics is shown on the vertical axis, while the horizontal axis indicates Elia's performance in those areas.

GRI 103-1

Topics that are considered less material by internal stakeholders are the following:

- 6 Board independence is rated less material due to the fact that this is a mature process at Elia. A clear corporate governance charter and internal procedures exist and are embedded in the organisation.
- 19 Air pollution is considered as less material because this is not relevant for a transmission system operator. Elia's main activity is to transport electrical power using a fixed infrastructure.
- 21 The internal stakeholders also rated Energy Resource Planning less material. This is potentially because the main part of its own electricity use is already from green electricity. Moreover, Elia's own electricity use can be considered immaterial versus the energy transported on Elia's grid.
- 27 Promoting social responsibility in the value chain/supply chain is also considered less material as the main part of the spend is in Europe, which has a high level of maturity concerning social responsibility topics (e.g. low risk of child labour, minimum wage).

A number of topics are borderline and will progressively be introduced in the following years:

- 5 Organisational Structure & decision making
- 18 Waste and Hazardous Materials Management
- 29 Community involvement (including education and culture)
- 31 Technology development impacting community.

GRI 102-47

All the other topics are considered as material with a special focus on:

- 1 Availability, reliability and future of the power system
- 4 Systematic risk management
- 13 Accident & incident management
- 10 Employee health, safety and wellbeing at work

More information on Elia Group's 4 most material topics can be found on page 16 of the Elia Group Activity Report 2018.

Sustainability ambitions at Belgian level

At Elia Belgium, the following sustainability ambitions were defined by the Executive Committee in November 2017. They will be reviewed in 2019.

	AMBITIONS FOR 2020	AMBITIONS FOR 2050
Energy grid	Develop a grid which enables the integration of 13% renewable energy or alternatives within the product mix at Belgian level and support the target of 20% renewable energy at European level.	Integrate renewables into both centralised and decentralised systems. Develop strong grid interconnections together with neighbouring countries. Use digitalisation and 'smarter grid' market design to exploit resources in an efficient way.
	Ensure that the yearly average interruption time does not exceed the maximum AIT of 2.55 min.	
Safety	Embed a safety culture at Elia by increasing the safety awareness of employees and contractors in order to: · ensure that every employee and contractor knows the principles of the GO FOR ZERO programme · ensure Elia's safety instructions are properly applied · avoid electrical near misses or incidents · increase reporting maturity and reduce the number of injuries.	Long-term ambitions to be defined at a later stage.
Employees	Develop an extended talent and organisational development programme. Move towards a new corporate culture with a new vision and ambition. Create a high-performance organisation to empower people to take more initiatives and enable quicker decision-making.	
Environment	Deliver a positive impact on society by realising further grid development enabling proper integration of renewable energy into the EU grid of the future. 20% reduction in CO_2 emissions from our own operations (compared to 2010).	Long-term ambitions to be defined at a later stage.
Community	We deliver the infrastructure of the future and innovate in services that enable the pathway to a reliable and sustainable power system, with the interest of the community at the heart of every decision. The Elia Group is constantly expanding its dialogue with stakeholders and keeps them informed throughout the entire duration of its projects. We perform the necessary studies and analyses and act as an advisor to the different governments on implementing the energy transition in the interest of society.	

2.1.10. Stakeholders Overview

Elia's engagement with stakeholders

GRI 102-40

Depending on the topics, Elia has contacts with public authorities and administrations, political parties, local citizens, civil society (associations representing environmental, economic, agricultural or other interests) and clients directly connected to its network.

GRI 102-42

The identification of stakeholders is related to the specific strategic topics that are chosen. Within the company a Corporate Reputation Committee has been created, presided over by the Chief External Relations Officer in order to follow up, for selected issues, on the different stakeholder contacts organised by the concerned departments within Elia.

Elia has many stakeholders' initiatives. The method and frequency of engagement per stakeholder group and the link to the material topics have been summarised on page 17 of the Elia Group Activity Report 2018.

Elia's Users' Group

GRI 102-21, GRI 102-43

Elia regularly organises Users' Group meetings and working groups. The Users' Group provides a platform that allows Elia to maintain an ongoing dialogue with its main customers and partners.

Every year, about four Users' Group plenary meetings are scheduled to inform the market participants and stakeholders about important and strategic topics related to our business. In support of these plenary meetings, there are three working groups which usually meet four times per year (more if necessary). They consist of the following:

- System Operation and European Market Design Working Group: This working group mainly addresses topics related to the operation of the high-voltage grid and capacity calculation, as well as initiatives and developments linked to the European integration of the electricity markets.
- Belgian Grid Working Group: This working group addresses issues associated with the Elia grid and related mechanisms, products and services that are of interest to Elia's customers.
- Balancing Working Group: This working group mainly addresses operational, technical and market-related issues in order to prepare for the challenges Elia's balancing market will face in the coming years.

Under the WG Balancing and WG Belgian Grid there are four task forces. The task forces are set up on an ad hoc basis to handle specific issues when necessary. Currently, two task forces are active:

- Implementation of Strategic Reserves Task Force: This task force is aimed at informing and consulting market players and stakeholders about all relevant issues linked to the implementation of strategic reserves.
- CIPU Redesign (iCAROS) Task Force: This task force aims to discuss topics related to future asset coordination procedures with the relevant stakeholders.

All information regarding the Elia Users' Group and the meetings of the different working groups is available on the Elia website.

An overview of the most relevant topics can be found in the table below.

External initiatives

GRI 102-12

External activities such as the yearly Stakeholder Day, the collaboration with Be Planet and, in particular, the initiative developed together with the distribution system operators to create a coalition with stakeholders for building the internet of energy and, as such, putting the consumer in the centre are described in the Activity Report 2018.

Users' Group	Session	Link to material topic
Plenary meetings	• **12.02.2018** – Federal Grid Code and General requirements	Transmission services
	• **25.04.2018** - Elia study 'Electricity scenarios for Belgium towards 2050': additional calculations	Transmission services Environment Community Involvement
	• **25.04.2018** – Federal Grid Code and General Requirements: Feedback public consultation	Transmission services
	• **25.04.2018** – Flow Based Improvements	Transmission services
	• **07.06.2018** – Federal Development Plan	Transmission services Environment Community Involvement
	• **07.06.2018** – 20% minimum RAM	Transmission services
	• **06.12.2018** – Internet of Energy (IoE)	Transmission services Demand-side Management
	• **06.12.2018** – Overview Public consultations 2019	Community Involvement

2.2 Grid

SDG 9

2.2.1. Distance covered by Elia's high-voltage grid in Belgium

G4-EUS-EU4

Voltage (kV)	**Underground cabling (km)**	Difference with 2017 (km)	**Overhead lines (km)**	Difference with 2017 (km)
400kV (DC)	9	9		
380kV	40	20	919	0
220kV	47	42	301	0
150kV	573	59	1,973	-2
110kV	0	0	8	0
70kV	293	-9	2,290	-21
36kV	1,938	-30	8	0
30kV	84	-24	22	0
Total	**2,984**	**67**	**5,521**	**-23**

The grid length is stable, with an increase of underground cables and a shift toward higher tension lines. A special mention is due to our new 400 kV DC line: Nemo Link.

2.2.2. Number of substations and converter locations

	2016	**2017**	**2018**	**difference with 2017**
Number of substations >=150 kV	297	298	297	-1
Number of substations <150 kV	518	516	516	0
HVDC converter locations	0	0	1	1
Total	**815**	**814**	**814**	

A site is considered a substation when there is electrical equipment belonging to Elia installed on site.

The voltage level attributed to the substation is the maximum voltage level of the Elia equipment present on site.

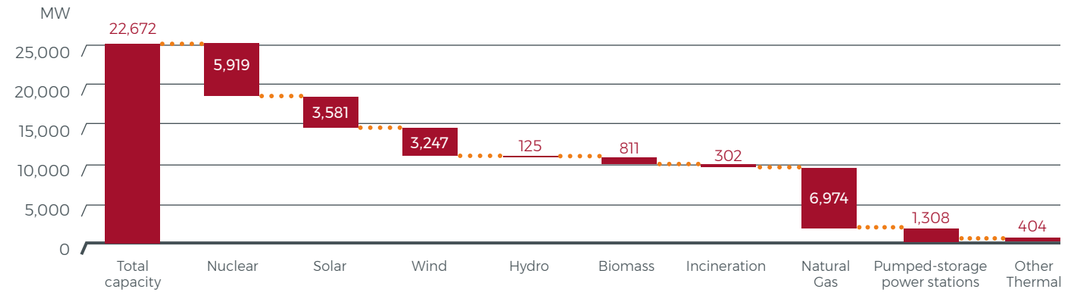
Overall, the number of substations has remained stable, although some low-voltage (>=150 kV) local transmission substations are being replaced by substations for the interconnection network and a first HVDC converter location is now in service (for Nemo Link).

Visit our website to consult the map of Elia's high-voltage grid.

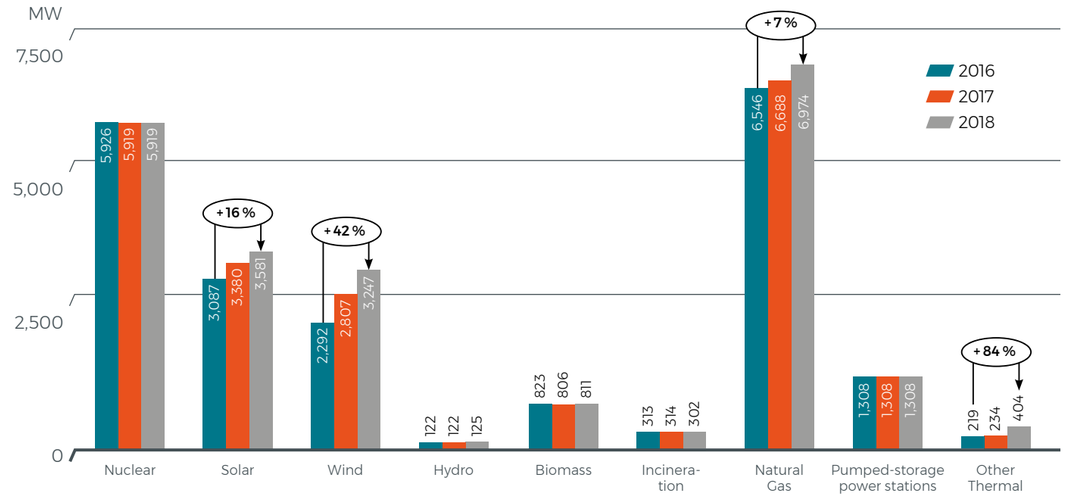
2.3 Energy

SDG 7, GRI 302-2, GRI 102-9

2.3.1. Evolution of installed capacity in Belgium



The total Belgium capacity is around 22,600 MW, which is mainly natural gas and nuclear energy.

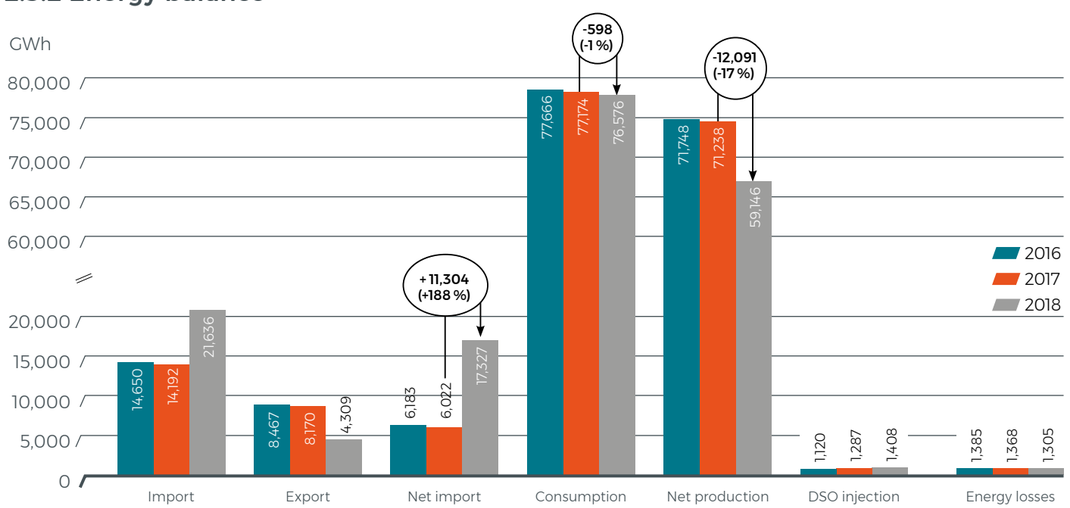


Nuclear installed capacity will remain stable until the first decommissioning, which is scheduled for 2022.

The installed capacity of renewable energy sources, such as solar and wind, has increased and is expected to increase further in the coming years.

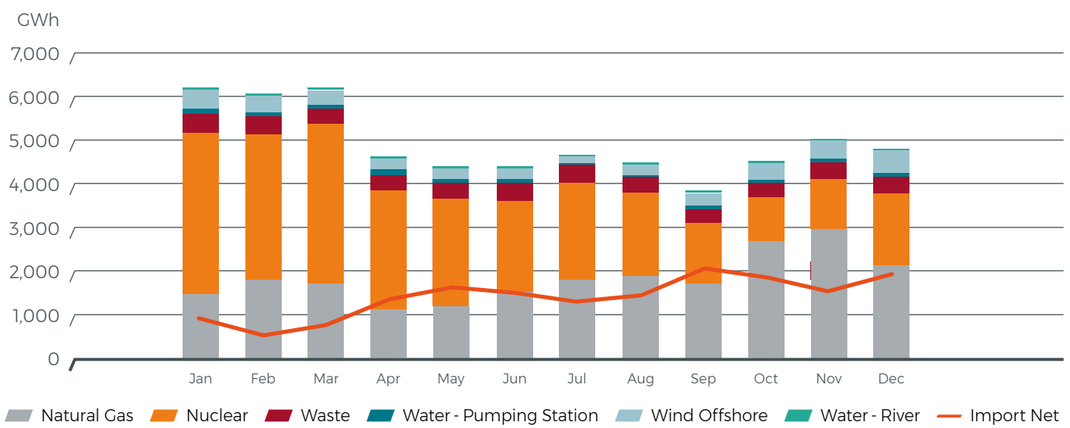
Elia acts as a market facilitator and in this role works hard to ensure that the grid is prepared to integrate new renewable energy.

2.3.2 Energy balance



Consumption decreases slightly each year. Due to the unavailability of some nuclear reactors, Net production of energy decreased sharply by 17% and this was compensated by a sharp increase in Net import (+188%). Energy losses have remained stable over the years.

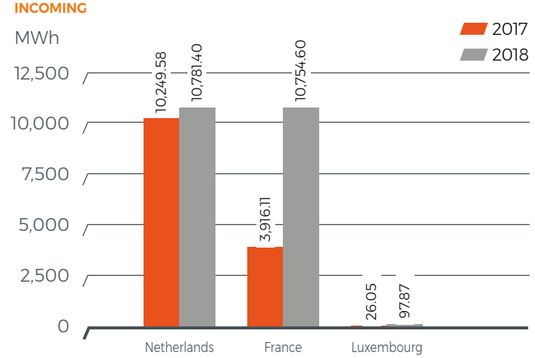
NET PRODUCTION VS NET IMPORT



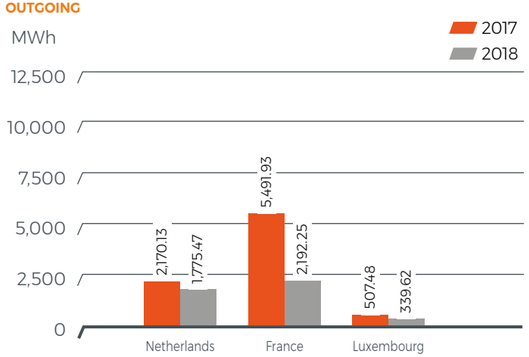
The above figure shows the effect of the shutdown of the nuclear reactors on a monthly basis during 2018.

2.3.3. Cross border exchange Belgium

INCOMING



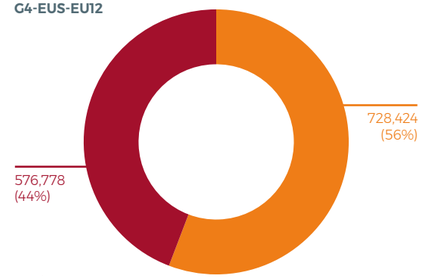
OUTGOING



The new Nemo Link connection (exchange with the UK) is operational since 31/01/2019.

2.3.4. Grid losses

G4-EUS-EU12



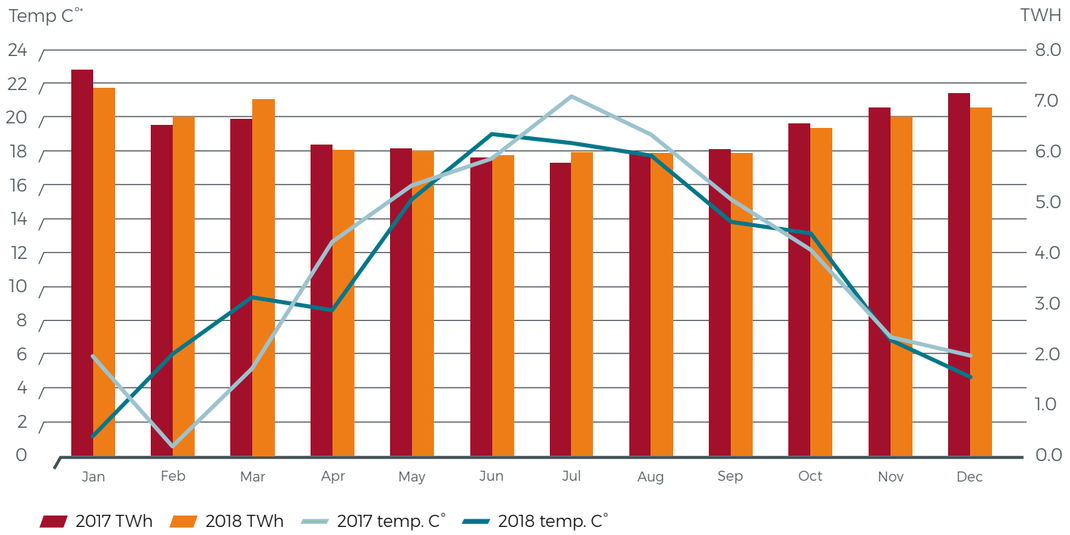
Grid losses federal level (from 150 kV): TSO, MWh

Grid losses regional level (less than 150 kV): Local TSO, MWh

Grid losses in Belgium can be divided in two parts: grid losses compensated following the federal legislation (>150 KV) and the other grid losses being compensated following a regional approach.

Transmission and distribution losses as a percentage of total energy (sum of consumption and export): 1.61%

2.3.5. Evolution of consumption



* Average monthly temperature, Zaventem, MeteoService.

Consumption in Belgium increases during the winter months, when the production of renewables is lower. This stresses the importance of international interconnections and reliable and sufficient domestic production.

2.4 Grid reliability in Belgium

2.4.1. Emergency and restoration

G4-EUS-DMA DISASTER/ EMERGENCY PLANNING AND RESPONSE

The transmission system operator (TSO) provides an infrastructure with adequate electricity interconnections for well-functioning markets and systems which forms the best guarantee of security of supply. However, even where markets and systems function well and are interconnected, the risk of an electricity crisis, as a result of natural disasters, such as extreme weather conditions, malicious attacks or a fuel shortage, can never be excluded.

Therefore, Elia Belgium has implemented a set of plans and procedures to prevent and manage an electricity crisis. The crisis management at Elia Belgium consists of three main parts;

- The emergency plan describing the internal crisis organisation and related procedures
- The system defence plan, including load shedding plan
- The restoration plan

The emergency plan describes the internal crisis organisation and related procedures following the Standardised Emergency Preparedness Plan (SEPP) methodology developed by CEMAC. It also describes the interfaces with the external stakeholders which are involved in an electricity crisis.

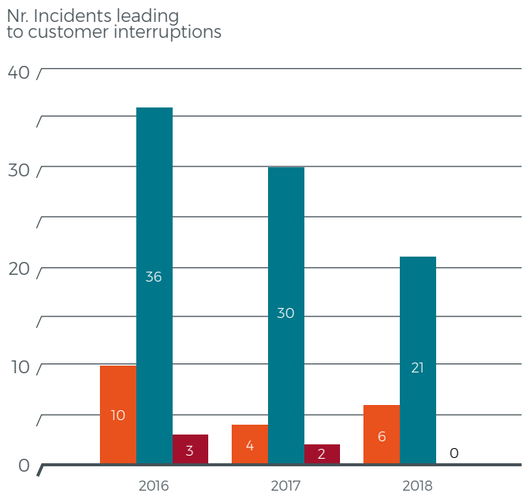
The system defence plan contains all automatic and manual measures aiming to prevent a blackout at any cost, to limit the extension of disturbances and to stabilise the electric power system when in Emergency State, in order to return to Normal or Alert State as soon as possible with minimal impact on grid users.

In accordance with the system defence plan, Elia Belgium has established a load shedding plan containing a certain amount of demand to be manually or automatically disconnected when necessary, to prevent the propagation or worsening of an electricity crisis.

The restoration plan contains a set of actions that can be used after a disturbance with large-scale consequences (e.g. blackout) to bring the electricity system back to the normal state.

Elia Belgium regularly trains its crisis teams by means of simulated exercises. System operators are prepared for crisis situations by means of theoretical and practical training on a real-time simulator.

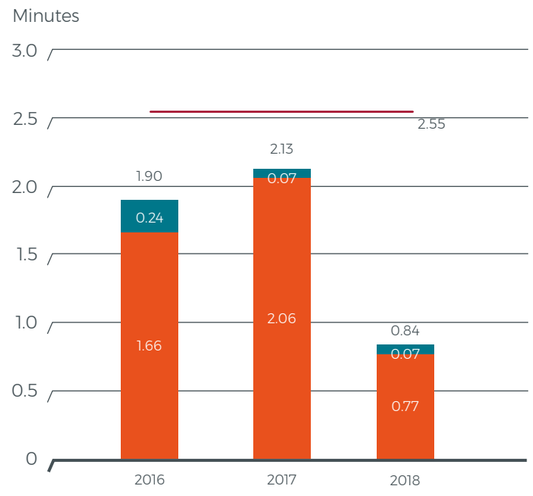
2.4.2. Grid interruptions



This graph shows the number of incidents which led to at least one customer interruption that lasted more than 3 minutes and for which Elia is responsible. Any interruptions caused by customer errors, thunderstorms, third parties, birds, etc. are not considered here.

Exceptional events represent the number of natural disasters, storms or other climatological circumstances, nuclear or chemical accidents, explosions, and so on resulting in an interruption that lasted more than three minutes. No exceptional event occurred in 2018.

2.4.3. Interruption time



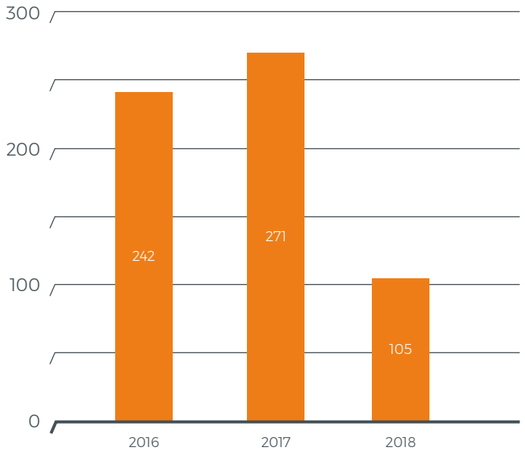
The majority of interruptions take place on the local transmission network as most customers are connected to the local transmission grid rather than the transmission grid.

The maximum interruption time is the reference value used for calculating the average interruption time (AIT) incentive. Based on a seven-year average, this value was introduced in 2015 and validated by CREG for four years. This reference value will be reviewed in 2019.

The interruption time in the Belgium grid has remained below this reference value over the last three years.

2.4.4. Non-supplied energy

Energy not supplied (MWh)



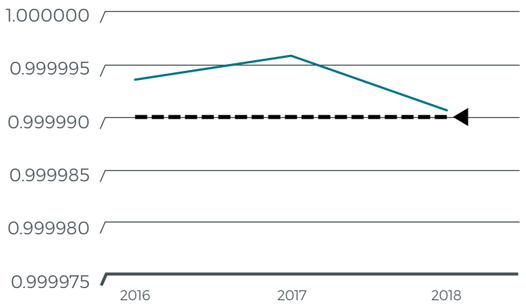
Energy not transported/not served (MWh) with internal responsibility

Energy not supplied (ENS) refers to all energy not supplied to our customers during outages of more than three minutes caused by Elia's internal problems. However, it does not take into account the impact of major events. This is the lowest ENS score for which Elia is responsible since this indicator was measured thanks to:

- Good operational management of the incidents
- The initiatives launched over the last few years to improve our Asset Management processes, to decrease the number of human errors, to improve the REX processes, etc.
- A little bit of luck: we sometimes face situations that could go wrong, but in 2018, we have been fortunate that those situations always remained under control.

2.4.5. Grid availability

Onshore availability at connection points



Onshore availability represents the availability of the interface points between the Elia grid and the customer's grid. It takes into account all the interruptions caused by intrinsic risks (weather, third parties, animal outside building, etc.) or by internal Elia problems (e.g. material failure, human error) which lasted more than three minutes, but excludes interruptions directly caused by Elia's customers. This onshore availability is calculated as 1-(AIT (intern Elia + intrinsic risk)/#min in the year).

In 2018, the onshore availability in Belgium remained at a very high level (above 0.999990).

2.5 Human Resources

SDG 8, SDG 5

Elia companies comply with international guidelines beyond the reach of its collective agreements and company agreements, such as the core labour standards of the International Labour Organisation (ILO: C87, C98 and C135).

2.5.1. Headcount Belgium

GRI 102-7, GRI 102-8, GRI 401-1

WORKFORCE EVOLUTION

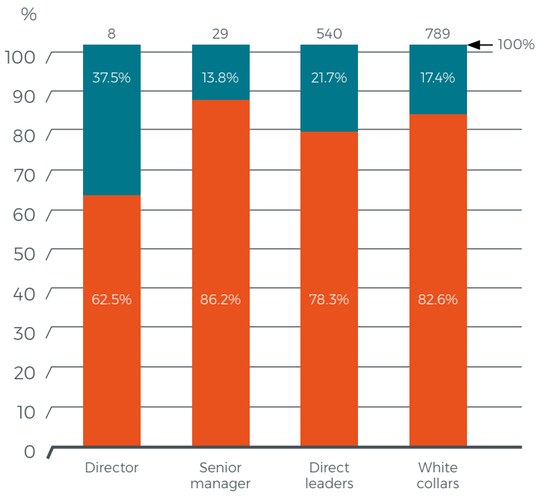
Both workforce and women representation show an increasing trend.

BREAKDOWN BY COMPANY AND GENDER

GRI 405-1

Women are less represented in EA and in EE, two companies requiring a more technical background. Since these two companies provide most of the senior managers this leads to a lower percentage of women in those roles.

BREAKDOWN BY RESPONSIBILITY LEVEL AND GENDER

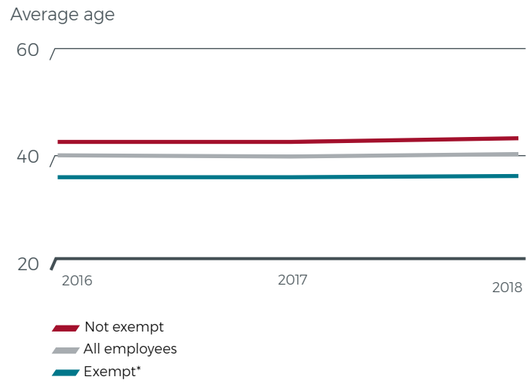


Women are well represented both at director and direct leader levels. To counter the underrepresentation of women in Senior Manager roles two main actions have been put in place:

- The inclusion of selection criteria on leadership and soft skills in addition to technical skills
- Internal transfers from less to more technical areas.

The existing cultural change programme will act as a catalyst.

AVERAGE AGE AND PERCENTAGE OF EMPLOYEES ELIGIBLE TO RETIRE



* The term ‚exempt' means exempt from being paid overtime. In our case, these are all employees that are not white collars (director, senior managers and direct leaders).

Average age is 41.97 and stable over the last years, exempts are almost 4 years younger than non-exempts.

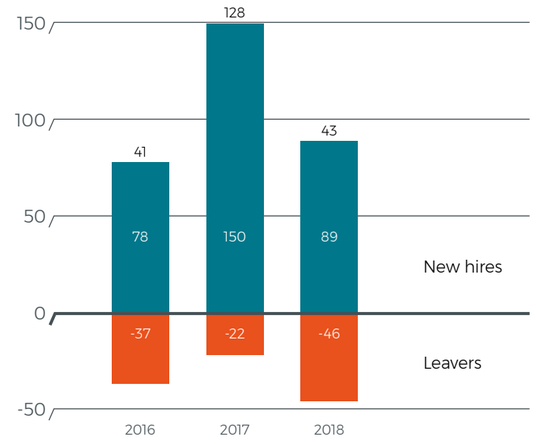
G4-EUS-EU15

Percentage of employees eligible to retire in the next 5 and 10 years (With an assumed retirement age of 65 for exempts and 63 for not exempts)	5 years	10 years
Exempts	2.86%	8.75%
Not exempts	10.12%	24.71%
Total	**7.08%**	**18.05%**

To address the future shortage of non-exempts, the HR department put into place a special hiring plan for this focus group.

2.5.2. New hires and leavers

NUMBER OF NEW HIRES AND LEAVERS



Calculation method

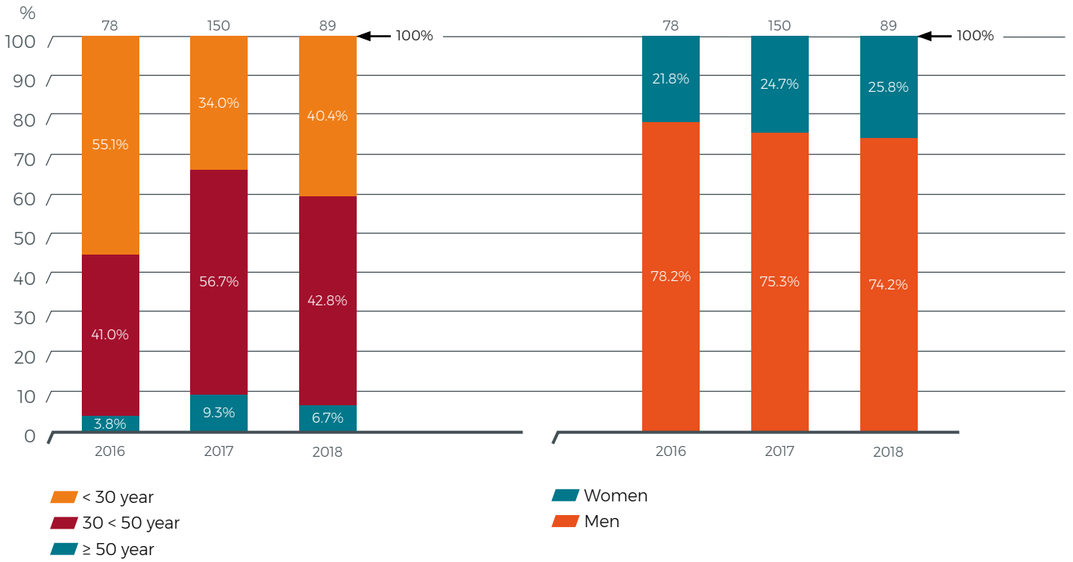
The new hires include all new employees within the planned budget and all the employees that were recruited as additions to the original budget. Changes in positions are not included.

The number of leavers is determined based on all employees leaving the company as a result of dismissal or resignation from 1 January to 31 December of the year concerned. Retiring employees are excluded from the scope.

After falling over the years, the number of employees leaving Elia increased in 2018 with 46 employees leaving the company, of which 15 were women and 31 were men. Two employees left for our sister company CORESO.

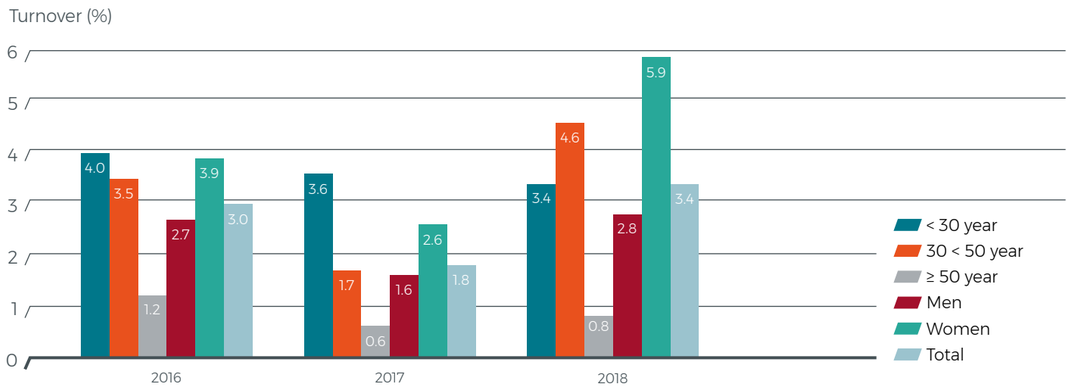
There is always an exit interview for leavers. After an historical low number of leavers, Elia moves towards the Belgian private sector average.

NEW HIRES PER AGE CATEGORY AND GENDER



Elia follows non-discriminatory hiring practices.

EMPLOYEE TURNOVER PER AGE AND GENDER CATEGORY



Employee turnover is determined based on all leavers divided by the total headcount on 31 December of the previous year. The employee turnover by age or gender category is based on all leavers in the respective category, divided by the total headcount in the same category on 31 December of the previous year.

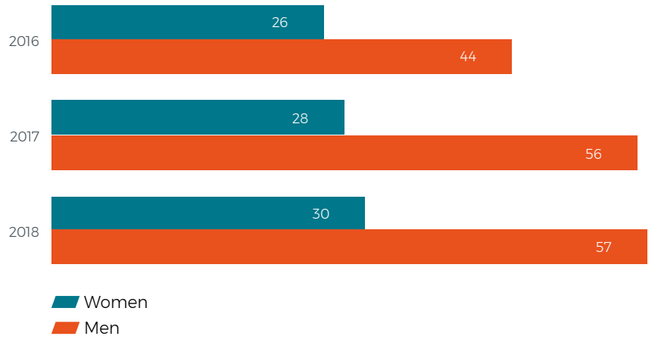
Women (5.9%) and employees aged between 30 and 50 (4.6%) are the biggest group of leavers.

The high number of leavers in 2018 reflects both the 'war on talent' (due to this regulated market, Elia cannot always offer competitive salary packages to some people whose technical skills are in high demand) and the limited career path evolution for some niche profiles with non-technical backgrounds. To face that challenge, Elia is proposing a more proactive career and talent management programme.

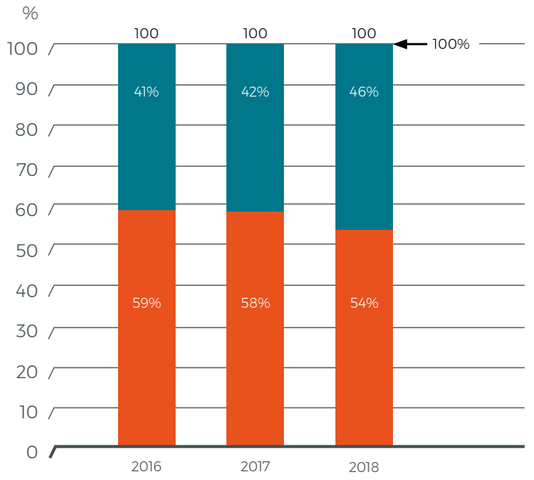
2.5.3. Parental leave

GRI 401-3

SPLIT PER GENDER



SPLIT BY TYPE OF PARENTAL LEAVE



In 2018, 87 employees (of which 57 were men) took parental leave, which is an increase compared to 2017. Most of them opted for a full-time parental leave but an increasing number are opting for leave as a reduction of their weekly working schedule.

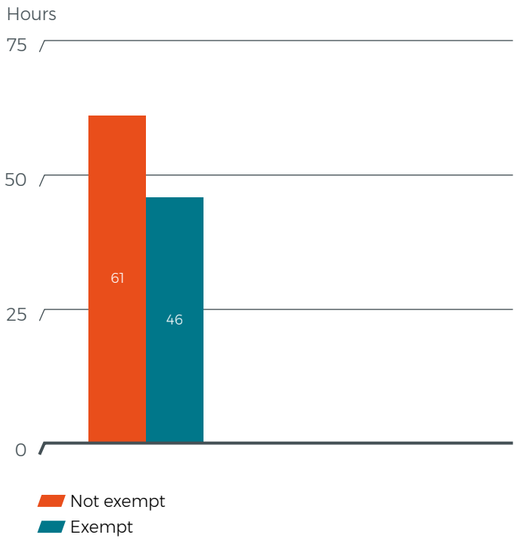
2.5.4. Employee Survey

An Employee Survey is realised every other year. No survey was made in 2018 but the results of 2017 were used to improve our HR policy by focusing on career management and by reviewing the internal performance and reward system.

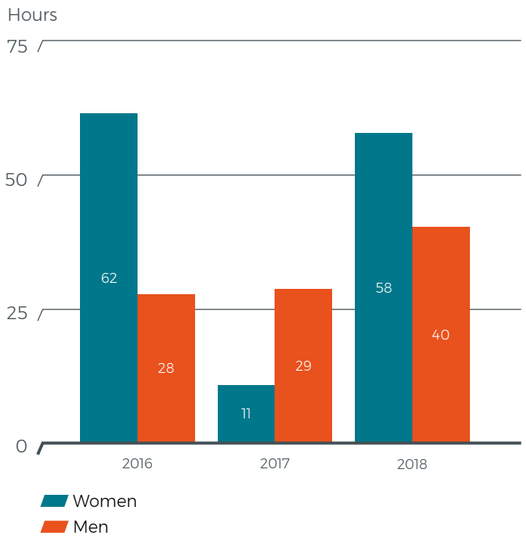
2.5.5. Training

GRI 404-1

AVERAGE HOURS OF TRAINING PER LEVEL



AVERAGE HOURS OF TRAINING PER GENDER



The recorded hours underestimate the real training hours received. Part of the training received by exempts* is outside our records (on-line trainings, reading of technical papers, peer meetings, et al.).

* The term "exempt" means exempt from being paid overtime. In our case, that is all the employees that are not white collars (director, senior managers and direct leaders).

Most of the training offered is on technical and safety competences. This training is compulsory. The other training courses are not compulsory and are either arranged by the company or authorised following a request from the employee.

The percentage of women in technical functions is lower, leading to lower compulsory training and a lower training rate.

2.6 Safety

Read more abo ut our Safety programmes on pages 88-91 of the Activity Report 2018

SDG 3, SDG 8, GRI 403-1, GRI 403-2, GRI 403-3, G4-EUS-LA6

Electrical infrastructure is and always will be dangerous. That is why safety is our top priority in all that we undertake. As part of our commitment to safety, Elia Group is working towards a zero accident rate for all types of work-related accidents and not only electrical risks.

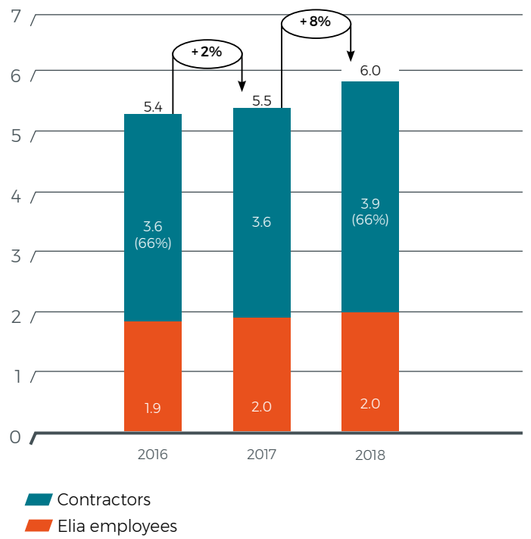
In Belgium, the GO FOR ZERO safety programme (begun in 2015 and planned until end 2019) aims to embed the safety culture within Elia and with contractors. It includes all projects.

After addressing training, tools and procedures, our main objectives in 2018 were the anchoring of the progress already made via the actions on operational dialogue and continuous improvement. Supported by our culture change programme, Make a difference, we continuously underline the importance of three key behaviours: "Give and receive feedback", "Have impact" and "One Voice".

With our "Keep your distance" campaign, we also aim to protect the general public and some target audiences such as the building sector and populations living near to our installations with signs, leaflets and other information campaigns.

2.6.1. A sharp increase in the work performed

Work performed (million hours)



Keeping the lights on while building the infrastructure of the future is a challenging task. We see year after year an increase in the work hours performed.

2.6.2. Concrete actions to train and to control

There was no new safety survey in 2018. We used the results of the survey in 2017 to work more on safety leadership, by defining our non-negotiable behaviours, by making our employees aware about road risks and through collaboration with our contractors.

Safety Weeks

Each year, Elia organises Safety Weeks for its staff in May and September in an effort to raise awareness about the importance of safety.

The programme included various communications, training sessions and team exercises, designed to ensure that everyone got involved and took the messages on board. In May 2018, the spotlight was on our "6 non-negotiables", i.e. behaviours that we no longer wish to see in the company. In September, we focused on "Safety on the road".

Safety training

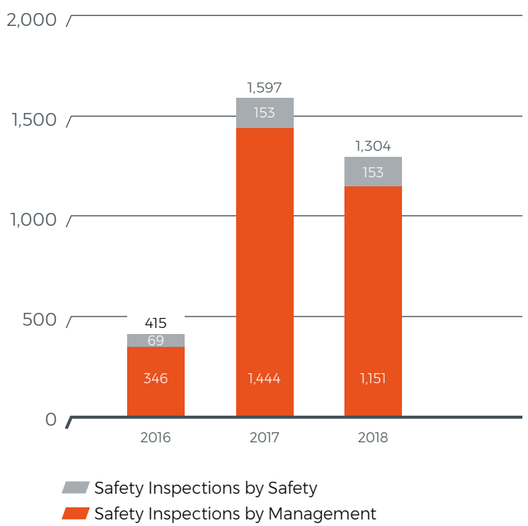
Elia continuously trains its personnel. All field employees must follow a training path, which is periodically refreshed.

Elia also provides training material, training and tests to contractors (for instance, 1,290 people followed our new "Works Supervisor" training and tra 1,041 passed the test and were certified).

Safety inspections

After a big increase in the number of inspections in 2017, the focus from 2018 on is more on the quality than the number of inspections.

SAFETY INSPECTIONS



2.6.3. Data shows a low occurrence of work-related, employee accidents

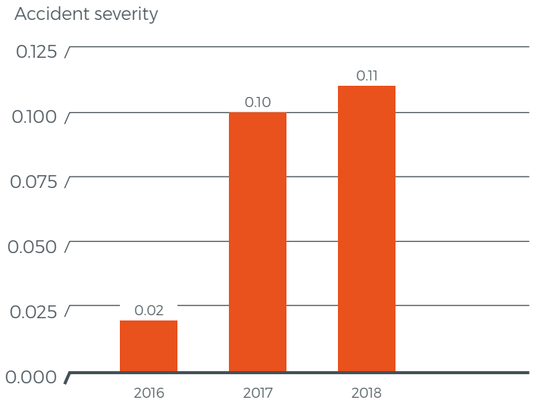
Number of staff injured with at least one day of lost time by gender

2016		2017		2018	
♀	♂	♀	♂	♀	♂
0	5	1	6	2	4

More than half of the accidents are related to office activities (slip and fall) and road traffic.

Expanding the safety culture beyond the technical departments is essential. In the last months of 2018 we started the Safety Leadership project to specifically address this.

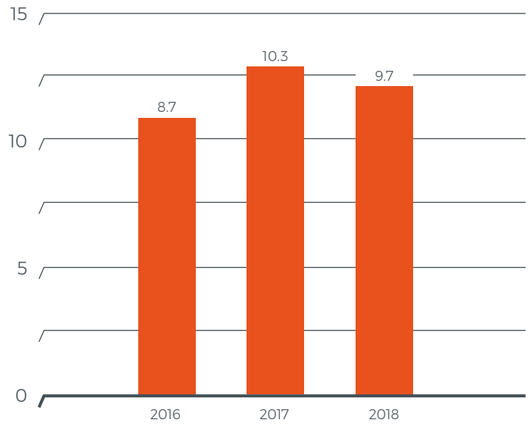
MISSED DAYS (ACCIDENT SEVERITY)



Number of missed days due to work-related accidents in calendar days x 1,000 / number of hours worked.

Almost all the missed days registered in 2018 are related to just 3 office accidents. There was no incapacity related to electricity.

AVERAGE NUMBER OF SICK DAYS PER EMPLOYEE



In general, employees had 10 sick days in 2018, which is in line with the previous years.

Calculation method

The average sick days per employee is calculated based on the total number of sick days divided by the total headcount on 31 December of the previous year.

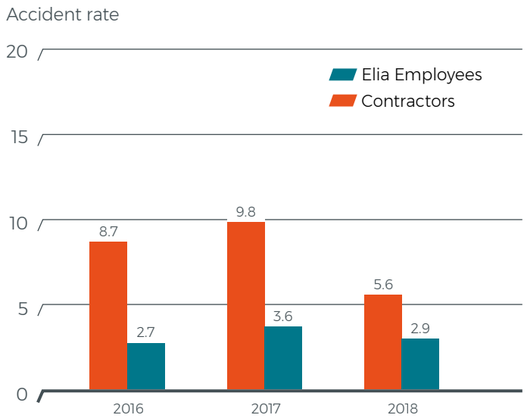
2.6.4. Data also shows the importance and the pay-off of working on safety for both employees and contractors

Contractors work more on technical sites and with fieldwork, so they are more exposed.

The Safety for Contractors project - part of the GO FOR ZERO programme – started three years ago and has meant that our contractors are much more aware about safety issues.

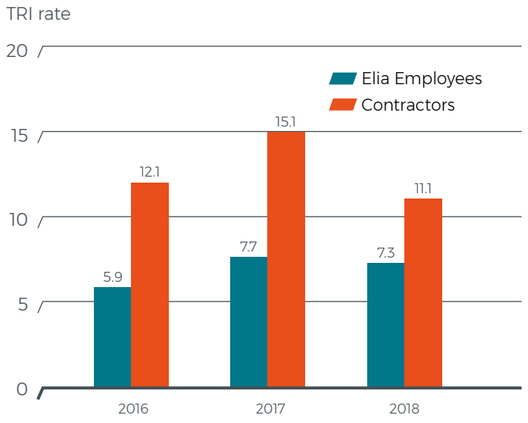
We made good progress on the rollout of the new High Safety Risk (HSR) process and the operational dialogue, which have a positive impact on the safety behaviour of our contractors.

ACCIDENT RATE

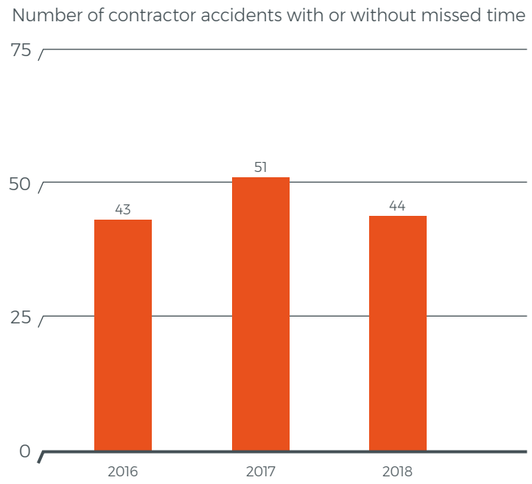


Number of work related accidents with missed time (>1day) x 1,000,000/number of hours worked

TOTAL RECORDABLE INJURY (TRI) RATE



Number of work related accidents x 1,000,.000/number of hours worked



The decrease in the total number of accidents (while increasing the working hours) shows the importance of prevention. However, one of our contractors lost his life in performing his work in 2018.

2.6.5. Fatal accidents

Despite our efforts, we sadly recorded three fatal accidents in 2018.

Elia employees

2016		2017		2018	
♀	♂	♀	♂	♀	♂
0	1	0	0	0	0

Contractors

2016		2017		2018	
♀	♂	♀	♂	♀	♂
0	0	0	1	0	1

A fatal accident occurred on the 11th of December in Beringen during line works. The victim had started to work before all the safety measures were in place; he was electrocuted by the induction current from the parallel conductor.

This accident reminds us we still have work to do on the development of the safety culture of our contractors, despite the progress we already observe in the field. We must focus more on the leadership of our contractors and the competence of their staff at each level of the company, by intensifying our involvement.

Third parties

2016		2017		2018	
♀	♂	♀	♂	♀	♂
0	0	0	0	0	2

Third parties working in the vicinity of high-voltage facilities are not always aware of the dangers. Even just entering the danger zone around high-voltage conductors can trigger a fatal electric arc, even without direct contact being made.

Elia must be notified of all works in the vicinity of high-voltage facilities so that the Contact Centre can inform the relevant parties of the risks involved and the safety distances to be respected.

Despite extensive awareness-raising campaigns rolled out in recent years, works are still being performed without being reported to Elia in advance. Unfortunately, 2018 saw two fatal accidents involving electrocution caused by the victims getting too close to a high-voltage line and triggering an electric arc. These accidents occurred on 27 June during work involving a concrete pump in Sint-Katelijne-Waver and on 17 December during roofing work involving an aerial lift in Evergem.

Elia is expanding its campaigns and is also working on more preventive measures.

2.7. Suppliers and human rights

SDG 12, GRI 102-9

2.7.1. Supply chain management

GRI 308-1, GRI 308-2

Elia has to comply with the European tendering rules. The application of these rules and other internal guidelines ensure that every supplier is treated in a non-discriminatory and transparent way and that the information sent is treated confidentially. The selection of the suppliers and the award of the different contracts are based on the evaluation of multiple criteria. The exposure to social or environmental risks is mitigated by the fact that every purchase is performed by a multifunctional team, including specific representatives from environmental and/ or safety. Depending on the purchase, the selection and awarding criteria are adapted to ensure that the selected supplier is compliant with Elia's objectives and values. CSR elements are integrated in the tendering contract, as well as within the general purchasing conditions, which are signed by the suppliers.

In 2018, Elia Belgium has developed a Supplier Code of Conduct, containing internationally accepted principles regarding ethical conduct, health and safety, environmental and social aspects.

In order to use this set of principles as a lever for a positive supply chain impact, we set up a risk-based approach. For all purchasing categories we assess risks based on traditional supply chain risks and supply chain sustainability risks. A matrix is drawn up to prioritise supplier engagement activities.

To rationalise resource and impact management we would like to focus on the suppliers, which are most relevant from that risk perspective. In 2019, besides having suppliers electronically confirm that they accept the terms of the Supplier Code of Conduct, we are planning to roll out an in-house, CSR Supplier Self-Assessment questionnaire to high-risk suppliers and some hand-picked, medium-risk suppliers to receive detailed information on where improvements are needed.

As from 2019, the Supplier Code of Conduct will systematically be part of the documents for European purchasing procedures.

2.7.2. Number of suppliers– EURO zone vs non-EURO zone

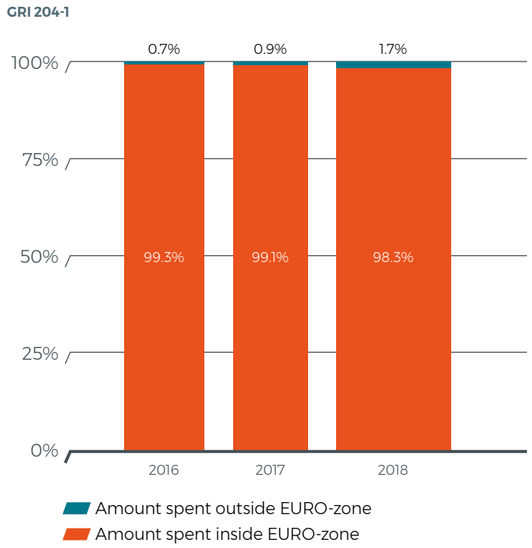
The data refer to the following Elia Group companies: ESO, EA, EE, EI and EGI Belgium.

	2016	2017	2018
EURO-zone suppliers	2,282	2,374	2,305
Non EURO-zone suppliers	74	92	116
Number of non-EURO countries with Elia suppliers	11	12	19

The number of suppliers for Elia Belgium outside the EURO-zone increases and is getting more diverse but it is still limited to 5%.

2.7.3. Split of yearly spend – EURO zone vs non-EURO zone

GRI 204-1



The last three years saw a strong increase of the total spend (+ 36%) due to the new offshore activities.

Spending outside the EURO-zone is still limited to 1.7% of the total amount. Moreover, it is concentrated in the same three countries of the previous year albeit in a different order : The UK (67%) is still ahead but the USA (16%) took the second position and Switzerland (7%) came in third.

Procurement outside the EURO-zone countries is very limited today and the environmental impact is also taken into account in the awarding criteria. Therefore, Elia complies with the high EU or Belgian standards in terms of environment, social responsibility and worker wellbeing.

A specific evaluation of the safety aspects is done separately since it is crucial for Elia to have suppliers on board that share the same view about the importance of safety.

2.7.4. Human rights

GRI 414-1

There is only limited impact on human rights violation for Elia as Elia's activities are mainly based within Europe. The large majority of purchases outside Europe are IT and consultancy related.

2.8 Community and Client relations

SDG 17

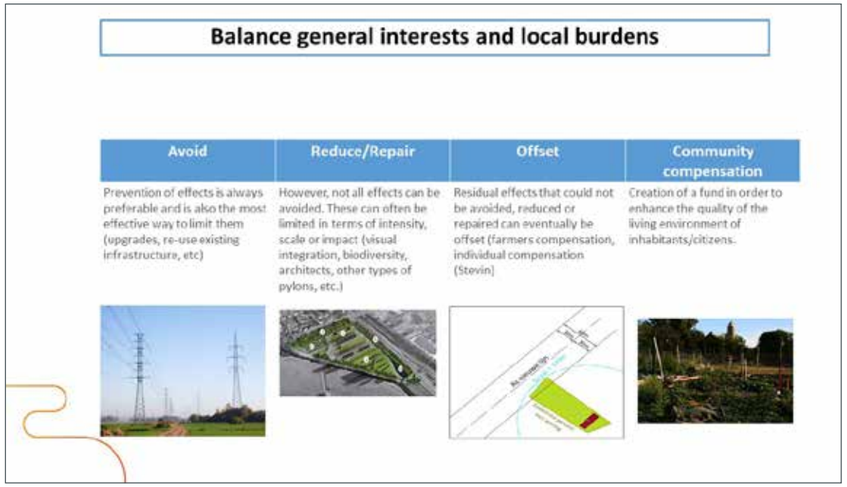
2.8.1. Public acceptance

GRI 102-29, GRI 413-1

We are convinced that early involvement with all stakeholders is vital for the success of the energy transition and for the huge projects needed to make it happen. Already in the early concept stage, we are working closely with all stakeholders such as local communities, associations, NGOs and various government organisations. We have set up several initiatives with governors and mayors who are indispensable when it comes to bringing all the interested parties together.

We developed an integrated communication and public acceptance methodology, integrating stakeholder and communication actions in a systematic way in the grid development and engineering process in order not only to control the risk of stranded costs but also to be able to realise the best project taking into account the interests of society.

We furthermore developed a public reference framework to mitigate the impact of the realisation of new infrastructure projects and to compensate for the remaining impact.



2.8.2. Customer Satisfaction Survey

GRI 417

Every two years, Elia measures the customer satisfaction level among its key stakeholders (distribution system operators, grid users, producers, access responsible parties, Users' Group, et al.). The main objectives of this survey are to provide an overview of the Key Performance Indicators (KPIs) related to service quality and their evolution over time.
The latest surveys were conducted in 2018 with 250 stakeholders. The KPIs measured by the Elia Satisfaction Index, reflect how stakeholders evaluate the products and services of Elia in general, the Customer Effort Score, reflecting the ease of doing business with Elia, the customer satisfaction regarding account management and image etc. The overall aim is to identify our strengths and weaknesses among the different stakeholders in order to further optimise the customer relationship.

With regards to the Elia Satisfaction Index, Elia scored 66%, reflecting the high quality of products and services. The majority of the stakeholders still describe collaboration with Elia as "easy". Compared to 2016, there is a status quo on the evaluation of Elia's Key Account Managers. Regarding image, there were stable results for Elia's expertise and communication with a significant increase in the extent to which Elia innovates.

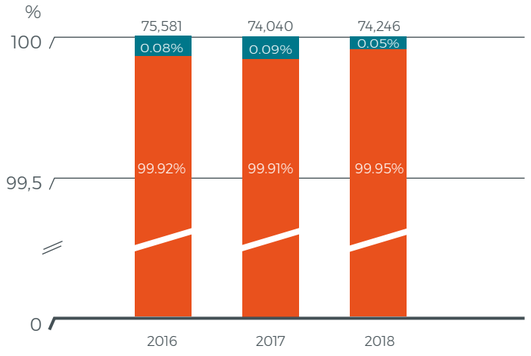
The survey highlighted the strengths that need to be maintained and priorities were set to further improve stakeholder satisfaction.

2.8.3. Requests received & handled at Contact Centre

Each year, Elia receives approximately 75,000 requests for information concerning works nearby its high-voltage network installations. These inquiries come from a range of sources including local residents, contractors, engineering firms, public authorities, utilities and project developers. The company provides information and instructions for working safely. Response times are based on statutory timeframes within which the Contact Centre must answer those requests. For example, the standard deadline for responding to routine requests is 7 working days from receipt. In 2018, 99.95% of all requests were answered within the set times.

Upon request via the Contact Centre, Elia offers free electromagnetic field measurements to the owners of land and buildings located near Elia facilities. In 2018, 134 questions about electromagnetic fields (EMFs) were received, and 85 measurements were performed. For the other 49 requests, only information was provided.

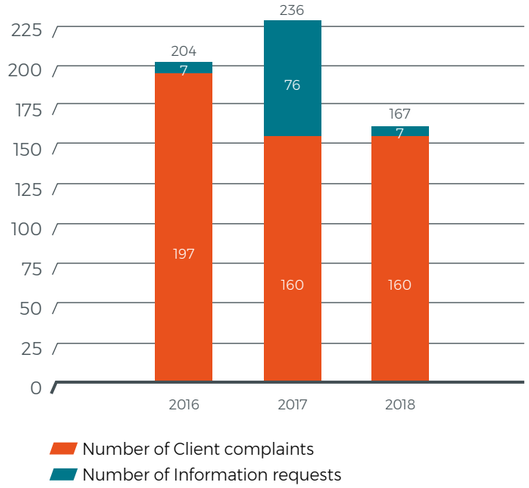
REQUESTS ANSWERED WITHIN 7 WORKING DAYS



2.8.4. Client information and complaints requests

These figures represent all information requests and complaints regarding power quality. The number of complaints and information requests is stable (the big increase of complaints in 2017 was due to just one incident).

However, the number of incidents have increased from 379 to 432 in 2018, resulting in an increase of requests coming from grid users directly connected to the Elia grid. The total number of information requests has not increased compared to 2017 thanks to a better collaboration between Elia and DSOs, resulting in a decrease of 23.3% of information requests coming from clients of the DSOs.



2.8.5. Corporate citizenship

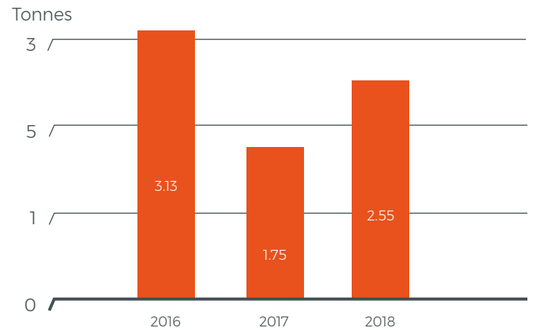
SDG 11

Several actions are reported in the Activity Report 2018 such as helping to find employment for refugees through training, collaboration with Be Planet to support local initiatives, educational projects, etc. More information on the subject can be found on pages 78-79 of the Elia Group Activity Report 2018.

Furthermore, any Elia employee involved in a community or charity-run project can request a contribution from Elia. The contribution is worth EUR 250 and can be applied for once a year. Elia donated a total of EUR 4,750 to 19 of these projects in 2018. Moreover, Elia Belgium donated almost EUR 12,000 to various initiatives such as financial support for chronically ill children in Africa, third world charities and sports events, amongst others.

As we did in 2017, we also report the data on the amount of hardware (laptops, docking stations, printers, screens and carrying cases) that received a second life, which were mostly donated to schools.

AMOUNT OF HARDWARE WHICH RECEIVED A SECOND LIFE



2.9. Environmental aspects

GRI 102-11

Environmental and social sustainability, as well as a clear commitment to environmental protection and the conservation of resources, are all integral components of the corporate strategy.

Our goal is to keep the impact of our corporate and construction sites and other activities on people and natural habitats to an absolute minimum.

We adopt the precautionary principle to reduce and avoid possible negative impact by doing studies (like studies in EMF), by calculating our carbon assessment for Belgium and by bringing climate risks into the regular risk management.

2.9.1. Low-frequency magnetic fields

GRI 416-1, SDG 3

Although no causal link can be established between electricity transmission infrastructures and human health, Elia takes this issue very seriously, both for each project that is carried out on the electricity grid and for scientific studies that improve the knowledge surrounding this matter.

For several years, Elia has been actively contributing to the progress of scientific knowledge by supporting various Belgian research centres and universities, grouped together in the Belgian BioElectroMagnetics Group (BBEMG). At an international level, Elia also supports the Electric Power Research Institute (EPRI), a non-profit organisation that conducts research in energy and the environment.

Each year, EUR 370,000 is spent on scientific research analysing the impact of low-frequency magnetic fields. The amount is fixed as Elia has contracts with the BBEMG and the EPRI.

See also chapter 2.8.3 concerning the free measurements on EMF.

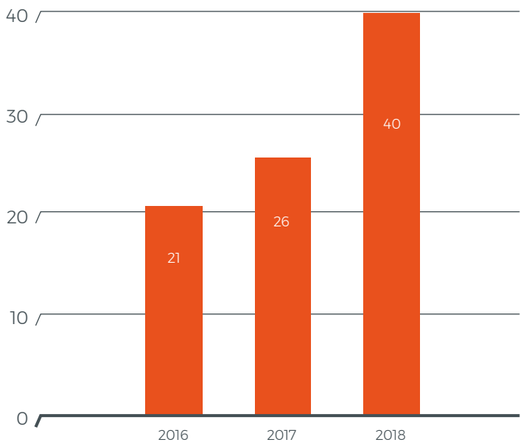
2.9.2. Noise

SDG 3

Elia's facilities cannot generate noise pollution. They are governed by acoustic standards, varying from region to region, which must be respected. Noise pollution can be caused, for example, by transformers in high-voltage substations, high-voltage lines and pylons. Underground lines do not make any noise.

Elia conducts noise studies if there are sufficiently founded complaints. In addition, soundscape studies are always carried out upstream of Elia's infrastructure projects to ensure that the standards are not exceeded.

NUMBER OF SOUNDSCAPE STUDIES PER YEAR



2.9.3. Biodiversity and landscape integration

SDG 14, GRI 304-1, GRI 304-2, GRI 304-3, G4-EUS-EN12

Elia's land-use can be divided into the following categories:

- surfaces under overhead lines (mostly on private land);
- surfaces over underground lines (mostly on public domain, such as roads);
- surfaces under the towers (sometimes Elia owns the small plot of land where the tower is);
- surfaces needed to build and maintain substations (the gravel must be kept free of weeds for safety reasons).

Most of the land used by corridors is not owned by Elia. Belgium law allows Elia to have lines and towers over private/public properties that can be on protected areas. The total length of the corridors in Natura 2000 areas is more than 320 km. Elia has some parts of land it owns that are managed for nature protection nearby protected areas, such as a marsh with ponds in (Merelbeke Flora, Ville-sur-Haine) where Elia encouraged amphibians to settle there by creating and maintaining ponds.

Overhead lines only change the surface where towers are, rarely where overhead conductors hang. There is a risk of collision and sometimes the electrocution of birds in areas with overhead lines and in substations (where the lines go down). Therefore, Elia is installing markers and nests to reduce the impact and to protect some endangered species.

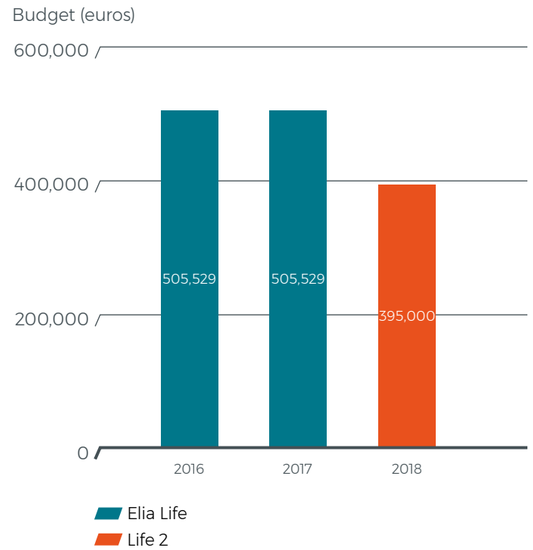
For safety reasons (to prevent falls and short circuits), no trees are allowed to grow close to high-voltage overhead lines.

Sometimes this can have a beneficial effect: there are moors (les fagnes) that are better protected in the corridors under the overhead lines crossing them, because the rest of the moors were planted with trees for wood production and by draining these areas. In the vicinity of Bronrome, the most valuable moorland is in the corridor under the line for example.

However, until recently, the standard maintenance policy for overhead lines involved ensuring that a corridor of approximately 50 metres wide below the lines was kept clear of all vegetation with a rotary slasher every five, six, seven or eight years. Completing in 2017, the 'Elia LIFE+' project was a seven-year, Europe-wide project that aimed to transform 130 km of forest corridors into fully-fledged 'ecological corridors'. Instead of using rotary slashers, Elia restored more stable natural environments below the lines (using peat bogs, bushes and grasslands managed by grazing), better suited to biodiversity. Given the success of the project, in 2018 Elia decided to pursue this action for another five years without subsidies under the name "Life2". Special attention is given to the control and removal of invasive plants.

Landscape integration of Elia infrastructure and restoral after removal are also important. Elia also took action to integrate the project in the landscape: the use of indigenous plants protected the local biodiversity.

ANNUAL IMPLEMENTATION BUDGET FOR THE LIFE PROJECTS



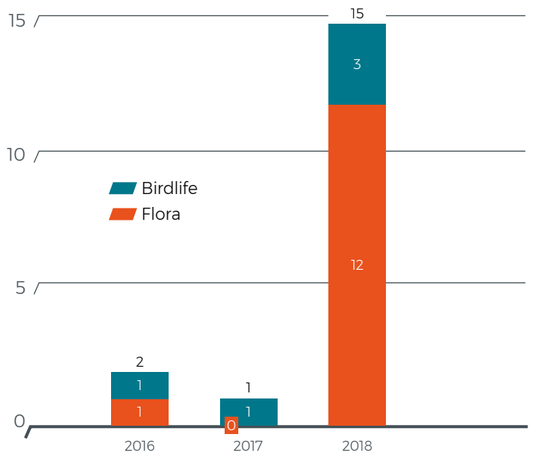
Since 2015, Elia has had a fixed annual budget of EUR 505,529 for the Elia-RTE LIFE project to restore natural habitats for fauna and flora at Natura 2000 and other sites. The Elia-RTE LIFE project ended in December 2017 but Elia has decided to continue the work by launching Life 2, despite no longer receiving funding from the European Commission and the Walloon Region. This second project will run until the end of 2022.

Life 2 : practical actions

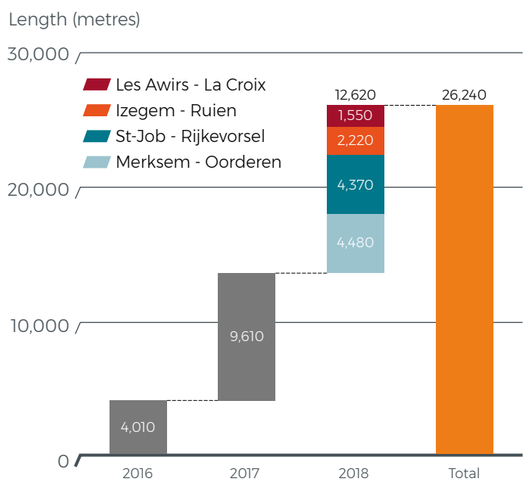
The first Elia Life project has led to the creation of a new company (totally independent of Elia): Ecofirst.

In 2018, orchards (400 plants/ha) and forest edges (2,000 plants/ha) were created covering the surface of 7 hectares under the lines. This project started in both Wallonia and Flanders.

NUMBER OF STUDIES TO MONITOR A PROJECT'S IMPACT ON THE BIODIVERSITY



PROTECTING BIRDS BY INSTALLING MARKERS

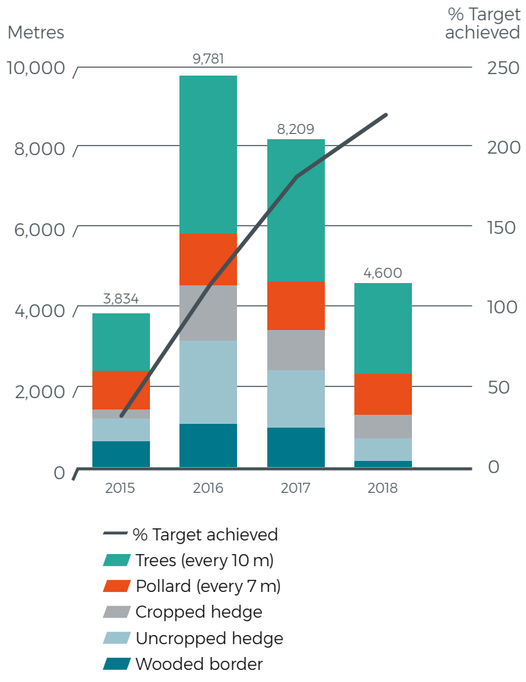


With the help of Belgium's leading environmental associations, Elia has identified 130 sections of its network of overhead lines that pose the greatest hazard to birdlife. Measuring 200 km in total, they are gradually being fitted with bird anti-collision devices over a 10 year period (starting from 2016). If a project is due to take place on these sections, markers will be installed immediately. For sections without projects, we will take advantage of scheduled interventions to fit markers on conductors or earth connections.

In 2018, Elia almost doubled the lines with bird markers attaining 26.2 km.

Sustainable integration of installations in the Stevin project (Elia Belgium)

During the Stevin project, Elia worked hard to minimise the impact of its installations on the landscape by planting large numbers of trees and shrubs. Elia largely exceeded the initial target.



The 'green screens' plantations linked to the Stevin project ended in 2018. People living nearby overhead lines gave Elia permission to plant trees and shrubs on the boundaries of their property, in order to hide the line from view. People were informed of this possiblity and were contacted by a local landscape protection organisation to make a plan about how best to hide the line, and this was at the expense of Elia. This effort was not a requirement of the permit.

2.9.4. Soil

Soil surveys have been carried out on more than 200 sites in Flanders in accordance with contractual agreements and Flemish legislation. Over the years, significant soil contamination was found on some sites (mainly attributable to historical pollution arising from earlier or nearby industrial activities) and several remediation actions have been launched.

The soil legislation was enforced later in the Brussels-Capital Region and Wallonia. Since 2014, Elia has developed a plan to map the soil condition of its own land in those regions in order to schedule the intervention priorities in accordance with existing and new soil legislation, which came into force on January 1, 2019 for the Walloon Region.

In 2018, EUR 670,000 has been paid out for surveys, follow up and the realisation of remediation works in Flanders and EUR 515,000 in the Brussels-Capital Region and Wallonia.

Continuous monitoring is needed. In 2018, for instance, a site with substantial soil pollution has been detected and flagged up to the Brussels regional authorities. Elia will propose an action plan in 2019.

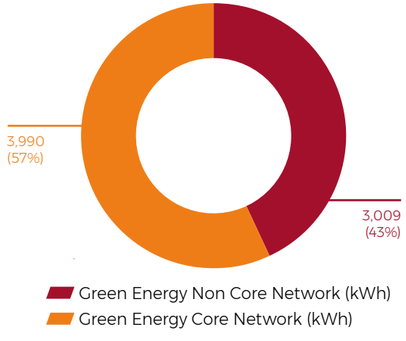
BUDGET (MILLION EUROS)

	2016	2017	2018
Flanders	0.5	0.5	0.7
Brussels-Capital Region and Walloon Region	0.7	0.6	0.5

2.9.5. Energy and greenhouse gases

GRI 302-1

Electricity consumption within the organisation



The electricity consumption of Elia is divided in two parts: core (substations, et al.) and non core (administrative centres). Other forms of energy (use of natural gas) are included in our carbon assessment.

SF6

GRI 305-1

SF6 gas has been used for over 30 years as an electrical insulator in high-voltage devices, including gas-insulated switchgear (GIS). GIS is often used in densely populated areas because it is much more compact when compared to traditional switchgear which uses air as an insulator. Elia has developed an investment and maintenance policy to reduce the risk of SF6 leakage. Manufacturers must guarantee a very stringent maximum percentage of SF6 loss throughout the lifetime of the facilities. The maintenance policy aims to keep operations involving compartments filled with SF6 to a minimum. The volume of SF6 gas installed on the Elia grid (36 kV to 380 kV inclusive, excluding the NEMO substation) is 111.9 tonnes. Consumption of SF6 gas (as a replacement and as a top-up in the event of a leak) is closely monitored using a system that tracks each cylinder of SF6. The SF6 leak rate for all Elia facilities was 0.34% in 2018.

Carbon assessment

SDG 13, GRI 201-2

Delivering the necessary grid infrastructure is key for the energy transition to happen. As we integrate more and more variable renewable electricity and as electricity exchanges at European level increase, our investment programme is vitally important to guarantee a reliable, affordable and sustainable energy system in the future. In 2018 we inaugurated a first subsea interconnector with the UK. Soon we will install the first element of the Modular Offshore Grid in Belgium. The decisions on such investments are taken by the Executive Committee and approved by the Board of Directors. The various investment plans are also approved by the responsible (regional) regulator or government, depending on the applicable legislation.

Additionally, the integration of volatile renewable energy in the system is challenging and demands the development of new tools and processes and the reinforcement of our collaboration with all market players.

GRI 305-1, GRI 305-2, GRI 305-3

Elia has been conducting a carbon assessment since 2010 to identify direct and indirect emissions from its activities in Belgium and is taking steps to control and reduce greenhouse gas emissions from its activities.

Since 2017, Elia has participated in the CDP, an international, not-for-profit organisation providing a global system for companies, investors and cities to measure, disclose, manage and share environmental information. For climate change, a company's score is made up of two factors:

- the level of detail and the comprehensiveness of its responses, and
- its awareness of climate issues, management methods and its progress on acting on climate change.

For Belgium, Elia's Supplier Engagement Rating for 2018 is B.

In 2019, the scope of the Carbon assessment will be broadened (it will also include the emissions in Germany) and the methodology and goals will be reviewed. The data for 2018 will be calculated in accordance with the new methodology and reported in the annual report for 2019.

A first approximation of the 2018 emissions is given by the data calculated in 2017. The total emissions for the following companies ESO, EA and EE were estimated at 368,439 Teq CO_2.

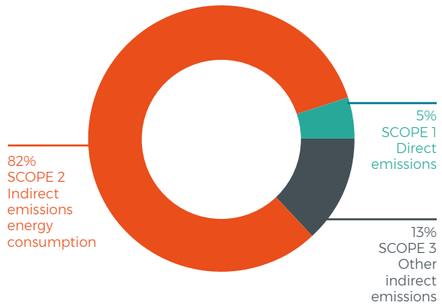
These emissions can be divided in the following three groups ("scope"):

Scope 1: direct emissions of greenhouse gases from owned or controlled sources. For Elia, they are mainly due to SF6 leakage and natural gas consumption for heating.

Scope 2: indirect emissions from the generation of purchased energy. For Elia, the main part is due to grid losses.

Scope 3: all the other indirect emissions (not included in Scope 2) that occur in the value chain of the reporting company, including both upstream and downstream emissions (by buying goods and services, employee commuting, et al.). For Elia, they are mainly generated by the construction and dismantling of our assets and network.

CARBON ASSESSMENT



3. 50Hertz in Germany

3.1. Sustainability management

3.1.1. Business model

GRI 102-1, GRI 102-2, GRI 102-3, GRI 102-4, GRI 102-6, GRI 102-7, GRI 102-9, SDG9

50Hertz* operates one of Europe's most modern electricity transmission grids in northern and eastern Germany, thereby ensuring 18 million people are supplied with electricity – 24 hours a day, 365 days a year. In eight locations, 50Hertz acts as an interface between energy producers on the one hand, and both distribution grid operators and major consumers on the other, with 1,045 employees to supply electricity around the clock. 50Hertz operates 10,390 kilometres of lines and coordinates the electricity market players in the grid area, manages and coordinates balancing groups and puts electricity from renewable energies that is not directly sold onto the electricity exchange. In order to help successfully shape the energy transition, 50Hertz is developing innovative solutions to aid the system and market integration of intermittent renewable energies.

50Hertz has a "natural monopoly" with its transmission grid in its grid area, i.e., in northern and eastern Germany the Company is the only operator of the extra-high-voltage grid and is therefore subject to regulatory oversight by the national regulatory authority, the Federal Network Agency. The regulatory system has a substantial impact on the business model. The Federal Network Agency also sets the annual revenue cap, upon which the network user charges for 50Hertz are based.

For further information please see Elia Group Activity Report Page 16.

* new locations as of January 2019

* Refers to 50Hertz Transmission GmbH and its fully-owned subsidiary 50Hertz Offshore GmbH.

3.1.2. Memberships

GRI 102-12, GRI 102-13, SDG17

50Hertz is involved in various societies, associations, and initiatives in the field of renewable energies, climate and environmental protection, human rights and harmonisation of the European electricity market.

	Energy	Climate	Environment	Human Rights
AVEU Arbeitgeberverband Energie- und Versorgungswirtschaftlicher Unternehmen e.V. [employers' association of energy and utility companies]	✓			✓
BDEW – Federal Association of the Energy and Water Industry	✓			
German committee of CIGRE Conseil International des Grands Réseaux Électriques	✓			
ENTSO-E – European Network of Transmission System Operators for Electricity	✓		✓	
Go15 – Reliable and Sustainable Power Grids (indirect through Elia)	✓		✓	
RGI – Renewables Grid Initiative	✓	✓	✓	
UN Global Compact		✓	✓	✓
VDE-Elektrotechnischer Verein e.V. [electrotechnical association]	✓			
World Energy Council	✓			
Diversity Charter				✓

3.1.3. Values, principles, standards and codes of conduct

GRI 102-16, GRI 102-17; GRI 102-19, GRI 102-20, GRI 102-26, GRI 102-32, GRI 102-33

For 50Hertz, business activity that is successful in the long term is achieved by acting in the best interests of the Company, as well as in the interest of society. This is reflected in the Company's vision: "A successful energy transition – for a sustainable world". 50Hertz has made it its mission to make the energy transition possible. The Company has set itself five strategic goals to fulfil this task in the best way possible. Thus 50Hertz wants to maintain the highest possible level of supply reliability, expand the transmission grid to meet demand, achieve a competitive and sustainable result, further improve efficiency, and foster its value-based corporate culture with a strong focus on occupational safety. The sometimes opposing objectives and interests of 50Hertz and its stakeholders are to be reconciled as much as possible. Maximum transparency, for example, which is also embodied in this report, provides the basis for this.

50Hertz expresses its commitment to responsible corporate management in its Company Charter, which lays out its intention to comply with the 10 principles of the UN Global Compact with regard to human rights, work standards, environmental protection and the fight against corruption. 50Hertz joined this global values alliance in April 2017 and since then has been active in the Global Compact Network Germany. Company documentation is also available to our employees containing all applicable guidelines, directives and manuals, work instructions, process handbooks and company agreements. The Company Charter and guidelines set out what is meant by correct corporate conduct and make clear the fact that all employees must comply with the law. These principles flow into organisational measures that are binding for the whole Company.

Under the overall responsibility of the Chief Financial Officer, the Corporate Development Department has defined a sustainability concept and a measures roadmap for the steady expansion of sustainability reporting, while the Communications and Public Affairs Department continues to define the reporting processes.

The importance of constantly expanding sustainability management is clear from its inclusion in the annual business plan, which is valid for five years. As part of the sustainability strategy, objectives, indicators and measures are systematically developed, reviewed and integrated into the corporate strategy. A company-wide committee at senior management level (CSR* Board) oversees this, from the development of measures to reporting presided over by the Chief Financial Officer and the Chief Human Resources Officer. The CSR Board meets twice a year to agree on targets and processes.

The various departments, units and teams are responsible for implementing the individual measures of the Company, as well as for defining and recording the performance indicators. The

* CSR = Corporate Social Responsibility

core CSR team meets every quarter for this purpose. In these meetings, the progress of implementation is discussed, as well as possible critical concerns raised by stakeholders. Data controllers make performance indicators understandable and available to the whole Company on the central transparency management platform. In the regular risk analysis and at an annual risk conference, sustainability aspects are also discussed with the management and assessed. In addition, certified management systems, such as OHSAS 18001 in occupational health and safety and ISO 27001 in information security management, as well as internal management systems based on recognised standards, including environmental management (according to ISO 14001) and early public participation (according to VDI 7000), are used in the core areas of CSR.

3.1.4. Relevant legal framework

GRI 419-1

50Hertz always acts in accordance with the law. Its business activities are subject to numerous national and European regulations. The following main laws and European regulations provide the framework for our business activities:

- the EnWG ["Energiewirtschaftsgesetz": German Energy Industry Act]
- the EEG ["Gesetz für den Ausbau erneuerbarer Energien": German Renewable Energy Sources Act]
- the NEMoG ["Netzentgeltmodernisierungsgesetz": German Grid User Charge Modernisation Act]
- the KWKG ["Kraft-Wärme-Kopplungsgesetz": German Combined Heat and Power Act]
- the BImSchG ["Bundes-Immissionsschutzgesetz": Federal Immission Control Act]
- the BNatSchG ["Bundesnaturschutzgesetz": Federal Act for the Protection of Nature]
- the German Digitisation of the Energy Transition Act
- the EU Energy Efficiency Directive
- the Fauna-Flora-Habitat (FFH) Directive
- the EU Birds Directive

In the fiscal year 2018, the federal cabinet approved the amendments of the NABEG, which will have an important influence on our business activities. The proposed legislative amendments mainly comprise the simplification and acceleration of approval procedures for laying, strengthening and optimising power lines. The gradual national standardisation of the transmission grid user charges, first set out by the NEMoG in 2017, was refined in 2018 with changes in the StromNEV and ARegV, and has resulted in the first 20% national share of network user charges. In addition, effective 1 January 2019, the NEMoG has incorporated the refinancing of grid connection costs for offshore wind farms from network user charges to a new offshore grid levy according to Sec. 17f EnWG. At a European level, the "Clean Energy for All Europeans" package was negotiated and finalised at the end of 2018.

3.1.5. Political influence

GRI 102-16, GRI 415-1

Because legislative activities have a major impact on the business activities of 50Hertz, the company represents its positions transparently and publicly as part of the political process. This is the responsibility of the Communications and Public Affairs department. This political communication is conducted responsibly and without donations to political parties. Ethical principles for political lobbying were set out. The guidelines on conduct in the political arena, which apply for the whole company and are agreed with the management, define these principles. They stipulate that 50Hertz makes no donations to politicians, parties, or political institutions, and when providing sponsorship ensures appropriate consideration and proper balance. Responsibility for contributions to party-affiliated foundations and associations is embedded centrally in the Communications and Public Affairs department. In this way, together with specific training programmes, 50Hertz ensures that employees who are active in terms of social and energy policy are guided in their communications and their actions by clearly defined principles. Furthermore, 50Hertz is entered in the EU Transparency Register and is committed to its Code of Conduct. In 2018, 50Hertz did not make any contributions to politicians or political parties.

3.1.6. Anti-corruption

GRI 205-1, GRI 205-2

The Company Charter and guidelines on preventing corruption set out 50Hertz's understanding of correct ethical conduct and make it clear that the Company complies with the law and does not tolerate corruption. These principles flow into organisational measures that are binding for the whole Company.

Since 2010, 50Hertz has had a policy in place that regulates the whistleblower system and prescribes the establishment of an internal Compliance Committee and an external ombudsman. The Compliance Committee comprises one member from Legal Affairs, one member from Human Resources and a compliance coordinator. The ombudsman reports to the Compliance Committee once a year in writing about how it has been used and the number of tip-offs received. If the ombudsman passes on a justified tip-off to 50Hertz, the Compliance Committee is convened immediately to deal with the case in hand and take further internal action if necessary. The Committee reports to the management of 50Hertz annually and on an ad hoc basis as required. In 2018, the ombudsman did not receive any tip-offs about corruption. No significant fines were imposed on 50Hertz in the fiscal year 2018 in connection with general business activities, power line construction projects or operations. The reporting threshold for administrative offences was set at EUR 25,000.

50Hertz also regularly provides all employees involved in the procurement process with training on the basics of procurement, anti-corruption and compliant behaviour. Since 2016, 19 training sessions have been held across different sites for 200 employees from throughout the Company. For 2019, 4 training sessions are planned for an expected 50 participants.

3.1.7. Risk management

GRI 102-30, GRI 102-11, GRI 202-2

As part of its systematic risk management, 50Hertz regularly surveys and assesses the following risk areas:

- Protection of life and limb
- Profit and loss
- Liquidity
- Reputation
- Supply reliability

50Hertz aims to avoid risks to the Company's continued existence, to reduce risk positions as much as possible where feasible and to optimise the opportunity/risk profile. Risk guidelines set down how risks are systematically identified, recorded, assessed and monitored on a quarterly basis. A risk conference is held once a year in which all department heads (second management level), as risk owners, and the risk manager meet with the management to discuss the most significant risks and risk-related issues. In the area of CSR, for example, these are occupational safety and new requirements from environmental legislation. In the upcoming months the risks assessed and monitored will be extended related to risk based on climate change.

In the sense of a holistic approach to risk management and the principle of precaution, 50Hertz involves suppliers and the associated processes. The company has anchored requirements regarding occupational safety and environmental protection in its purchasing and procurement policy, which are binding for all suppliers. In the future 50Hertz will analyse its influence on the structure of the sustainable supply chain in detail, expand upon documents relevant to its suppliers on sustainability related aspects and make its business partners even more aware of occupational safety, health protection and environmental protection topics.

3.1.8. Security

G4-EUS-DMA DISASTER/ EMERGENCY PLANNING AND RESPONSE

As an operator of critical infrastructure, 50Hertz is required to ensure information security under the IT-SiG ["IT-Sicherheitsgesetz": IT Security Act]. Information must be processed, stored and communicated such that the availability, confidentiality and integrity of the information and the systems are adequately ensured.

To this end, an information security management system was introduced in 2017 and certified in 2018 in accordance with ISO 27001. This established security process ensures that IT risks are systematically identified and addressed. In particular, security alerts and warnings that are issued by the German Federal Office for Security Technology (BSI) are recorded and evaluated as part of this process. If required, necessary protective measures are derived and implemented. In the reporting year, no targeted cyberattacks on 50Hertz were registered and no damage from information security incidents was recorded. 50Hertz employees, as well as temporary and external employees, participated in an online training session on information security in 2018.

In January 2018, 50Hertz received the ISO 27001 information security management system certification, as a result of which 50Hertz has to fulfil its obligation as an operator of critical infrastructure on the basis of the IT security catalogue of the Federal Network Agency. In November 2018, the repeat audit was performed.

For 50Hertz, security goes beyond its corporate boundaries. Therefore, both internal and external stakeholders receive training in crisis management and communication in the form of regular crisis team exercises, among other things. As a result of this, not only existing structures, processes and reporting channels are evaluated and continuously improved, but the crisis team participants and employees also receive intensive training on how to deal with unexpected events under special stresses and quickly make appropriate decisions to manage crises. These and further measures aim to continuously and holistically increase the resilience of 50Hertz.

3.1.9. Materiality and objectives

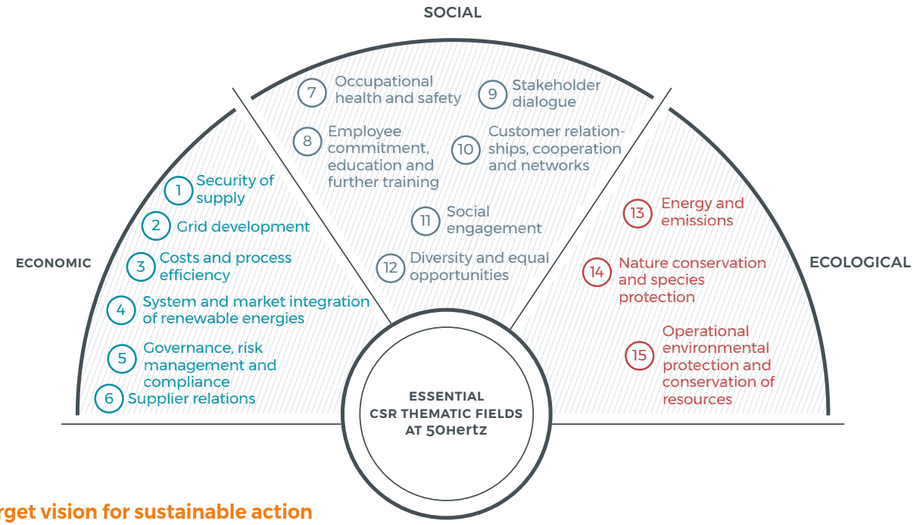
GRI 102-15, GRI 102-46, GRI 102-47, GRI 103-1, GRI 103-2, GRI 103-3

50Hertz examined the economic, environmental and social impacts of its business activities pursuant to the Global Reporting Initiative (GRI) standards for sustainability reporting. The general aspects listed there were translated into topics that are relevant for 50Hertz and aligned with the interests of our stakeholders by means of benchmarks, peer group reports and employee surveys. A detailed survey of stakeholders was conducted in the fourth quarter of 2017 with the aim of systematically developing the materiality analysis and sustainability management.

Our stakeholders include our partners, the public, non-governmental organisations (NGOs), politicians, regulatory agencies, investors, the media, customers, suppliers and representatives of 50Hertz employees. The qualitative survey confirmed the key areas of the report. In 2018, the process for obtaining a common materiality analysis was launched at the level of Elia Group. This process will be continued in 2019. For this reason, the further differentiation of the main topics from 50Hertz with regard to boundaries and description is postponed until the result of the joint materiality analysis.

3.1.10. Stakeholders

For a detailed report concerning 50Hertz stakeholders, please see chapter Stakeholder Engagement in this part of the report.



Our target vision for sustainable action

1
- High security of supply through sustainable system, market and grid operation
- Top performance in comparison to other grid operators
- Certified information security management system

2
- Need-based grid expansion
- Reduction of connection costs for offshore wind farms

3
- Continuous improvement of process efficiency
- Sustainable increase of cost efficiency

4
- Comprehensive system integration of renewable energies, among other things, through physical grid connection of particularly system related components particularly

5
- Improved cooperation in the three GRC fields
- Strengthening the internal control systems and the compliance function
- Set-up of a supervisory committee at holding level
- Introduction of a tax compliance management system

6
- Consideration of environmental awareness and occupational safety standards for selection of suppliers
- Increase ratio of companies with the appropriate certification

7
- Prevention of work-related accidents
- Promoting awareness for safe behaviour
- Recertification of the occupational safety management system

8
- High employee commitment
- Promotion of needs and target-oriented development and further training
- Offering internal development and career opportunities

9
- Early public participation
- Applying the 50Hertz standards regarding information, dialogue and participation to all relevant projects
- Establishing a lessons learned process, including evaluation for public participation

10
- Intensifying cooperation and networks with customers and with politically and socially relevant stakeholders
- Reliable and timely communication with customers
- Use of customer surveys as a basis for further improvements

11
- Appropriate, systematic support for social, cultural and community projects

12
- Equal and fair participation of all employees
- Supporting people with disabilities in working life
- Maintaining the gender quota for all management levels

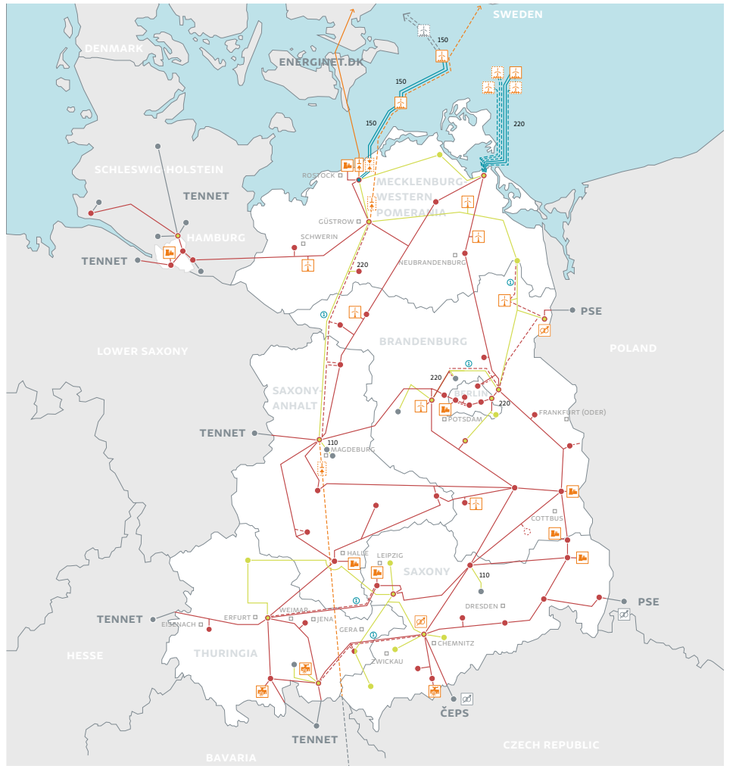
13
- Minimising controllable energy consumption and emissions
- Replacement of the SF6 greenhouse gas

14
- Minimising intervention in nature and the landscape when building lines and substations
- Implementing compensation measures with the greatest benefits to the whole of society
- Forward-looking, intervention-minimising and ecologically sustainable line and route planning
- Better protection of birds and amphibians

15
- Prevention and recycling of waste generated when building, operating and demolishing plants

3.2. Grid

SDG9



LEGEND

Switching stations (most with links to distribution system operators)

- 380 kV
- 220 kV
- Transformation 380/220 kV
- Transformation 380/150 kV
- Planned/under construction
- Other companies

Line	380 kV
Line planned/under construction	380 kV
Line	220 kV
HGÜ/Gleichstromverbindung	300/320/400/525 kV
HGÜ/Gleichstromverbindung planned/under construction	300/320/400/525 kV
Other companies	380/220 kV
HVDC/back-to-back converter planned/under construction	380/150 kV
HVDC/DC link	400 kV
HVDC/DC link planned/under construction	320/525 kV
Grid connection offshore	150/220 kV
Grid connection offshore planned/under construction	150/220 kV

SYSTEM USERS:
Our customers are regional distribution system operators as well as power plants, pumped-storage plants, wind farms and major industries connected to the transmission system.

- Conventional power plant (lignite-fired or coal-fired power plant)
- Pumped-storage plant
- Phasenschiebertransformator
- Onshore/offshore wind farm
- Onshore wind farm planned/under construction
- Offshore wind farm planned/under construction

① New construction largely along existing routes

STATUS AT DECEMBER 2018

3.2.1. Total length of lines

C4-EUS-EU4

Total length of lines	2016	2017	2018
Thereof overhead lines 380 kV	7,225 km	7,245 km	7,250 km
Thereof overhead lines 220 kV	2,647 km	2,612 km	2,607 km
Thereof sea cable 220 kV	-	-	190 km
Thereof sea cable 150 kV	270 km	270 km	270 km
Thereof underground cables - various	73 km	73 km	73 km
Circuit length in total	10,215 km	10,200 km	10,390 km

3.2.2. Substation and switching stations

Total length of lines	2016	2017	2018
Substations	63	65	65
Switching stations	6	7	8

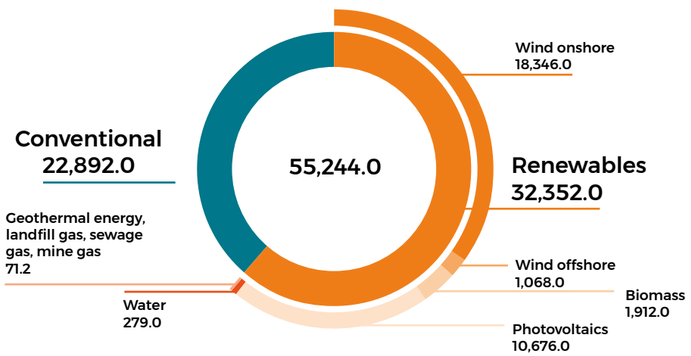
In 2018, the testing operation of a new switching station on the offshore platform Arkona started.

3.3. Energy

SDG7, GRI 302-2, GRI 102-9

3.3.1. Installed capacity

Installed capacity in MW

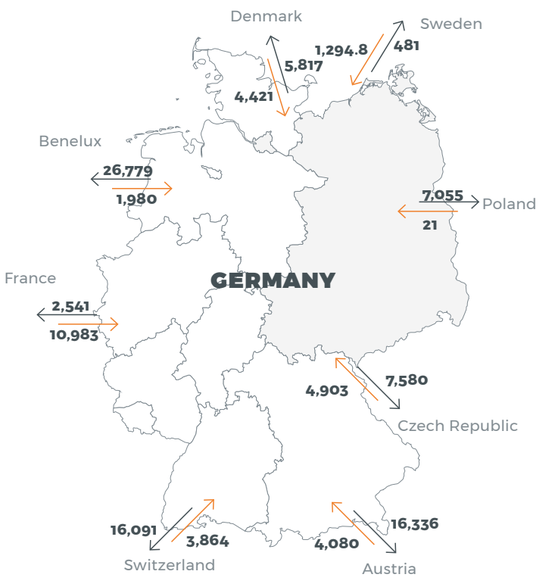


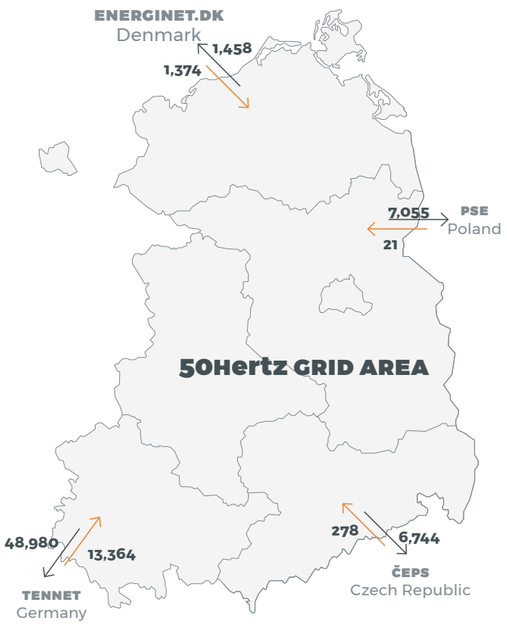
3.3.2. Energy balance yearly

Only Elia reports on this indicator.

3.3.3. Energy import & export

GRI 302-2





50Hertz's grid area represents 49 TWh, making it a major energy exporter in Germany and Europe.

3.3.4. Grid losses

G4-EUS-EU12

Some energy is always lost when electricity is transmitted, whether as current heat loss in transmission lines, in transformers and other system elements, or as leakage and corona loss. In 2018, 50Hertz recorded grid losses of 2.5 TWh. The average grid losses at the extra-high-voltage level were 240 MW; those of transformation were 45 MW. With the SuedOstLink between Saxony-Anhalt and Bavaria, 50Hertz is planning the first 400 kV extra-high-voltage direct current transmission line in its grid area. This technology is more suitable than conventional three-phase AC current technology to expediently transport large amounts of energy over long distances with lower grid loss and optimal control.

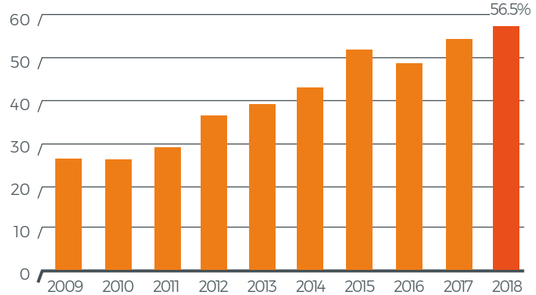
The share of grid losses in the total amount of electricity transported is 2.13%.

3.3.5. Energy consumption

In the grid area of 50Hertz, electricity consumption is stable over the year at 96.8 TWh in 2018 (96 TWh in 2017 and 2016).

3.3.6. Development of renewable energies

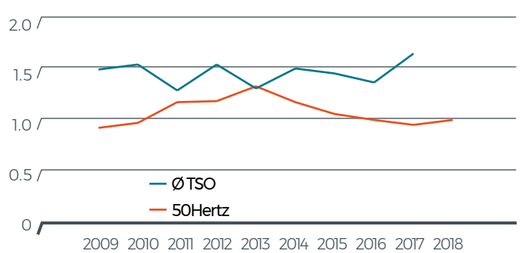
Development of the renewable energies share in electric consumption in 50Hertz grid area in %



3.3.7. Reliability

The 50Hertz region is a pioneer in the integration of renewables and at the same time offers a high level of security of supply.

Disruptions / 100 km length of line



3.4. Human Resources

3.4.1. Management approach

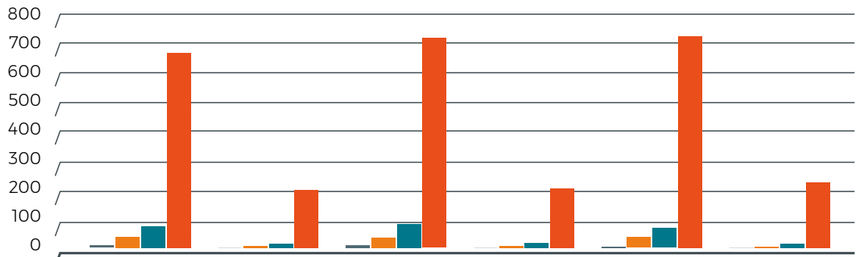
GRI 102-7, GRI 102-8, GRI 102-26, GRI 102-38, GRI 102-41

50Hertz owes its success entirely to the success of its employees. It is the responsibility of the Company to help them develop their skills, foster their health and commitment, involve them in decisions and guarantee equal opportunities for all. The maintenance and development of the value-based corporate culture is one of the Company's main goals and the strategic foundation for all personnel decisions. As part of the extended management team, the Chief Human Resources Officer is responsible for all personnel strategy issues.

An annually updated five-year business plan serves as a framework for qualitative and quantitative personnel planning. 50Hertz complies with international guidelines beyond the reach of its collective agreements and company agreements, such as the core labour standards of the International Labour Organisation (ILO: C87, C98 and C135) and workers' rights in the UN Global Compact.

At 43.6, the average age of employees at 50Hertz is more or less unchanged when compared to the previous year.

Total Headcount Germany*



	2016 Men	2016 Women	2017 Men	2017 Women	2018 Men	2018 Women
Director	4	0	4	0	4	0
Senior Manager	34	5	32	5	35	4
Direct Leaders	71	14	76	15	65	14
White collars	642	187	674	187	706	217
TOTAL	751	206	786	207	810	235

* Head count 50Hertz Transmission and 50Hertz Offshore

3.4.2. Remuneration policies

Fair pay for employees and attractive benefits are a matter of course at 50Hertz. The remuneration systems are refined according to need to ensure the Company remains an attractive employer for our staff in future. IG BCE (the Union for the Mining, Chemical and Energy Industries), together with the Employers' Association of Energy and Supply Companies (Arbeitgeberverband Energie- und versorgungswirtschaftlicher Unternehmen e.V. – AVEU), negotiates our collective agreements. Fair remuneration based on requirements and performance regardless of gender is supplemented by comprehensive company benefits and the offer of a company pension scheme.

In addition, employees have the option to share in the previous business year's success by means of Elia Group's stock programme. The year 2018 was the sixth year every employee was offered up to 24 shares at a reduced price. Nearly 58% of eligible employees took advantage of the offer.

50Hertz transparently and voluntarily releases the total earnings of the management team in the consolidated financial statements in detail, listing the fixed and variable overall remuneration, as well as corporate pensions and any other benefits to 50Hertz's management. The features of the remuneration systems are explained with disclosures in the corporate governance declaration.

The factor of compensation of the highest-paid employee to the median annual total compensation for all employees is 8.2.

3.4.3. Incentive systems

The remuneration system includes success- and performance-based elements, which offer an incentive for achieving common corporate goals and corresponding individual goals. A number of goals relate to sustainable corporate management, such as compliance with occupational health and safety guidelines or successful social dialogue.

3.4.4. Codetermination

GRI 402 MA

50Hertz is not only committed to the freedom of association, collective industrial agreements and the protection of employees' representatives, but also values the trusting and constant cooperation with all codetermination bodies.

The Supervisory Board of 50Hertz comprises six members and is above the equal representation of employee and employer interests as contractually guaranteed by legal requirements. In three supervisory board meetings in 2018, through written reports, and in verbal presentations by the management, the Supervisory Board was updated about and discussed the current status of our business, our economic situation and the status and development of risks. A Spokesmen's Committee with information and consultation rights represents the interests of our executives.

Our Works Council is responsible for representing all employees who are covered by collective agreements and all non-pay scale employees at 50Hertz. A group-wide exchange takes place in the European Works Council of Elia Group. During joint activities like the Industrial Group Committee of the Electricity Industry and the Work Group of Network Operators, we actively foster employee interests in the infrastructure networks' sector.

Furthermore, we regularly send guest speakers and lecturers to educational events hosted by IG BCE. In order to support our employees' union commitment, we offer orientation and information events such as our "Schnupperkurse Mitbestimmung" (trial courses on codetermination). The youth and trainee representation (Jugend- und Auszubildendenvertretung – JAV), which was first established and elected for a two-year term in December 2016, represents the interests of our young employees across the company. JAV works closely with the other codetermination bodies.

A regular exchange of opinions with employees is facilitated through various platforms (see Stakeholder Engagement section) and, in particular, the regularly conducted Employee Survey "Sag es!" (Say it!). The last Employee Survey took place in 2017. The results were discussed with staff in workshops in the first quarter of 2018 and specific measures were derived from them.

3.4.5. Gender, diversity and equal opportunities

GRI 405-1, GRI 405-2, SDG 5, SDG8

As a reflection of its convictions and in compliance with the ILO convention 111, 50Hertz is committed to fostering diversity and strictly condemns any discriminatory conduct in all aspects of professional life. All of our employees enjoy equal rights regardless of their ethnic origin, age and gender, their sexual orientation, religious affiliation, political views, national or social origin, or any other factors. In the reporting year, 50Hertz became a member of the German Diversity Charta, a working initiative for fostering diversity in companies and institutions, thus reinforcing an open and appreciative corporate culture.

Equal opportunities for men and women: This goal is part of the "Equality Charta" of the IG BCE, which 50Hertz has signed. The Company feels it is its duty to support the idea of "Fair Share" and strive for a proportion of female employees in our job profiles equal to that outside of the Company. As of 31 December 2018, there was a 9% share of female managers, an almost 17% share at the second management level, a 17% share of Supervisory Board members and a 0% share in management (20% as of 30 September 2018)*. The in-house initiative "50:50 – das Frauennetzwerk" (The Women's Network) works towards promoting the development of personal and professional competence and the presence and influence of women at 50Hertz. The EntgTranspG ["Entgelttransparenzgesetz": German Remuneration Transparency Act] entered into force on 6 July 2017. 50Hertz Transmission GmbH has submitted its first report on equal opportunities and equal pay in the Management Report of 31 December 2017.

At 50Hertz, fostering diversity and equal opportunity also means giving people with health-related disabilities the same opportunities as people without disabilities. We concluded an inclusion agreement in 2013 with the Works Council, the Spokesmen's Committee, and the representative body for disabled employees at 50Hertz, which contains measures aimed at supporting people with disabilities in their working life. An internal inclusion team is charged with implementing and monitoring the agreement. During the fiscal year, the proportion of severely disabled and equivalent employees was 2.3%. In total, 10 employees with restrictions were employed by 50Hertz in the reporting year. This proportion will continue to be gradually increased in accordance with workplace-specific requirements in commercial and technical departments. In 2017, the Company entered into a partnership with the Annedore-Leber Vocational Training Centre and integrated a trainee with disabilities. In the fiscal year, 50Hertz entered into a partnership with AfB gGmbH for the disposal of IT clients' hardware. The renowned inclusion company offers employment to disabled people and contributes to the prevention of further CO_2 emissions by processing and selling used IT equipment.

There were no cases of discrimination in 2018.

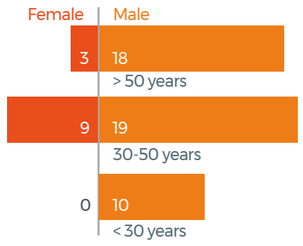
* As of 1 January 2019, 50Hertz will once again reach a 20% share of females in management thanks to Sylvia Borcherding starting work.

3.4.6. Workability

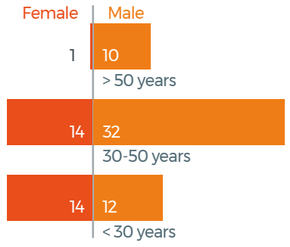
GRI 401-1, G4-EUS-EU15

Employees of 50Hertz benefit from a family-friendly work environment and the opportunity to find a work-life balance. In order to give mothers and fathers the necessary flexibility for managing childcare, there is a company agreement promoting compatibility of work and family. The agreement regulates questions of parental leave, support services, flexible work hours, special leave and sabbaticals, as well as professional support. In the 50Hertz Netzquartier building, there is also a day care centre for the children of our employees, which also offers spaces for children from the neighbourhood. Beyond that, we have established a parent-child office for short-term childcare needs.

Number of leavers by age and gender



Number of new employees by age and gender



Together with the General Works Council and the IG BCE, an agreement was established on fostering and maintaining the employability of our staff. This agreement provides a basis for personnel policies that will help us face the effects of demographic change. Our objective is for employees to be able to carry out their work activities without any limitations until they reach their regular retirement age.

Percentage of employees going into retirement in the next 5 years	M	F
Total 50Hertz Transmission	5.7%	1.2%
Director	0%	0%
Senior Manager	12.82%	0%
Direct leaders	6.33%	0%
White collars	5.31%	1.3%

3.4.7. Parental leave

GRI 401-3

Parental Leave	
Number of employees on parental and caregiver leave	13
of which male	3
of which female	10
Number of employees on parental leave 01.01.2018-31.12.2018	78
of which male	53
of which female	25

3.4.8. Training and education

GRI 404-1, GRI 404-2

The Company can only reach its corporate goals if the staff is highly qualified and thoroughly informed about current developments. Employees are therefore offered individually tailored education and training opportunities and relevant additional qualifications. Systematic succession planning guarantees that a sufficient number of potentially suitable employees are available for all management positions, and that we can fill vacancies from within the Company whenever possible. To that end, we identify and develop talent – for instance through programmes for "Young Professionals" designed and offered in cooperation with Elia Group. 50Hertz obtains qualified new talent through our own internal apprenticeship programme, a 24-month trainee programme and by hosting internships and supervising doctoral, bachelor's, and master's theses in cooperation with universities and colleges. In 2018, a total of 35 student employees and 5 trainees worked for 50Hertz. Currently, 20 young men and women are completing their industrial or business apprenticeships, which corresponds to a trainee rate of 1.9%. On average, each employee received 11.76 hours of training in the reporting year, excluding regular safety training. In addition, management staff are offered 50Hertz-specific training modules for developing individual leadership skills. Since 2014, 123 management employees (division, department and team heads) have participated, working cross-departmentally and cross-hierarchically on specific cases from their day-to-day management practice.

3.4.9. Occupational health and safety

GRI 403-1, GRI 403-2, GRI 403-3, SDG8, G4-EUS-LA6

At 50Hertz, protecting the health and safety of employees is the highest priority, as is underscored by the guideline on occupational health and safety, which is binding for all employees. The occupational health and safety area oversees a company-wide occupational safety management system pursuant to OHSAS 18001. The occupational safety management system was again successfully certified according to OHSAS 18001:2007 in November 2017.

Occupational health and safety and injury and illness prevention are integrated into our corporate strategy and practiced by all employees as they go about their daily business. Every employee is instructed on how to be conscious of hazards, report them immediately and submit suggestions for promoting safe and healthy working conditions. In the fiscal year, occupational health and safety was once again one of the key projects in 50Hertz's business plan. In 2018, the large-scale campaign "gib8" (pay attention) was initiated in order to raise employees' and suppliers' awareness of issues relating to occupational health and safety. By taking specific measures and providing information material, the campaign has a direct impact on potentially endangered areas and addresses a variety of specific target groups. The personal protective equipment (PPE) worn by workers is always kept up to date, new PPE is wear-tested and the catalogue is adapted in line with the respective requirements.

Occupational health and safety is not limited to our own employees. The stringent 50Hertz standards also apply to contracted companies working on 50Hertz construction sites. During the contracting process and later via IT-supported construction monitoring by specially trained 50Hertz employees, it is ensured that suppliers comply with 50Hertz's strict safety requirements. Special instructions for guaranteeing occupational safety when contracting external companies for work in the scope of the 50Hertz transmission grid (OAFN) have been transparently and bindingly regulating this since May 2018.

During the 2018 reporting year, three reportable accidents occurred at 50Hertz. We therefore met our target for accident rate and accident severity in 2018. With the aim of avoiding future accidents at work, each accident was thoroughly evaluated and mitigating measures concerning occupational safety taken from this and implemented.

At 11 in total, the number of work-related accidents in contracted companies declined compared with the prior year. In 2018, 2017 and 2016 there were also no fatalities.

Accident statistics

	2016	2017	2018
Work-related accidents (with at least 1 day of downtime)	3	6	**3**
Accident rate[1]	2.0	4.5	**2.0**
Accident seriousness[2]	0.16	0.23	**0.02**
Number of accidents external companies	21	16	**11**

[1] Number of work-related accidents resulting in downtime (≥1 day) x 1,000,000/ Number of hours actually worked.

[2] Number of days lost due to work-related accidents in calendar days x 1,000/ Number of hours actually worked.

SDG3

The early recognition and prevention of work-related illnesses, as well as maintaining the employability of staff are also integral components of occupational health and safety at 50Hertz. To achieve these goals, 50Hertz provides appropriate occupational medical care, which primarily focuses on personal protection and prevention of health risks. In addition, 50Hertz regularly provides all of its employees with occupational medical consultations, vaccinations and advice on ergonomics in the workplace. A qualified and confidential external consultation is made available at all times in the event of personal stress, conflicts or addiction issues. Employees can also participate in various public events like the "Berlin Team Relay race", the "HSH Nordbank Run" benefiting the children's charity "Kinder helfen Kindern" (Children helping Children), the bicycle race "Jedermann-Radrennen Cyclassics" in Hamburg or the "Rennsteig-Herbstlauf" run in Thuringia.

3.4.10. Safety inspections

From 1 July 2017, all new contracts at 50Hertz include an agreement for quality assurance on construction sites, including an unrestricted right for 50Hertz to carry out checks. If the required standards are not met, there is a penalty point system, as well as an escalation model system. In this connection, further measures for future compliance with safety regulations are set out by binding rules. 1,159 construction site inspections were planned for 2018. With 1,190 inspections performed (as of December 2018) this target was exceeded.

3.4.11. Safety trainings

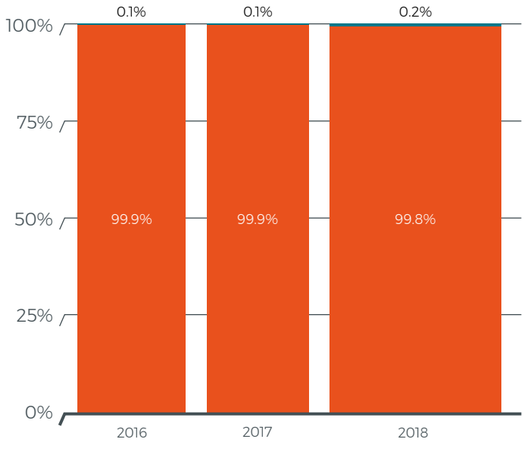
Employees in the professional departments are instructed six times per year, those in the engineering and commercial departments once per year. We also conduct an annual occupational safety competition to further raise awareness and motivate our staff. On the one hand, the number of prior-year accidents for each location is taken into consideration and on the other, knowledge on occupational safety is tested and deepened in a practical section that differs every year.

3.5. Suppliers, local added value and human rights

SDG 12

3.5.1. Number of suppliers

GRI 102-9, GRI 204-1



3.5.2. Local added value

GRI 203-1, GRI 203-2, GRI 204-1

50Hertz and its subsidiaries are subject to tax. Taxes are used to finance measures and current expenses of regional administration bodies. The different regional administration bodies are then entitled to the revenue generated from the different types of taxes.

As an employer, 50Hertz pays the wage tax for its employees to the tax authorities. This wage tax is recognised under personnel expenses. The federal government primarily levies income and corporate income tax as well as VAT. Through a complicated fiscal equalisation scheme between the regional administration bodies, which is laid down in the financial constitution of German basic law, these taxes partly go indirectly to the regional administration bodies of federal states and communities in 50Hertz's grid area. In 2018, 50Hertz paid EUR 40.9m (prior year: EUR 84.5m) in corporate income tax. Additionally, EUR 1,158.3m (prior year: EUR 1,095.4m) VAT and EUR 1,053.3m (prior year: EUR 941.9m) input VAT were incurred.

In addition to these federal taxes, the municipalities also levy real estate tax and trade tax. These taxes go directly to the municipalities. This means that this part of 50Hertz's added value can be directly used in the municipalities of 50Hertz's grid area via their households to finance their expenses. In the fiscal year, the 50Hertz Group paid EUR 0.4m (prior year: EUR 0.4m) in real estate tax and EUR 47.9 (prior year: 65.7m) in trade tax.

In its regulations adopted by management, 50Hertz has undertaken not to adopt an "aggressive tax policy" and to pay its taxes on time and in accordance with the law. By making this voluntary commitment in the areas it can influence, 50Hertz has created a framework for sustainably distributing the added value generated. The main beneficiaries of this are structurally weak regions located in 50Hertz's grid area.

In 2018, 50Hertz purchased goods and services totalling EUR 921m from companies headquartered in Germany. Of this amount, EUR 141m, or 15.3%, went to companies based in 50Hertz's grid area.

The lower percentage compared to 63% in 2017 is primarily due to awarding the contract for a submarine cable to connect the Ostwind 2 wind farm (Westlich Adlergrund cluster CWA 2) of EUR 542m to a syndicate based in Cologne. This and other orders will be called by the companies in subsequent years as goods delivered and services provided.

3.5.3. Corporate citizenship

50Hertz supports numerous projects in its grid area, primarily relating to cultural, energy and environmental education, as well as youth and social affairs. Clear management and organisational structures have been established for the implementation of our many social activities. Our Communications and Public Affairs department is responsible for our engagement. The Department coordinates with management to set the goals, coordinate the activities and examine inquiries for worthy projects. Our guideline for donations and sponsoring defines our general support principles, assessment criteria and the organisational process transparently and consistently, and is binding for all employees. When granting donations and sponsoring support, it is always ascertained that the cause is commensurate with our corporate values, is geared towards sustainability, offers true added value for our society and the public and follows the defined process.

In the surroundings of the headquarters, the 50Hertz Netzquartier, sees itself as a good corporate citizen, which actively contributes to making the new residential and working district "Europacity" attractive to its residents. The day care centre "Energiebündel" welcomes not only children of 50Hertz employees but youngsters from the neighbourhood as well. Since the summer 2017, the "Rundgang 50Hertz" exhibition is held annually in the Netzquartier building. Together with the Hamburger Bahnhof Museum for Contemporary Art in Berlin, outstanding works by graduates of various art academies in the grid area were exhibited. This offered talented young artists a platform for entering the world of the professional art market, making valuable connections and pursuing their career. The project will be continued in 2019.

Specifically educating children and adolescents about the energy transition is of great importance. An interactive exhibit called "Energie gemeinsam wenden" (Changing energy together), developed by 50Hertz and the Independent Institute for Environmental Issues (Unabhängiges Institut für Umweltfragen e.V.) in late 2012, playfully teaches students about different aspects of the energy transition. The interactive exhibit was awarded the title of Project of the UN Decade "Bildung für nachhaltige Entwicklung" (Education for Sustainable Development) by the German UNESCO Commission. In the 2018 reporting year, 1,108 students visited the exhibit.

50Hertz also supports selected projects in its grid area that foster a multi-faceted cultural landscape. As part of the renowned Artist in Residence programme at the Konzerthaus Berlin, the pianist Sir András Schiff was supported. We also supported the Musikfestspiele Mecklenburg-Vorpommern again.

As in prior years, 50Hertz was again actively involved in numerous initiatives, associations and organisations in 2018. Some examples are the Rennsteig-Herbstlauf run in the Thuringian Forest, the Kreisfeuerwehrverband fire services association in Oberlausitz-Spree, the Schulförderverein parent teacher association in Röhrsdorf and the youth chapter for new volleyball talent of VFB 91 Suhl e.V.

In 2019, 50Hertz plans to compensate for the CO_2 emissions produced by air travel by promoting electrification projects in the Global South.

3.5.4. Human rights

GRI 308-1, GRI 414-1

50Hertz expresses its commitment to respecting human rights, the right to privacy, personal safety and freedom of expression, as well as ownership rights of its employees, residents and customers. 50Hertz also assumes responsibility for compliance with social standards in the supply chain. For this reason, 50Hertz is not only a member of the UN Global Compact, it is also committed to the core labour standards of the International Labour Organisation (ILO).

In order to ensure that business partners also observe international rules on human rights – such as the prohibition on forced and child labour – sustainability and ethics are essential components in the assessment of suppliers and service providers.

50Hertz raises awareness for sustainable conduct in regular supplier meetings to ensure that respect for compliance with ethical principles and guidelines continues to grow in the long term. All orders are placed centrally. As a result, all of 50Hertz's business locations are examined to ensure their compliance with human rights obligations. The plan is to gradually expand supply chain management to include sustainability topics over the next few years. A common code of conduct for suppliers of Elia Group is currently under review and is to become a binding component of all supplier contracts in future. In the reporting year, the first risk assessment on sustainability issues and human rights was carried out in the form of desk research for the 20 largest suppliers, which have a total order value of more than EUR 378m and a share in the Company's entire order volume of around 68%. Nineteen of the companies assessed have their registered offices in Germany and one in Milan; the majority of the companies are affected by the CSR reporting requirements and must therefore publish reports containing information on non-financial indicators and human rights issues according to international reporting standards. No risks were identified. 50Hertz is looking at further expanding supply chain management and extending reporting to include human rights issues in future.

3.6. Stakeholder Engagement

3.6.1 Stakeholder dialogues

GRI 102-21, GRI 102-40, GRI 102-42

As part of the materiality analysis process, the 50Hertz stakeholder environment was analysed and defined. The company regularly contacts and exchanges information with these stakeholder groups.

Stakeholder environment

	Finance			Environment/ Society							Market				
Dialogue formats	Mining, chemical, energy industrial union	Shareholder	Investor	Rating agencies	Media	Federal Network Agency	Policymakers	Public	Science	NGOs	Citizens' initiatives	Suppliers	Generators	Distribution network operators	Major consumers	Transmission system operators
Networks work group	✓															
Electricity industry group committee	✓															
Guest talks	✓															
Bankers Day			✓													
Analysts and investors telephone conferences			✓	✓												
Financial statement press conference			✓		✓											
Annual reports		✓	✓	✓		✓	✓	✓	✓	✓						
Networks state meeting northeast							✓									
Energy lunch in the network quarter							✓									
System security conference													✓	✓	✓	✓
EEG conference																
Supplier day												✓				
Customer day													✓	✓	✓	
50Hertz art tour								✓								
Hands-on exhibition								✓								
Social media					✓			✓								
Science advisory board									✓							
University cooperations									✓							
Dissertations, master's and bachelor's theses									✓							
RGI meeting										✓						✓
Bird protection conference									✓	✓	✓					✓
Early public participation							✓	✓			✓					
International visitor groups							✓		✓							✓
Conference "Controlling load flows, strengthening European electricity trading"																✓

3.6.2. Cooperations and innovations

50Hertz is lead coordinator of the WindNODE joint project, in which over 70 project partners in the northeast German model region are working for four years in total on common solutions for integrating even larger amounts of renewables into the power system as efficiently as possible. The list of participants includes energy supply companies, grid operators and high-tech specialists, but also companies from the automotive industry, the supply and disposal sector, housing and retail enterprises, as well as universities and research institutions in the region. WindNODE encompasses all six northeast German states including Berlin and is under the auspices of the six state premiers and the mayor of Berlin. The companies Siemens and Stromnetz Berlin, as well as economic development agencies Berlin Partner, Energy Saxony and ZukunftsAgentur Brandenburg join 50Hertz in the strategic control of WindNODE. The flexibility platform, an integral part of the project, was trialled in November 2018. This digital purchasing platform enables electricity consumers, electricity producers and storage operators to offer services that are appropriate for the region and flexible in terms of when they are rendered, which ensures that less renewable energy has to be restricted during grid bottlenecks.

A scientific council was established for the purpose of regular exchanges between science and practice. The volunteer committee currently consists of 16 professors from the fields of energy technology, energy industry, energy law and energy policy. The council meets once or twice a year to discuss and assess current topics and future issues relevant to 50Hertz. In 2018, both half-yearly meetings focused on the issues "optimisation of existing grids" and "innovative technologies for the energy transition". An important aspect of its work is the initiation and execution of joint research and development projects and studies, as well as the supervision of dissertations, bachelor's and master's theses. There are also plans to integrate sustainability topics in this dialogue in future.

Beyond this, 50Hertz has worked with a number of universities in the balancing zone for many years. The topics of our joint research deal with, for instance, the voltage quality of extra-high-voltage grids, the operation of three-phase current and direct current on one pylon, the determination of critical conditions in the 50Hertz grid, or the implications of the energy transition for the economy, politics and society. In addition, we are active at the universities and research institutions by regularly giving practice-oriented lectures, talks and workshops.

For 50Hertz, active lead management and participation in research and development projects are an integral part of innovation management. In diverse cooperations with academic and industry partners, focus is largely placed on activities in the areas of new technology, energy markets and system security, the integration of renewable energies and the required development of the electrical system. Overall, around EUR 2m (prior year: around EUR 3m) was spent on research and developme projects in 2018. This was counterbalanced by EUR 0.15m (prior year: around EUR 0.25m) that 50Hertz received in public non-repayable subsidies.

Together with various European environmental associations and other transmission system operators, 50Hertz has founded the Renewables Grid Initiative (RGI), which supports grid expansion for the effective integration of renewable energies across Europe, driving forward the dissemination of innovative consultation practices in the process (further selected memberships page 38).

3.6.3. Public acceptance

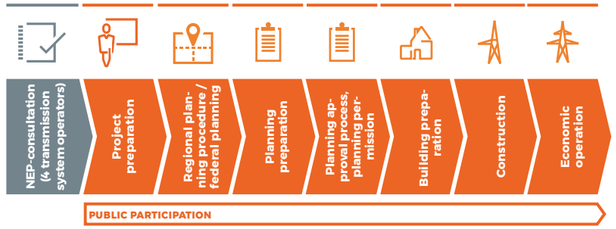
GRI 102-29, GRI 102-43, GRI 102-44, GRI 413-1, G4-EUS-DMA-STAKEHOLDER PARTICIPATION

When planning and implementing the grid expansion, 50Hertz takes a comprehensive dialogue and participation approach. The involvement of relevant stakeholder groups plays a vital role when it comes to sustainable grid expansion. Firstly, regional and local stakeholder groups are carefully analysed and issues, questions and concerns of those living locally are addressed. For this, 50Hertz follows the VDI 7000 standards. This allows 50Hertz to develop and implement a participation plan together with the region, based on both the standards of early public participation that were a success and the project specifications of each project. In the regions in which existing capacities are being increased or new transmission substations and lines are being built, the need to inform and involve citizens is varied. 50Hertz wants to align itself to the specific needs and engage in dialogue locally. This is the only way to further improve plans, integrate knowledge that is available locally and to involve those affected.

Dialogue with relevant stakeholder groups begins very early in the planning phase of projects. This includes consultations on grid development plans as well as grid enhancement and expansion projects. Dialogue with the affected parties is conducted according to clearly defined requirements, in set formats and by means of a standardised "tool kit".

Internal project-related guidelines define the timelines and interplay between project planning, approval, public participation and stakeholder management. This includes comprehensive lessons learned processes, which enable the company to continuously develop the standardised "tool kit" for public participation at 50Hertz. Moreover, 50Hertz participates in the debate on the quality of public participation, for example, in the Alliance for a Diverse Democracy of the Bertelsmann Foundation and as a member of the Dialog-Gesellschaft e.V.

Cooperation with universities and partners



	NEP-consultation (4 transmission system operators)	Project preparation	Regional planning procedure / federal planning	Planning preparation	Planning approval process, planning permission	Building preparation	Construction	Economic operation
Target groups								
Policy and administration	✓	✓	✓	✓		✓	✓	✓
Citizens' initiatives	✓			✓	✓			
Residents		✓	✓	✓	✓	✓	✓	✓
Public interest bodies	✓		✓		✓		✓	
NGOs	✓		✓	✓				✓
Participation								
World Café								
Group conferences			✓		✓			
Planning panels		✓		✓				
Dialogue mobile		✓	✓	✓	✓	✓		
1:1 discussions	✓	✓		✓				
Advisory board		✓	✓	✓	✓	✓	✓	
Dialogue								
Work groups (across all Federal states)		✓	✓	✓	✓	✓	✓	
Information market	✓*	✓	✓		✓			
Press talks			✓		✓			
Hotline		✓	✓	✓	✓	✓	✓	✓
Launches								✓
Regional events		✓	✓	✓	✓			
Project presentation	✓	✓	✓	✓	✓			
Information								
Public relations	✓		✓	✓	✓	✓	✓	✓
Newsletter			✓	✓	✓	✓	✓	✓
Printed material		✓	✓	✓	✓	✓	✓	✓
Website	✓	✓	✓	✓	✓	✓	✓	✓

* As part of the consultation on NEP, the 4 transmission system operators are holding information and dialogue events, where selected procedures, methods and used data will be presented for the 1st draft of the NEP. Subsequent to this, opinions about it can be given.

3.7. Environmental aspects

3.7.1. Management approach

GRI 102-11, GRI 102-26, GRI 308-1, GRI 308-2, G4-EUS-DMA-BIODIVERSITY

Environmental and social sustainability, as well as a clear commitment to environmental protection and the conservation of resources are all integral components of the corporate strategy. 50Hertz is a forerunner in the integration of renewable energies into the entire electrical system: In 2018, around 57% of gross electricity consumption in the 50Hertz balancing zone came from wind or photovoltaic power as well as biomass, hydropower and other renewable energies. The development of the extra-high-voltage grid is necessary for transporting steadily increasing amounts of renewable energies over long distances and to ensure the security of the electricity supply and an effective electricity market. Our goal is to keep the impact of 50Hertz's plants and activities on people and natural habitats to an absolute minimum. Therefore, compliance with the NOVA principle is a matter of course for 50Hertz. NOVA states: grid optimisation (Netz-Optimierung) before reinforcement (Verstärkung) before expansion (Ausbau). What this means in concrete terms is that 50Hertz only builds new lines when all other options for increasing grid capacity have been exhausted.

The planning, operation, maintenance and environmentally friendly conversion and expansion of our transmission grid in the northern and eastern part of Germany follow national and European frameworks and regulations. This operational implementation of environmental requirements is controlled by means of company guidelines and process instructions, which are constantly updated and adapted. In our environmental protection organisation guideline, 50Hertz has defined concrete obligations and tasks. Principally, management is responsible for environmental protection. It defines the goals and organisation of the Company's environmental protection efforts. Within management, the Chief Technical Officer assumes the function of environmental officer. The management also appoints the hazardous materials, waste and water protection officers, who advise the entire organisation on environmental issues.

50Hertz ensures the availability of any relevant information and all required resources for fulfilling the strategic and operative objectives relating to energy efficiency and environmental protection. Environmental protection activities are documented internally in annual environmental reports. The Environmental Report for the 2018 reporting year will be published in March 2019. For this reason, some of the figures mentioned are based on estimates and have been marked.

50Hertz consistently and actively works on continuously improving its environmental performance, energy-related performance and improving its management system. To gradually further develop operational environmental protection and energy management, you also need to raise the awareness of and actively involve employees, which are motivated to act in an environmentally friendly and energy-efficient way. The legal requirements for training are met. While the law requires water protection and waste officers to attend two-day training every two years, at 50Hertz they receive one day of training every year. The training for employees and hazardous materials officers involved in the hazardous materials process is provided every five years. Individual company departments, such as the Procurement/ Facility Management Department and the project units, are given training as required.

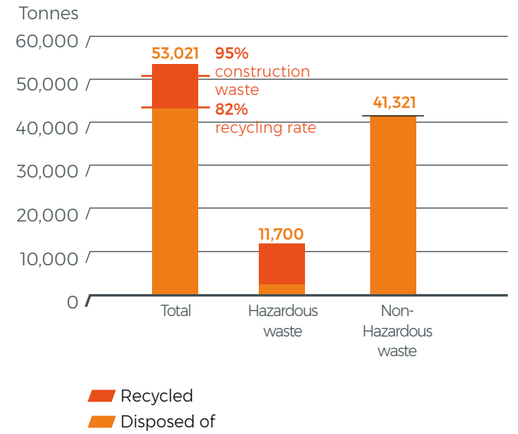
As of 1 July 2017, all new supplier contracts at 50Hertz include an "agreement for quality assurance on construction sites", which contains matters from the precautionary principle in environmental protection, among other things. Compliance with these is regularly assessed via IT-supported construction site inspections. In the reporting year, 1,190 construction site inspections were carried out. The common code of conduct for suppliers of Elia Group, which is currently under review and binding for all suppliers, contains additional principles on environmental protection and resource conservation.

3.7.2. Waste disposal

GRI 306-2, SDG12

When it comes to handling waste, 50Hertz's top priority is prevention. However, the annual waste production and composition is heavily dependent on restructuring and dismantling projects, as well as compensatory and replacement measures. A year-by-year comparison is therefore not appropriate. When dealing with waste that cannot be prevented, we act on the principle "Avoid – reuse – reduce – recycle – dispose". When we build, convert or dismantle a system, we dispose of any parts we no longer need in resource-friendly ways.

Waste disposal 2018



*Estimate/projection as of 31 December 2018

50Hertz was able to comply with the legally prescribed recycling requirement (recycling before disposal) at a recycling rate of about 82%. In the 2018 reporting year, two larger environmental remediation projects took place in Ragow and Berlin Charlottenburg. These projects largely related to floors that were cleaned or disposed of properly if they could not be cleaned.

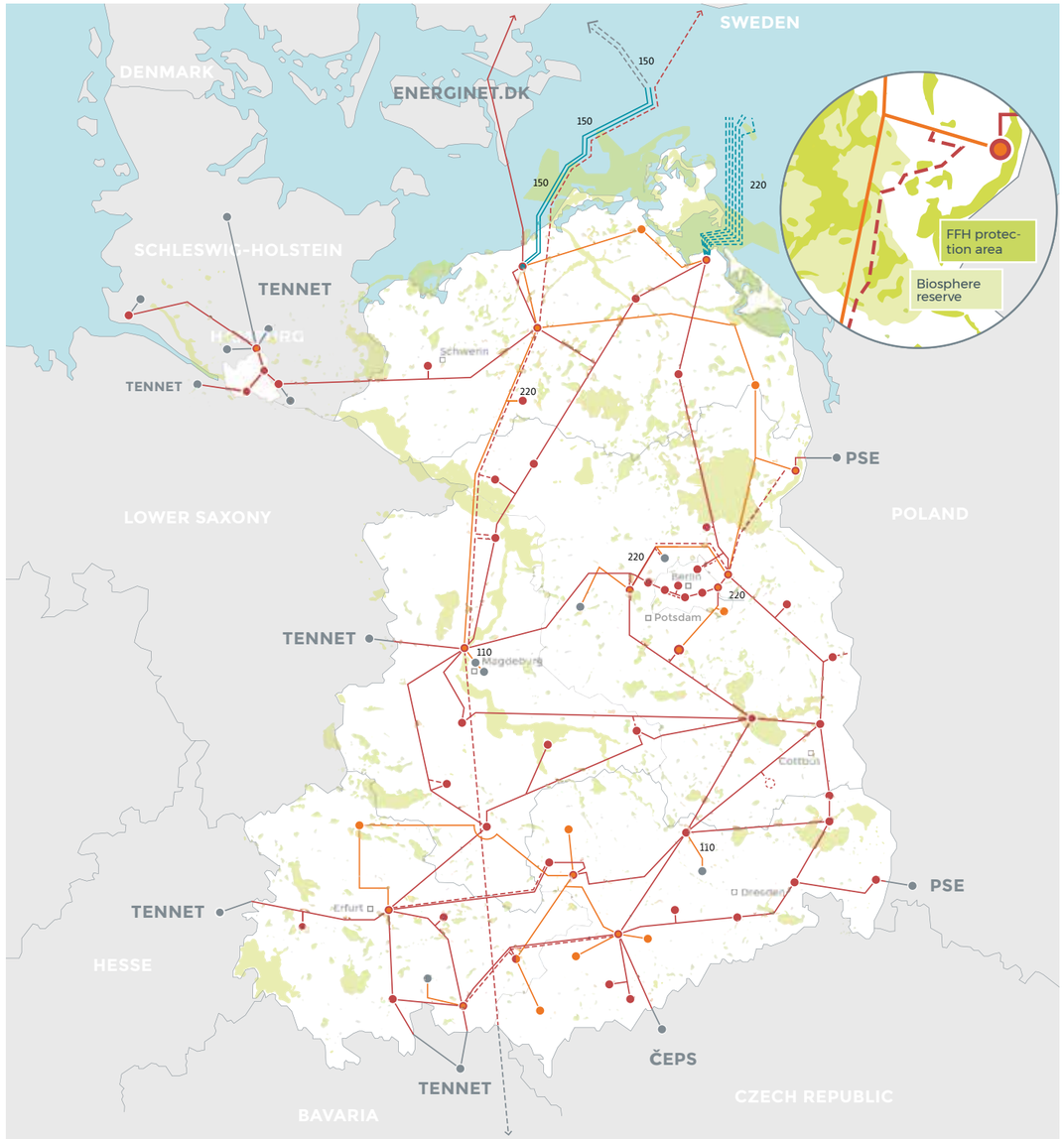
3.7.3. Biodiversity

GRI 304-1, GRI 304-2, GRI 304-3, G4-EUS-DMA-BIODIVERSITY, G4-EUS-EN12, SDG12

It is the policy of 50Hertz to keep its impact on nature and the restriction of biodiversity as low as possible. During permit approval procedures for project planning, we not only consider the economy, needs of residents and technological concerns, but always keep in mind the protection of plant and animal life. In the preliminary stages of such procedures, environmental impact assessments are carried out to minimise any nature conservation conflicts at an early stage. Then an appropriate corridor is identified in which, in a subsequent step, the exact route of the line through that corridor is mapped and a list of necessary protective, compensatory and replacement measures is compiled. All of these examinations are conducted together with external environmental planners, routing experts and, if necessary, other scientific and nature conservation specialists. Only once the entire process is completed can the construction project commence – under external ecological construction supervision. Site preparation and construction schedules are implemented in ways that minimise even the temporary impact on natural features, take conservation periods and requirements into consideration early in the process, and obligate companies subcontracting for 50Hertz to consider the ecological aspects of their operations. Following this, a final assessment is performed.

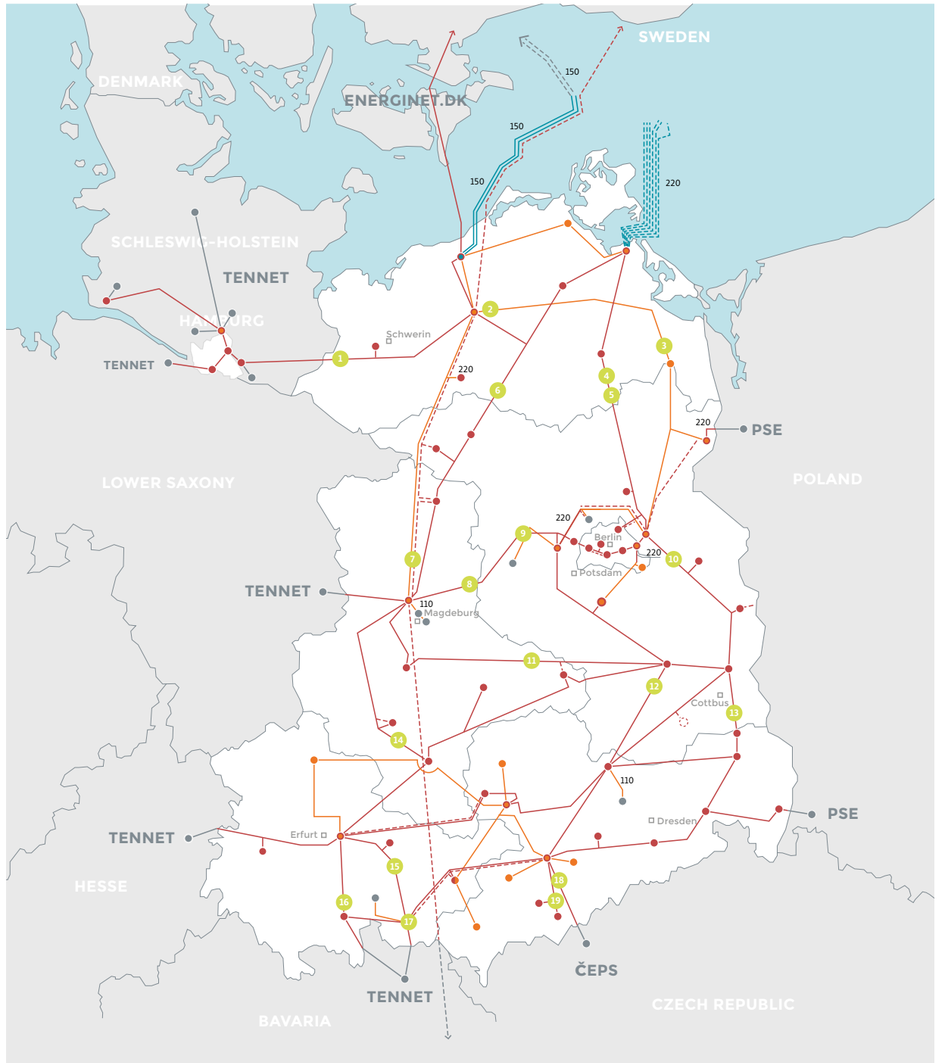
According to the BNatSchG ["Bundesnaturschutzgesetz": Federal Act for the Protection of Nature], there is an obligation to avoid causing preventable damage to nature and the landscape or to otherwise keep it as low as possible. Whenever possible and reasonable, lines are bundled with existing overhead lines and infrastructures such as railway beds and highways. Line routes are adapted to the local natural features so as to impact the integrity of the landscape no more than necessary. Where interference is unavoidable, 50Hertz takes compensatory and replacement measures. These can be divided into six categories: planting measures, forestry measures, water measures, species protection, dismantling measures and other measures. When planning and implementing compensatory and replacement measures, 50Hertz involves the affected communities, conservation agencies, interested citizens and NGOs early in the process. 50Hertz works with them as partners to develop suitable plans early on and suggests these to the authorities as part of our approval planning. For this purpose, regional eco pools are being used more and more. Eco pools are contributions to projects of other organisations, as well as compensation payments, which enable more comprehensive measures than planting individual replacement plants and are therefore more effective, efficient and sustainable. In 2017, 50Hertz adopted guidelines for targeted compensation management. They define the action areas necessary for successful approval and implementation of the measures. An internal assessment commission meets every two months to decide on the measures. The chosen measures are recorded in a real estate cadastre. There are currently 292 compensatory and replacement measures being planned in the 50Hertz grid area and 418 being implemented and maintained. Therefore, the total number of compensatory and replacement measures has increased from 630 in 2017 to 710 in the reporting year.

There are many different protection zones in the 50Hertz grid area, which are recorded in a cadastre. The FFH protection zones, national parks and biosphere reserves are displayed in the picture. Among other things, the grid area contains many bird sanctuaries, which 50Hertz makes sure it protects when building new lines.



There are many different protection zones in the 50Hertz grid area, which are recorded in a cadastre. The FFH protection zones, national parks and biosphere reserves are displayed in the picture. Among other things, the grid area contains many bird sanctuaries, which 50Hertz makes sure to protect when building new lines.

To build overhead lines in forested areas, we generally have to establish aisles because the lines need enough space to the sides and must be high enough off the ground to maintain the necessary safety distances. Sections of these aisles therefore have to be regularly kept clear of trees. Trees and shrubs, however, are habitats for countless species of animals and plants. The goal of 50Hertz is to impact these natural spaces as little as possible in the long term, thereby increasing biodiversity under the lines. Using a system of ecological aisle management (Ökologisches Schneisenmanagement or ÖSM) developed in 2010 in cooperation with Erfurt University, the company plans and manages line routes with foresight, minimal impact and ecological sustainability: The aisle under an overhead line is redeveloped in ways that restore natural habitats while still facilitating safe operation. In the course of our project, the aisle therefore develops into a biologically diverse and valuable natural space. 50Hertz applies the ÖSM system as mandated to new line route construction, and also to existing line routes on a voluntary basis.



Ecological Aisle Management (EAM)

	Measures	Area in hectares
1	Edge of forest, Kölziner Tannen	1.8 ha
2	Eco-account, Suckower Tannen	14 ha
3	Gameland, Bienenweide Schönwalde	5.6 ha
4	Biotope management NABU area	1.9 ha
5	Edge of forest eco-account, Hohenzieritz	2.5 ha
6	Edge of forest structuring, Satow meadow orchard	9.8 ha
7	Grazing, Mahlpfuhler Fenn	6 ha
8	Hohenbellin hedges	6 ha
9	NABU project, Marzahner Fenn	1.8 ha
10	Biotope management, Altlandsberg municipal forest	25 ha
11	Wild flower meadow, Külsoer Mühle	0.4 ha
12	Edge of forest pond, Rochhauer Heide	13 ha
13	Edges of forest, Döbbener Heide	12.6 ha
14	Biotope management, Harz conservation area	3.2 ha
15	Pilot line, Hummelshain	9.1 ha
16	Pilot line, Oberweißbach	1.8 ha
17	Biotope structuring, Ruppersdorf	1 ha
18	Slope planting, Burkhardtsdorf	0.3 ha
19	Grassland seed test area	0.5 ha
		~ 116.3 ha

Extra-high-voltage lines harm bird life. Hence, 50Hertz also makes a huge effort to protect birds and minimise negative impact. In 2017, a new species-specific method was developed in the course of line construction projects for systematically determining the effects on species populations to enable the identification of targeted protective and compensatory measures. There were plans to install 30 km of bird protection markers in the existing grid in 2018. Due to an accident in the reporting year, the installation was suspended until the accident has been dealt with and an accident avoidance strategy has been developed. The installation of bird protection markers will be continued in 2019 as planned. 50Hertz also continues to actively support the set-up of the "Vogelfund und Stromleitung" (dead birds and power lines) hotline by NABU (Naturschutzbund Deutschland), a German nature conservation association, as part of the "Renewables Grid Initiative". 50Hertz conducted a comparative study on the effectiveness of spiral and clack markers, and also installed cameras on two stretches of the grid in a bird sanctuary. All these measures and projects will help to prevent collisions in such places more effectively in future.

Another step towards consistent reduction of interference with the environment is the development of the "compactLine" pylon design. This innovative research and development project features lower masts, narrower line routes and a solid-panel tower with a smaller circumference. It will allow us to reduce our interference with landscapes and nature through overhead lines. The compact design provides a good opportunity to integrate a new 380 kV line into existing 220 kV line routes. In August 2018, an approximately two kilometre-long pilot line was trialled.

3.7.4. Water protection

GRI 306-5, SDG14

50Hertz is committed to effective water protection. As the business activities of 50Hertz do not result in significant water usage, its responsibility in this regard is not so much to reduce water consumption, but to consider water resources in the ground during grid and substation projects and to avoid water and soil pollution with hazardous materials. For instance, 50Hertz has installed special safety features in oil-containing systems. To protect the natural environment, elaborate constructions are installed beneath transformers in substations to prevent drips from entering the soil. The safety systems are inspected regularly by maintenance technicians and refurbished or replaced when needed. Waste water is only discharged with appropriate permission from water authorities and if it was regularly tested for hazardous substances. With regard to water protection, the WHG ["Wasserhaushaltsgesetz": Water Resources Act] and state-specific systems regulations (VAwS) are of particular importance to 50Hertz. Employees are trained in the environmentally friendly operation of our systems and water protection officers are kept continuously updated on all new developments. In the grid area, the requirements of the WHG and VAwS are especially relevant for the coastal regions of Mecklenburg-Western Pomerania. Three submarine cable routes of the Ostwind 1 line construction project, which is currently underway, run south from the Westlich Adlergrund cluster, past the island of Rügen, through Greifswalder Bodden to their landing site near Lubmin. In the landing zone, we have to bore under sensitive natural conservation areas and valuable biospheres. By using the low-impact, ditchless horizontal flush drilling method, 50Hertz significantly reduces interference with flora and fauna in the dune landscape. In addition, 50Hertz is an important contributor to making the Baltic Sea safe for people and the environment. Therefore, every preparation includes the clearing of historical waste at the bottom of the Baltic Sea, such as weapons from previous world wars.

3.7.5. Energy consumption

GRI 302-1, GRI 302-4, SDG7, SDG13

50Hertz supports the objectives of the EU and the federal government for reducing CO_2 emissions, particularly by expanding the grid, which increases the share of CO_2-neutral energy sources, but also by optimising the company-wide carbon footprint. In 2015, an external energy audit according to the DIN EN 16247-1 standard was commissioned for the first time to systematically record the energy consumption of our systems and administrative buildings. This audit is set to be repeated in 2019. As yet, there are no current, robust figures available on energy consumption in 2018. 50Hertz is looking into introducing a process for determining consumption figures during the year.

The energy audit revealed optimisation potential across the Company, the feasibility of which was carefully examined in terms of economy and sustainability. In 2016, 50Hertz moved to its new headquarters, the 50Hertz "Netzquartier", in Berlin Mitte. Sustainability was a key aspect of the planning and construction of the headquarters building in terms of energy efficiency, ecology, utilisation options and accessibility. The 50Hertz Netzquartier has received the internationally recognised Gold Award of the German Association for Sustainable Building (Deutsche Gesellschaft für Nachhaltiges Bauen – DGNB) and the American LEED Standard (Leadership in Energy and Environmental Design). For new buildings, such as the regional centres in Röhrsdorf, Hamburg Ost and Berlin Charlottenburg, aspects of sustainable construction in terms of energy use have already been taken into account in the planning and implemented where possible.

	Energy consumption	
	MWh	%
Electricity	50,744.187	84.8
District heating	2,467.109	4.1
Fuel (petrol)	32.910	0.1
Fuel (diesel)	5,799.063	9.7
Natural gas	788.442	1.3
Total energy consumption	59,831.710	100.0

The vehicles in the fleet have a large impact on the carbon footprint, but are indispensable for comprehensive coverage of our extensive grid area and quick access to our systems. In 2018, these vehicles produced 1,758.18 tonnes of CO_2 .

A new location concept emerged from the efficiency project as a long-term factor, which will come into effect in 2019. 50Hertz is currently increasing its locations in northern and eastern Germany from seven to 10. Among other things, this will decrease the driving distance and will therefore also lead to a reduction in greenhouse gas (GHG) emissions. Moreover, electric and hybrid vehicles are being tested and selectively used as part of fleet management. For reasons of efficiency, there are no plans to use them extensively at present. The fleet is constantly updated with the latest technology in the course of procuring replacements. Vehicles that comply with the EURO 5 emission standard were replaced with vehicles that adhere to the EURO 6 emission standard.

3.7.6. Emissions

GRI 305-1, GRI 305-2, SDG7, SDG13

We use sulphur hexafluoride (SF6) in our contactors, transformers and gas-insulated switchgear. This gas is a central operating material at 50Hertz because of its excellent insulating and arc properties. At the same time, however, SF6 has high greenhouse potential, so great caution is taken in transporting, storing and using the gas. 50Hertz complies with the requirements of the European F-Gas Regulation (EU) no. 517/2014, which was updated in 2014. Since 2005, the Company has worked in accordance with the Voluntary Commitment of SF6 Producers and Users (Freiwillige Selbstverpflichtung der SF6-Hersteller und -Nutzer). Its goal is to reduce the loss rate of 0.8% of the total in 2004 to 0.6% in 2020. In the Berlin-Charlottenburg substation, a new kind of gas-insulated 110 kV switchgear is being installed, which instead of the conventional insulation gas SF6, uses a gas mix with much lower greenhouse potential. The gas mix called g[3] has the same technical properties as SF6 but is up to 99% less harmful in terms of the greenhouse effect. As a result of conscientious handling and internal monitoring for operation and maintenance of our gas-insulated systems, in 2018 we came in significantly below the "Voluntary Commitment of SF6 Producers and Users" with a loss rate of 0.11%[1].

Various modes of transport are used for business trips. In the reporting year, air travel accounted for 335 tonnes of CO_2 equivalents . In addition, employees produced around 6.66 tonnes of CO_2[2] by using public transport. 546,000 kilometres were travelled by long-distance train. Long-distance train journeys are not reported, as Deutsche Bahn claims to use 100% green electricity.

50Hertz is currently evaluating the gradual expansion of its climate management and thus the possibility of reducing its GHG emissions. In the 2018 reporting year, direct and indirect GHG emissions were calculated for the first time.

Greenhouse gas emissions

Greenhouse gas emissions in 2018 in tCO_2 equivalent

DIRECT (SCOPE 1)		
SF6 leakage	4,277.00	0.34%
Company fleet*	1.29	0.00%
Emergency generator headquarter*	1,758.18	0.14%
Total direct emissions	**6,036.47**	**0.48%**
INDIRECT (SCOPE 2)		
District heating*	184.86	0.01%
Electricity consumption headquarter*	1,897.62	0.15%
Grid losses	1,222,500.00	97.39%
Energy consumption own assets	24,310.65	1.94%
Total indirect emissions	**1,248,893.13**	**99.50%**
INDIRECT (SCOPE 3)		
Air travel	293.90	0.02%
Rail travel (long-distance)	0.00	0.00%
Rail travel (local)	6.66	0.00%
Total indirect emissions	**300.56**	**0.02%**
Total amount	**1,255,230.16**	**100.00%**

The calculated figure in the carbon footprint corresponds to 1,222 tonnes of CO_2 equivalents per person including grid losses and 32 tonnes of CO_2 equivalents per person excluding grid losses (basis: 1,027 employees).

1 the figures stated are estimates as of 31 December 2018

2 Estimated value as of 31 December 2018

* the figures stated are estimates as of 31 December 2018. The following calculation bases and emission factors were used to calculate CO_2 equivalents: SF6/IPCC Fifth Assessment Report (ARS), vehicle fleet/direct fuel consumption, energy (electricity, district heating)/Federal Environmental Agency 2017 Scope 2 Guidance, business trips/information provided by service providers, Scope 3 Guidance

4. GRI reference table

GRI 102-55

This annual Sustainability Report has been prepared in accordance with the Global Reporting Initiative (GRI) Standards: Core option. It is Elia Group's second annual integrated report and covers the period from 1 January 2018 to 31 December 2018.

Common (C)	Belgium (B)	Germany (G)	GRI number	GRI description	Page
GRI 102: General information 2018					
1. Organisational Profile					
X		X	102-1	Name of the organisation	(C) Activity report p. 6 Sustainability report p. 2 (G) Sustainability report p. 40
X	X	X	102-2	Activities, brands, products, and services	(C) Activity report p. 7 (B) Sustainability report p. 5 (G) Sustainability report p. 40
	X	X	102-3	Location of headquarters	(B) Sustainability report p. 5 (G) Sustainability report p. 40
	X	X	102-4	Location of operations	(B) Sustainability report p. 5 (G) Sustainability report p. 40
X			102-5	Ownership and legal form	(C) Activity report p. 8
X	X	X	102-6	Markets served	(B) Sustainability report p. 5 (G) Sustainability report p. 40
X	X	X	102-7	Scale of the organisation	(C) Sustainability report p. 2 (B) Sustainability report p. 21 (G) Sustainability report p. 40, p. 48
	X	X	102-8	Information on employees and other workers	(B) Sustainability report p. 21 (G) Sustainability report p. 48
X	X	X	102-9	Supply chain	(C) Activity report cover (B) Sustainability report p. 15, p. 31 (G) Sustainability report p. 52
X			102-10	Significant changes to the organisation and its supply chain	(C) Activity report p. 8-9
	X	X	102-11	Precautionary Principle or approach	(B) Sustainability report p. 34 (G) Sustainability report p. 43, p. 58
X	X	X	102-12	External initiatives	(C) Activity report p. 65 (B) Sustainability report p. 13 (G) Sustainability report p. 41
X	X	X	102-13	Membership of associations	(C) Activity report p. 66 (B) Sustainability report p. 6 (G) Sustainability report p. 41
2. Strategy					
X			102-14	Statement from senior decision-maker	(C) Activity report p. 2-5, p.1 6
X	X	X	102-15	Key impacts, risks, and opportunities	(C) Activity report p. 2-5, p. 12-13 Corporate governance and financial report p. 16 (B) Sustainability report p. 10 (G) Sustainability report p. 43

3. Ethics and integrity

X	X	X	102-16	Values, principles, standards, and norms of behaviour	(C) Activity report p. 87 (B) Sustainability report p. 8 (G) Sustainability report p. 41, p. 42
	X	X	102-17	Mechanisms for advice and concerns about ethics	(B) Sustainability report p. 8 (G) Sustainability report p. 41

4. Governance

X			102-18	Governance structure	(C) Activity report p. 10-11
X	X	X	102-19	Delegating authority	(C) Corporate governance and financial report p. 5 (B) Sustainability report p. 6(G) Sustainability report p. 41
	X	X	102-20	Executive-level responsibility for economic, environmental, and social topics	(B) Sustainability report p. 6, Corporate governance and financial report p. 9 (G) Sustainability report p. 41
X	X	X	102-21	Consulting stakeholders on economic, environmental and social topics	(C) Activity report p. 74 (B) Sustainability report p. 13 (G) Sustainability report p. 53
X			102-22	Composition of the highest governance body and its committees	(C) Activity report p. 11
X			102-23	Chair of the highest governance body	(C) Activity report p. 11
	X	X	102-26	Role of the highest governance body in setting purpose, values, and strategy	(B) Corporate governance and financial report p. 5 (G) Sustainability report p. 41, p. 48, p. 58
X	X	X	102-29	Identifying and managing economic, environmental and social impacts	(C) Activity report p. 71 (B) Sustainability report p. 32 (G) Sustainability report p. 55
X	X	X	102-30	Effectiveness of risk management processes	(C) Corporate governance and financial report p. 16 (B) Sustainability report p. 9 (G) Sustainability report p. 43
		X	102-32	Highest governance body's role in sustainability reporting	(G) Sustainability report p. 41
		X	102-33	Communicating critical concerns	(G) Sustainability report p. 41
		X	102-38	Annual total compensation ratio	(G) Sustainability report p. 48

5. Stakeholder engagement

X	X	X	102-40	List of stakeholder groups	(C) Activity report inner cover (B) Sustainability report p. 13 (G) Sustainability report p. 53
	X	X	102-41	Collective bargaining agreements	(B) Sustainability report p. 3 (G) Sustainability report p. 3, p. 48
X	X	X	102-42	Identifying and selecting stakeholders	((C) Activity report p. 17 (B) Sustainability report p. 13 (G) Sustainability report p. 53
X	X	X	102-43	Approach to stakeholder engagement	(C) Activity report p. 17, p. 74 (B) Sustainability report p. 13 (G) Sustainability report p. 55
X		X	102-44	Key topics and concerns raised	(C) Activity report p. 16, p. 18, p. 74 (G) Sustainability report p. 55

6. Reporting principles

X			102-45	Entities included in the consolidated financial statements	(C) Activity report p. 8 Corporate governance and financial report p. 80
	X	X	102-46	Defining report content and topic Boundaries	(B) Sustainability report p. 5 (G) Sustainability report p. 43
X	X	X	102-47	List of material topics	(C) Activity report p. 16 (B) Sustainability report p. 11 (G) Sustainability report p. 43
			102-48	Restatements of information	There are no restatements of information provided in previous reports.
			102-49	Changes in reporting	The Annual Report 2018 is the second integrated annual reporting in line with the GRI - Core principles
			102-50	Reporting period	Fiscal year 2018
			102-51	Date of most recent report	Annual report 2018
			102-52	Reporting cycle	Annual reporting cycle
	X	X	102-53	Contact point for questions regarding the Annual Report	(B) **Marleen Vanhecke** External Communications & External Relations marleen.vanhecke@elia.be (G) **Kerstin Rippel** Communication and Public Affairs Kerstin.Rippel@50hertz.com
			102-54	Claims of reporting in accordance with the GRI Standards	This Annual Report has been prepared in accordance with the GRI Standards: Core option
X			102-55	GRI content index	(C) Sustainability report p. 65

GRI 103: Identified Material Aspects and Boundaries

X	X	X	103-1	Explanation of the material topic and its Boundary	(C) Activity report p. 17 (B) Sustainability report p. 11 (G) Sustainability report p. 43
X		X	103-2	The management approach and its components	(C) Activity report p. 17 (G) Sustainability report p. 43
X		X	103-3	Evaluation of the management approach	(C) Activity report p. 17 (G) Sustainability report p. 43

GRI 201: Economic performance

X			201-1	Direct economic value generated and distributed	(C) Activity report p. 19 Corporate governance and financial report p. 26, 29, 49, 50, 52, 55, 56, 65
X	X	X	201-2	Financial implications and other risks and opportunities for the organisation's activities due to climate change	C) Activity report p. 13, p. 24, p. 41-43, 52 (B) Sustainability report p. 9, p. 38 (G) Activity report p. 34-35

GRI 203: Indirect economic impacts

X		X	203-1	Development and impact of infrastructure investments and services supported	(C) Activity report p. 27, p.30 (G) Sustainability report p. 52
X		X	203-2	Significant indirect economic impacts, including the extent of impacts	(C) Activity report p. 27 (G) Sustainability report p. 52

GRI 204: Procurement practices

	X	X	204-1	Proportion of spending on local suppliers	(B) Sustainability report p. 31 (G) Sustainability report p. 52

GRI 205: Anti-Corruption

	X	X	205-1	Operations assessed for risks related to corruption	(B) Sustainability report p. 8 (G) Sustainability report p. 42
	X	X	205-2	Communication and training on anticorruption policies and procedures	(B) Sustainability report p. 9 (G) Sustainability report p. 42
X	X	X	205-3	Confirmed incidents of corruption and actions taken	No incidents of corruption occurred during the reporting period.

GRI 206: Anti-competitive behaviour

X	X	X	206-1	Legal actions for anti-competitive behaviour, anti-trust, and monopoly practices	No legal actions pending or completed during the reporting year.

GRI 302: Energy

	X	X	302-1	Energy consumption within the organisation	(B) Sustainability report p. 37 (G) Sustainability report p. 63
	X	X	302-2	Energy consumption outside of the organisation	(B) Sustainability report p. 15 (G) Sustainability report p. 46

GRI 304: Biodiversity

X	X	X	304-1	Operational sites owned, leased, managed in, or adjacent to, protected areas and areas of high biodiversity value outside protected areas	(C) Activity report p. 80-83 (B) Sustainability report p. 35-37 (G) Sustainability report p. 59-62
X	X	X	304-2	Significant impacts of activities, products, and services on biodiversity	(C) Activity report p. 80-83 (B) Sustainability report p. 35-37 (G) Sustainability report p. 59-62
X	X	X	304-3	Habitats protected or restored	(C) Activity report p. 80-83 (B) Sustainability report p. 35-37 (G) Sustainability report p. 59-62

GRI 305: Emissions

	X	X	305-1	Direct greenhouse gas (GHG) emissions (Scope 1)	(B) Sustainability report p. 38 (G) Sustainability report p. 64
	X	X	305-2	Energy indirect greenhouse gas (GHG) emissions (Scope 2)	(B) Sustainability report p. 38 (G) Sustainability report p. 64
	X		305-3	Other indirect greenhouse gas (GHG) emissions (Scope 3)	(B) Sustainability report p. 38

GRI 306: Effluents and waste

		X	306-2	Waste by type and disposal method	(G) Sustainability report p. 59

GRI 307: Environmental compliance

X	X	X	307-1	Non-compliance with environmental laws and regulations	The organisation has not identified any significant non-compliance with environmental laws and/or regulations.

GRI 308: Supplier Environmental Assessment

	X	X	308-1	New suppliers that were screened using environmental criteria	(B) Sustainability report p. 31 (G) Sustainability report p. 53, p. 58
	X	X	308-2	Significant actual and potential negative environmental impacts in the supply chain and actions taken	(B) Sustainability report p. 31 (G) Sustainability report p. 58

GRI 401: Employment

	X	X	401-1	Total number and rates of new employee hires and employee turnover	(B) Sustainability report p. 21 (G) Sustainability report p. 50
X	X	X	401-2	Benefits provided to full-time employees that are not provided to temporary or part-time employees	There are no differences between the benefits provided to full-time and part-time employees.
	X	X	401-3	Parental leave	(B) Sustainability report p. 25 (G) Sustainability report p. 50

GRI 402: Labour/Management Relations (MA)

		X			(G) Sustainability report p. 49

GRI 403: Occupational Health and Safety

X	X	X	403-1	Occupational health and safety management system	(C) Activity report p. 88-91 (B) Sustainability report p. 27 (G) Sustainability report p. 51
	X	X	403-2	Hazard identification, risk assessment, and incident investigation	(B) Sustainability report p. 27 (G) Sustainability report p. 51
	X	X	403-3	Occupational health services	(B) Sustainability report p. 27 (G) Sustainability report p. 51

GRI 404: Training and Education

X	X	X	404-1	Average hours of training per year per employee by gender, and by employee category	(C) Activity report p. 92-95 (B) Sustainability report p. 26 (G) Sustainability report p. 50

GRI 405: Diversity and Equal Opportunity

X	X	X	405-1	Diversity of governance bodies and employees	(C) Sustainability report p. 3 (B) Sustainability report p. 21 (G) Sustainability report p. 49
		X	405-2	Ratio of basic salary and remuneration of women to men	(G) Sustainability report p. 49

GRI 406: Non-Discrimination

X	X	X	406-1	Total number of incidents of discrimination and corrective actions taken	The organisation has not identified any incidents of discrimination during the reporting period.

GRI 413: Local Communities

X	X	X	413-1	Operations with local community engagement, impact assessments, and development programmes	(C) Activity report p. 70-83 (B) Sustainability report p. 32 (G) Sustainability report p. 55

GRI 414: Supplier Social Assessment

	X	X	414-1	New suppliers that were screened using social criteria	(B) Sustainability report p. 31 (G) Sustainability report p. 53

GRI 416: Customer Health and Safety

X		X	416-1	Assessment of the health and safety impacts of product and service categories	(C) Sustainability report p. 34
X	X	X	416-2	Incidents of non-compliance concerning the health and safety impacts of products and services	(B) Sustainability report p. 8 (G) Sustainability report p. 42

GRI 417: Marketing and Labelling

	X				(B) Sustainability report p. 32

GRI 419: Socio-economic Compliance

X	X	X	419-1	Monetary value of significant fines for non-compliance with laws and regulations in the social and economic area	(B) Sustainability report p. 8 (G) Sustainability report p. 42

G4 - Electric Utilities Specific (EUS)

Lines & losses & quality of service

	X	X	EU4	Length of above and underground transmission and distribution lines by regulatory regime	(B) Sustainability report p. 14 (G) Sustainability report p. 45
	X	X	EU12	Transmission and distribution losses as a percentage of total energy	(B) Sustainability report p. 17 (G) Sustainability report p. 47.

Demand management approach

X			DMA	Management approach to ensure short and long-term electricity availability and reliability	(C) Activity report p. 52
X			DMA	Demand-side management programmes including residential, commercial, institutional and industrial programmes	(C) Activity report p. 54, 68, 105
	X	X	DMA	Disaster / Emergency Planning and Response	(B) Activity report p 32 Sustainability report p 18 (G) Sustainability report p. 43
	X	X	DMA	Disaster / Emergency Planning and Response Stakeholder participation	(B) Activity report p 73 (G) Activity report p 77, p. 105

Biodiversity

	X	X	EN12	Description of significant impacts of activities, products, and services on biodiversity in protected areas and areas of high biodiversity value outside protected area	(B) Sustainability report p. 35 (G) Sustainability report p. 59

Health and safety & Human resources

	X		LA6	Type of injury and rates of injury, occupational diseases, lost days and absenteeism, and total number of work related fatalities, by region and gender	(B) Sustainability report p. 27
	X	X	EU15	Percentage of employees eligible to retire in the next 5 and 10 years broken down by job category and by region	(B) Sustainability report p. 22 (G) Sustainability report p. 50

Reporting parameters

Registered office

This report is limited to Elia System Operator and Elia Asset, which operate as a single economic entity under the names Elia and 50Hertz Transmission.

The registered office of Elia System Operator and Elia Asset is located at
Boulevard de l'Empereur 20
1000 Brussels, Belgium

The registered office of 50Hertz GmbH is established at
Heidestraße 2
D-10557 Berlin, Germany

The registered office of Eurogrid International is located at
Rue Joseph Stevens, 7
1000 Brussels, Belgium

The registered office of Elia Grid International is located at
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Reporting period

This annual report covers the period from 1 January 2018 to 31 December 2018.

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Ce document est également disponible en français.
Dit document is ook beschikbaar in het Nederlands.

We would like to thank everyone who contributed to this annual report.

Scan the QR code to visit our download centre.

Employees of 50Hertz at the foot of the offshore transformer station “Viking” (Wikinger)

After three years of construction, the submarine cables between the Viking offshore wind farm (Iberdrola) north of the island of Rügen and the connection point to the 50Hertz grid in Lubmin have been laid. For the first time in Germany, 220 kV AC technology (alternating current) is used for offshore grid connection. This makes higher power transmission possible.

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