

ANNUAL REPORT 2016

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1 COMPOSITION OF MANAGEMENT BODIES

1.1 Board of Directors

The Board of Directors has the following members:

- Mr Pier Francesco Zanuzzi, Chairman of the Board of Directors;
- Mr Philip Sheppard, Vice-Chairman of the Board of Directors;
- Ms Cordelia O'Hara, director until 28 April 2016;
- Mr Duncan Burt. director from 29 April 2016:
- Mr Dirk Biermann. director.
- RTE Réseau de Transport d'electricité SA, with Mr Sébastien Henry as its permanent representative, *director*;
- Ms Brigitte Peyron, director;
- Mr Carlo Sabelli, director;
- Mr Frank Vandenberghe, director until 31 October 2016;
- Mr Patrick De Leener, director from 1 November 2016;
- Mr Dirk Aelbrecht (deceased 24 January 2016¹), director until 24 January 2016;
- Ms Maria José Clara, director;
- Ms Pascale Fonck, director from 29 April 2016;
- Mr Tomás Domínguez Autrán, director from 28 October 2016;
- Mr Emilio Cerezo Diez, director from 28 October 2016.

Following the death of Mr Dirk Aelbrecht, the company's Board of Directors co-opted Ms Pascale Fonck to act as a company director on 29 April 2016. Next, the company's Ordinary General Meeting of 29 April 2016 definitively appointed Ms Pascale Fonck as a company director for a term that expires immediately after the company's Ordinary General Meeting in 2018 related to the financial year ending 31 December 2017.

Ms Cordelia O'Hara stepped down as a director with effect from 28 April 2016, so on 29 April 2016, the company's Board of Directors co-opted Mr Duncan Burt to act as a company director from 29 April 2016. The company's Ordinary General Meeting of 29 April 2016 then definitively appointed Mr Duncan Burt as a company director for a term that expires immediately after the company's Ordinary General Meeting in 2018 related to the financial year ending 31 December 2017.

The Ordinary General Meeting of 29 April 2016 also definitively appointed Mr Pier Francesco Zanuzzi, who was co-opted by the Board of Directors on 29 June 2015, as a company director for a term that expires immediately after the company's Ordinary General Meeting in 2018 related to the financial year ending 31 December 2017.

Following the entry of REE (Red Eléctrica de España S.A.U.) into the company's share capital as a new shareholder, the company's Extraordinary General Meeting on 28 October 2016 appointed Mr Tomás Domínguez Autrán and Mr Emilio Cerezo Diez as company directors for a term that expires immediately after the company's Ordinary General Meeting in 2018 related to the financial year ending 31 December 2017.

Mr Frank Vandenberghe stepped down as a director with effect from 1 November 2016, so on 28 October 2016, the company's Board of Directors co-opted Mr Patrick De Leener to act as a company director from 1 November 2016. The company's Extraordinary General Meeting of 28 October 2016 then definitively appointed Mr Patrick De Leener as a company director for a term that expires immediately after the company's Ordinary General Meeting in 2018 related to the financial year ending 31 December 2017.

¹ The Board was greatly saddened to learn of the death of Mr Dirk Aelbrecht on 24 January 2016.





None of the directorships are remunerated and all will expire immediately after the 2018 Ordinary General Meeting to approve the annual accounts as at 31 December 2017.

The Board of Directors met seven times in 2016 and discussed technical, financial, economic and strategic issues.

1.2 Daily management responsibilities

Mr Jean-François Gahungu was appointed to replace Mr Patrick De Leener as head of operations, with the title Chief Executive Officer, effective from 1 November 2016.

Mr Cédric Auxenfans was appointed Chief Operating Officer, effective from 1 August 2012.

1.3 Auditors

The Ordinary General Meeting of 24 April 2015 appointed KPMG Réviseurs d'Entreprises SCCRL and Ernst & Young Réviseurs d'Entreprises SCCRL as the company's auditors for a term of three years, expiring at the 2018 Ordinary General Meeting to approve the annual accounts for the year ending 31 December 2017. KPMG Réviseurs d'Entreprises SCCRL is represented by Benoît Van Roost and Ernst & Young Réviseurs d'Entreprises is represented by Marnix Van Dooren.

The auditors' remuneration is €13,350.00 per year, to be indexed annually in line with the consumer price index.

2 MAIN EVENTS DURING THE YEAR

Coreso's shareholders are Elia System Operator (Belgium), RTE (Réseau de Transport d'Electricité, France), National Grid (UK), Terna (Italy), 50Hertz (eastern Germany and Hamburg), REN (Redes Energéticas Nacionais, Portugal) and, since 28 October 2016, REE (Red Eléctrica de España). The Spanish transmission system operator, REE, joined Coreso on 28 October 2016.

Coordination of Electricity System Operators (Coreso), which launched its operations in February 2009, is the first technical coordination centre in continental Europe to be shared by multiple electricity transmission system operators (TSOs)². Coreso has notably enhanced the operational coordination of transmission systems in the Western Europe region in response to new challenges. The development of renewable energies, which are by nature intermittent, and the increase in cross-border exchanges within the European electricity market make electricity flows increasingly variable. In this field, Coreso has demonstrated a high level of reliability and expertise. Its added value in terms of identifying situations which pose a potential risk to the electricity system – risks which can only be detected by having an overview extending beyond the national scope of each individual transmission system – is now essential.

Specifically, Coreso provides the control centres of participating transmission systems with forecasts about the security of systems within its observation zone. To that end, Coreso conducts security analyses, and also simulates various scenarios and suggests remedial action. Coreso coordinates exchanges between the various national control centres, which remain responsible for implementing these actions in their respective systems, with a view to obtaining the agreement of each control centre for the proposed corrective actions.

In 2016, Coreso was able to provide D-1 (day-ahead, i.e. one day before real time) analysis and coordination services every day for the eighth consecutive year.

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² TSOs throughout the rest of the document.



As well as security analysis activities and projects under development, 2016 saw the following operational developments:

2.1 D-2 capacity calculation on the Italian boarder (Central South Europe (CSE) area)³

The test phase for the D-2 capacity calculation service on Italy's northern border ran from February to June 2016 (official launch date).

As a coordination centre (on behalf of RTE, Terna and Eles⁴) and in cooperation with Swissgrid⁵, APG⁶ and TSCNet⁷, Coreso is in charge of checking data quality, file merges and two-days-ahead (D-2) calculations regarding maximum import capacities at Italy's northern border.

Using a data improvement loop, security analyses and an innovative algorithm that automatically identifies the best set of remedial actions in situations in which there are constraints (phase-shifting transformer, specific topology in a substation and redispatching), Coreso helps its partners to implement this project, which is geared towards a technically and economically optimised D-2 capacity system to replace the annual capacity-calculation process.

Testing and development of the new service commenced in February 2014 in the form of the results of two optimised capacity calculations being supplied on a daily basis. The analyses conducted by Coreso enable TSOs to fine-tune the method used and to provide better quality input data.

Following a conclusive testing phase with the relevant external market players, including publication of the results, the daily values began to be used to determine actual capacity allocation in early February 2016.

2.2 Intraday capacity calculation on the Italian border (Central South Europe (CSE) area)

Coreso worked with the same partners on a project to implement a similar intraday capacity calculation process in the CSE area. This project is currently at the design specification stage. The main challenges are a high degree of automation and improved performance due to the very short deadlines expected for intraday market allocation processes.

While awaiting the release of the automated process for the region, which is scheduled for 2018, Coreso developed a new intraday security analysis process for Terna and RTE. The new process assesses the impact of the market's use of the new capacity calculated for D-2, bearing in mind any new event, and confirmation of the availability (or otherwise) of preventive and remedial measures.

This was also an opportunity for Coreso to test out new tools and an 'agile' IT method in cooperation with a new partner.

2.3 D-1 security analysis of the grid in the south-east of the UK

Coreso has been carrying out its first D-1 operational process with CGMES⁸ files (future European format) sent by the British transmission system operator since 30 October 2015.

In parallel with National Grid, Coreso is analysing constraint limits on the grid in the south-east of the UK at two different times (off-peak and peak) and producing a detailed report of the findings.

The next step for 2017 will be to perform this calculation every hour, 24 times a day, to gain a clear overview of how constraints develop as the day progresses.

³ The CSE (Central South Europe) area comprises Italy, Slovenia, Switzerland, Austria and France.

⁴ Slovenian TSO.

⁵ Swiss TSO.

⁶ Austrian TSO.

⁷ Regional Coordination Centre based in Munich.

⁸ Common Grid Model Exchange Standard.



2.4 Activities linked to the market coupling mechanism (Central West Europe (CWE) area⁹)

Since May 2015, day-ahead market coupling within the CWE area has been based on the flow-based method¹⁰ for calculating border exchange capacities, replacing the ATC market coupling mechanism. This is a world first and has had an immediate and significant positive impact on electricity prices, which are converging much more frequently in the CWE area.

Since this flow-based coupling mechanism became operational, Coreso has been confirmed as the operator of the CWE area's joint flow-based system on behalf of RTE and Elia. Coreso also hosts the platform used in market coupling.

Furthermore, the seven TSOs involved in the CWE area have confirmed Coreso's operational role in coordinating validation and verification of D-2 capacity forecasts for each TSO's grid; these values are crucial for calculating regional flow-based capacity.

After this new mechanism for calculating D-2 border exchange capacities was launched, Coreso developed new processes to assess intraday capacities in the CWE area. Coreso developed processes and tools in order to act as the contact point for RTE and Elia and coordinate with the other TSOs on the CWE borders. A night calculation and a day calculation for early-evening peak-load hours will be carried out every day from early 2016.

Since September 2015, Coreso has been finalising and testing out an automatic optimisation algorithm for remedial action that will be incorporated into future intraday capacity calculation processes also based on the flow-based method.

2.4.1 Development of activities linked to market coupling in the CWE area

Coreso has been adapting its file merging process since December 2015 with a view to using data provided by APG, the Austrian transmission system operator.

2.4.2 Intraday capacity calculation in the CWE area

Since 30 March 2016, a new combined study process has been in force, with security analyses for the most likely configuration and for certain extreme import/export scenarios in the CWE area, and with impact analyses examining the effects of the increase in the intraday capacities brought to market on the Dutch-Belgian and German-Dutchborders. A second operator has been involved in testing in the mornings a new intraday flow-based method¹¹, which is currently under development, since October 2016. Coreso is continuing its work on intraday capacity calculation in the CWE area. To that end, it has taken charge of the project for the adaptation and implementation of an intraday flow-based method, modelled on the method used for D-1 since 2015, which was developed in partnership with all seven of the area's TSOs and one other RSC (TSCNet).

2.4.3 D-1 capacity calculation using the flow-based method in the CWE area

At the request of the German TSOs, since October 2016, Coreso has successfully expanded its process for merging D2CF¹² files (D-2 grid models) for the CWE area with

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⁹ The CWE (Central West Europe) area comprises the Netherlands, Germany, Belgium and France.

¹⁰ The flow-based method is an approximative, linear model of the grid that allows the physical margin on the infrastructure to be calculated with a view to ensuring grid security. This method is used for market coupling within a given area, in the aim of determining capacity allocations.

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¹² D-2 Congestion Forecast.



individual forecasts supplied by the German TSOs, which had been produced separately and were not merged in advance by Amprion¹³.

2.4.4 D-1 capacity calculation using the flow-based method in the CORE area¹⁴

Following the European regulator ACER's ¹⁵ decision of November 2016 regarding future capacity calculation areas in Europe and in application of the European guideline on capacity allocation and congestion management (CACM), a new area, called CORE, is to be formed by merging the CWE (Central West Europe) and CEE¹⁶ (Central East Europe) areas. The new area's TSOs have launched a new project for calculating D-1 capacity in the CORE area using the flow-based method. Together with TSCNet. Coreso is taking part in this project and is preparing to act as a Coordinated Capacity Calculator in application of the new guideline.

2.5 **Development of the European Merging Function platform**

In partnership with RTE/DES, Coreso is continuing to develop the European Merging Function platform, which sets out to create a full model of the European grid based on individual models provided by the TSOs by applying a new standard describing grid models exchanged in this manner, called the Common Grid Model Exchange Standard (CGMES). This function's deployment, which will be enforced by several Regional Security Coordinators (RSCs), is being managed at ENTSO-E1 level by Coreso. The new platform was tested successfully several times in 2016, when it was used to validate files submitted by various TSOs.

2.6 Analysis of short and medium-term generation and demand adequacy (SMTA) at **European level**

European countries are currently and increasingly faced with the challenge of responding to load – i.e. demand - with sufficient electricity generation. The underlying reasons for this are the strong and intermittent presence (or absence) of renewable energy and the increasingly uncertain profitability of conventional generating facilities.

If energy is not present - at any given time - in a particular country, potential help from other countries depends on the overall availability of electrical energy and the grid capacity to transmit it to the country in need.

Seasonal studies (winter and summer) covering six months are carried out at European level. The aim of the project analysing the short and medium-term adequacy (SMTA) of generation and demand at European level is to design and implement a week-ahead, two-days-ahead and day-ahead process. Coreso is running this project for ENTSO-E at European level. Setting up the project, analysing the existing situation as well as developing a simple design and prototype tools enabled Coreso to continue testing with 27 European TSOs and two other RSCs (Regional Security Coordinators) in 2016. The analytical model, which was originally deterministic, was improved by the addition of a probabilistic module developed in collaboration with the ULB. This new module is capable of simulating several consistent climate scenarios with a view to gauging the impact of fluctuations in wind and solar power generation on generation/demand adequacy.

¹³ Amprion is one of Germany's four TSOs, the others being 50Hertz, TenneT GmbH and Transnet BW.

The CORE area was formed by merging the CWE and CEE areas. The Agency for the Cooperation of Energy Regulators (ACER) decided to create this new area on 17 November 2016 as part of the implementation of the regional capacity calculation project.

¹⁵ Agency for the Cooperation of Energy Regulators.

¹⁶ The CEE (Central East Europe) area comprises Germany, Austria, the Czech Republic, Hungary, Poland, Slovakia and Slovenia.

Transmission System Operators for Electricity. This association represents Europe's 42 transmission

system operators (in 35 countries).



The project will continue to work on the method in 2017 by refining the study at pan-European level, which will include a simulation of market flows, and by running one-off demonstrations of more accurate analyses at regional level.

The results of the pan-European weekly test for this method were deemed to be interesting enough to merit application in actual generation/demand adequacy analyses for countries bordering France, following the shortage experienced in winter 2016-2017. As such, the project has contributed to actual inter-TSO coordination activities set up by Coreso to counter the shortage.

2.7 ENTSO-E operational planning data exchange platform

Coreso played an active role in designing and establishing the ENTSO-E operational planning data exchange platform (OPDE¹⁸ Project) to ensure that the new platform was integrated as well as possible.

2.8 Creation of new jobs

To cope with the extension of its services and to manage related projects, Coreso continues to strengthen itself and become more professional. In particular, more staff are to be taken on for the Project unit (three additional FTEs¹⁹) and the Operational unit (two additional FTEs).

2.9 Organisation of the project team

In view of the application of new European guidelines (the CACM guideline and the System Operation Guideline (SOGL)) and the expected rapid growth in activities, both from a geographical point of view due to the arrival of new shareholders and from a functional point of view due to the development of the five coordination services, Coreso has revised the structure of its project team by implementing a comprehensive change programme: the workforce has practically doubled, a project management method tailored to Coreso's operating environment has been produced, new roles have been created, new processes and new management and reporting tools have been adopted, and a 'project culture' and associated training scheme have been introduced.

The project programme that was implemented consists of several projects, most of which are linked to the development of the capacity calculation activities described above in the five areas in which Coreso is active.

An arbitrage process for the various developments required has been drafted so that these developments can be aligned with Coreso's aims and priorities through a clear delegation and decision-making process involving Coreso's project teams, management team and Governance Board.

A monthly monitoring process for the resulting IT developments has been implemented too.

3 OUTLOOK

3.1 Provision of the five services

In late 2014, ENTSO-E approved its vision for European operational coordination based on RSCs.

To summarise, the following functions are a top priority for ENTSO-E with respect to inter-TSO operational coordination (the so-called 'minimum coordination functions'):

- 1. Improved delivery of the Individual Grid Model (IGM)/Common Grid Model (CGM);
- 2. Calculation of capacity to be allocated to regional markets;

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¹⁸ Operational Planning Data Environment.

¹⁹ Full-time equivalents.



- 3. Security analysis (including analysis and proactive coordination of remedial action);
- 4. Short and medium-term supply-demand adequacy:
- 5. Inter-TSO outage planning coordination.

The corresponding implementation plan was compiled by ENTSO-E during the first half of 2015.

At the ENTSO-E Assembly of 10 December 2015, the multilateral agreement for RSC-based TSO cooperation was approved and signed by the TSOs.

With this mandatory contractual framework, TSOs across Europe are taking up the commitment to establish five regional coordination services and to set up or appoint RSCs to perform these coordination services.

With this major step taken, RSCs have now evolved from voluntary initiatives to initiatives with a structural role and place.

Against this backdrop, REE, the Spanish transmission system operator, joined Coreso as a shareholder on 28 October 2016. Discussions are also underway with other system operators with a view to expanding the shareholder base.

3.2 **Cooperation with TSCNet**

The rapid growth that Coreso has seen in its activities is also being experienced - for the same reasons - by TSCNet, which performs the same tasks as Coreso as the Regional Security Coordinator for the CEE (Central East Europe) area. As such, Coreso and TSCNet share the same challenges in three areas: CORE, Central South Europe and Channel²⁰.

In the interests of guaranteeing consistency and efficiency and looking ahead to the harmonisation of approaches required by the upcoming SOGL guideline. Coreso and TSCNet have decided to cooperate and share operations in a balanced way and to pool their tool development efforts. A cooperation project was outlined in 2016. It will be launched in 2017 so that the expected benefits will be realised in the coming years.

SUBSIDIARIES

The company has no subsidiaries.

5 **EVENTS AFTER THE END OF THE YEAR**

No significant events occurred after the end of the financial year.

²⁰ This area comprises France, Belgium, the Netherlands and the United Kingdom.

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6 NOTES TO THE ANNUAL ACCOUNTS

6.1 Introduction

6.1.1 Key figures

In thousand €	31 December 2016	31 December 2015
EBITDA*	1,061.25	951.32
EBIT*	428.98	375.42
Net result (before tax)	428.62	393.11
Net result (after tax)	209.70	218.39
Solvency ratio	47.68%	47.51%
Liquidity ratio	97.06%	103.32%

Solvency = equity/total assets

Liquidity = current assets/short-term liabilities

6.2 Balance sheet

6.2.1 Fixed assets

Fixed assets include the following:

In thousand €	2016	2015
Intangible fixed assets	320.32	30.68
Property, plant and equipment	1,922.00	1,859.79
TOTAL FIXED ASSETS	2,242.32	1,890.47

The investments made in 2016 were in software and hardware and totalled €1,402,100.

The net book value of fixed assets was €2,242,320 and includes cumulative depreciations at year-end 2016 totalling €632,270.

6.2.2 Current assets

'Trade debtors' totalled €1,136,370, compared with €570,410 in 2015. The difference is mainly due to the creation of a provision for invoices to be issued to shareholders in respect of the operational services fees for 2016 (€241,000), instead of the credit note that was drawn up in 2015 (€256,000) in respect of the operational services fees for 2015 ('cost-plus' mechanism).

'Other amounts receivable' includes recoverable taxes and VAT totalling €27,770 plus a total of €248,210 in reimbursable social security contributions.

Cash comprises liquidities worth €860,150 of which €100,000 is invested for a short period.

6.2.3 Deferred charges and accrued income

This item comprises operating expenses to be deferred to financial year 2017 (€40,640).

^{*}EBIT = earnings before interest and taxes

^{*}EBITDA = EBIT + amounts written off/depreciation



6.2.4 Equity

As at 31 December 2016, share capital totalled €1,000,000 represented by 15,210 shares and was fully paid up at the time Coreso was set up.

Following the positive result for the financial year 2016 (€209,700), a €10,480 appropriation to the legal reserve was booked. The remainder of the distributable profit (€199,210) has been carried forward.

Equity amounted to €2,172,190 after appropriation of the 2016 result.

6.2.5 Debts

'Trade debts' at year-end 2016 totalled €1,515,220. They relate to invoices not yet due totalling €93,620 and invoices to be received totalling €1,421,600.

Social security liabilities cover a number of provisions such as holiday allowances, bonuses and personnel insurance. The total amount for this item is €687,710.

Tax debts totalled €35,640 and relate to corporate income tax payable on the result for 2016.

6.2.6 Accrued charges and deferred income

This item mainly comprises deferred income totalling €44,780.

6.3 Income statement

6.3.1 Operating income

Operating income can be subdivided as follows:

In thousand €	2016	2015
Service fees	8,915.95	7,059.11
Other operating income	324.71	1,333.75
Total	9,240.65	8,392.86

The service fees relate to security analysis services for the CWE grid and are based on the 'cost-plus' mechanism (operational service fees) and income relating to other services like flow-based market coupling and D-2 country merge.

'Other operating income' encompasses mainly recovery of withholding tax on personal income and grants.

6.3.2 Operating charges

Operating expenses totalled €4,393,880 for 2016 (compared with €3,949,140 in 2015) and relate to the costs of rent, consultants, IT maintenance, hospitality, and so on.



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6.3.3 Personnel expenses

Remuneration and social security costs are broken down as follows:

In thousand €	2016	2015
Remuneration	2,902.82	2,538.66
Social security costs	870.93	886.48
Other social security expenses	11.77	10.12
Total	3,785.52	3,435.26

The rise from €3,435,260 (2015) to €3,785,520 (2016) is essentially due to the increase in full-time equivalents from 28.2 in 2015 to 33 in 2016.

6.3.4 Depreciation

Depreciation of property, plant and equipment totalled €632,270 and is calculated according to the valuation rules approved by the Board of Directors, as indicated in the annual accounts.

6.3.5 Financial income

Financial income amounted to €630, of which €130 was generated by cash investments made in 2016 and €500 by exchange gains.

6.3.6 Financial charges

Recurring financial charges amounted to €1,000, of which €420 was due to exchange losses and €570 to miscellaneous finance expenses.

6.3.7 Taxes

In 2016, the profit before tax was €428,620. After applying notional interest and taking into account disallowed costs, Coreso's tax burden in 2016 was €218,920.

6.3.8 Net profit

For 2016, Coreso booked a net profit after tax of €209,700.

6.4 Appropriation account

At the Ordinary General Meeting to be held on 20 April 2017, the Board of Directors will propose the following appropriation:

In thousand €	2016	2015
Profit for the financial year	209.70	218.39
Profit carried forward from the previous year	914.36	706.89
Appropriation to the legal reserve	10.48	10.92
Distribution of the dividend	0.00	0.00
Result to be carried forward	1,113.58	914.36

6.5 Financial instruments

Coreso does not use financial instruments to hedge possible future risks.

7 DESCRIPTION OF THE RISKS AND UNCERTAINTIES FACING THE COMPANY

7.1 Financial risks

Coreso's funding needs are met by the contributions of its shareholders. To meet its needs, Coreso draws up a budget and reviews it in good time with its shareholders, which are also its main customers. In the event of unforeseen funding needs, Coreso can appeal to its shareholders for the release of extra cash at very short notice. Since its shareholders are also exposed to inherent financial risks, there is a residual financial risk for Coreso if any of its shareholders default. However, Coreso's residual risk remains very low when its shareholders are taken into account.

7.2 Data quality risks

In its role as a coordinator of Transmission System Operators (TSOs), Coreso performs analyses of cross-border electricity flows, advises TSOs on congestion management, and contributes to Security of Supply (SoS) operations. To perform these tasks as effectively as possible, Coreso relies heavily on data from all the TSOs concerned and on this data being complete, validated according to the agreed acceptance criteria, consistent, accurate and delivered on time. Initiatives are underway within ENTSO-E to put in place a structural framework for the provision of harmonised qualitative data by TSOs. Coreso is actively involved in this.

7.3 ICT²¹ risks

Coreso is also highly dependent on the continuity of its ICT infrastructure to deliver its services in good time.

The management of the ICT infrastructure, including software applications and their hosting and data storage, are being outsourced to external suppliers and service providers. A single supplier acts as the first line of support for troubleshooting any ICT issues. All contracts with ICT providers include guarantees on long-term support and maintenance services for all critical ICT components.

The power supply of ICT infrastructure is also backed up by uninterruptible power supply systems in Brussels and Lomme (France).

In addition, following a comprehensive IT audit in 2013, a work plan for enhancing the company's IT maturity was implemented in 2014 and 2015. IT resources were also upgraded as part of the plan.

7.4 HR risks

Coreso's strength lies in the quality of its staff, exposing the company to various risks, i.e. inadequate skill sets, the strain of work shifts inherent to Coreso's monitoring activities, and FTE turnover.

Coreso relies on the pool of experts provided by its shareholders to fill any sudden gaps in human resources and has drawn up plans for joint training with the engineers employed by its TSOs.

7.5 Risks related to regulatory changes among European TSOs regarding coordination

The consolidation of international power exchanges following the liberalisation of the European electricity market, combined with the need to ensure overall security of supply in Europe, led to a need for increased cooperation and coordination among European TSOs.

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²¹ Information and Communication Technologies.



Although decisions will still need to be taken by TSOs on the legal front, on roles and responsibilities, on governance and on the tools or expertise of future European coordination entities, there remains a risk that Coreso may not be sufficiently prepared for the future cooperation and coordination needs of the market and its players. Coreso can mitigate this risk by proactively identifying needs, adapting to be able to meet those needs and positioning itself as a trusted long-term partner.

Furthermore, the need for greater coordination is now widely acknowledged and in fact formally established. Plans to put in place a structural framework for Europe-wide operational coordination via RSCs were formally approved by ENTSO-E in late 2014. In spring 2015 the implementation plan was drawn up and in December 2015 a multilateral contract was signed committing all TSOs.

7.6 Other risks

Coreso realises that there may be other risks of which the company is unaware, or that risks currently deemed negligible may become more significant in the future.

8 RESEARCH AND DEVELOPMENT

Coreso is involved in two European projects:

- iTesla: 'Innovative Tools for Electrical System Security within Large Areas, designed to promote
 the future coordinated and stable operation of the pan-European electricity transmission system'.
 Coreso contributed its expertise to aid the development of the tools needed for effective future
 coordination. The project was closed in 2016;
- GARPUR: 'Generally Accepted Reliability Principle with Uncertainty modelling and through
 probabilistic Risk assessment'. Coreso is a member of the Reference Group and takes part in
 workshops aimed at TSOs, and in the session to demonstrate a prototype of the quantification
 platform designed to be used to test various reliability criteria (at the end of the project, in 2017).

Coreso constantly develops its activities by designing new coordination processes that require innovation in terms of both methods and tools.

20 April 2017,

Carlo Sabelli Director Patrick De Leener Director