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LETTER FROM  
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AND THE CEO



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# ANTICIPATING CHANGE AND TAKING ACTION



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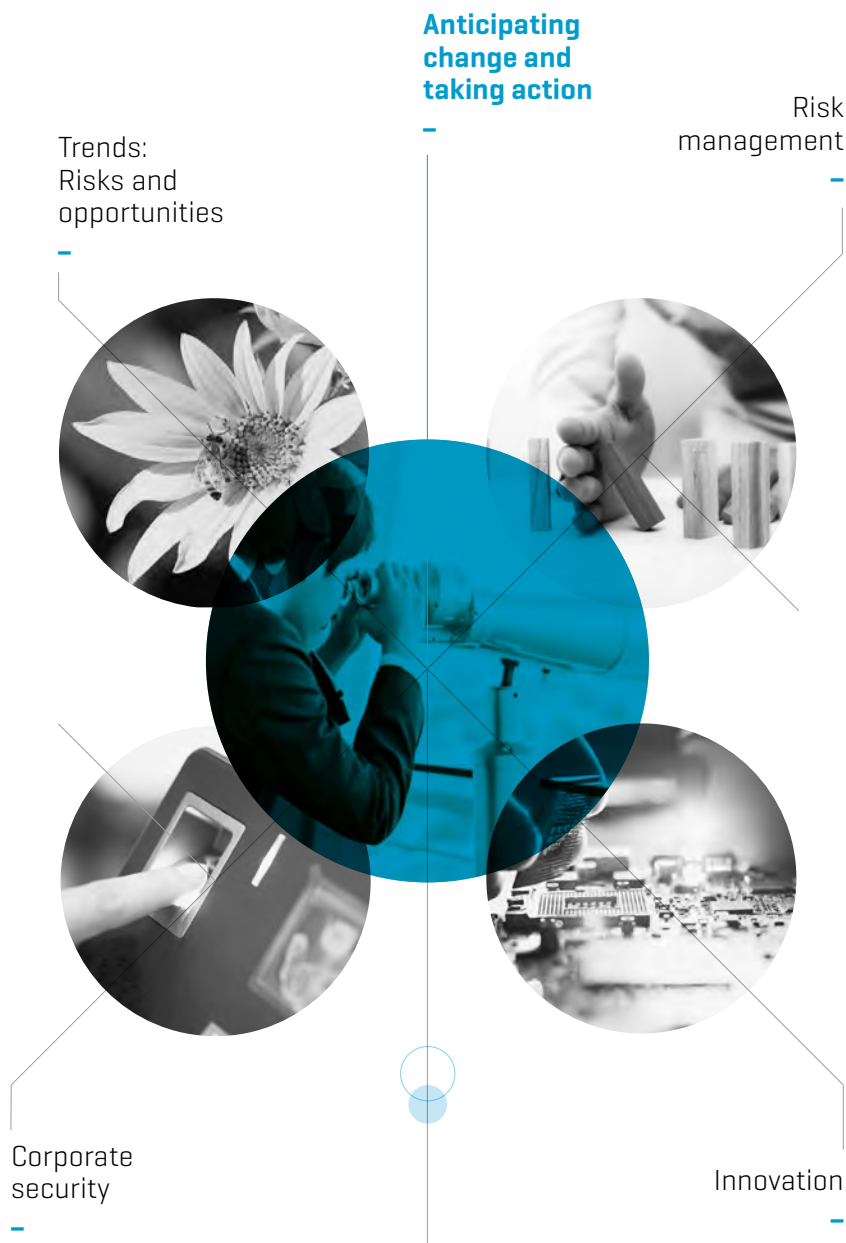
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The current global context is determined by constant change. Companies must identify the trends that will have an impact on them in the future, so that they can define their stance when facing this change. Therefore, it means advancing towards a proactive management approach capable of converting potential risks into opportunities.

In this regard, the Red Eléctrica Group takes on the following commitment as a sustainability priority:

Promote a corporate culture of innovation and flexibility that allows us to identify growth opportunities and respond to the challenges of the future, anticipating and adapting both to global trends and to the regulatory environment arising from the new energy model.



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# TRENDS: RISKS AND OPPORTUNITIES





# Trends: risks and opportunities /102-15

The existing global challenges set the framework for the agendas of companies and determine their sustainability in the long term. For this reason, the Red Eléctrica Group has carried out a thorough analysis of its sustainability context, identifying the main existing trends, in order to be aware of the issues relevant to the Company's business model with a present and/or future impact.

## GLOBAL TRENDS: A FUTURE CONDITIONED BY MEGATRENDS

The Red Eléctrica Group has identified four global trends or megatrends. That is, key issues with a level of global influence that will generate significant impacts, both on the business model of companies in all sectors as well as on the management of the public administrations of all countries.



The acceleration of urban development will motivate the progression of construction megaprojects to meet the needs of the population.



The consolidation of demographic changes associated with the ageing of the population will generate a greater demand for social services and may increase the overall risk concerning the loss of talent.

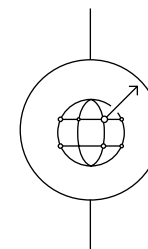


The breakthrough of noteworthy technological developments will increase the productive potential of companies and will lead to new investment opportunities.



The rebalancing of global economies will favour the development of emerging economies as major consumption centres.

## Global TRENDS



KEY ISSUES  
with a global level  
of influence

*With relevant impacts  
on the business model  
of companies and  
on management of the  
public administrations  
of all countries.*





## SUSTAINABILITY TRENDS: AREAS TO MAKE SUSTAINABLE PROGRESS ON

The Red Eléctrica Group has identified **twelve sustainability trends**, that is, key issues with a level of global influence linked to areas of sustainability management.



The definition of global objectives at the Paris Climate Summit or the Sustainable Development Goals, among others, entail the **empowerment of companies**, which are positioned as key agents for the achievement of said targets.



Investors understand the added value of sustainability and focus on the impacts that companies have in the environmental, social and good governance fields promoting the growth of **socially responsible investment (SRI)**.



**Climate change** has been established as a global challenge that will determine the way business is done, especially after the targets set in the Paris Agreement.



The shortage of talent increases the concern of companies to build a **good employer brand** that contributes to motivating and retaining existing talent.



The European Commission focuses on the **protection of nature and biodiversity** in its action plans and the main financial institutions are committed to integrating natural capital considerations into their products and services.



The existence of greater demands made by society to the companies makes them understand the need to value the positive impact generated, making the **social footprint** a key argument of corporate discourse.



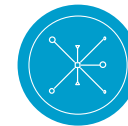
Socially responsible investment funds focus on **integrating the environmental variable in financing**.



The **lack of resources** is brought to the forefront and the **circular economy** consolidates itself as a system to guarantee the efficient use of resources.



Exposure to risks linked to **water** increases and is established as a factor with the potential to limit the business growth of companies.



Companies assume increasing responsibility with respect to their value chain making it necessary to have a **sustainable management of the supply chain** that converts suppliers into a business partner.



Companies are increasingly concerned about improving the **ethics, compliance and corporate governance** systems, taking transparency as the determining tool for generating trust with their stakeholders.



The increasing requirement for **accountability to third parties** is driven by the development of new reporting frameworks for non-financial information, as well as by new requirements derived from external assessments to which companies are subject.



The single European energy market and the development of North Africa are, for the European Union, factors representing the need to increase the interconnection capacity from now until 2020.

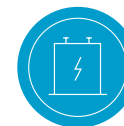


## SECTORAL TRENDS: MOVING TOWARDS A NEW ENERGY MODEL

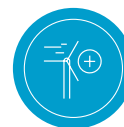
The Red Eléctrica Group has identified **four sectoral trends**, that is, key issues with a high level of influence in the scope of activity of the Red Eléctrica Group.



The European Union foresees the need to increase the **interconnection capacity** between now and 2020, with focus on two aspects: create a single European energy market and support the development of North Africa.



The electrification of the energy system and, consequently, a greater **integration of renewable energies** in the mix, is a key element in the transition towards a low carbon economy.



The development of **energy storage** projects allows for backup energy ensuring a reliable and quality supply in electricity systems, integrating the variable of renewable generation.



**Self-consumption** constitutes a new technological reality for the electricity sector, compatible with the existence of transmission grids and distribution networks that guarantee supply.

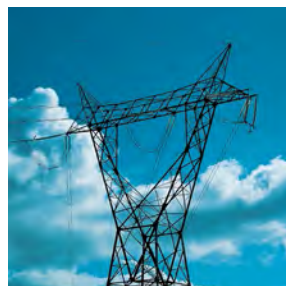


## SUSTAINABILITY OPPORTUNITIES

The 2030 Sustainability Commitment has made it possible to integrate a long-term vision into the Company. As a result, the Red Eléctrica Group has identified a series of challenges and opportunities [see diagram] that make up the roadmap to be followed by the Company in the coming years.

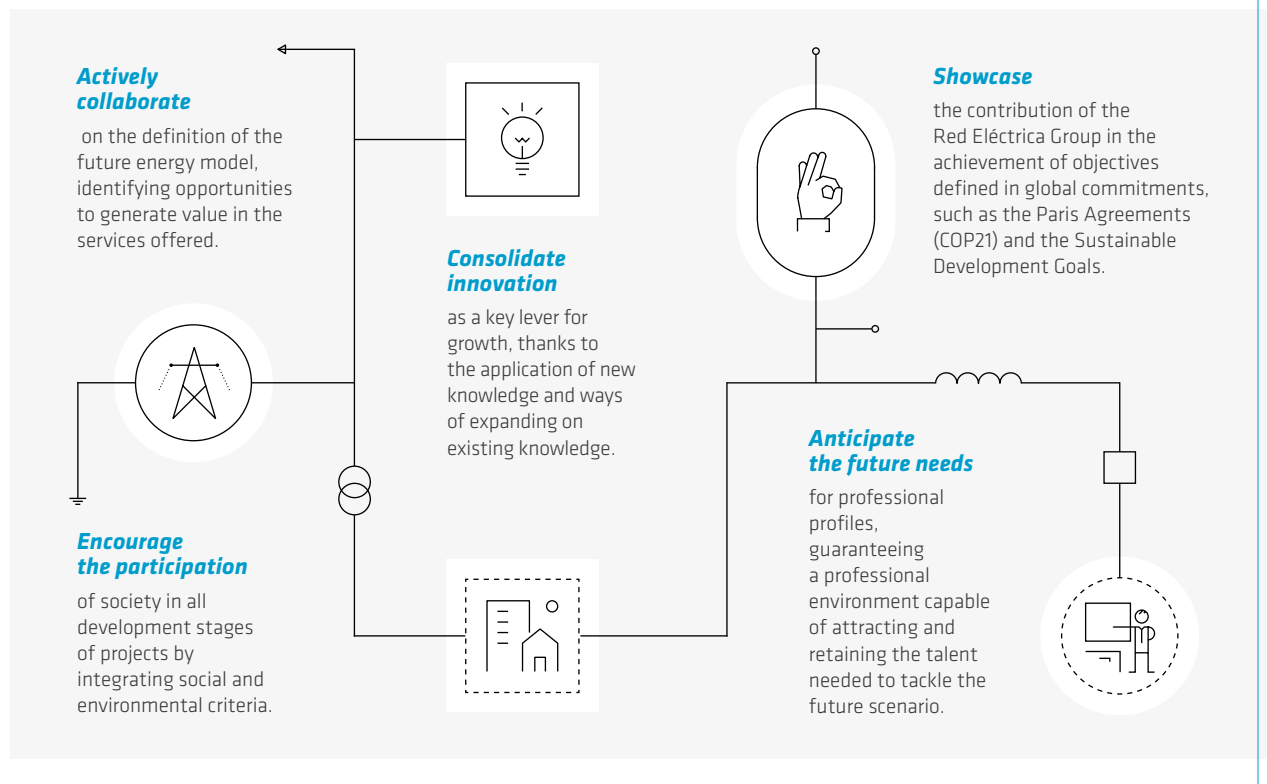
These global opportunities join those derived from the fight to curb **climate change**, which implies a change in the energy model and in the transmission model. The policies established at European level are clearly aimed at achieving these goals.

In this regard, the need to increase the share of renewable energy in the electricity system (through the connection of new facilities and the optimisation of its management), the necessary advances to improve the efficiency of the system and changes in mobility policies (through the promotion of rail transport and the development of the electric vehicle) represent a clear need for new investment in the transmission grid (in terms of new lines and interconnections) and, therefore, a clear business opportunity for the Company.



The fight to curb climate change implies a change in the energy model and the transmission model, as established by European policies.

## CHALLENGES AND OPPORTUNITIES





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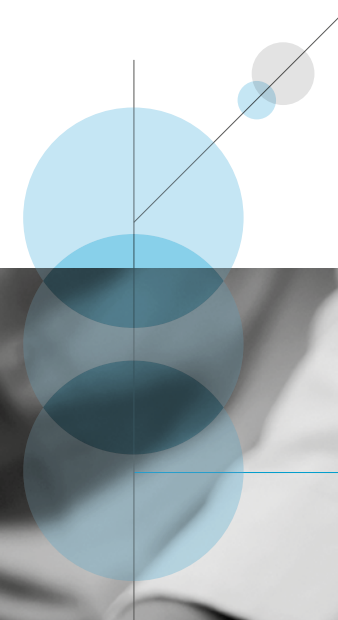


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# RISK MANAGEMENT





# Risk management<sub>/102-11</sub>

The Red Eléctrica Group has a comprehensive risk management system in place in order to facilitate compliance with the Group's strategies and objectives, ensuring that the risks that could affect them are identified, analysed, assessed, managed and controlled in a systematic manner, with uniform criteria and within the level of acceptable risk approved by the Board of Directors.

The Management System conforms to the ISO 31000 standard on the principles and guidelines in risk management and is ongoing and comprehensive in nature, consolidating said management per business unit, subsidiary and support areas at a corporate level.

The Red Eléctrica Group has a Comprehensive Risk Management Policy and a Comprehensive Risk Management and Control Procedure, based on the Comprehensive Risk Management Framework COSO II [Committee of Sponsoring Organisations of the Treadway Commission].

## COMPREHENSIVE RISK MANAGEMENT POLICY

This policy, approved by the Board of Directors, aims to establish the principles and guidelines of the Risk Management System, and integrates the policy for the control and management of tax risks.



### Characteristics of the Comprehensive Risk Management Policy

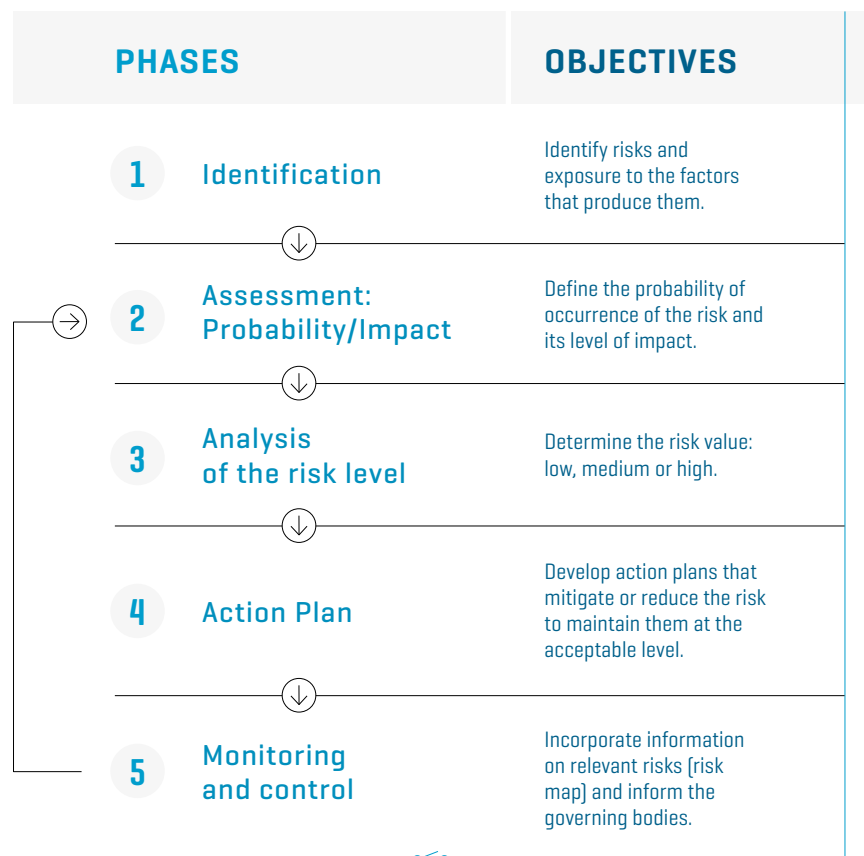
- Aligned with the Group's strategic plan.
- Identifies the various risk categories.
- Establishes the Group's **acceptable risk level**.
- Provides **action guidelines** to manage and mitigate those risks.



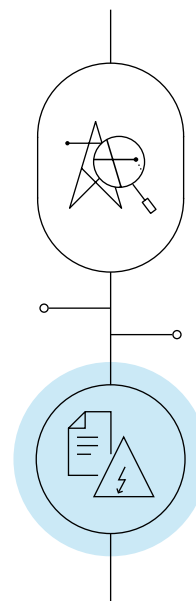
## COMPREHENSIVE RISK MANAGEMENT PROCEDURE

The **General Comprehensive Risk Management and Control Procedure** regulates the process of identification, analysis, assessment and control of the management of the relevant risks faced by the Group. This process is

carried out in order to ensure that the various levels of management of the Group are fully aware of and assess the risks that threaten the Group's strategies and objectives, and that the management of these risks is undertaken in accordance with the acceptable risk limits established.



## Risk MANAGEMENT



## COMPREHENSIVE RISK MANAGEMENT

Analysis, assessment and control of relevant risks faced by the Group

-  
**Management within the acceptable risk limits established**

## ORGANISATIONAL STRUCTURE 102-30 / 102-31

The **risk management system** is comprehensive in nature, to the extent that all units of the Group and the different governing bodies participate in it, as part of a systematised management process, in accordance with the guidelines and criteria established in the general Procedure and Policy for Comprehensive Risk Management and Control. In these documents, the different responsibilities of the governing bodies and those of each of the organisational units are defined, as well as the flow of information and the activities to be undertaken by the various bodies [see organisational diagram on the next page].



## ORGANISATIONAL STRUCTURE REGARDING RISK MANAGEMENT AND CONTROL

- Approve the Comprehensive Risk Management Policy of the Group.
- Approve the criteria for the acceptable risk level.
- Periodic monitoring of the efficiency of the comprehensive risk management system.



**Board of Directors  
Audit Committee**

**Advisory Committee to the  
Chairman's Office**



- Monitoring of the relevant risk map.
- Ensure the adequate control and monitoring of risk management and mitigation action plans.

GUIDELINES



INFORMATION

- Support organisational units of the Group in the implementation of the Comprehensive Risk Management and Control Procedure.
- Control that risks are managed within the acceptable risk level established and in accordance with the principles and guidelines set out in the Comprehensive Risk Management Policy.
- Monitor the risk level of the Group and the evolution of its risks.
- Ensure information on risks flows to the bodies responsible for their control and from these to the units responsible for the management of the corresponding processes or projects.



**Internal Audit and Risk Control  
Management Area [\*]**



**Organisational units responsible  
for the process or projects**



- Identify and report to the Internal Audit and Risk Control Management Area on the appearance of new relevant risks, or relevant changes in risks already identified, that may have an impact on the activities, processes and projects managed.
- Assess relevant risks with the support of the Internal Audit and Risk Control Management Area and manage such risks.
- Manage the activities, processes and projects in accordance with the acceptable risk level established. Design and execute, when appropriate, action plans to take the risks to the corresponding acceptable level and maintain them at said level. Carry out said management in accordance with principles and guidelines established in the Comprehensive Risk Management Policy.

[\*] This management area reports to the Chairman's Office.



# The execution of the transmission and operation activities of the electricity system is critical for the security and continuity of the electricity supply.

## RISK STRUCTURE 102-15

The core business of the Red Eléctrica Group is the transmission of electricity and the operation of the electricity system in Spain. Said activities are regulated in as far as they are critical to the security and continuity of the electricity

supply and are carried out on an exclusive basis. This classification as a regulated activity affects not only the setting of regulated income and the social, economic and environmental aspects, but also the conditions that must be met by the Company when undertaking its main activity.



## Types of risk of the Red Eléctrica Group

### OPERATIONAL RISKS

- Operational risks that may affect the electricity system and that are related to the proper functioning of the Transmission Grid and System Operation.
- Environmental risks and those related to people. These risks are mainly associated with the location in which the activities are carried out and the safety of the people assigned to the works.
- Comprehensive corporate security risks. This groups together the risks related to physical security and cybersecurity.
- Other operational risks. Those of an operational nature not included in the aforementioned types.

### REGULATORY RISKS:

- Regulatory risks related to being Spanish TSO. Those risks related to regulations that affect the Group in its activity as the Spanish TSO.
- Other regulatory risks, derived from regulations other than those governed by the above. This especially includes tax risks, which are those produced by the application of the tax regulation as well as the interpretative complexity or amendments to the same, and the possible reputational impacts in the management of tax affairs.

### FINANCIAL AND COUNTERPARTY RISKS

- Financial and counterparty risks. Corresponds to financial risks, market risks and those related to the non-compliance of counterparties in relation to their contractual obligations:

### BUSINESS DIVERSIFICATION RISKS

- Risks associated with the telecommunications business.
- Risks due to international business. Encompasses those risks associated with the activities carried out by the Group through its subsidiaries abroad.



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## RISK TOLERANCE LEVEL

The level of risk that the Red Eléctrica Group is willing to accept is established both for the risks individually and in aggregate form (level of global acceptable risk). The Risk Management System of the Red Eléctrica Group defines a methodology for the determination of acceptable risk. In this way, all identified risks are classified into three categories: high-level risks, medium-level risks and low-level risks.

Two parameters are used to establish the level of a risk, which are the probability of occurrence and the impact it would have for the Company should the risk materialise. This may have an impact on four key elements of the business as detailed below:

### ELECTRICITY SUPPLY

Measured by the Energy Not Supplied (ENS) that would result should the event take place.

### ACHIEVEMENT OF THE ESSENTIAL STRATEGIES

Degree of impact on the achievement of the essential strategies.

Depending on the probability of occurrence and the level of impact of each risk, it is positioned in the probability/impact matrix, which automatically determines the level of risk, which may be low, medium or high.

As a result of the risk analysis carried out by the Red Eléctrica Group in the most recent Risk Map, the distribution of risks according to the categories and levels defined above is included in the 'Risk distribution by category and level' chart.

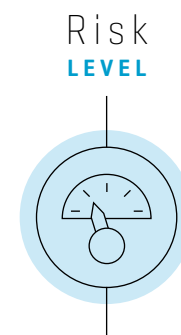
In accordance with the Comprehensive Risk Management Policy, at an individual level, any risk that does not exceed the level of low risk will be considered acceptable. Risks that exceed this level must be subject to actions until the acceptable level is reached to the extent that the risk is manageable, and the cost of mitigation measures

### REPUTATION

Degree of impact on the reputation (geographical scope, duration and ability to restore it).

### ECONOMIC LOSS

Impact on the income statement before Corporate Tax.



TWO PARAMETERS:  
probability of  
occurrence and the  
impact it would  
have on the Company

is justified by the impact that the materialisation of the risk may have on the Group.

The Board of Directors approves the level of global acceptable risk that the Group is willing to assume for each of the four types of impacts contemplated in the Comprehensive Risk Management System, already mentioned. As general criteria for risk management, the Group's overall risk level, determined as a result of the statistical aggregation of individual risks, must not exceed this level of globally acceptable risk.

## Risk distribution by category and level N°.





## RISKS MATERIALISED IN 2017

During 2017, no noteworthy risk materialised.

Transmission grid facilities are exposed, permanently, to operational events that may have an impact on the continuity and security of the electricity supply.

In 2017, there were events whose consequences were power outages of minor importance. In general, these events are caused by third parties and by extreme weather conditions. Given these events, the control systems have worked properly, as evidenced by the availability index of the peninsular transmission grid, which in 2017 was 98.28%.

The Group also has insurance policies that limit the potential impact of these events on the Company's income statement.

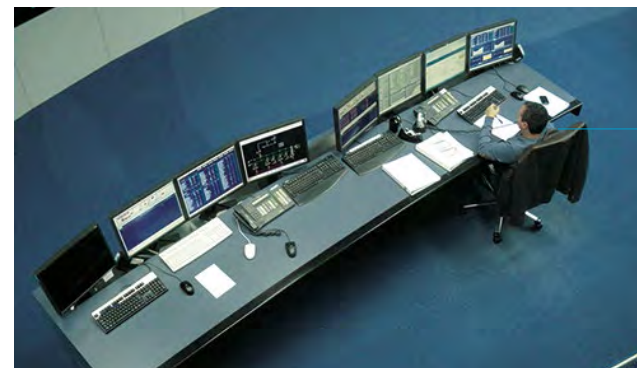
## RESPONSE AND MONITORING PLANS

In the process of identification, analysis, assessment and control of risks, the necessary actions are established to reduce the level of risk and take it to the acceptable risk value.

For the monitoring of risks, the current risk management system includes the **monitoring of more than 500 action plans** aimed at reducing the level of risk and **more than 300 indicators** to monitor their evolution.

For high-level risks and others of special relevance these are monitored every six months, and for the rest of the risks these are monitored annually, and when circumstances dictate for specific risks. **The Internal Audit and Risk Control Management Area reviews, with the management units, the evolution and impact of the action plans** previously established to reduce said risks.

Additionally, actions are carried out with other Group units for the development of risk management in line with the Comprehensive Risk Management System. Thus, in 2017, work was carried out



on the development of the risks map of regulatory compliance and comprehensive corporate security.

Furthermore, Red Eléctrica has **contingency plans** that regulate the various crisis situations that could arise in the event of an electrical incident (to guarantee security of supply), or non-electrical that could have an impact on the environment, people, and the operational aspects of the Company, the availability of its systems, business results or any other event that has an impact on the Company's reputation.

The Company also has an action guide for the management of cyber-incidents, updated in 2017,

which establishes the criteria and guidelines for the management of any incident related to cybersecurity.

In a supplementary manner, Red Eléctrica has a System of Internal Control over Financial Reporting (ICFR), with the aim of obtaining efficiency and security in the processes for the drafting of economic and financial information about the Company, adopting international best practices, in a timely and voluntary manner. The ICFR includes Red Eléctrica's tax information and proceedings as well as the associated controls.



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## MAIN RISKS OF THE RED ELÉCTRICA GROUP AT PRESENT / 102-15 / 102-29

| TYPE OF RISK  | DESCRIPTION  | MAIN RISK MANAGEMENT ACTIONS  |
|---|--|---|
| <b>Regulatory risks as TSO</b>                                  |  |   |
| Risk of changes to the electricity system regulation            | <ul style="list-style-type: none"> <li>• Risk of regulatory changes occurring that could have a negative impact on the activities related to transmission and system operation.</li> </ul>   | <ul style="list-style-type: none"> <li>• Dialogue with the Regulator.</li> <li>• Presentation of proposals to the Regulator.</li> </ul>   |
| <b>Other regulatory risks</b>                                   |  |   |
| Other regulatory risks  | <ul style="list-style-type: none"> <li>• Tax risks.</li> <li>• Changes in environmental regulation.</li> </ul>   | <ul style="list-style-type: none"> <li>• Adherence to the Code of Good Tax Practices.</li> <li>• Setting up of the tax strategy of the Red Eléctrica Group.</li> <li>• Incorporation of Tax Risk Policy into the Comprehensive Risk Management Policy of the Group.</li> <li>• Adaptation to the legislation related to climate change.</li> </ul>  |
| <b>Operational risks of the electricity system</b>              |  |   |
| Risks related to power outages and the evacuation of generation | <ul style="list-style-type: none"> <li>• Risk of a breakdown/fault occurring in the facilities that may significantly impact on the electricity system, causing power outages on the Spanish Peninsula or on the Islands.</li> </ul> | <ul style="list-style-type: none"> <li>• Emergency equipment and procedures.</li> <li>• Periodic inspections of equipment and systems.</li> <li>• Preventive and predictive maintenance programmes.</li> <li>• Renovation and improvement plans for facilities.</li> <li>• Improvement of grid meshing and increase in the construction of facilities to deal with the Electricity Infrastructure Plan approved by the Government.</li> <li>• Contracting insurance policies to cover possible damages that can be derived from an incident.</li> <li>• Contingency plans.</li> </ul> |
| Risks associated with the operation of the system               | <ul style="list-style-type: none"> <li>• Human errors in the coordination or configuration of equipment.</li> <li>• Malfunction of telecommunications.</li> <li>• Failure of computer systems that support the activity.</li> </ul>  | <ul style="list-style-type: none"> <li>• Strengthening of the transmission grid.</li> <li>• Power service restoration plans.</li> <li>• Plan for the renovation and improvement of facilities.</li> <li>• Improvement of the telecommunication systems.</li> <li>• Implementation of security mechanisms in the IT used.</li> <li>• Ongoing training of operators.</li> <li>• Contingency plans.</li> </ul>   |



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## MAIN RISKS OF THE RED ELÉCTRICA GROUP AT PRESENT / continued

| TYPE OF RISK   | DESCRIPTION  | MAIN RISK MANAGEMENT ACTIONS   |
|--|--|--|
| <b>Comprehensive corporate security risks</b>                                  |  |  |
| Risks that may affect the security of facilities                               | <ul style="list-style-type: none"> <li>Impact on security in facilities (substations, control centres, buildings, etc.) such as vandalism, sabotage, theft, terrorism, etc.</li> </ul>   | <ul style="list-style-type: none"> <li>Security systems in facilities.</li> <li>Service for the permanent monitoring of facilities.</li> <li>Contact with the Spanish Civil Guard and National Police.</li> <li>Comprehensive Corporate Security Management Model.</li> <li>Consultation and collaboration with the CNPIC (National Centre for Critical Infrastructure Protection).</li> <li>Operator Security Plan [OSP] and Specific Protection Plans [SPP].</li> </ul>  |
| Risks related to cybersecurity   | <ul style="list-style-type: none"> <li>Non-availability of systems.</li> <li>Unauthorised access to specific IT applications.</li> </ul>   | <ul style="list-style-type: none"> <li>Fire walls and anti-intrusion systems</li> <li>Antivirus systems</li> <li>Increase in the security of access requirements</li> <li>Mechanisms for the detection of incidents</li> <li>Software updates</li> <li>Hacking simulations</li> <li>Training and awareness programmes.</li> <li>Comprehensive Corporate Security Management Model.</li> <li>Consultation and collaboration with the CNPIC (National Centre for Critical Infrastructure Protection).</li> <li>Development of the Operator Security Plan [OSP] and Specific Protection Plans [SPP].</li> <li>Action guide in the event of cyber-incidents.</li> </ul>  |
| <b>Risks associated to the environment and the health and safety of people</b> |  |  |
| Risks of impact on the environment   | <ul style="list-style-type: none"> <li>Impact on flora.</li> <li>Impact on fauna especially birdlife.</li> <li>Contamination of soil and water.</li> <li>Impact on archaeological heritage.</li> <li>Risk of fires.</li> </ul> | <ul style="list-style-type: none"> <li>Application of strict environmental criteria in all phases of planning, development and maintenance of facilities.</li> <li>Environmental supervision of construction works.</li> <li>Biodiversity strategy and actions.</li> <li>Development of research projects and fire prevention plans.</li> <li>Projects for birdlife conservation.</li> <li>Environmental training courses for field staff.</li> <li>Environmental awareness of suppliers.</li> <li>Environmental supervision of construction works.</li> <li>Implementation of Environmental Work Certification.</li> <li>Establishment of collaboration agreements in the field of environmental protection with the various Autonomous Communities.</li> <li>Fire protection plans.</li> <li>Contingency plans.</li> </ul> |

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| TYPE OF RISK                              | DESCRIPTION  | MAIN RISK MANAGEMENT ACTIONS  |
|---|--|---|
| Risks derived from climate change / 201-2 | <ul style="list-style-type: none"> <li>Changes in legislation motivated by climate change.</li> <li>Physical risks on the facilities: <ul style="list-style-type: none"> <li>Changes in the properties of the conductors.</li> <li>Decrease in conductivity.</li> <li>Impacts caused by wind, electrical discharges, extreme rainfall, etc.</li> <li>Accumulation of pollutants.</li> </ul> </li> <li>Effects of climate change on the operation of the system.</li> <li>Emissions of greenhouse gases.</li> </ul> | <ul style="list-style-type: none"> <li>Commitment and action plan for the fight against climate change.</li> <li>Voluntary Agreement for the comprehensive management of SF<sub>6</sub> in the electricity industry, between the Ministry of Agriculture, Food and Environment, equipment manufacturers (AFBEL), UNESA, REE and waste management companies.</li> <li>Development of system operation tools [CECRE].</li> <li>Construction of new transmission lines for the evacuation of renewable energy.</li> <li>Strengthening of international interconnections.</li> <li>Development of demand-side management initiatives (interruptibility service, measures to achieve a more efficient consumption profile, and initiatives for the implementation of the electric vehicle).</li> <li>Development of research and innovation projects: new technologies and technical solutions for efficient system management, new tools for emergency situations, smart demand-side management, energy storage.</li> </ul> |
| Risks related to management and employees | <ul style="list-style-type: none"> <li>Lack of motivation and competencies of staff to reach the Company objectives.</li> <li>Fraud and corruption.</li> <li>Workplace accident rate.</li> <li>Conforming to occupational health and safety risk prevention.</li> </ul>  | <ul style="list-style-type: none"> <li>Development programmes for experts and directors.</li> <li>Work-life balance policy and implementation of a management system.</li> <li>Hiring of young employees with potential.</li> <li>Maintenance and improvement of the structured risk prevention system in accordance with the OHSAS 18001 standard.</li> <li>EFR1000 certification (Family-Responsible Company - known as EFR in Spain).</li> <li>Implementation of the Code of Ethics, the whistle-blowing channel and audits.</li> <li>Application of the staff appraisal system.</li> <li>Technical Procedures for the organisation of safety.</li> <li>General procedure for accident management and incidents.</li> <li>Operational Group regarding Prevention.</li> </ul>   |
| Other operational risks                   | <ul style="list-style-type: none"> <li>Failure of the processes associated with certain activities of the Group such as engineering, construction, procurement, human resources, etc.</li> </ul>   | <ul style="list-style-type: none"> <li>Controls implemented in each process.</li> <li>Specific action plans.</li> <li>Contingency plans.</li> </ul>   |



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## MAIN RISKS OF THE RED ELÉCTRICA GROUP AT PRESENT / continued

| TYPE OF RISK   | DESCRIPTION  | MAIN RISK MANAGEMENT ACTIONS  |
|--|--|---|
| <b>Financial and counterparty risks</b>                |  |   |
| Risk of increased costs of equipment and raw materials | <ul style="list-style-type: none"> <li>• The control of the price of equipment and raw materials is a key part of the management of the construction and maintenance activities.</li> </ul>                  | <ul style="list-style-type: none"> <li>• Promote competition.</li> <li>• Increase normalisation and standardisation.</li> <li>• Drafting of turnkey contracts.</li> <li>• Assurance of the price of raw materials and/or the €/€ exchange rate in large projects.</li> </ul>  |
| Risk of increase in the interest rate                  | <ul style="list-style-type: none"> <li>• Variations in interest rates that may detract from that contemplated in the Strategic Plans of the Company.</li> </ul>  | <ul style="list-style-type: none"> <li>• Periodic reviews of interest rates and their impact on the income statement.</li> <li>• Maintaining the percentages of the fixed / variable financial structure.</li> <li>• Monitoring of possible actions that would imply a revision that could entail a downgrading of the rating.</li> <li>• Development of a financial risk policy and instruments for its management and control.</li> <li>• Establishment of new financing mechanisms that allow access to markets in an agile and efficient manner.</li> </ul> |
| Unfavourable variations in exchange rates              | <ul style="list-style-type: none"> <li>• Possible negative impacts due to the unfavourable variation in exchange rates.</li> </ul>   | <ul style="list-style-type: none"> <li>• Establishing hedging mechanisms for transactions performed in non-euro currencies.</li> <li>• Development of a Financial Risk Policy and mechanisms for its management and control.</li> <li>• Design of an international financing scheme.</li> </ul>   |
| Inadequate coverage when faced with claims             | <ul style="list-style-type: none"> <li>• Insufficient coverage when faced with a significant increase in claims made against the Company.</li> <li>• Loss of solvency of the reinsurance company.</li> </ul> | <ul style="list-style-type: none"> <li>• Provisioning.</li> <li>• Ongoing monitoring of the level of claims.</li> <li>• Reinsurance risk.</li> </ul>  |
| <b>Risks of the telecommunications business</b>        |  |   |
| Risks that can affect the business                     | <ul style="list-style-type: none"> <li>• Operational and business risks related to the telecommunications business.</li> </ul>   | <ul style="list-style-type: none"> <li>• Monitoring the quality of service provided.</li> <li>• Monitoring the portfolio of clients.</li> </ul>   |
| <b>Risks of business abroad</b>                        |  |   |
| Risks to foreign subsidiaries                          | <ul style="list-style-type: none"> <li>• Regulatory and operational risks of foreign subsidiaries.</li> </ul>  | <ul style="list-style-type: none"> <li>• Maintaining good relationships with agencies and organisations where the subsidiaries are located.</li> <li>• High-quality standards in the services offered.</li> <li>• Monitoring of regulatory developments and economic evolution.</li> <li>• Monitoring of the projects undertaken by subsidiaries.</li> </ul>  |

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## MAIN RISKS OF THE RED ELÉCTRICA GROUP AT PRESENT / continued

| TYPE OF RISK   | DESCRIPTION   | MAIN RISK MANAGEMENT ACTIONS  |
|--|---|---|
| <b>Risks that may emerge in the future</b>                                   |   |   |
| Changes in the regulatory framework  | <ul style="list-style-type: none"> <li>Regulatory changes with an impact on the activities of Red Eléctrica.</li> </ul> | <ul style="list-style-type: none"> <li>Active participation in ENTSO-E.</li> <li>Increased role in national and international forums.</li> <li>Communication with the regulators.</li> <li>Business diversification.</li> </ul> |
| Major environmental and social demands in projects                           | <ul style="list-style-type: none"> <li>Delays or increased costs in the execution of projects.</li> </ul>               | <ul style="list-style-type: none"> <li>Communication plan of the environmental and social activity.</li> <li>Maintain relationships with relevant institutions.</li> </ul>  |
| Increase of political uncertainty  | <ul style="list-style-type: none"> <li>Worsening of the situation of markets and international relations.</li> </ul>    | <ul style="list-style-type: none"> <li>Development of activities in regions that offer political and economic stability.</li> </ul>   |
| Changes in the electricity model due to the breakthrough of new technologies | <ul style="list-style-type: none"> <li>Cost of adaptation to changes.</li> </ul>  | <ul style="list-style-type: none"> <li>Efficiency actions contemplated in the Group's strategic plan.</li> <li>Promote innovation in the Group's activities.</li> </ul>   |



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# CORPORATE SECURITY





# Corporate Security

**In order to guarantee** comprehensive corporate security in the present and in the future, anticipating and adapting to global trends and the environment as part of its 'anticipating change and taking action commitment', Red Eléctrica has opted to combine security, giving it a corporate and global character for the entire Group. Thus, security is not only understood as the protection of critical infrastructure, but also the protection of people and information assets.

This way of conceiving security in a broad and interdisciplinary way allows us to respond to physical and cyber-threats in a global and comprehensive manner. Currently the trendsetters are:

- The new regulatory developments [adaptation to the standard for critical infrastructure protection].

- Alliances with the National Centre for Critical Infrastructure Protection and the National Cybersecurity Institute.

- The new services currently available [security based on risk analysis and control].

- New trends [implementation of new technologies].

The first objective of Red Eléctrica has been to define a Comprehensive Corporate Security Management Model, whose strategy and measures allow the Company to prevent, protect and react to risks and threats that may affect the physical security of people, assets, logical security and the security of the Group's information.





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## COMPREHENSIVE CORPORATE SECURITY MANAGEMENT MODEL

The governance, management and operation model of the Red Eléctrica Group, approved in September 2017, is based on good practices and existing standards in these fields. The model covers the eleven capabilities that an organisation must have in order to maximise its resilience in adverse situations.

- **Risk management:** automated and dynamic treatment of security risk.
- **Security plan:** develop, implement and monitor the security plan, as well as establish collaboration and cooperation mechanisms.
- **Assets, changes and configuration:** asset management in accordance with security guidelines during the asset's lifecycle.
- **Exchanges of information:** establishment and implementation of a secure information management model.
- **External dependencies:** establish the necessary control mechanisms associated with the services provided by the supply chain.

- **Personnel involved in security:** implementation of a security structure and improving the level of security awareness among staff.
- **Incidents and continuity of operation:** increase resilience to undesired events.
- **Threats and vulnerabilities:** establishment and implementation of a management model for the control of threats and vulnerabilities of assets, including intelligence services.
- **Identities and accesses:** establish mechanisms to control access to the assets of the organisation and identity management.
- **Regulatory compliance:** establishment and implementation of a regulatory framework for comprehensive corporate security, as well as compliance with national and international security regulations.
- **Situational awareness:** monitoring and reporting of the Group's security status.

The aforementioned capabilities, following that established by standards, are addressed based on a three-tier structure:

### COMPREHENSIVE CORPORATE SECURITY GOVERNANCE

Tier level responsible for defining the strategic objectives in this matter essentially through a strategic plan for comprehensive corporate security and for monitoring its correct implementation according to the objectives and strategies of the business.

### COMPREHENSIVE CORPORATE SECURITY MANAGEMENT

Tier level responsible for defining the Comprehensive Corporate Security Plan that must meet the requirements defined by the governing body, as well as managing the functions and security processes arising from said plan.

### COMPREHENSIVE CORPORATE SECURITY OPERATIONS

Tier level responsible for the execution of the Comprehensive Corporate Security processes related to the infrastructure, always within the guidelines and limits established by Management.



## COMPREHENSIVE CORPORATE SECURITY ACTION PLAN

For the drafting of the **action plan [2017-2019]**, an analysis of the current situation of the security status has been conducted for all the assets, information systems, operation systems and physical security groups.

In the first phase of the implementation of the comprehensive corporate security model, the actions will focus on the most critical capabilities for the Group's business, prioritising the actions of the governance and management tiers. Efforts will be focused on those capabilities which are most critical:

- Risk management
- Assets, changes and configuration
- Incidents and continuity of operation
- Threats and vulnerabilities

In order to measure the degree of implementation and availability of each of the capabilities of the model, four stages of maturity will be used to indicate the status and progress of each of the capabilities.



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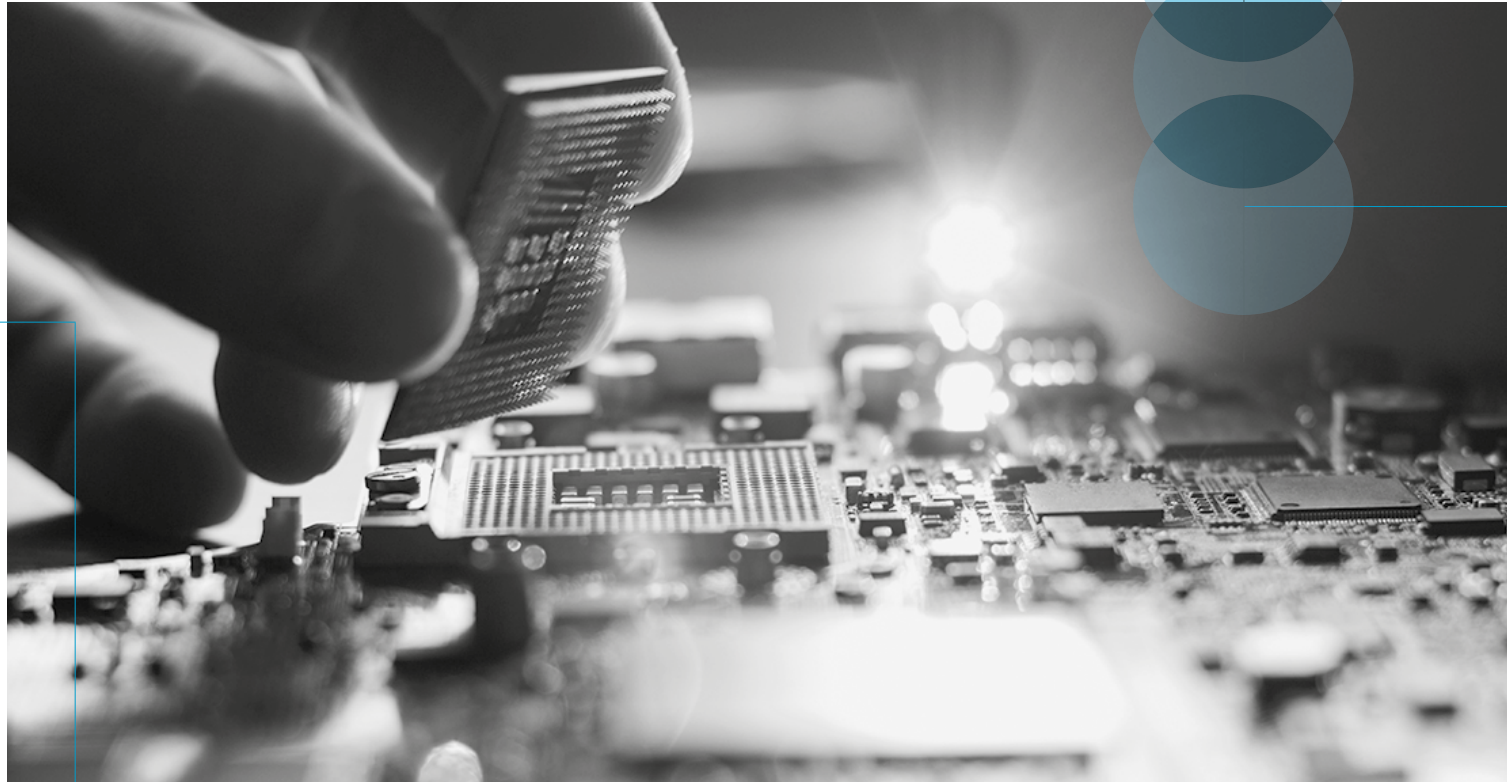


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# INNOVATION

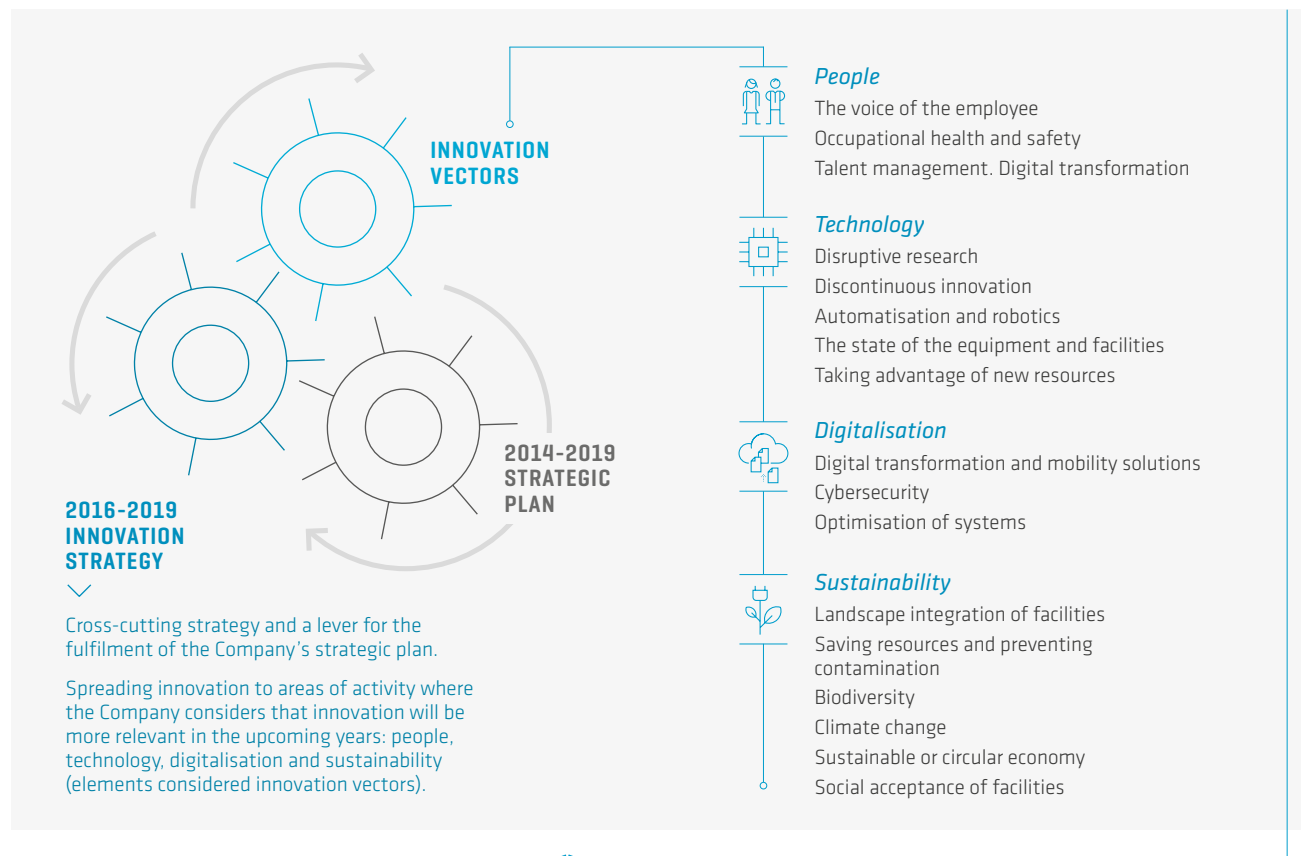




# Innovation / 103-1 / 103-2 / 103-3

**Innovation** in the Red Eléctrica Group consists of providing value, driving and promoting the incorporation of technologies, solutions and new ways of working as a lever of growth and efficiency that, in a structured way, promote a cultural change to take on the Group's future challenges, supporting its long-term sustainability and that of the electricity system as a whole.

Derived from the 2014-2019 Strategic Plan of the Red Eléctrica Group, the Company designed the current **2016-2019 Innovation Strategy**, with the aim of spreading the innovative culture to all areas of business activity, focusing on four vectors: digitalisation, people, technology and sustainability.





## INNOVATION VECTORS

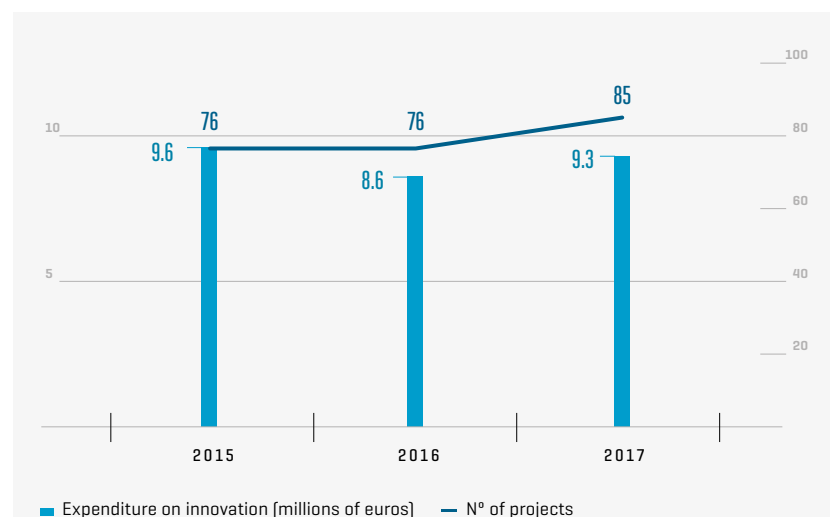
The **innovation vectors** bring together the areas in which the Company will especially boost innovation in the coming years. Therefore, the Company does not concentrate its efforts regarding innovation solely on these four vectors, but these are indeed the key areas where most of the effort is focused.

For the period 2016-2019, and for each vector, priority courses of action have been defined that should help guide innovation plans and programmes in the Red Eléctrica Group [detailed in the diagram on the previous page].

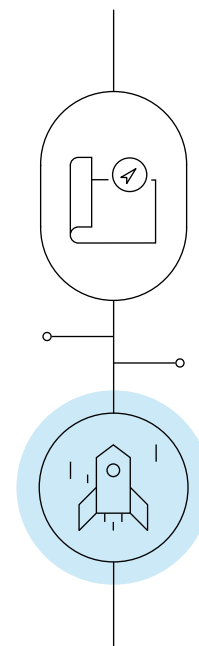
## DEDICATION OF RESOURCES TO INNOVATION PROJECTS

The level of investment in innovation projects has been sustained in recent years, which clearly shows the Red Eléctrica

### Investment in innovation 2017 Target: 9 million euros



## Innovation PROJECTS



Expenditure  
on innovation  
2017  
**9.3**  
M€

**85 projects**  
underway during  
2017

Group's commitment to a culture of innovation developed through its strategy. This fact not only requires an important financial investment, but also an important dedication of the Company's professional resources, as well as collaboration with researchers, universities and technological centres of the innovation ecosystem in which the Group is immersed. Below is the data for the last three years, in which the average investment in innovation projects stands at 9.17 million euros per year, and the average number of projects per year was almost 80.

## GRID2030 INNOVATION PROGRAMME

The Red Eléctrica Group, as part of the development of its innovation strategy, is committed to supporting the development of disruptive innovation activities that anticipate the future of electricity systems and accelerate the development of technological solutions that could have a high impact on the TSO activity in a horizon of 10-12 years.



In response to this commitment, the Grid2030 programme, a pioneering initiative in Spain, was launched at the end of 2017. Grid2030 is a multi-year collaboration that will allow, on the one hand, socio-economic and technical innovations to be explored related to the operation and transmission of electricity and, on the other hand, to support the development and early commercialisation of applications

based on cutting-edge technology, accelerating their deployment and progressive acceptance through the participation of companies and industries. By means of several open calls for proposals, the Company will collate proposals that could lead to Innovation and Development projects.

Through experiences such as GRID2030, the Red Eléctrica Group expects to increase its knowledge

in technologies and added value services, as well as to increase its resilience, face the challenges that the new energy model envisages and guarantee the competitiveness of the Company in the long term.

#### EXAMPLES OF INNOVATION PROJECTS UNDERWAY

During 2017, the Red Eléctrica Group has had 85 innovation projects underway. Some of the most significant ones are described below.

The **Grid2030** programme, a pioneering initiative in Spain, will generate R&D+i projects in the field of electricity transmission and operation.

| Name                    | Project definition   |
|-------------------------|--|
| <b>BEST PATHS</b>       | European project to overcome the technical barriers that the current pan-European electricity grid may encounter when attempting to safely integrate massive amounts of energy from renewable sources. |
| <b>MIGRATE</b>          | Project aimed at improving the understanding of the behaviour of the electricity system with a high penetration of devices based on power electronics.   |
| <b>VEGETA</b>           | Development of a new methodology to optimise the plan for managing the vegetation growing along the routes of the high-voltage electricity lines.  |
| <b>TRAFO SOSTENIBLE</b> | Approval of the use of natural ester fluids as a refrigerant in standard power transformers.   |



## Red Eléctrica has established, as a management goal for 2017, the definition of a digital transformation strategy for the Group.

### DIGITAL TRANSFORMATION

Digital transformation is a process of changing operations, business models and ways of working to add more value, facilitated by the rapid development of new digital technologies. It is also considered that it is the way to start up an organisation so that, when technological disruption arrives, the Company can better adapt to new business environments. For a company like Red Eléctrica, due to its neutral position and the fact it is the centrepiece of the system, this transformation represents an enormous opportunity.

This is why the definition of a **digital transformation strategy** for the Red Eléctrica Group has been set as a management objective for 2017, so that the aforementioned changes in the sector can be addressed. Digital transformation is a fundamental

element for the deployment of several of the key actions on which the 2014-2019 Strategic Plan is based, and it is expected to be one of the pillars in the Group's strategy for the coming years.

The **objectives** to be achieved through digital transformation in Red Eléctrica are the following:

- Improvement in operational efficiency.
- Development of new business models.
- Adaptation of the Group's human capital so it can be effective working in a digital company.

The **structure** of the digital transformation strategy includes three interrelated axes, divided, in turn, into ten programmes.

### Cultural change



This will help to develop the skills of the workforce and their way of working, allowing the value of new opportunities in the market to be taken advantage of and therefore help the Company evolve towards a more agile organisation capable of adapting quickly to change.

As key elements of this transformation, two dimensions are established: **people** (knowledge, attitudes etc.) and **the working environment** (workspaces, policies, processes etc.)

### Efficiency and new business



This encompasses those key actions aimed at **creating value** through leveraged initiatives in **digital technologies and skills**. These initiatives, should they not be identified, strengthened and channelled properly, could jeopardise the future of the Company.

The key actions of the axis are classified based on three programmes: **efficiency, current business growth and new business**.

### Data technology and governance



Technology is a key lever to promote the effective development of the other two axes:

- In **cultural change**, enabling the new ways of working, where mobility and collaboration will be essential requirements.
- In **efficiency and new business**, looking not only for traditional improvements aimed at the optimisation of processes and efficiency, but also exploring possibilities for generating value that new technologies offer.

In addition, the necessary conversion of data into information and knowledge is also analysed, which is key to a more efficient management of assets and a gateway for new business models.

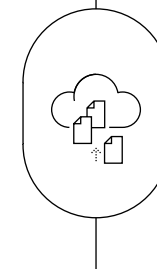


For the correct Kickoff of the digital transformation strategy in the Group, a management model has been proposed along with an action plan with initiatives in this field for their development in the coming years.

During 2017, more than 100 digital transformation initiatives have been identified which are currently underway in the Group, with the following being noteworthy for their contribution to the objectives of the digital transformation strategy:



## DIGITAL TRANSFORMATION strategy



## Entails a MANAGEMENT MODEL AND ACTION PLAN

During 2017, more than 100 digital transformation initiatives have been identified which are currently underway in the Group

### IMAGINA

The Project, in its change management and implementation phase, establishes a strategy based on **collaboration, innovation, leadership, openness and orientation to stakeholders, flexibility and agility**; defining specific initiatives that are materialised through the working groups, the project team and the ambassadors of change, Imagineers.

### MANINT

Programme composed of four projects planned in the 2017-2019 horizon, which seeks to **optimise the management of transmission grid assets** through analysis and improvement of the associated corporate processes and the development and implementation of tools and functionalities of advanced data analysis using an agile methodology.

### INTEGRA

Comprehensive planning initiative, which aims to obtain a **single planning of activities in the Transmission Division of the Company**, considering the non-availability of the transmission grid and on which an adequate planning of the supply of materials and services needs can be carried out.