



Thursday June 22, 2017

## **PRESS RELEASE**

## RTE and CentraleSupélec sign a research chair on the contributions of digital technologies for electrical systems

On June 22, 2017, RTE and CentraleSupélec signed a new five-year academic partnership. Its objective: to study the potential offered by digital technologies for the management of the electrical system.

For several years, RTE has been studying the potential of digital technologies in the management of the electrical system. Thanks to its close scientific and pedagogical relationship with CentraleSupélec, RTE wished to reinforce this collaboration and put this new partnership on a long-term basis in order to accelerate its innovation processes and benefit from the scientific expertise of leading research teams with which to interact in the field of engineering sciences. In this context, a five-year research chair has been signed.

The development of digital technologies represents a challenging lever that can transform the management, development and operation of the electrical system. The integration of these technologies into the electricity transmission grid will enable RTE to make the most of existing infrastructures and to propose new ways of accomplishing its missions within the framework of the energy transition.

The design of the communication network that will be deployed to observe and control the electricity transmission grid will require multidisciplinary challenges specific to energy networks. This chair will involve several CentraleSupélec laboratories and teams which are acknowledged in France and worldwide around four key disciplines: Communications, Computing, Control and Decision-making, and Electrical Engineering.

Through its courses and laboratories, CentraleSupélec has been a key player in developing this vision that has become essential today: the convergence of the fields of Energy and Communications.

Thanks to a policy of active support, RTE creates a solid environment of partners and experts whose complementary skills enable to develop the new concepts and solutions of a network combining electricity and the digital.

RTE, Electricity Transmission Network, is a service company. Our fundamental mission is to provide all our customers with access to a safe, clean and economical power supply. RTE connects its customers via a suitable infrastructure and offers all the tools and services beneficial to them thus meeting their needs, with a view to economic efficiency, environmental friendliness and safety in Energy supply. To this end, RTE operates, maintains and develops the high and very high voltage network. RTE guarantees the correct functioning and safety of the electrical system. RTE transports electricity between (French and European) electricity suppliers and consumers, whether electricity distributors or manufacturers directly connected to the transmission network. 105,000 km of lines, between 63,000 and 400,000 volts and 50 cross-border lines, connect the French network to 33 European countries, thus offering opportunities for electricity exchanges that prove essential for the economic optimization of the electrical system. RTE employs 8,500 people.

CentraleSupélec, a Public Institution of a scientific, cultural and professional nature, was created by the merging of Ecole Centrale Paris and Supélec in January 2015. Since 2009, the two Schools have steadily strengthened their partnership and collaboration in order to cover all their activities (initial training, research and further training) and to assert their shared values of excellence, innovation, entrepreneurship, international openness and leadership.

Today, CentraleSupélec consists of 4 campuses in France. It has 4,700 students, 3,500 being engineering students, and includes 16 laboratories or research teams. As an international School, CentraleSupélec has offices in China, India and Morocco.

CentraleSupélec is a reference centre in the field of engineering sciences and systems and a leading School in higher education and research, ranked among the best institutions in the world. CentraleSupélec is a founding member of Paris-Saclay University and chairs Ecole Centrale Group.