Institut Mines-Télécom launches the "Cybersecurity of Critical Infrastructures Chair" with 7 industrial partners and the Brittany region

With the support of Télécom Bretagne, in collaboration with Télécom Paris Tech and Télécom SudParis, together with 7 industrial partners and the Brittany region (as part of the Center of Cyber Excellence), this Chair will contribute to the development of research and training activities at international level in an area that has become a national priority: the cybersecurity of critical infrastructures. The Chair was officially launched on January 25 at the International Cybersecurity Forum in Lille (FIC2016).

A context of national concern

In a world that is increasingly connected and dependent on information and communication systems, many components, such as sensors and industrial automation devices, are now connected to the internet. In this expanded “cyberspace”, the cybersecurity of critical infrastructures (water production plants, energy networks, industrial processes, etc.) represents a major concern that has today become a government priority.

It has therefore become a true challenge for French research, as the work currently being carried out this subject is still minor. In this context, the "Cybersecurity of Critical Infrastructures Chair" proposes to gather together researchers specialized in cybersecurity and industrial systems architects in order to propose concrete and scientifically validated solutions.

Dynamically adapt the security of a system to ward off attacks

Currently, security policies for information systems are deployed statically. A method that would allow the dynamic updating of security policies is becoming a necessity. This Chair’s goal will therefore be to develop a theoretical and experimental framework for specifying and managing a security policy capable of dynamically adapting to changes in the risk environment.

For this purpose, research work will focus on 4 priorities:

- Advanced analysis of data for cybersecurity purposes
- Definition of metrics for analyzing security risks
- Responsiveness to multiple and coordinated events
- Collection and generation of cybersecurity data to be made available

The results could be of interest to several sectors, particularly in industrial control systems, vehicle applications, major communication networks, and cloud computing. This Chair will offer students of Institut Mines-Télécom graduate schools the possibility of developing unique expertise in the cybersecurity of critical infrastructures, an area in which the needs for skills will be significant in the industry and service sectors, from innovative SMEs to large industrial groups.
A partnership with 7 industry stakeholders and the Brittany region
Along with the Regional Council of Brittany, which has invested in this area of research (specifically in the context of the Center of Cyber Excellence), seven industrial partners have agreed to contribute to this Chair: Airbus Defence and Space, Amossys, BNP Paribas, EDF, La Poste, Nokia and Orange.

In addition to their direct interest in the anticipated scientific advances, these partners will benefit from a larger pool of experts, capable of answering their growing needs in the area of the cybersecurity of critical infrastructures. The combination of civilian and military partners in this area will also make it possible to work directly with government agencies. The Chair will contribute to the development of the Center of Cyber Excellence, which is a cooperation between the state and various public research stakeholders in the area of cybersecurity, including Télécom Bretagne on behalf of Institut Mines-Télécom.

A Chair made up of several schools for international academic exposure
The Chair consists of a team that makes use of a network of researchers from Télécom Bretagne, Télécom ParisTech and Télécom SudParis. It will host world-renowned researchers in the area of cybersecurity, will organize international symposiums and strengthen cooperation with other international chairs on the same topic.

It is financially supported by Fondation Télécom, which accompanies the long-term establishment of general interest partnerships between the Institut, its telecommunications schools, and companies on major technological and societal issues concerning digital technology.

About Institut Mines-Télécom www.mines-telecom.fr
Institut Mines-Télécom is a public institution dedicated to Higher Education and Research for Innovation in the fields of engineering and digital technology. Always tuned into the economic world, it combines high academic and scientific legitimacy with a practical proximity to business and a unique positioning in 3 major transformations of the 21st century: Digital Affairs, Energy and Ecology, and Industry. Its training and research for innovation are rolled out in the Mines and Télécom Graduate Schools under the supervision of the Minister for Industry and Electronic Communications. Institut Mines-Télécom is a founding member of the Industry of the Future Alliance. It maintains close relationships with the economic world and has two Carnot Institutes. Every year around one hundred startup companies leave its incubators.

Press contact
Agence OXYGEN
Maëlle Garrido / Monique Kindrebeogo
+33 (0)1 41 11 37 85 / +33 (0)1 41 11 23 99
maelle@oxygen-rp.com / monique@oxygen-rp.com

Télécom Bretagne
Priscillia Créach
+33 (0)6 30 51 38 30
Priscillia.creach@telecom-bretagne.eu

Institut Mines-Télécom
Jérôme Vauselle
+33 (0)1 45 81 75 05
jerome.vauselle@mines-telecom.fr