Press release
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Institut Mines-Télécom reveals its National Center for Networks and Systems for Digital Transformation to boost the impacts of its digital sovereignty work

- **A center for coordinating IMT activities in the area of future communications networks and distributed systems for digital transformation;**
- **A multi-school, multidisciplinary, multi-partner center in close cooperation with the industrial world;**
- **A center for structuring a sovereign ecosystem aligning research, education, innovation and support for companies.**

The National Center for Networks and Systems for Digital Transformation organizes and coordinates the activities of Institut Mines-Télécom schools related to this theme in association with academic and industrial partners. The center incorporates the needs of industrial stakeholders right from the start to provide a range of services and activities combining education, research, innovation and transfer. Various major business sectors (e.g. transport, energy, health) will be closely involved in the center's work to help identify unresolved challenges and potential solutions to explore. The center is aligned with national and European public policies and plays a key role in standardization. It contributes to the major programs co-led by the Institut Mines-Télécom as part of its overall strategy.

Institut Mines-Télécom is a major player in the digital sector with established expertise in the fields of networks and systems for digital transformation. It brings together a vast scientific and educational community through various key research, innovation and education programs thanks to the expertise of its schools (telecommunications, cloud computing, IoT, cybersecurity). IMT co-leads the 5G and Networks of the Future Priority Research and Equipment Program (PEPR) and the FRAMExG maturation-prematuration program (French pRogram for IP Massification of Europe in XG). It also leads the CMA (*Skills and Professions for the Future*) IMTfor5G+ Skills and Professions for the Future program which aims to prepare the candidates France will need for the current transformations underway and partners with the PIA4 (*Investing in the future programme*) Beyond 5G project. The combined skills cover a wide spectrum (radio, communication networks, cloud computing, IoT, cyber, data spaces, uses and regulation, sobriety) in keeping with the national "5G and Networks of the Future" acceleration strategy which aims to increase industrial and digital sovereignty. These skills will enable the design, development, deployment and operation of networks and systems and facilitate interactions between the digital industry and other sectors, which are increasingly interlinked.

A comprehensive and integrated offer

The National Center is an original, flexible and responsive structure without walls. It will support various parts of the value chain thanks to the dynamics of the different scientific communities involved that are spread throughout the IMT schools. The center will contribute to cutting-edge research by taking advantage of test and innovation platforms based on international standards. It will also contribute to standardization work and incorporate its advances into the initial and lifelong learning programs offered at Institut Mines-Télécom schools.

Support for technological developments in companies

The center will maintain close ties with the economic sphere. It will spearhead new proposals for various innovation projects with industrial stakeholders and research partners. It will remain attentive to companies' needs in terms of training and respond by drawing on the expertise of IMT schools. Companies including BearingPoint, Cisco, Ericsson, Eviden, Hackuity, Nokia, Orange, and Thales and technological research institutes B-Com and SystemX have already expressed their support for the center. Through the network of incubators at Institut Mines-Télécom schools, the center will be able to facilitate multiple entrepreneurial projects (from within IMT or from external partners).

Fields of research, expertise and "impact" education

The center will therefore provide a multi-school approach involving several activities and partners. Its activities will be deployed across the entire technology chain, from components and physical layers to converged network-cloud architectures and the end-to-end protection of services. Research teams from the schools will also deal with topics related to new business models, data protection, sobriety and uses. In light of the significant need for engineers, the education associated with the center's work will focus specifically on more sustainable engineering, with positive impacts for society and economic sectors.

The center was developed by research professors from Institut Mines-Télécom schools:

- IMT Atlantique: Catherine Douillard, Xavier Lagrange, Christian Person
- IMT Nord Europe: Laurent Clavier
- Mines Saint-Etienne: Olivier Boissier, David Delafosse, Jean-Paul Viricelle
- Eurecom: Raymond Knopp, Adlen Ksentini
- Télécom Paris François Baccelli, Marc Bourreau, Daniel Kofman, Philippe Martins, Gérard Memmi, Van-Tam Nguyen
- Télécom SudParis: Hervé Debar, Maryline Laurent, Djamal Zeghlache

Odile Gauthier, Executive President of Institut Mines-Télécom: "*The National Center for Networks and Systems for Digital Transformation offers an innovative approach by bringing together the activities of Institut Mines-Télécom schools in this area on a multidisciplinary basis. As part of our overall strategy for 2023-2027, we aspire to play a major scientific, technological and educational role in digital sovereignty and sobriety. The center will be a key tool for accomplishing this."*

Christophe Lerouge, Dean of IMT Atlantique: "*At IMT Atlantique, our approach is based on interdisciplinary engineering and the constant strengthening of technological aspects. We are delighted with the creation of this center, which is being jointly established with our colleagues from IMT. IMT Atlantique is only too happy to co-lead this key project given the cooperation*

with companies, contributions to European and international standardization processes and to the development of PEPRs and Skills and Professions for the Future projects (CMAs).

Nicolas Glady, Dean of Télécom Paris*: "At Télécom Paris, our scientific and educational strategy revolves around major socioeconomic issues. We aim to have a positive and respectful impact on social and environmental challenges, especially in terms of digital infrastructure, networks of the future and 6G, in order to ensure digital sovereignty. We are proud to help co-create this Institut Mines-Télécom center based on a collaborative approach that we have already implemented in the field of telecommunications with our two laboratories, the LTCI and i3, which work in collaboration with national research organizations and companies, and in our co-leadership of the Networks of the Future PEPR."*

About Institut Mines-Télécom www.imt.fr

Institut Mines-Télécom is the leading public group of French engineering and management schools to be placed under the supervisory authority of the Ministry of the Economy, Finances and Industrial and Digital Sovereignty. It is a public research and higher education institution made up of eight public graduate schools: IMT Atlantique, IMT Mines Albi, IMT Mines Alès, IMT Nord Europe, Institut Mines-Télécom Business School, Mines Saint-Étienne, Telecom Paris and Telecom SudParis as well as two subsidiary schools: EURECOM and InSIC. It leads and develops a rich ecosystem of partner schools and economic, academic and institutional partners and players in training, research and economic development. Created to meet France's needs in economic and industrial development since the 19th century, Institut Mines Télécom's graduate schools have supported all the communications and industrial revolutions. Through its research and its training of engineers, managers and PhD students, Institut Mines-Télécom tackles the major industrial, digital, energy and environmental challenges in France, Europe and around the world.

Today, Institut Mines-Télécom and its 10 schools are imagining and building a world that combines science, technology and economic development with a respect for the planet and the people who live on it. It is double Carnot certified and trains 13,600 students every year.

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Press contact Institut Mines-Télécom :
Séverine Picault
06 27 66 05 09 – severine.picault@imt.fr