Press release
Nota de prensa

Madrid, Spain 4 October, 2023

Cutting-edge European telecommunications research infrastructure unveiled with a node in Madrid

IMDEA Networks and the Universidad Carlos III de Madrid (UC3M) have presented SLICES-ES, a **European infrastructure for experimenting with future information and communications technologies that will be based in Madrid**, most likely at the Madrid university's facilities. This scientific instrument, which will become operational during 2024 and with some initial services already underway since October 2023, will be made available to the research community to carry out complex experiments in the area of digital sciences.

We are currently experiencing a major technological revolution in the area of ICT (Information and Communication Technologies). The scientific community is constantly researching new solutions to support this transformation and, thus, contribute to an improvement in our lives. Therefore, several scientific infrastructures have emerged that offer experimentation services with cutting-edge resources, which are otherwise only offered in industrial R&D laboratories with limited functionality. To combat these problems, the ESFRI SLICES research infrastructure has been launched, providing high quality **experimentation services with emerging technologies in the area of information and communications technology sciences**, such as 5G/6G, Internet of Things (IoT), Network Functions Virtualisation (NFV) or Cloud Computing, for example.

IMDEA Networks, UC3M, and the University of the Basque Country are participating in the Spanish SLICES node (SLICES-ES). Specifically, the first infrastructure open to the European scientific community for testing in the field of telecommunications and with a very powerful Internet of Things (IoT) satellite service with Europe-wide coverage will be established in Madrid. "**It is therefore a very important milestone because what it represents is that Europe is aware of the need to have strategic autonomy in information technologies**. We must join forces to improve our R&D capabilities in this regard," says **Arturo Azcorra**, director of IMDEA Networks and a professor at UC3M. He also adds: "This is great news, therefore, for the academic and business world, and for society. We can consider it to be a global milestone in the field of open experimentation via satellite".

During the official presentation of the national Spanish node, which took place at the Hotel Riu Plaza de España, researchers working in areas and platforms related to the Spanish SLICES node at different levels took part. For example, **Carlos Jesús Bernardos**, professor at UC3M, and **Joerg Widmer**, research director at IMDEA Networks, spoke about how it will be used in the development of 6G and in experimentation with millimetre wave networks.

Another of the researchers who has driven this project, **Carmen Guerrero**, from UC3M's Telematics Engineering Department, highlights the usefulness that this infrastructure will have

for the research community in the area of future networks. "**They will have access to cutting-edge deployments to carry out experiments that are currently not readily available to scientists in general**, or that do not even exist today. In fact, there is currently a lack of access to experimental facilities and SLICES will provide these services to the research community in Europe".

Source(s): IMDEA Networks Institute

URL: Cutting-edge European telecommunications research infrastructure unveiled with a node in Madrid

About us

IMDEA Networks Institute, promoted by the Regional Government of Madrid, is a research organization on computer and communication networks whose multinational team is engaged in cutting-edge fundamental science and technology. As a growing, English speaking institute located in Madrid, Spain, IMDEA Networks offers a unique opportunity for pioneering scientists to develop their ideas. IMDEA Networks has established itself internationally at the forefront in the **development of future network principles and technologies**. Our team of highly-reputed researchers is designing and creating today the networks of tomorrow.

Some keywords that define us: 5G, Big Data, blockchains and distributed ledgers, cloud computing, content delivery networks, data analytics, energy-efficient networks, fog and edge computing, indoor positioning, Internet of Things (IoT), machine learning, millimeter-wave communication, mobile computing, network economics, network measurements, network security, networked systems, network protocols and algorithms, network virtualization (software defined networks – SDN and network function virtualization – NFV), privacy, social networks, underwater networks, vehicular networks, wireless networks and more…

IMDEA Networks Institute
28918 Leganes (Madrid) Spain
Avda. del Mar Mediterráneo, 22

+34 91 481 6210
mediarelations.networks@imdea.org
www.networks.imdea.org

Twitter: @IMDEA_Networks | Facebook | Instagram | Flickr | YouTube