

# IDEMIA and Telefónica España boost the security of 5G SIM technology with pioneering solutions to protect users' communications

# CONNECTIVITY

POSTED ON 05.03.22

- Telefónica Spain is carrying out a pilot project to employ the Quantum-Safe 5G SIM card developed by IDEMIA with the aim of guaranteeing customer privacy.
- This pioneering world-first solution implements the latest algorithms to effectively protect users' data and privacy against quantum computing.

Madrid, 20<sup>th</sup> april 2022.- IDEMIA, a leading company in identity technologies, together with Telefónica Spain have successfully conducted pilot tests with the Quantum-Safe 5G secure element that will shield users' communications from possible attacks derived from the application of quantum computing to processes.

The advent of quantum to digitization, which implies that some of the algorithms used may be potentially vulnerable, have increased the need to secure all processes to the maximum, including those of 5G communications. The Quantum-Safe 5G SIM technology uses a cryptographic algorithm resistant to quantum computing so that when a cell phone "talks" with the 5G SA network through the IMSI (International Mobile Subscriber Identifier), a unique identification code for each cell phone device, integrated in the SIM card, this communication is fully secured against any possible attack as the SIM incorporates this IDEMIA end-to-end encryption solution with new cryptographic algorithms.

Telefónica España has tested this technology in order to protect the privacy of its customers in Spain. In addition, IDEMIA and the operator intend to continue working on updating the Quantum-Safe solution in various scenarios identified as critical, including improvements to consumer eSIM technology.

At the forefront of innovation to protect critical data, IDEMIA's Research and Development department is focused on developing quantum-resistant solutions that protect society and continues to work on technological advancements such as Quantum-Safe SIM/eSIM that will help prepare the industry for tomorrow's future.

*We have chosen to work with IDEMIA on post-quantum technology as they are a world leader in security solutions. By encrypting the International Mobile Subscriber Identifier (IMSI) we consider it important to leverage this new technology to develop the best possible privacy shield in the new 5G networks and SIM cards.*

Jose-Ignacio Honorato, Head of Digital Services and Mobile Equipment at Telefónica Spain

*With Quantum-Safe technology, we're preparing today the technological vaccines for tomorrow, in particular to maintain security of critical systems and data protected by*

**About us** - As leader in identity technologies, IDEMIA is on a mission to unlock the world and make it safer. Backed by cutting-edge R&D, IDEMIA provides unique technologies, underpinned by long-standing expertise in biometrics, cryptography, data analytics, systems and smart devices.

IDEMIA offers its public and private customers payment, connectivity, access control, travel, identity and public security solutions. Every day, around the world, IDEMIA secures billions of interactions in the physical and digital worlds. With nearly 15,000 employees, IDEMIA is trusted by over 600 governmental organizations and more than 2,300 enterprises spread over 180 countries, with an impactful, ethical and socially responsible approach.

For more information, visit [www.idemia.com](http://www.idemia.com) and follow @IDEMIAGroup on Twitter.



your press contact(s).

**SANDRA VALERII**

[sandra.valerii@idemia.com](mailto:sandra.valerii@idemia.com)

**PRESS OFFICE**

[idemia@havas.com](mailto:idemia@havas.com)