

ANALYSIS

## *Caricaturing the 5G as the Asian 'big brother' of mobiles is unfair*

Never before in the telecom sector has a technological advance caused as much political and media upheaval as the forthcoming arrival of the fifth generation of mobile telephony. The flood of information creates confusion and free interpretations that blur its true potential.

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The 5G is designed to communicate with extreme reliability and immediacy to machines, robots, vehicles, drones, sensors, and any electronic device / Adobe Stock

The fifth generation of **mobile connectivity** promises much faster downloads, wider coverage and more stable connections. However, if we look at this technology only through the screen of our smartphone, we will be seeing a very small part of what this breakthrough will bring to our society. Whoever thinks that the new generation's change of scenery focuses on our mobile devices is wrong.

This standard is a 'network of mobile networks', to which very different types of devices will be connected and, therefore, it will cover many fields of application

Smartphones today can do just about anything. The new generation 5G is an evolution for mobiles, but above all, it will be a real revolution for the productive sector and will lead us to the **fourth industrial revolution**.

If anything distinguishes the 5G from previous generations of mobile networks, it is the fact that it is designed to communicate with extreme reliability and immediacy to *machines, robots, vehicles, drones, sensors*, and any electronic device, ... and also the mobile phone.

In this sense, this standard is a 'network of mobile networks', to which very different types of devices will be connected, which means it will cover numerous fields of application.

For a mobile network like the 5G to be able to adapt to such a wide variety of connections and applications, its internal structure, its **architecture**, must be extremely flexible. This is achieved by building the network with very high-performance **processors** (computers), in which different types of **software** are executed at each moment, depending on each situation to which the network has to adapt. 5G, when fully deployed, will be an **ultra-flexible network**, an almost 'liquid' network.

This ultra-flexible architecture means that a large part of the core elements of the 5G network are actually software, allowing the network to be reconfigured in seconds, or divided -virtually- into networks dedicated to each of the sectors or usage scenarios mentioned above. And this is where the **suspensions** and concerns, converted into **geopolitical strategies**, of some governments lie.

## **Security and privacy are not new risks**

However, the **security and privacy** of communications is not exactly a new risk, nor is it exclusive of mobile telephony or of 5G. The possibility of **cyber-attacks**, viruses, backdoors in programs installed in computers, phones and the actual networks, has been with us for two decades, since the Internet came to be widely used.

Taking the risk of security and privacy of this technology as the reason for commercial protectionism does not make sense

The precautions regarding security on 5G networks should not be very different from those we should already have in relation to any other software, operating system, browser or app that we use every day.

In March 2019, Europe initiated a round of consultations with member countries to determine and regulate the privacy and security risks of 5G, and the result will be the application of regulatory and certification measures similar to those of any other type of device and software.

Taking the risk of security and privacy as the reason for commercial protectionism, claiming that 5G equipment is designed for espionage, or caricaturing 5G as the Asian "big brother" of mobile telephony is simply unfair.

This is what we are talking about this week in Valencia at the [Global 5G Event](#) and the [EuCNC2019](#) Congress, two international reference events that aim to discuss the keys to the present and future of this technology, which takes us to a completely new scenario.

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