

The next 5G

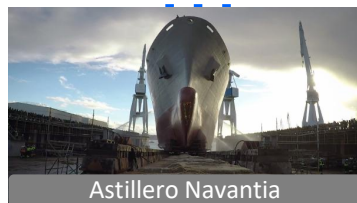
Standalone (SA), mmWave and Network Slicing
for real use cases

MWC 2023

MAKING
THINGS
HAPPEN

MELIÀ
HOTELS & RESORTS

More than 90 5G innovation projects with customers



Astillero Navantia



Corte Inglés Logística



Maersk



Drones Colaborativos



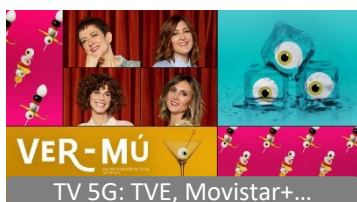
Baleària



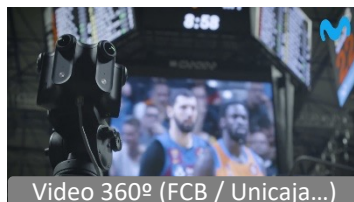
CIOA (Centro Oftalmológico)



Hospital Quirón



TV 5G: TVE, Movistar+...



Video 360º (FCB / Unicaja...)



ADIF



Daimler



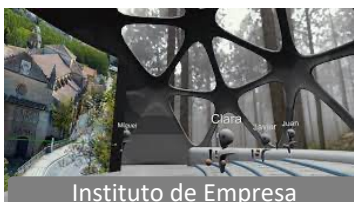
J Vigo - Slicing Crítico



Estadio 5G (Riazor)



Quirófano 360



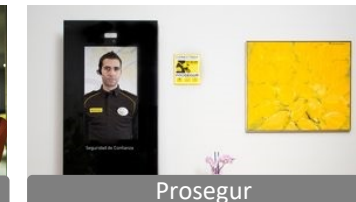
Instituto de Empresa



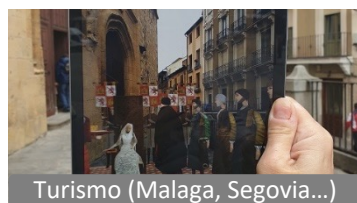
Infraestructuras viarias



Telepresencia Eventos



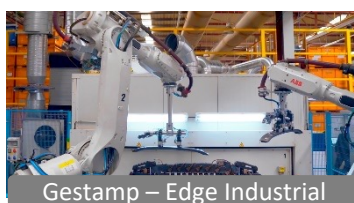
Prosegur



Turismo (Malaga, Segovia...)



Idiomas 5G (Meliá)



Gestamp – Edge Industrial



Open Golf Madrid



Roche



SailGP

¡ But this is far from done !



SA

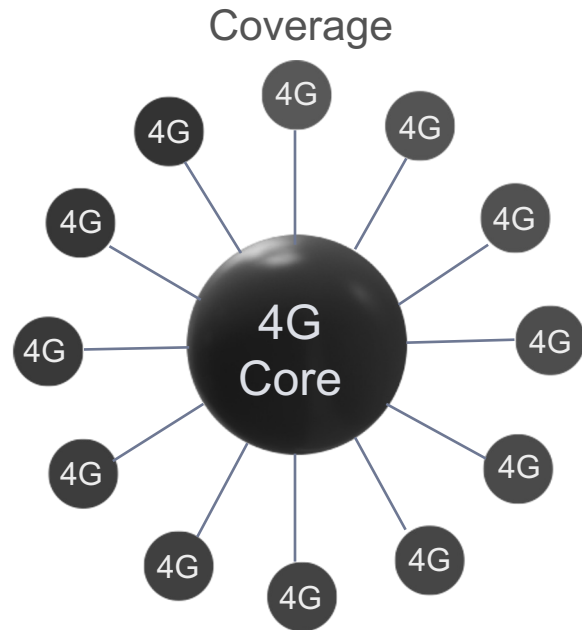
26 GHz

Network Slicing

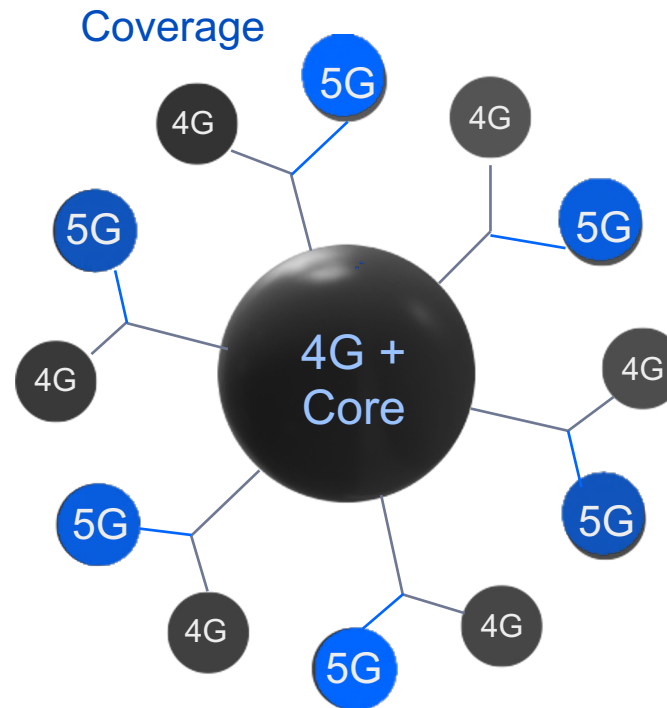
The Next 5G



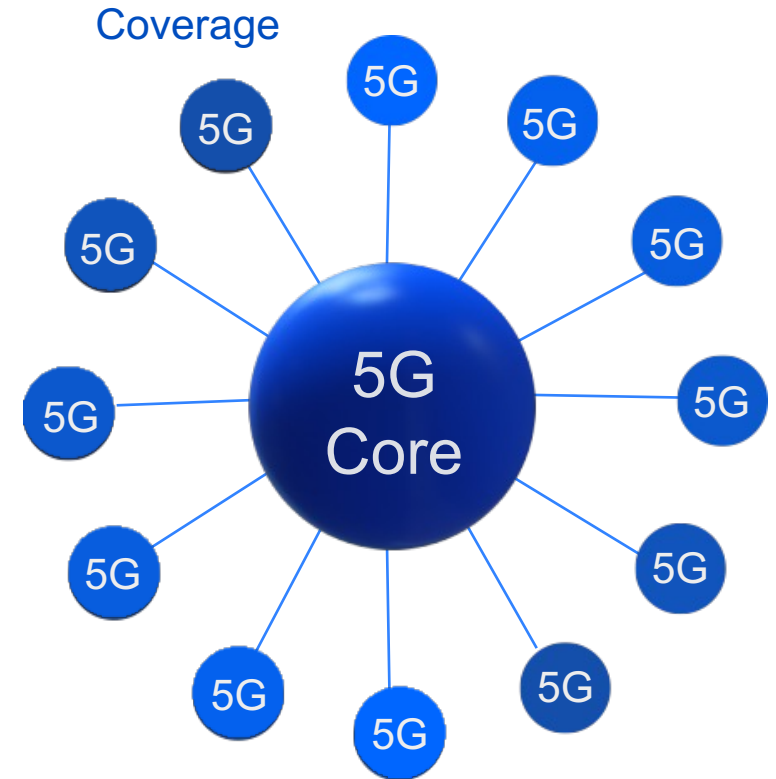
But ... ¿What is 5G Standalone (SA)?



4G



5G NSA



5G SA



What's new in 5G SA



- **More reliability and predictability (uRLLC):** the occasional 1 ms is not useful. We need predictability.
- **Network Slicing: Network “lanes” or partitions dedicated to specific services.** The key feature to ensure critical services have the resources they need to run smoothly.
- **Ability for Massive Connectivity (mMTC).** Up to 1 million per Km2
- **Simpler coverage planning than with NSA:** There's no need to combine 4G bands like in NSA. This would allow certain improvements like, for instance, take profit of the larger coverage footprint of the 700 MHz band.





SA

700 MHz
Commercial Network





SA

700 MHz
Private Network





26 GHz



Telefónica is the only Spanish operator that has obtained a full 1 GHz spectrum at the 26 GHz auction



Telefónica is the only Spanish operator that has obtained a full 1 GHz spectrum at the 26 GHz auction

- We understand this frequency band as an essential asset in the pursue of a sound 5G strategy
- It shows Telefónica's commitment in the development and leadership of a solid and future proof 5G ecosystem.
- Telefónica will be the fist operator in reaching speeds like 5 Gbps downlink and 1 Gbps uplink.



A photograph of a modern warehouse interior. In the foreground, a white robotic arm is positioned on the left, and a small white mobile robot carrying a stack of cardboard boxes is on the right. The background shows high industrial shelving units filled with boxes. A network diagram with blue lines and nodes is overlaid on the image, suggesting a connected industrial environment.

26 GHz

Why is this band so important ?

- ¡ Bandwidth !
- Uplink
- Low Latency
- Slicing
- Massive connections



And what about Network Slicing ?



eMBB



uRLLC



mMTC



V2X



Public
Safety



Network slicing on 5G SA public network

Pioneering experience

- 1st hotel with 5G indoor coverage and network slicing on public network in Europe.

Uses cases for the hotel:

- **Network slicing**
- Simultaneous translation



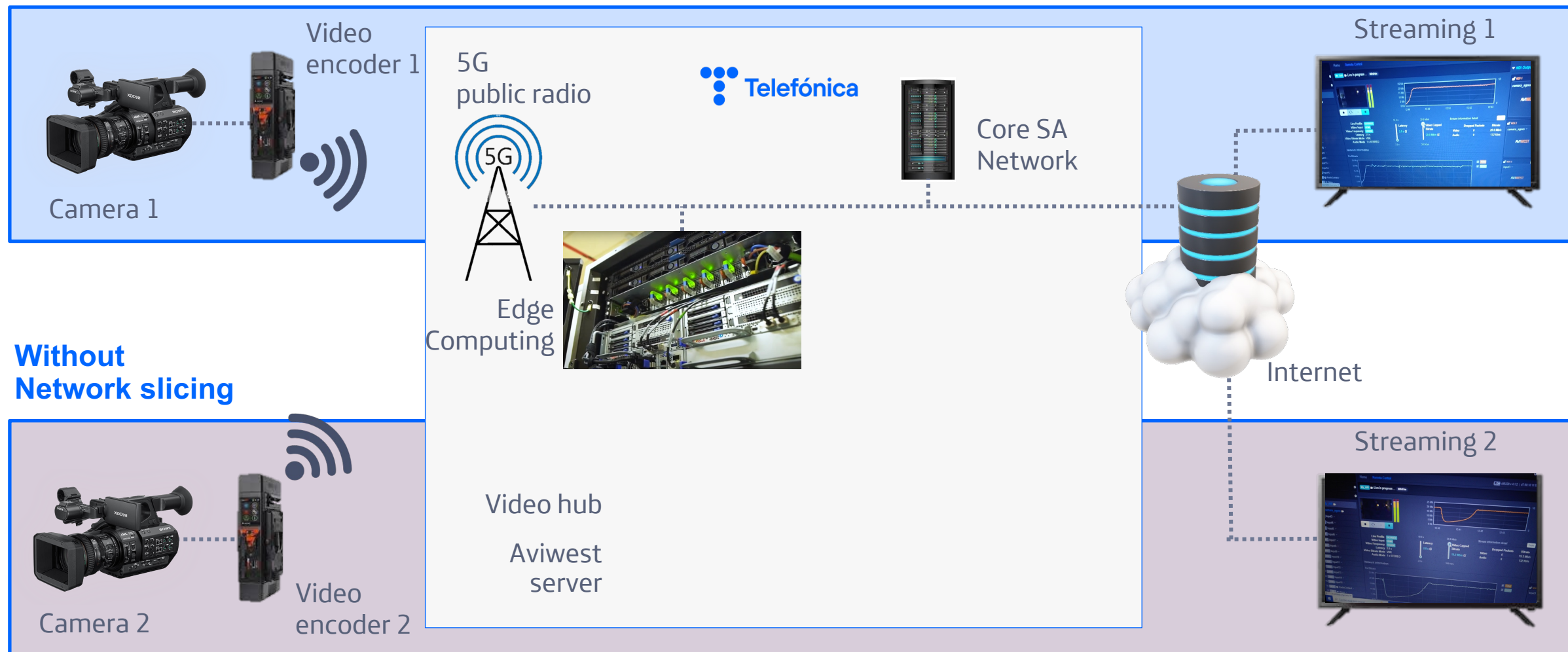
A portrait of Tomeu Fiol, a man with a shaved head and light beard, wearing a blue blazer over a black sweater and white shirt. He is looking slightly to the right. The background is a blurred interior with warm lights and horizontal lines.

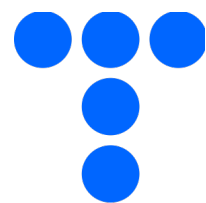
Tomeu
Fiol

Global Hotel Technologies Director,
Meliá Hotels

Live Demo!

With Network slicing





Telefónica