



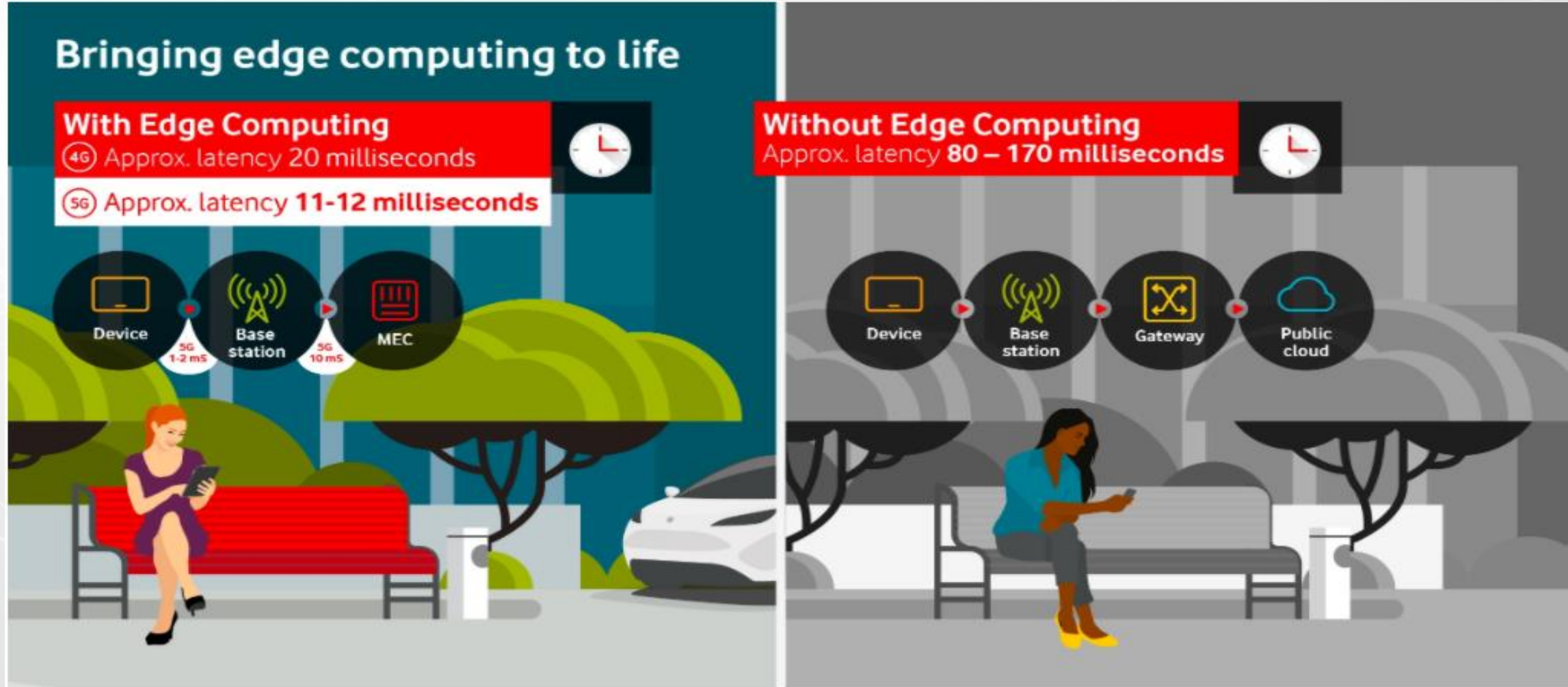
When milliseconds matter

IoT and Edge Computing II: The Far Edge
December 2020

Olti Xhezo
Vodafone Group



Will Multi-access Edge Computing actually MEC a difference?



Digital transformation is powering the industrial evolution



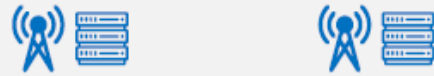
Cloud Computing



- **Cloud computing** is the de-facto standard for developers and enterprises due to its scalability, flexibility and cost efficiency



Edge Computing



- **Multi-access Edge Computing (MEC)** refers to computing at the edge of the telco network
 - **Dedicated MEC** bundled with private networks on premise
 - **Distributed MEC** at the edge of macro network



Edge Applications



- A wide range of **potential benefits** of MEC have been proposed



Reliability & Stability



Security & Data privacy



Distributed data workload



Ultra low latency

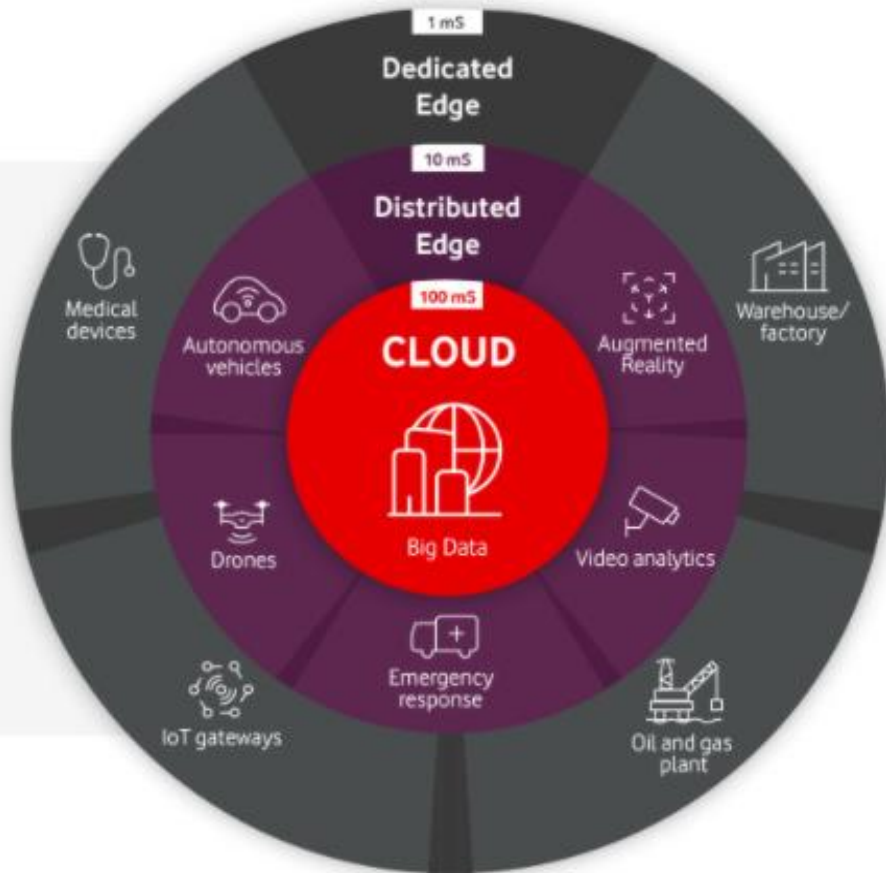


Local data processing



New form-factors

Dedicated vs Distributed



Dedicated MEC

Deployed at site, it bundles together edge computing with a mobile private network (MPN), providing secure, dedicated connectivity and computing for the business needs.

- Remote locations that are hard to connect (e.g. industries such as mining, heavy goods and oil and gas or optimised factory).
- Tasks that require an extremely low response time, such as live remote-operated surgery.

Distributed MEC

Supports multiple businesses and brings together the power of the cloud with a public 4G or 5G network.

- Suitable for solutions that need to be deployed across various sites and is especially useful when moving assets need to be connected and analyse data in a matter of milliseconds
- Video analytics, real-time asset inspection and drones, as well as immersive experiences in retail, events, and tourism.



Continental and Vodafone worked together to increase road safety by combining 5G, cellular vehicle-to-everything (C-V2X) and MEC technologies to create a digital shield to prevent accidents on the road. More info [here](#)

Giving organisations in Europe the edge

Vodafone and AWS Wavelength partnership



First pilot organisations in Europe successfully trialling Vodafone MEC solutions based on AWS Wavelength, including Dedrone, Digital Barriers, Groopview, and Unleash live, with HERE Technologies to start trials in Germany in early 2021.



Less than 10 milliseconds response times between base station and location where application server is hosted



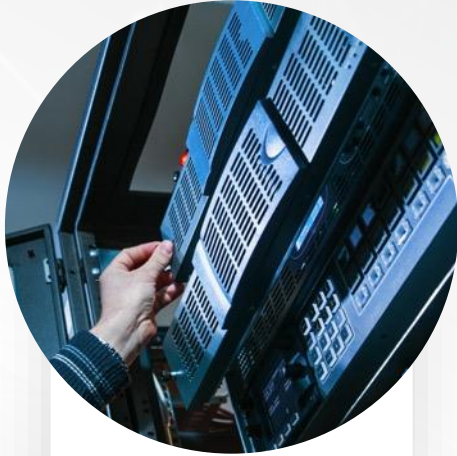
First MEC and 5G commercial centre to open in London, UK in spring 2021, with more to follow in UK and Germany

Vodafone Business will run a MEC innovation programme in collaboration with AWS from early 2021 for a wider developer and business community to experiment with this new technology. More info [here](#).

The power of our ecosystem



**Dedicated
with MPN**



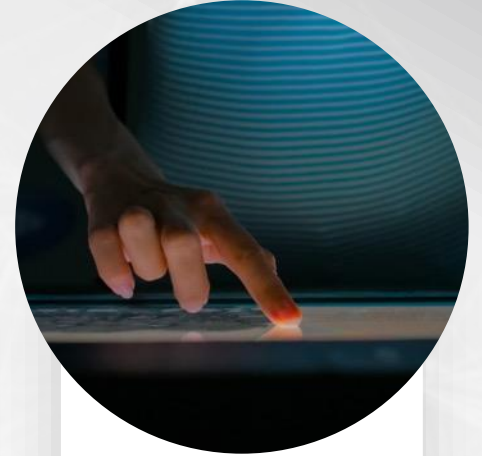
**Distributed
with 4/5G**



**Services to
advise, move,
build & run**



**An Open
Management
Platform**



**E2E App
partner
ecosystem**