



The Telco Edge Cloud

What it is and where we are

OEC Fall Workshop, 7th December

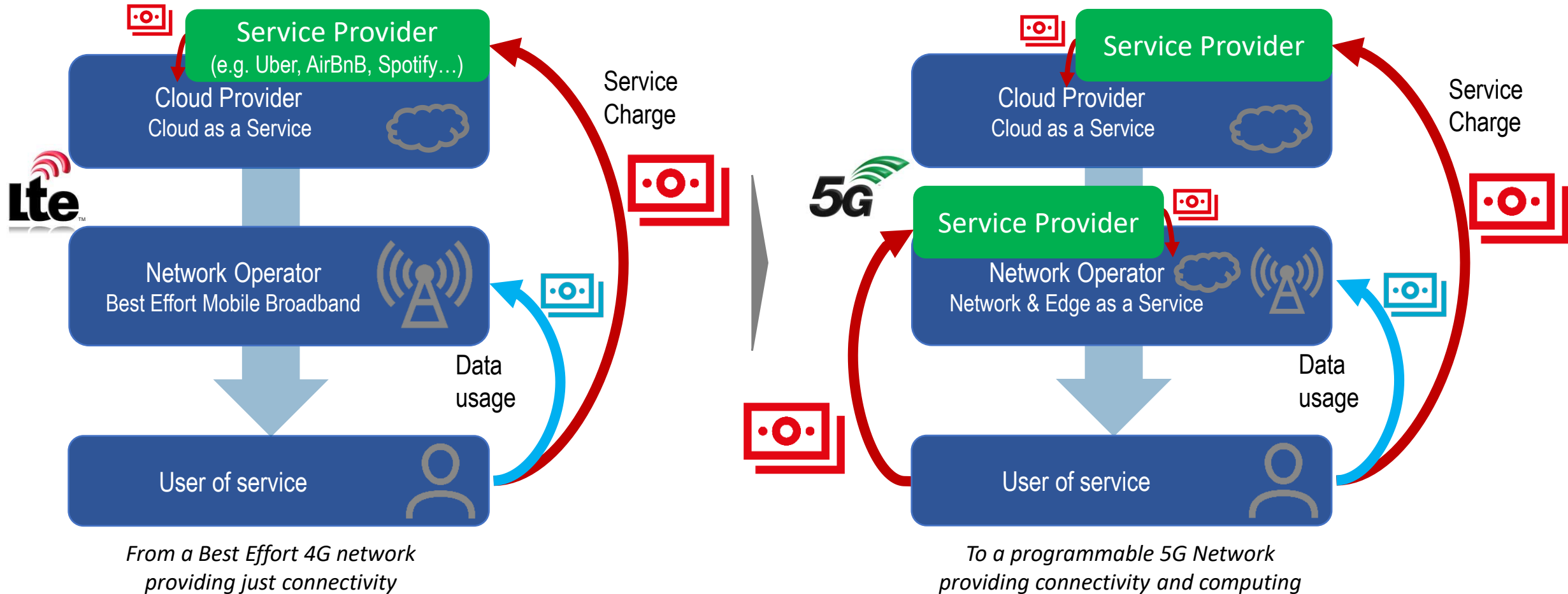
Juan Carlos García

SVP Technology Innovation & Ecosystem – Telefonica

Chairman of GSMA's Telco Edge Cloud taskforce

Operator Platform – Objective

5G provides opportunities for operators to further monetize their Network investment

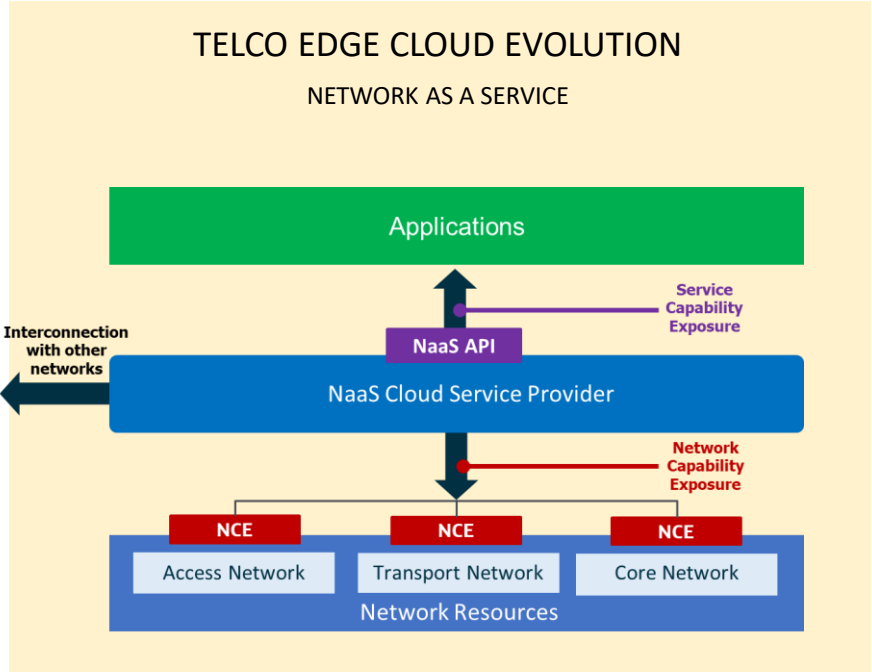
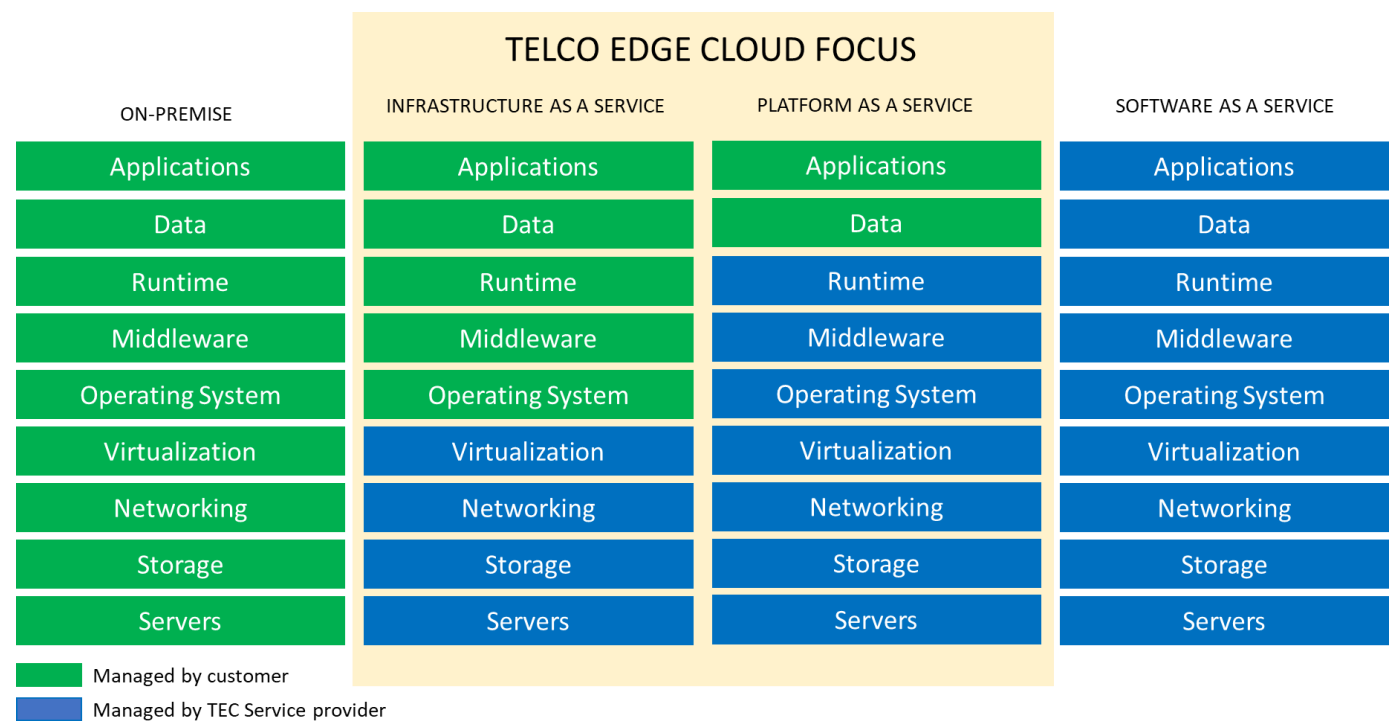


Telco Edge Cloud concept

- The Telco Edge Cloud is a global distribution system that offers Edge Computing services for customers to **develop, deploy and manage edge-based solutions over a global footprint**, benefiting from the unique capabilities that Telecom operators offer.
- It offers a **digital one-stop shop** for edge computing services, on a trusted and secure environment.
- It presents a **fair and transparent commercial model** across the value chain.
- TEC is built on edge technology based on a combination of **Open Source, Cloud and Telco standards**.
- It provides a **single and simple interface** (GUI, CLI, API), that facilitates the relationship with multiple Service Providers and multiple Mobile Operators, interconnected by **open and standard federation** mechanisms.
- TEC is supported by a group of **25 operators** from Europe, Middle East, Asia-Pacific and the Americas.



Telco Edge Cloud Services



The Telco Edge Cloud is evolving fast

Future Networks Programme



Operator Platform Concept
Whitepaper
January 2020

<https://www.gsma.com/futurenetworks/resources/operator-platform-concept-whitepaper/>

*Prepare for
Service
launch*

25 Operators



*Define the
Technical
framework*



30 Operators and 15
Technology providers

Telco Edge Cloud taskforce



*Edge Service Description and
Commercial Principles*

<https://www.gsma.com/futurenetworks/resources/telco-edge-cloud-october-2020-download/>

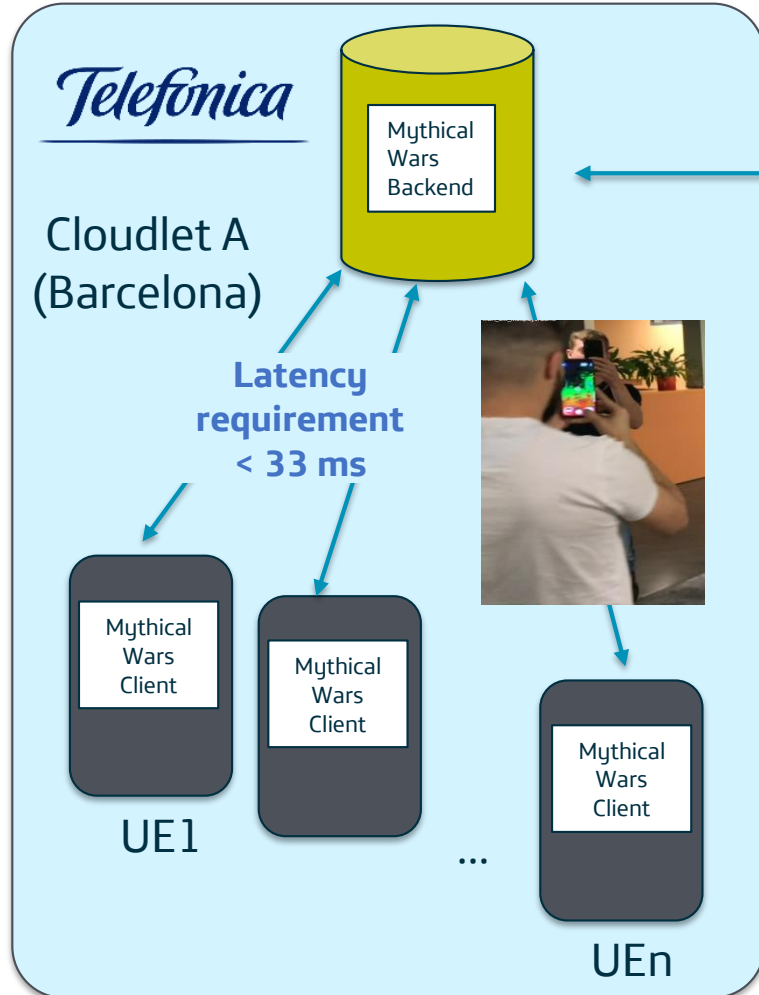
Operator Platform Group



*Operator Platform Edge
Requirements overview*

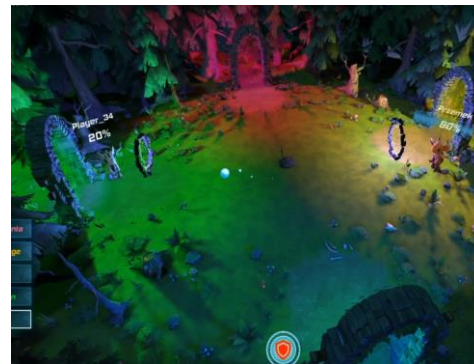
<https://www.gsma.com/futurenetworks/resources/op-telco-edge-proposal-whitepaper/>

MultiOperator Mobile XR gaming - DT-Telefonica connecting apps across borders



E2e latency requirement
from UE/Country A to UE/Country B < 100 ms

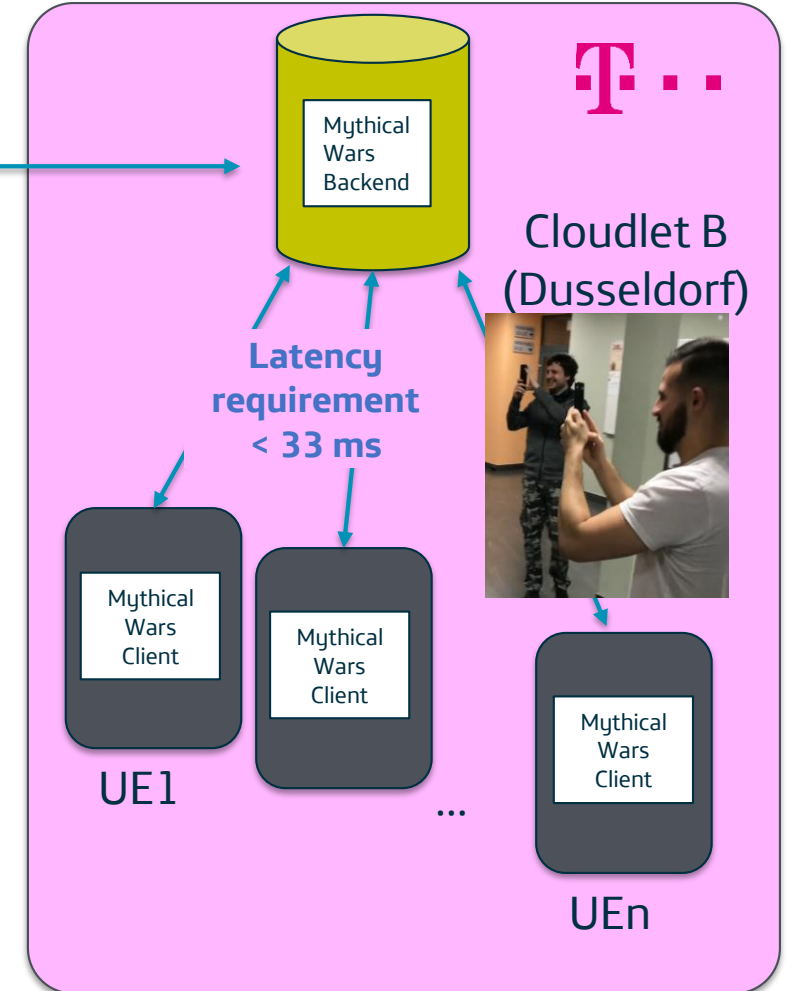
- 2 countries: Spain and Germany
- 2 Operators: Telefonica and Deutsche Telekom
- 1 gaming experience across the 2 countries



<Mobileedge>

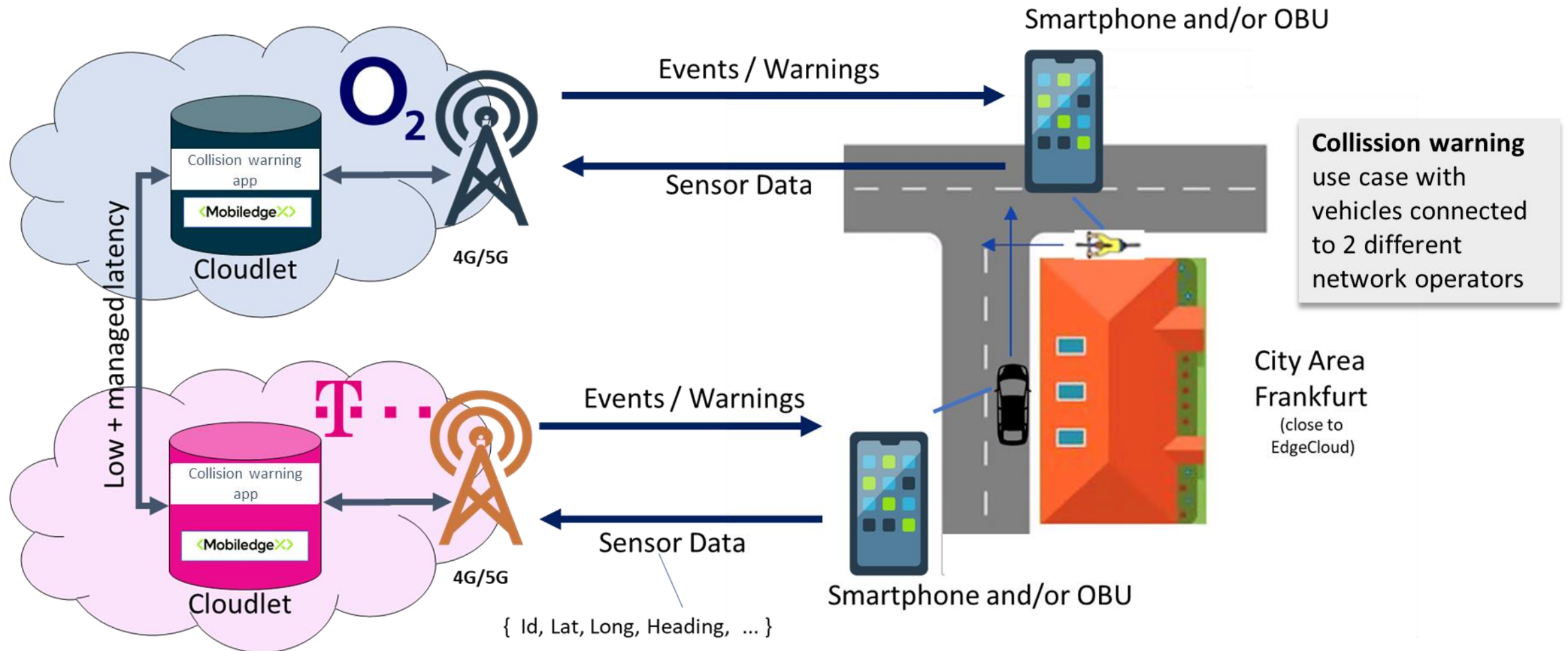


<https://youtu.be/05IO7-W-VHk>



MultiOperator V2X scenario - DT-Telefonica

connecting app instances in different MEC platforms



MultiOperator MEC (MOM) experience

Prototyped and tested MEC interconnection and mobility

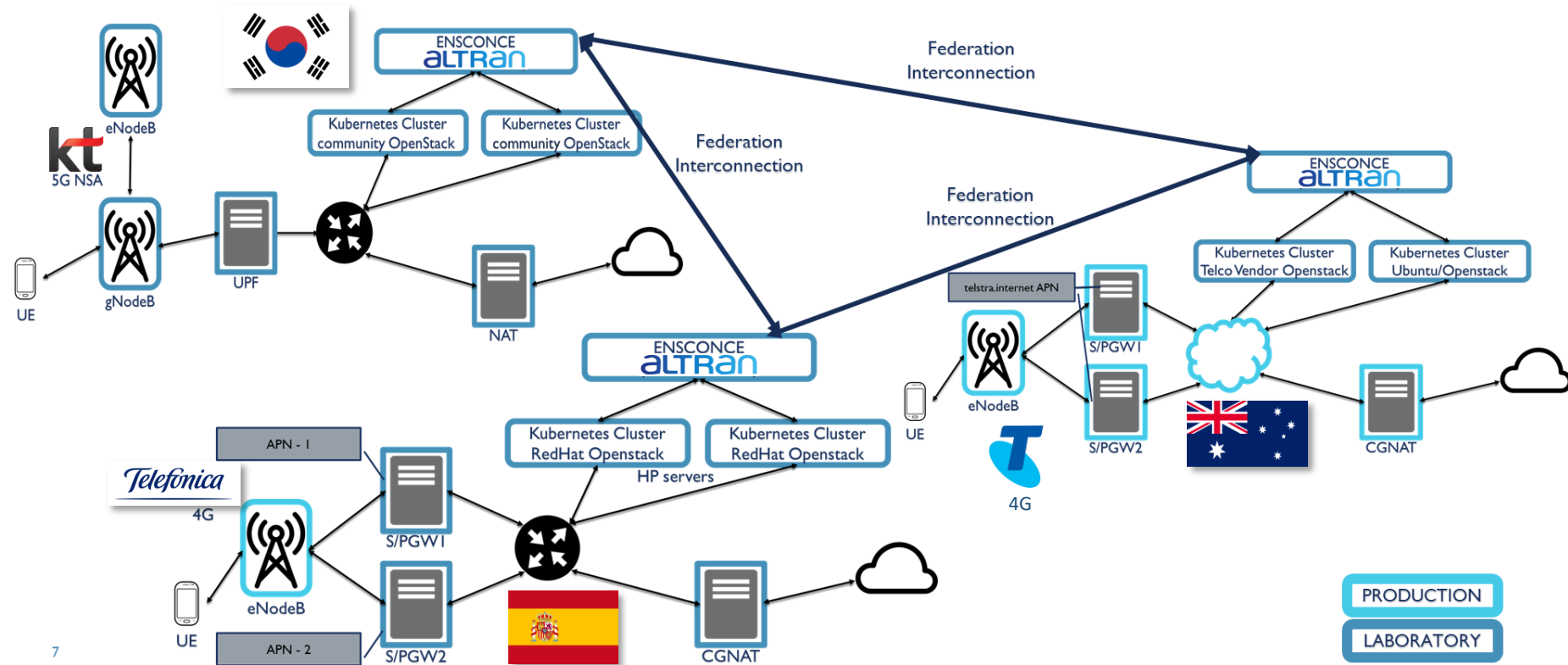
FIRST PHASE

- **Interconnection** of Edge Computing platform using the **same** Technology (Altran)
- **Smart edge application deployment** over the combined footprint from a single interface
- **Mobility support:** Smart Edge Discovery

<https://www.gsma.com/futurenetworks/resources/5g-video-series-operator-platform-altran/>

Heterogeneous Network and Computing environment:

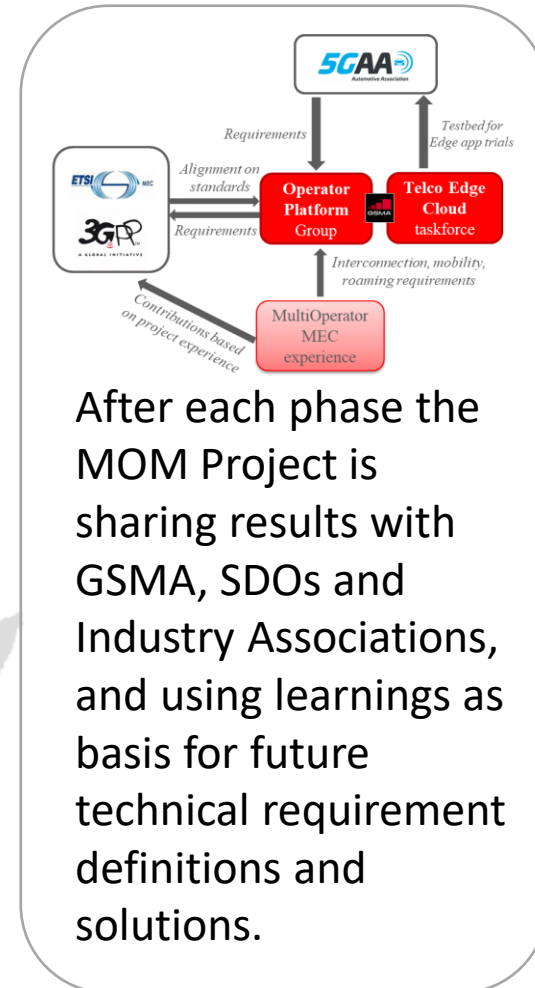
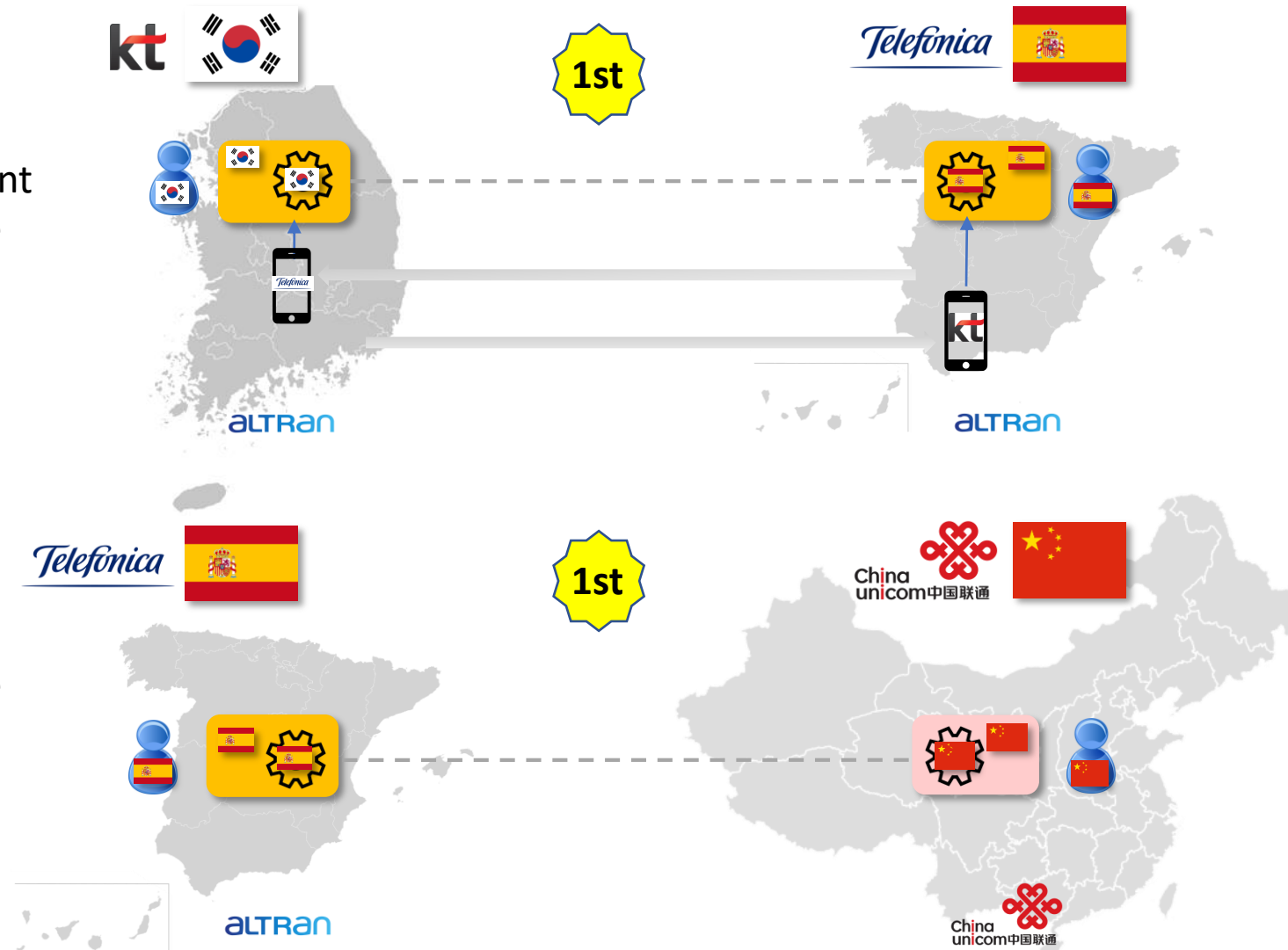
- Different Radio Technology (4G Telstra&Telefonica, 5G in KT&CU, 3 different RAN and Core vendors)
- Different runtime environments (hardware, VIM)



Prototyped and tested MEC interconnection and roaming

SECOND PHASE

- **Roaming** management (KT, Telefonica): Edge Discovery while roaming.
- **Interconnection of different MEC technologies** (Telefonica, China Unicom): Edge app deployment over the combined footprint from both MEC platforms.



TEC Trials workshop – 2-3 December

Operators



Participants



- On 2-3 December, the TEC taskforce has run a matchmaking workshop connecting operators and industry partners with innovative proposals, addressing different vertical needs.
- Examples use cases include: Manufacturing/IoT, AR/VR in manufacturing and broadcasting, Gaming, Healthcare, Automotive, Blockchain and more
- New Trial workshops will be held in 2021: contact futurenetworks@gsma.com if interested

What is next for Telco Edge Cloud?

Telco Edge Cloud taskforce



Edge Service Description and
Commercial Principles

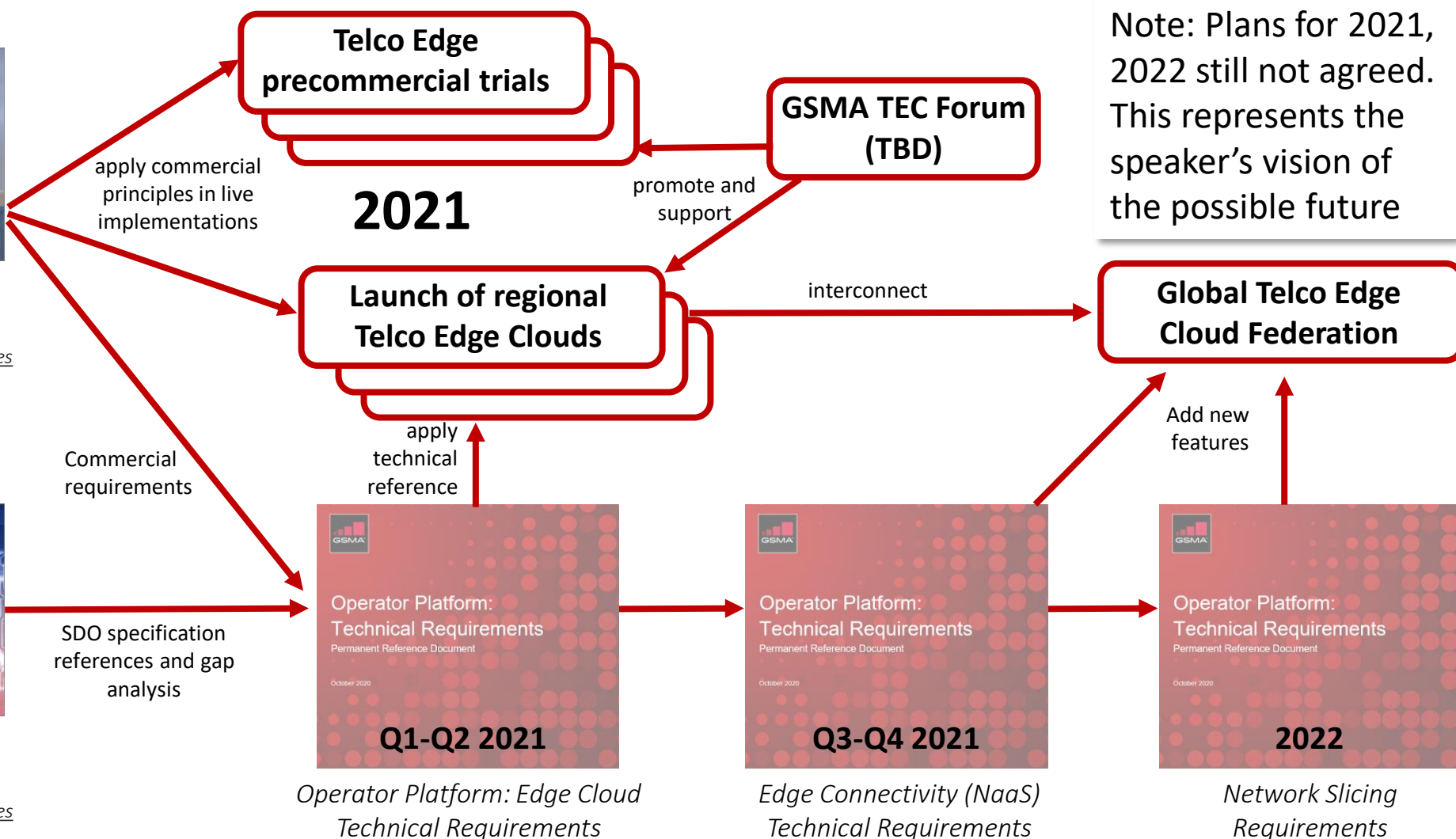
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Operator Platform Group



Operator Platform Edge
Requirements overview

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Summary

- Operators are moving forward in the definition of the **Telco Edge Cloud Services**, opening the opportunity for application providers to develop and deploy Edge applications over a **global footprint**, delivering an **optimal and controlled experience** (latency, jitter, bandwidth...) over a **secure and trusted environment**.
- **First documents** have been delivered in October and further releases are planned for Q1-Q2 next year.
- **Precommercial trials** with customers, started in 2020, will continue in 2021 showing the value of a telco-based Edge Cloud and its differential features for mobile Edge apps (mobility and roaming management).
- **MEC interconnection** and **mobility** and **roaming** management has been prototyped and tested in 2020.
- Telco Edge Cloud is moving to execution mode, with and **initial rollouts** at regional level in 2021. **Standardization and development of interconnection** will be key to create the global Telco Edge Network.
- **Operator Platform** Group is setting the reference Technical framework for a **Telco-based Edge Computing** in 2020 and will add **Edge Connectivity on Demand** in 2021, **Network Slicing** in 2022



Thanks!