

# Paradigm shift with 5G Monetization

Silvana Apicella  
5G Network Evolution Driver  
Market Area Europe and Latin America

Telfor  
November 21<sup>st</sup>, 2023



**ERICSSON**



# 5G for economic and social growth



## Economy

### GDP Increase



960 Bln \$  
Contribution to  
Global GDP in 2030  
22.3Mln new job  
creation by 2025

[GSMA, The Mobile Economy  
2023 \(2023\)](#)  
[The IHS 5G Economy Update](#)

## Society

### Social inclusion



5G FWA is Ultrafast  
technology to close  
digital divide and  
meet EU Gigabit  
targets

### Sustainability



-15% EU total emission  
reduction by 2030 -  
2017 baseline

[McKinsey, Europe's path to  
Decarbonization](#)

## Industry

### Productivity increase



Automation, predictive  
intelligence, operational  
efficiency

[WEF, The Impact of 5G Report.pdf  
\(weforum.org\)](#)

## CSP

### Cost reduction & Revenue increase

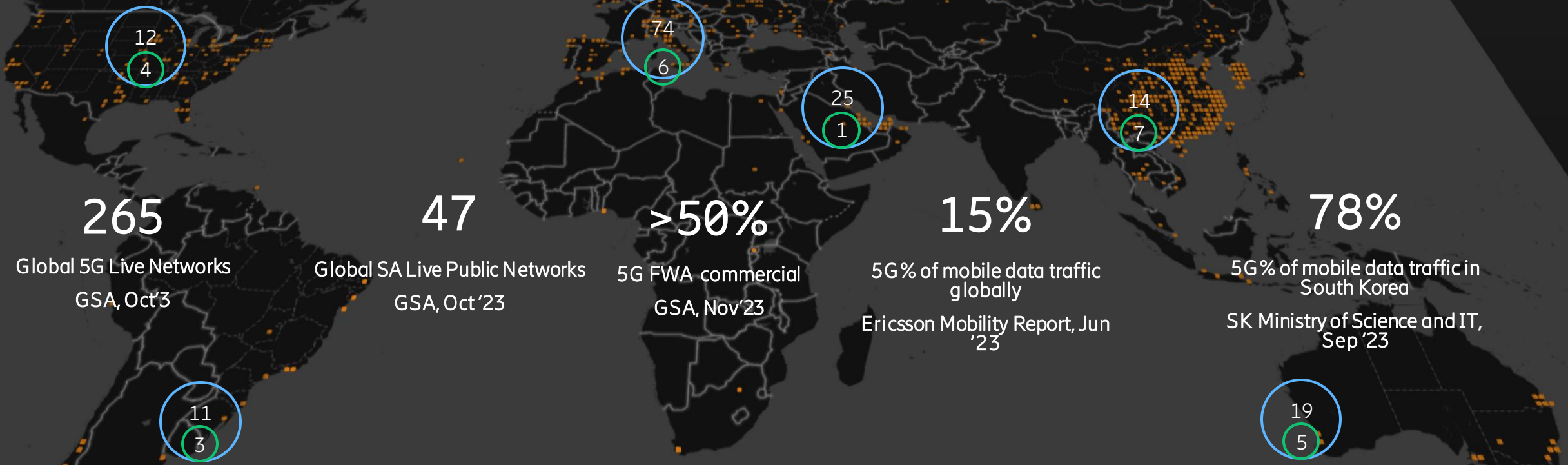


Cost/GB reduction,  
automated operation

*New business models  
and monetization  
opportunities in B2C  
and B2B space*



# 5G is the fastest-scaling mobile technology



**265**  
Global 5G Live Networks  
GSA, Oct'3

**47**  
Global SA Live Public Networks  
GSA, Oct '23

**>50%**  
5G FWA commercial  
GSA, Nov'23

**15%**  
5G % of mobile data traffic globally  
Ericsson Mobility Report, Jun '23

**78%**  
5G % of mobile data traffic in South Korea  
SK Ministry of Science and IT, Sep '23

April 2019  
5G measurements taken with Speedtest®

Source: Ericsson analysis on Speedtest Intelligence® data from Ookla®

# 5G business opportunities

A framework for 5G value creation



Enterprise  
B2B



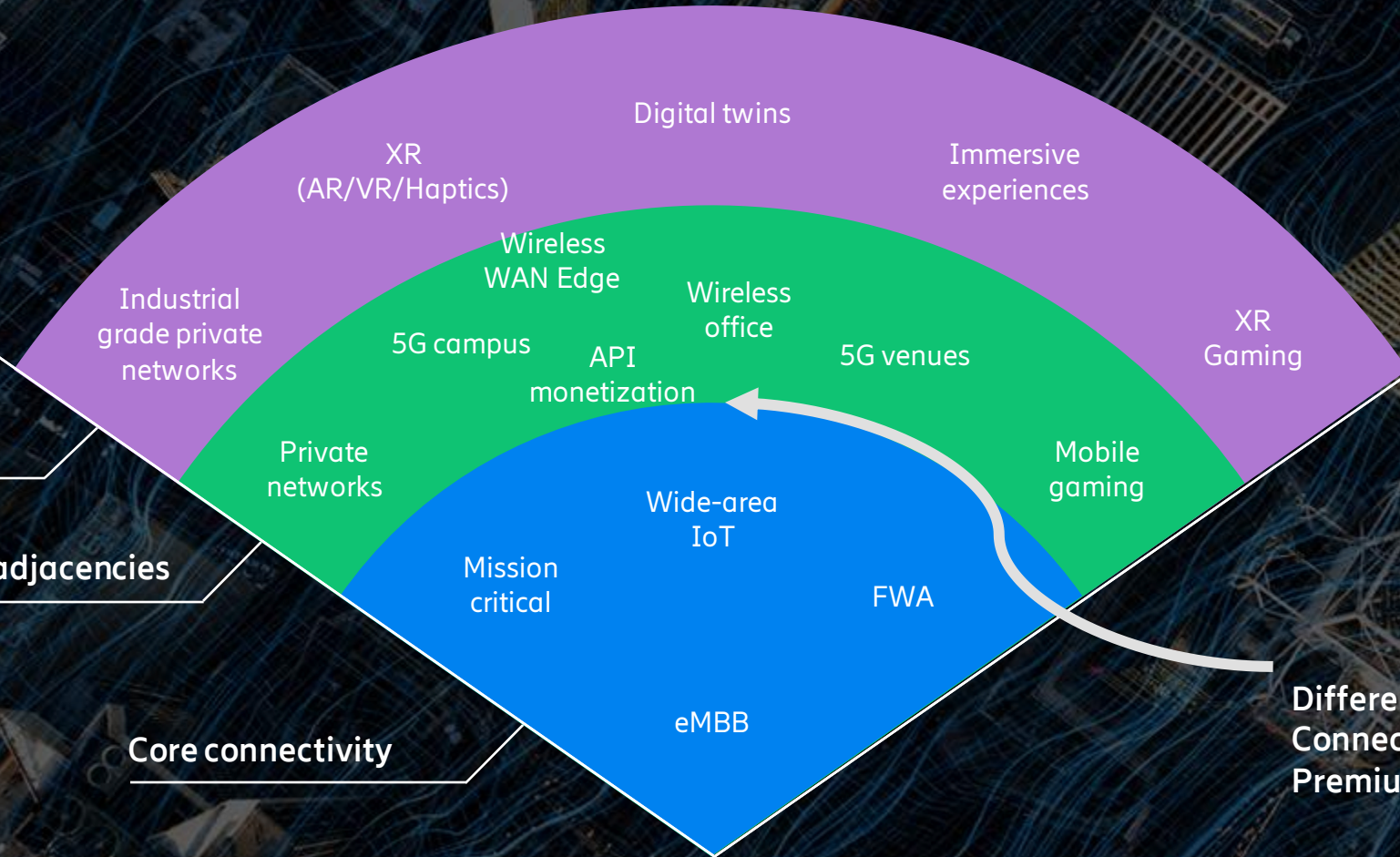
Consumer  
B2C

Future innovation

Current adjacencies

Core connectivity

Differentiated  
Connectivity for  
Premium experience

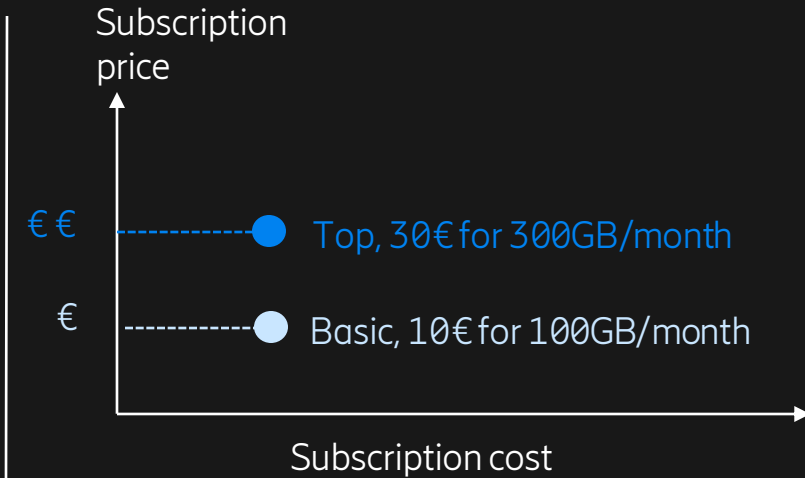
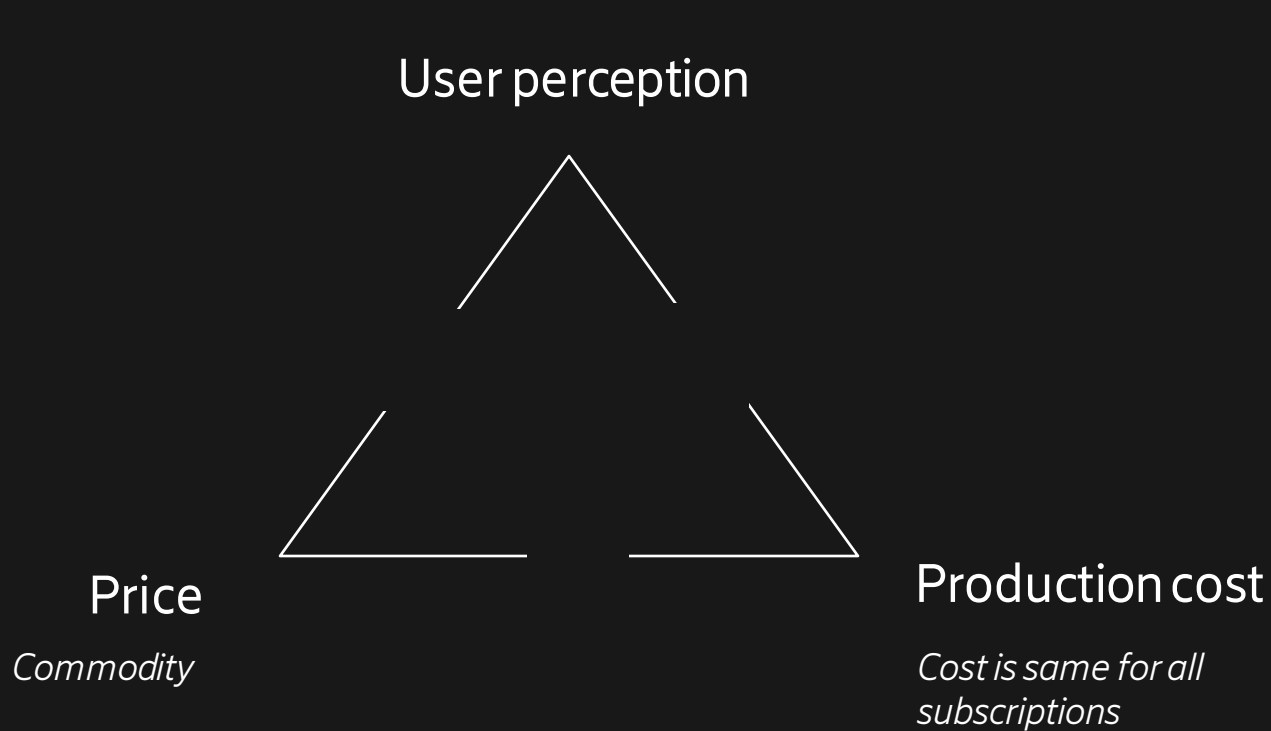




# Mobile internet dilemma – today's problem



Price-Perception-Cost disconnect



One type of connectivity:  
Best Effort Internet

# Reality of network traffic

Videoclips vs videoconferencing



You tube Requirements  
Movies and TV shows



Microsoft Teams Requirements  
Bandwidth requirements Mbps  
up/down

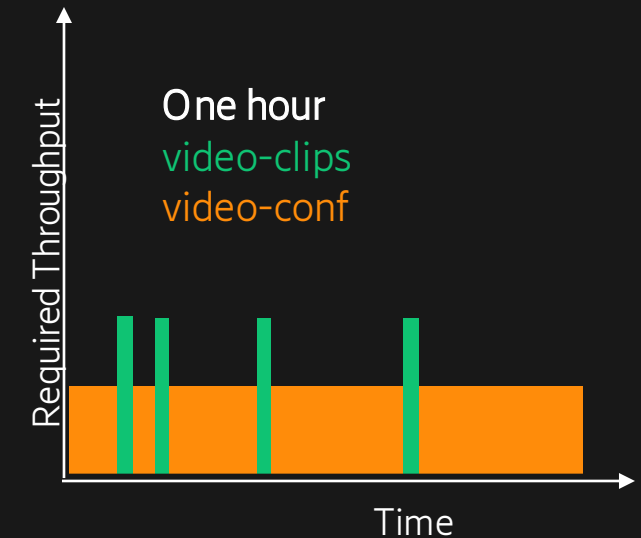


Video Resolution	Recommended Speed Mbps
4K	20
HD 1080p	5
HD 720p	2.5
SD 480p	1.1
SD 360p	0.7

Video	Recommended Speed	Best Performance
One-to-one	1.5/1.5	4/4
Meetings	2.5/4	4/4

Bit rate observed  
Using mobile app

One-to-one	12
Three (group call)	20
Four (group call)	20



One type of connection, same cost  
Different price, different user perception

# Mobile internet dilemma

price-perception-costconnect



*Clear purpose per subscription*

User perception



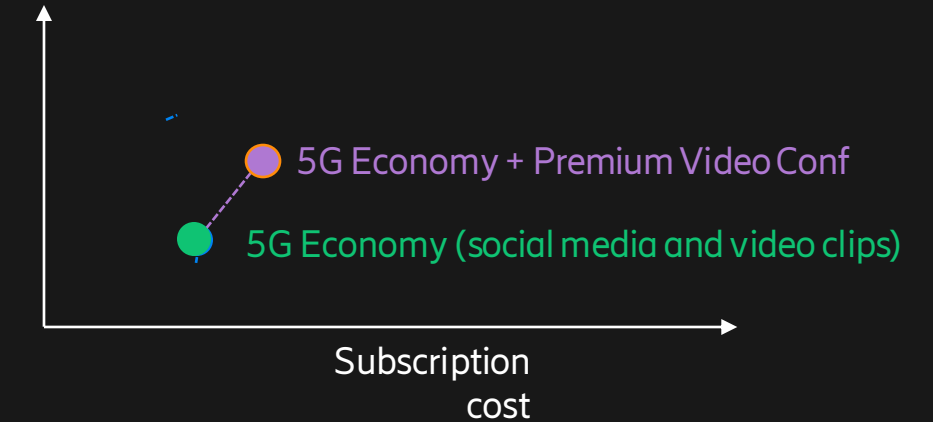
Price

Production cost

*Network as a differentiator*

*Economy – lower cost*

Subscription price



Different types of connectivity

Premium experience while laying the foundation for revenue growth

# Differentiated connectivity in action

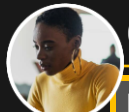
The smartphone of the future is here



## Jenny - Gamer

Personal Profile

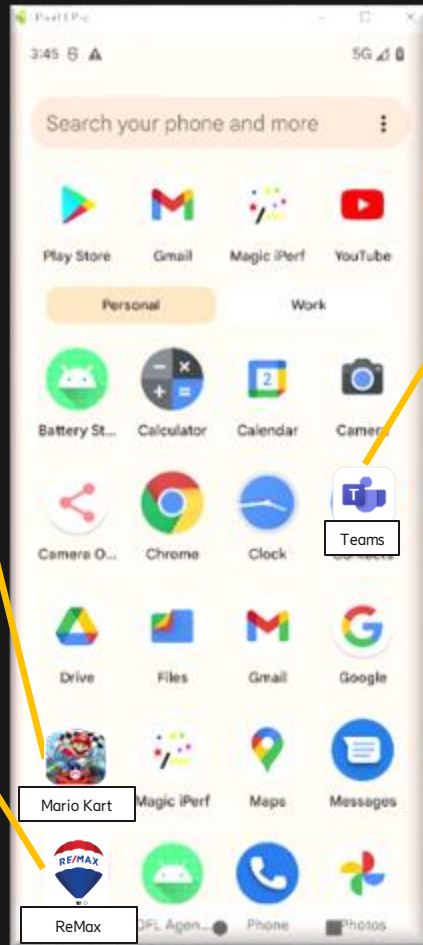
- **Economy:** Google, Teams, YouTube
- **Real-time Gaming:** e.g. Mario Kart



## Carla - Real Estate

Personal profile

- **Economy**
- **Premium XR** connection provided by Remax



## Mira - Employee

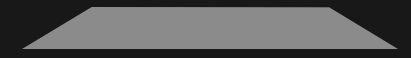
Personal profile

- **Economy:** Teams, Google, YouTube,

Work Profile

- **Premium video conferencing:** Teams, Zoom

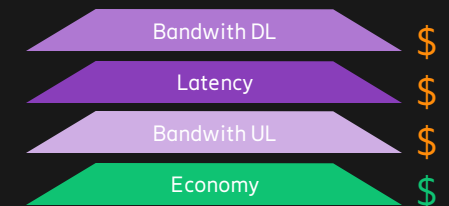
## One-network-fits-all



Best effort performance



## Differentiated connectivity



Multiple performance levels

App category ↔ Traffic category by device OS through URSP (User Route Selection Priority)  
e.g. Gaming ↔ Short latency



# 5G Monetization Paradigm Shift

With Standalone Network Slicing and API Exposure



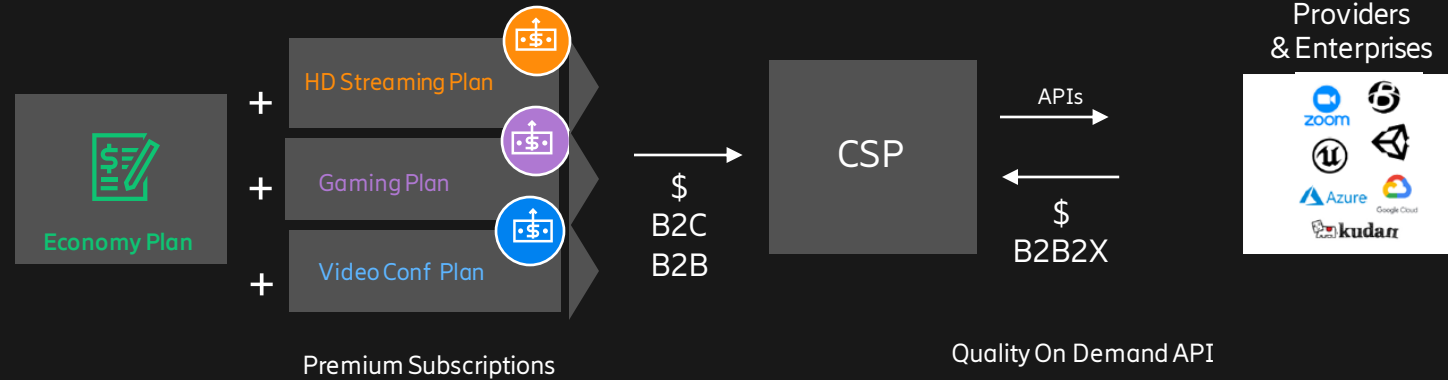
One type of connectivity:  
Best Effort internet



One type of subscription

User pays CSP  
10€ for 100GB/month

Different types of connectivity  
Optimized apps for B2C, B2B and B2B2X



Multiple types of subscriptions

User pays CSP  
+2€/month

New Business Models

ASP pays CSP  
to get premium upgrade for end-user

# 5G Monetization Paradigm Shift

With Standalone Network Slicing and API Exposure



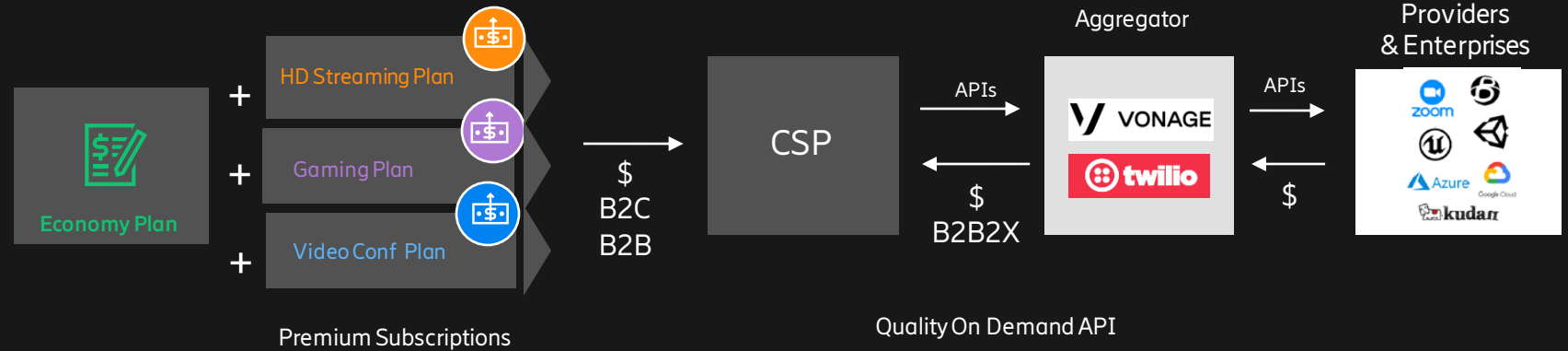
One type of connectivity:  
Best Effort internet



One type of subscription

User pays CSP  
10€ for 100GB/month

Different types of connectivity  
Optimized apps for B2C, B2B and B2B2X



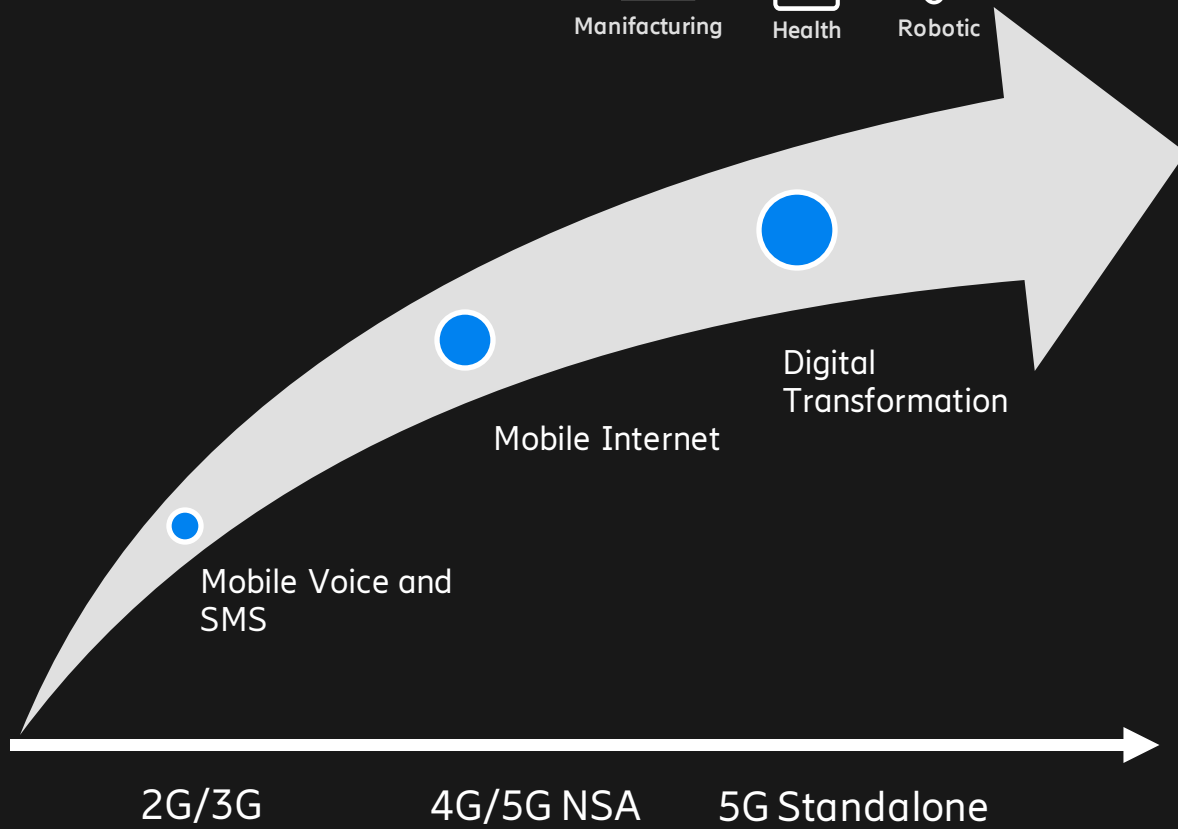
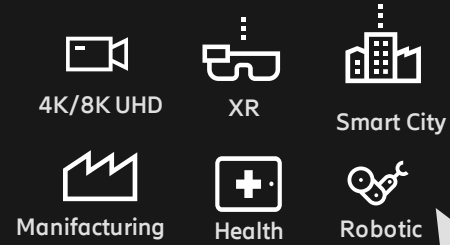
Multiple types of subscriptions

User pays CSP  
+2€/month

New Business Models

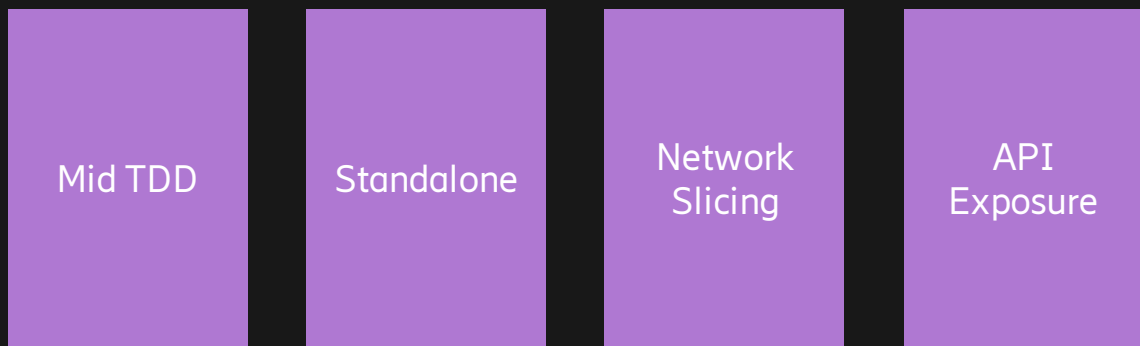
ASP pays Aggregator, Aggregator pays CSP  
to get premium upgrade for end-user

# 5G: the future is bright



What will unlock new revenues?  
CSPs need new types of connectivity, e.g. XR  
CSP need to provide the application developers/providers of new 5G use-cases the tools to differentiate connectivity i.e.  
**5G as a Platform for Innovation**

## The key 5G Monetization Technology Pillars

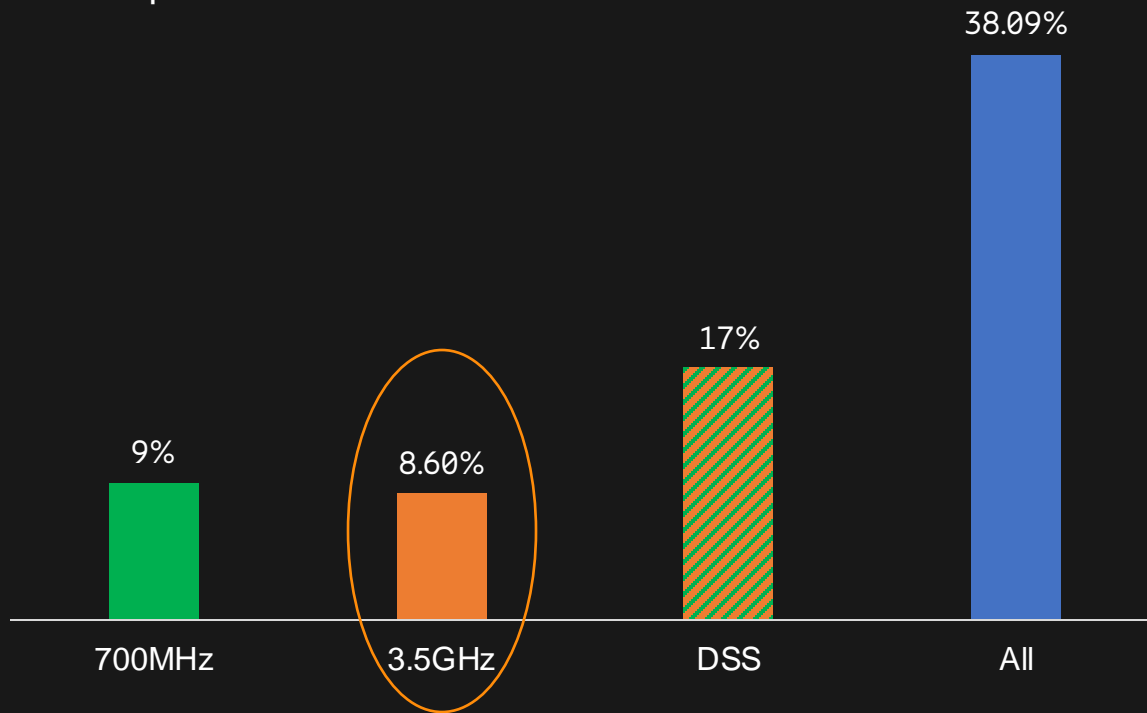




# 5G European Deployment Status



5G Spectrum deployment in relation to LTE sites - Europe



Source: Annual stakeholder workshop –5G EU Observatory, Oct '23

**5x**

more 5G base stations/inhabitant in South Korea vs Europe

**2,7x**

more 5G base stations/inhabitant in China vs Europe

**8%**

Mid TDD % in India after 6 months from the launch Europe took 4 yrs

Europe is late in "5G Step Change" deployment: Standalone and Mid TDD

New 5G jobs at risk

# Actions to accelerate 5G Monetization & Infrastructure

## Governments

Maximize incentives for 5G deployment

Tradeoff between spectrum fee and deployment constraints

Favor private investment to close digital divide with 5G FWA

## Regulators

Remove uncertainty around new service differentiation enabled by network slicing i.e. open internet

Avoid specific regulation that constraints new business models e.g. APIs

Focus on KPIs related to "5G Step Change" deployment – Standalone and Mid TDD

## CSP

Explore new offerings beyond traditional Mobile Broadband to break the down-wards spiral : Best Performance → More Data → Lower prices

Prepare the network for "5G Step Change" to enable new monetization opportunities

## Vendors

Sharing the Best practices at global level from commercial, technology and deployment standpoints

Make available the technology toolbox to pursue 5G monetization and cost-effective 5G deployment



# CSPs exploring 5G SA and Slicing for premium experiences



- ▶ T-Mobile  
Slice for video calling application developers



- ▶ T-Mobile  
Slice for remote media production



- ▶ Deutsche Telekom  
Slice for media production



- ▶ Vodafone UK  
Slice for media production



- ▶ Vodafone UK  
Slice for cloud VR gaming



- ▶ SingTel  
Slice for event experience



- ▶ FarEasTone  
Slice for public safety service



- ▶ Telstra  
Slice for construction site







**ERICSSON**