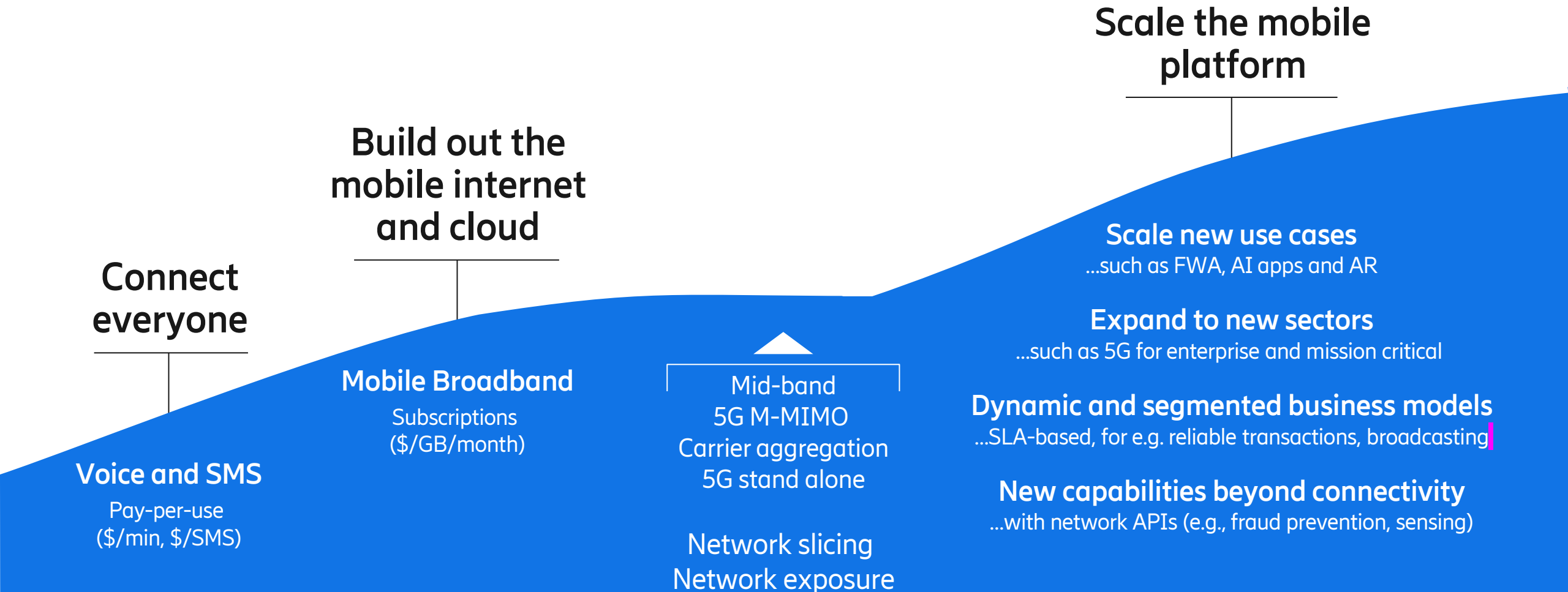


5G advanced to 6G, emerging applications

Magnus Ewerbring, PhD
Vice President, CTO APAC
Ericsson



Mobile, unlocking the next wave of innovation



5G expanding in new segments

Local, city, country-wide digitalization



Source: Einride



High-performing 5G network-quality supports digitalization, driving new demands

New applications and devices for all

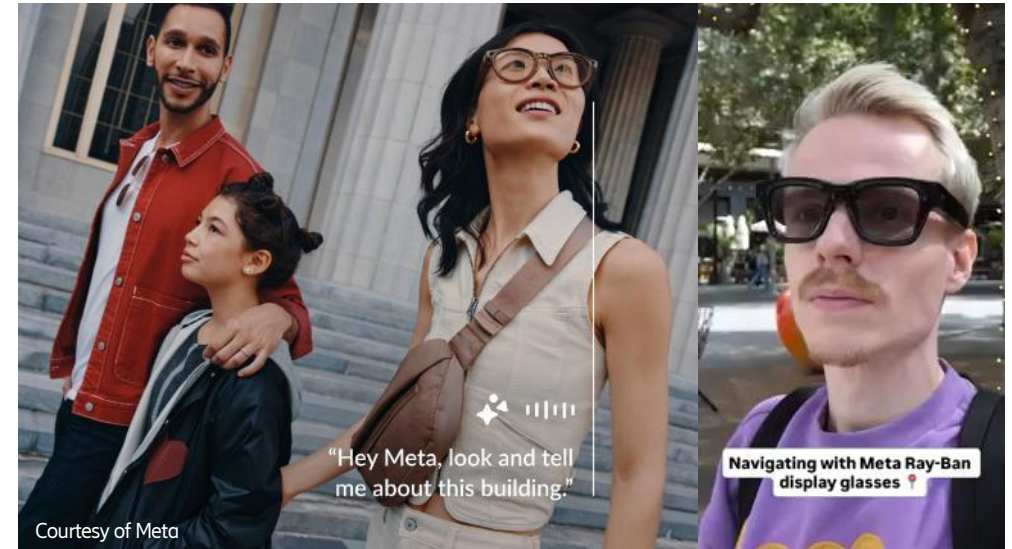
Enterprise and consumers

XR Holo-medicine



- XR assisted surgery
- Less mortality rate, shorter time for surgery
- In full operation at NUHS Singapore

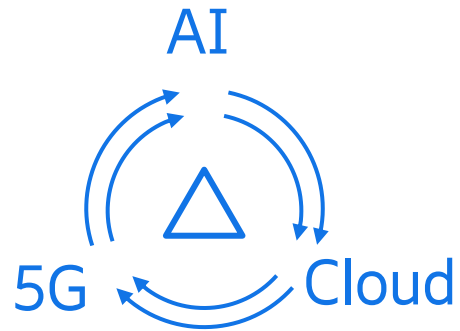
XR devices coming for consumers



- Large potential to service consumers
- Guidance, information and leisure
- Will require good 5G quality

5G drives new applications, 6G to excel further

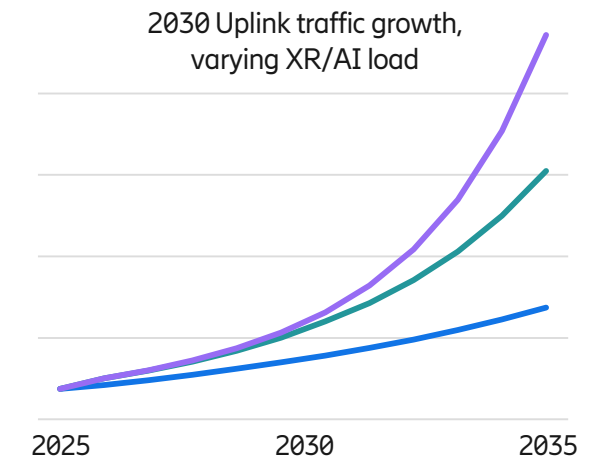
Technology advancements



New applications



New demands

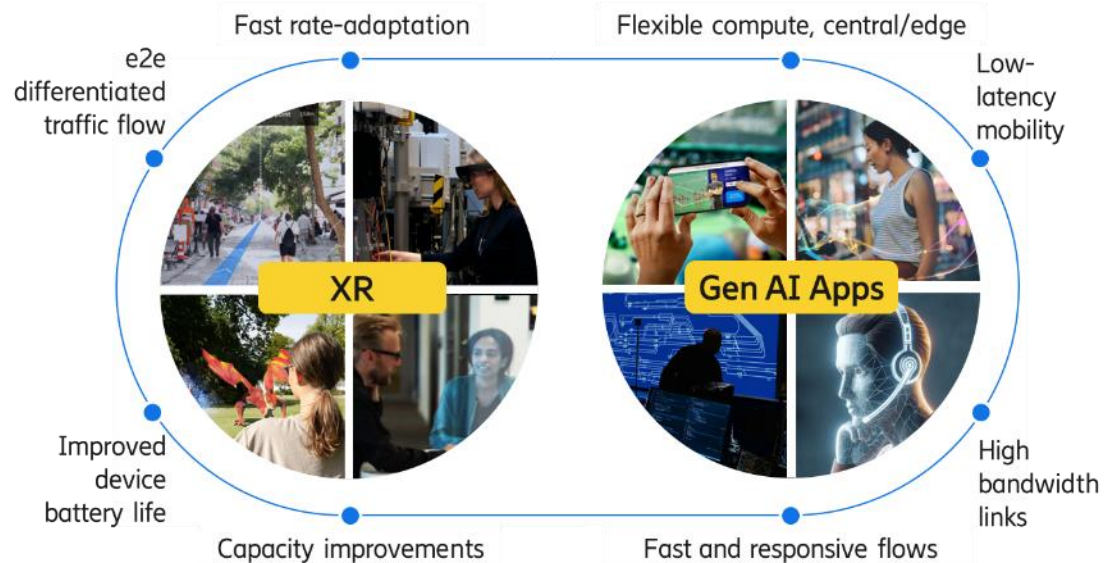


Demanding Uplink need

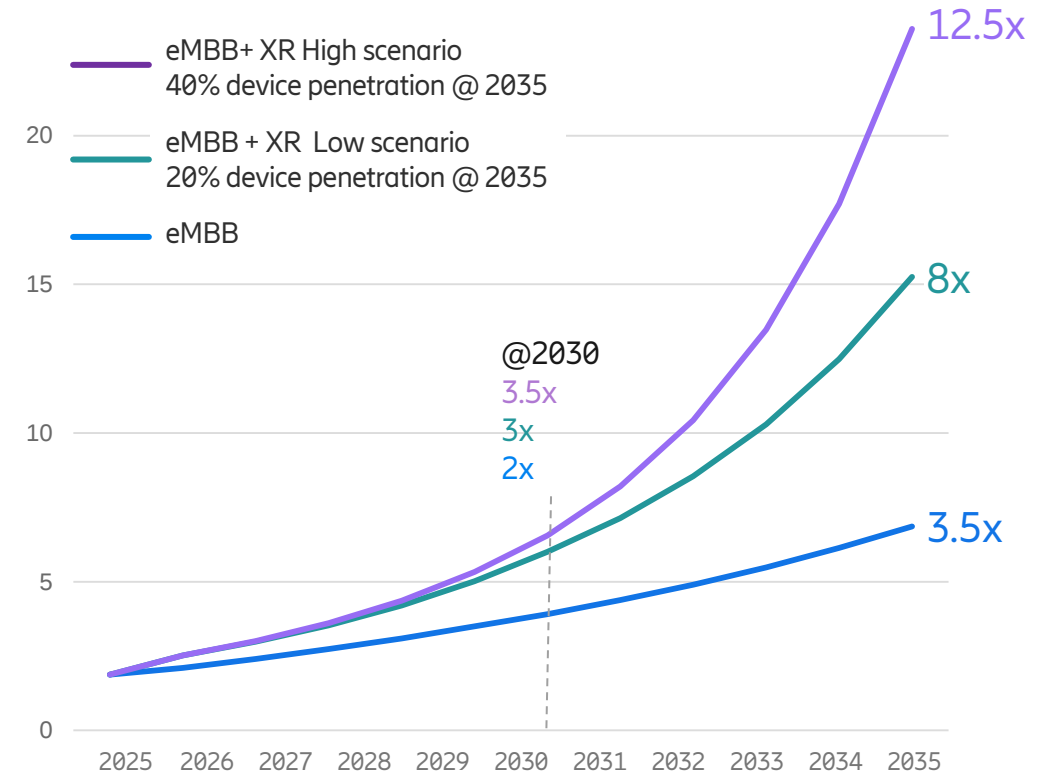
- Capacity
- Latency
- Cell-edge performance

Future traffic load, uplink heavy

Functionality to support higher uplink load



Uplink traffic per subscriber and month [GB]



Short term Early adopters of AI glasses/AI-enabled devices, AI apps, sensors, IoT

Mid term Scale of consumer usage of AI assistants on smartphones, AI/AR glasses

Long term Emergence and scale of AVs, humanoid droids and more

Best networks for and with AI



10%

Spectrum efficiency with
AI native link adaptation

80%

Reduced signaling with **machine learning assisted paging**

95%

Reduction in customer order failures with **order fallout detection and prediction**



25%

Better 5G coverage with
5G-aware traffic management

33%

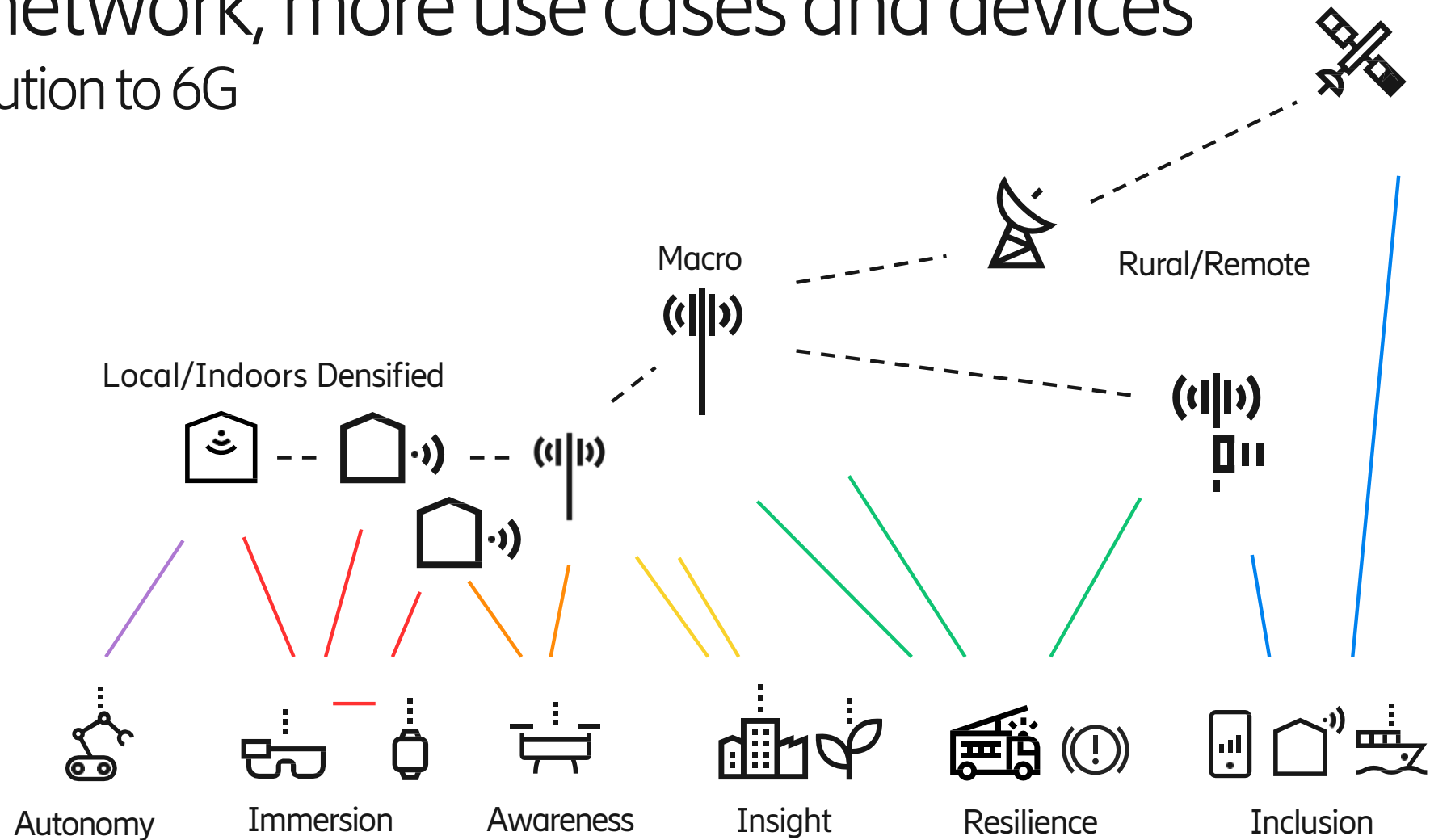
Energy savings and no KPI degradation with **Service Continuity**

>95%

incidents prevented with **RAN KPI degradation prediction**

One network, more use cases and devices

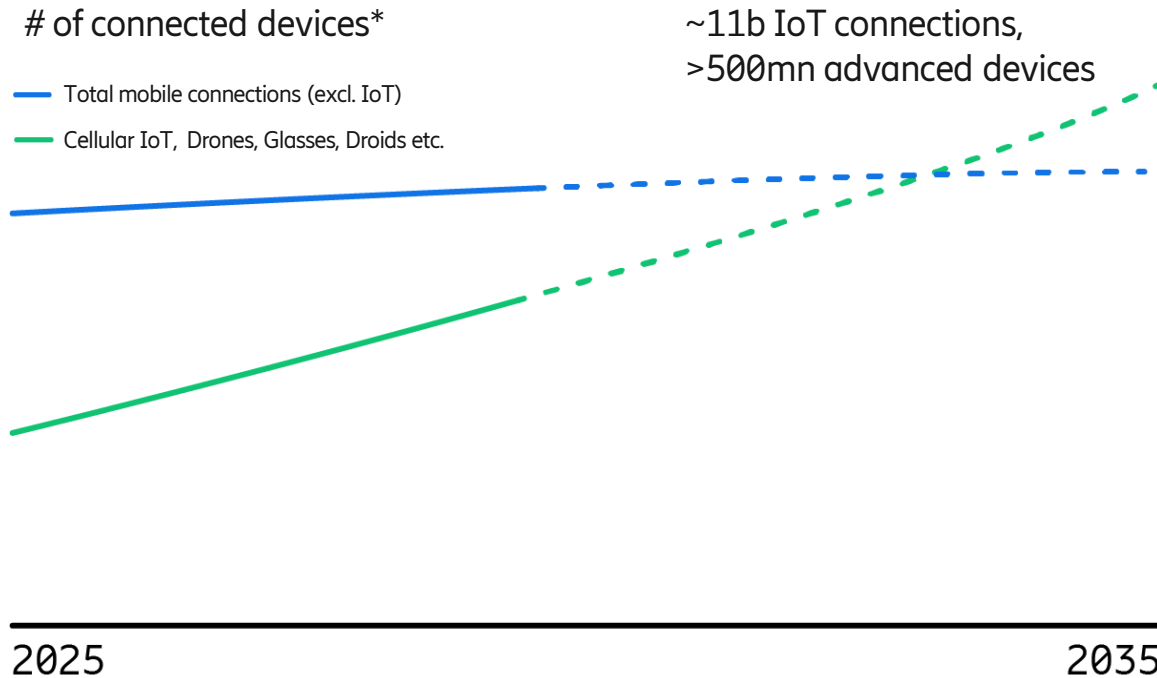
5G evolution to 6G



More devices, separate data flows, more edge compute

6G use cases - new revenue areas

Advanced devices uptake to outpace smartphones



*) GSMA: i) Mobile cellular connections, excl. IoT. and ii) Licensed cellular IoT. Assuming beyond 2030 follows current trajectory.

AI driving demands for 6G



Smartphones



XR devices



AI wearables



Drones



Sensing



Future devices

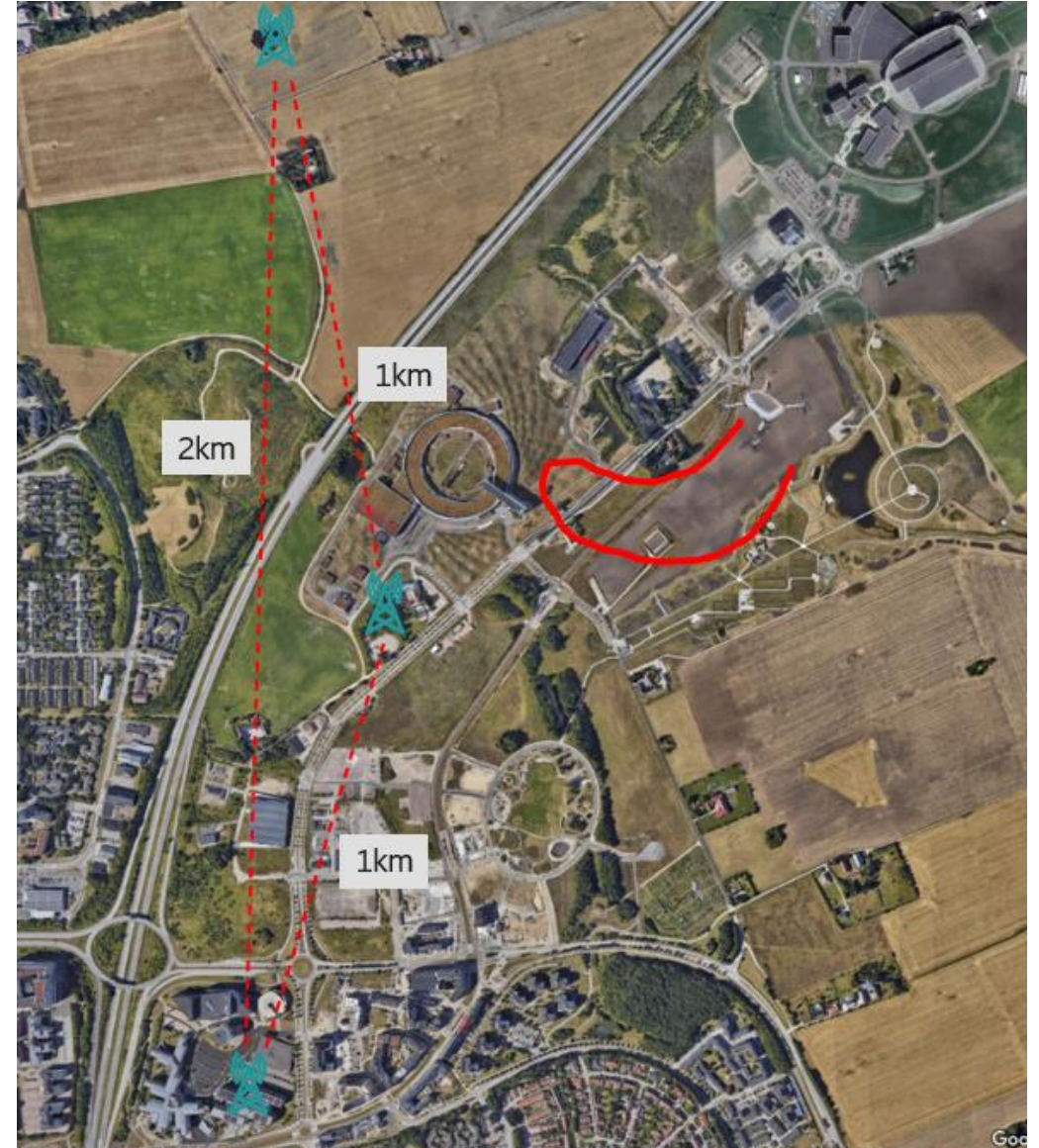
45%

By 2030, the share of time spent using AI apps outside the home is expected to rise from 35% today to 45%.

Ericsson ConsumerLab report Jan 2026: Winning in the market with differentiated connectivity offerings

Integrated Sensing and Communication

- ISAC is a flagship feature for 6G
 - Long-gone research explores long-term ISAC concepts and architecture
 - Active support in standardization
 - Trial setup in operation
 - Well advanced real-world functionality
 - Focus on technology enablers and research
- Drone detection
 - ~1-2 km site-to-site distance
 - Site height 30-45 meters
 - 2-3 km: Tx-drone-Rx distance
 - Drone height 90 meters, speed ~25 km/h
 - 10-15 m ground truth drone GPS reporting capability accuracy



6G exposing more value through network APIs



APIs for differentiated
connectivity services



APIs for information,
compute and AI services



Transport data for
anything, anywhere

Process & store data

Be a source of data

Better direct interaction with
the app ecosystem

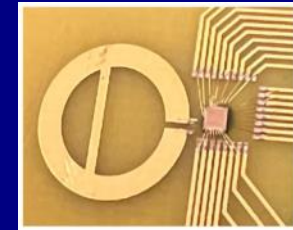
Network taking a bigger role
in the combined ecosystem

Industry evolution towards 6G

Business foundation for 6G builds on 5G monetization and differentiated services

Add 6G and new bands

New and existing spectrum,
new and extended functionality



Evolution of Core, OSS/BSS to SMO, AI and intent driven autonomous networks, 5G Advanced

Cloud native, 5G stand-alone, slicing capabilities, exposure and network APIs, Full network programmability, RedCap, NTN



Business evolution to scale the mobile platform

Monetize incl. FWA, Mission Critical, enterprise networks, capabilities (fraud prevention, location, etc.)

Scale differentiated connectivity & add AI / AR devices & introduce use cases like immersive comms, sensing, etc.

Scale 6G enabled use cases, e.g. immersive comms, sensing, etc.



Consumer

Residential

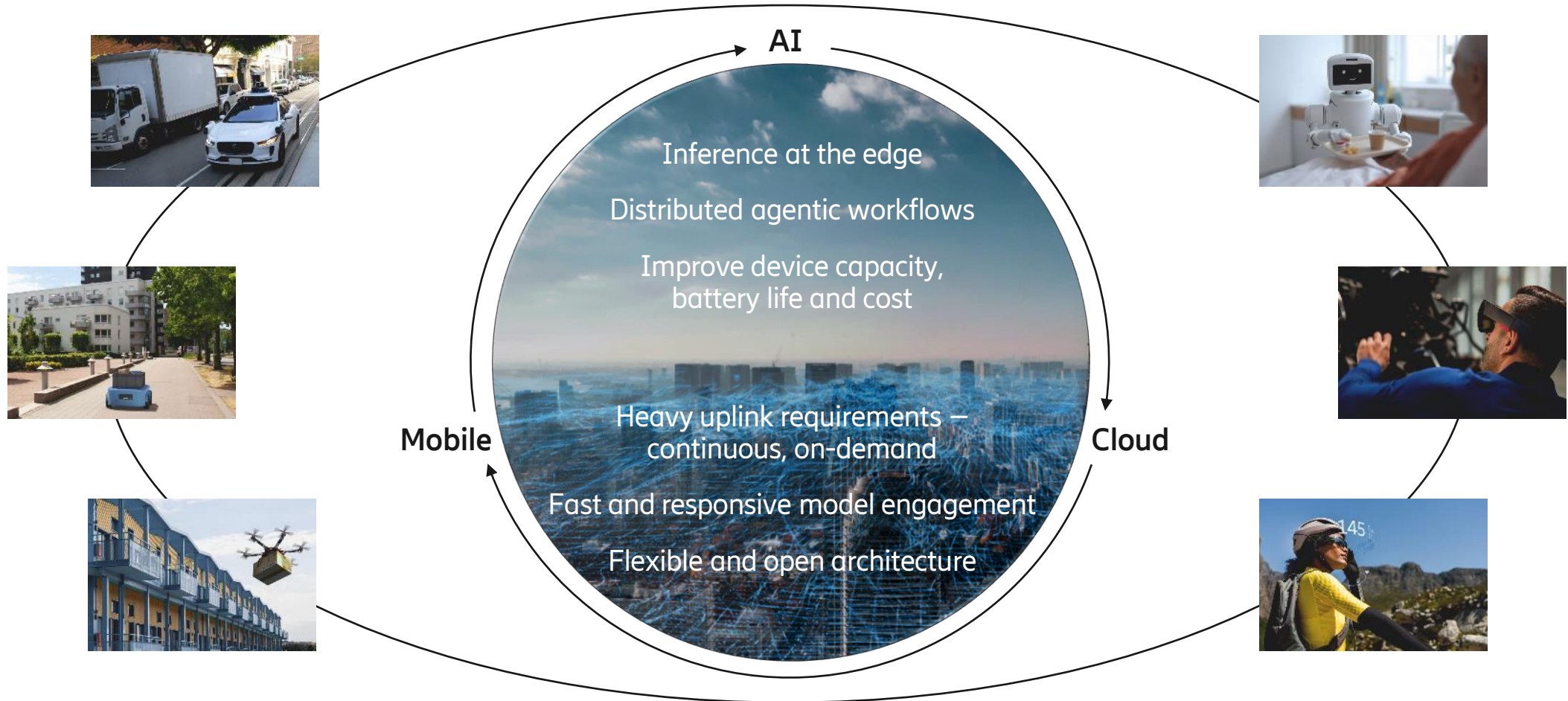
Industries

Enterprise

Governments

Society

The intelligent fabric





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