



The Standards People



Approaching the 5th Generation Fixed Network

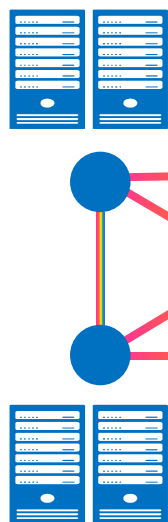
ISG F5G

Presented by: **Luca Pesando** (Chair of ISG F5G)

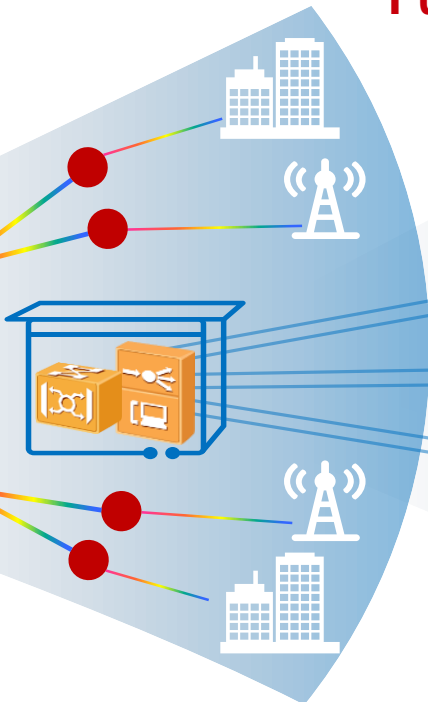
October 14, 2020

Fibre to Everywhere for an Unlimited Future

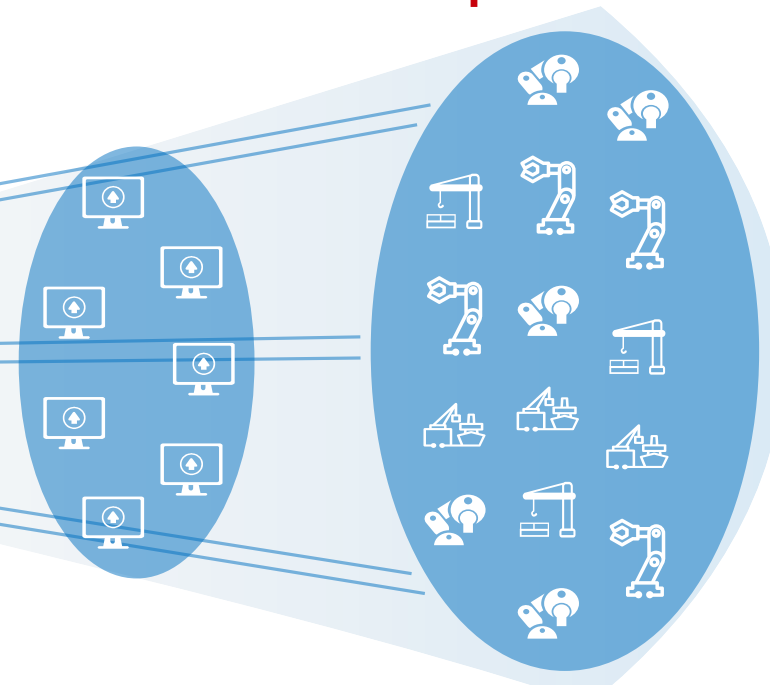
Full-fibre DC



Full-fibre Home



Full-fibre Campus



OTN to CO
→ to Site

Fibre to Home
→ to FTTRoom

Fibre to Enterprise
→ to FTTDesk

Fibre to Factory
→ to FTTMachine

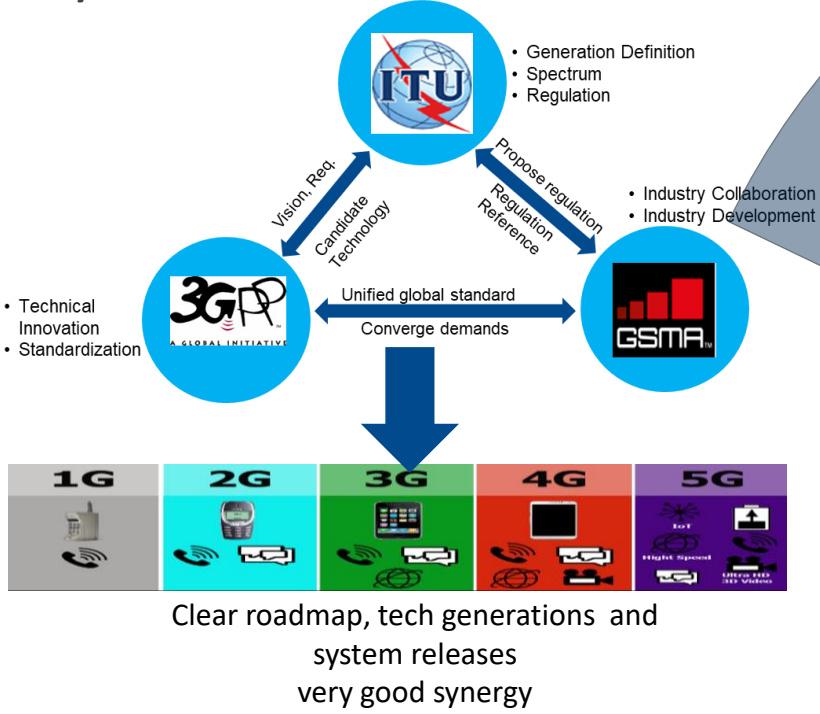
Fiber to Everywhere to make fixed access future proof

- Extending to more end-user : 2Home, 2Room, 2Business, 2Comsumer, 2Mobile, 2Device, 2Machine, etc.
- Reducing everywhere the fibre-to-end user distance: Km → 100m → 10m → 1m
- Number of connections expanding: X3 (Room), X10 (Desk), X30 (Machine), X100 (Smart city)

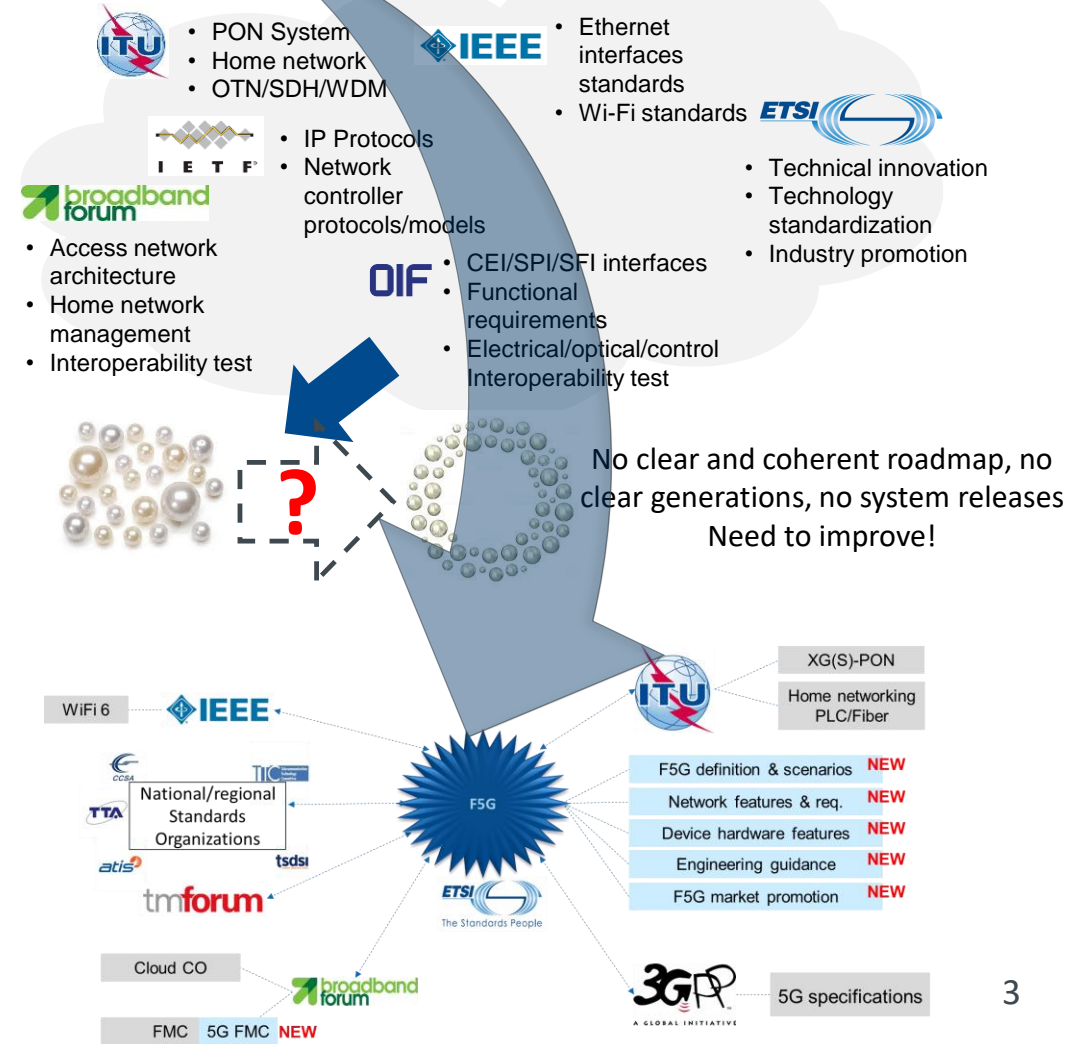
Learning from Mobile: improving the standard process in Fixed Networks



Mobile World: Sync'd Work of few entities



Fixed World: Scattered Efforts and loose Coordination



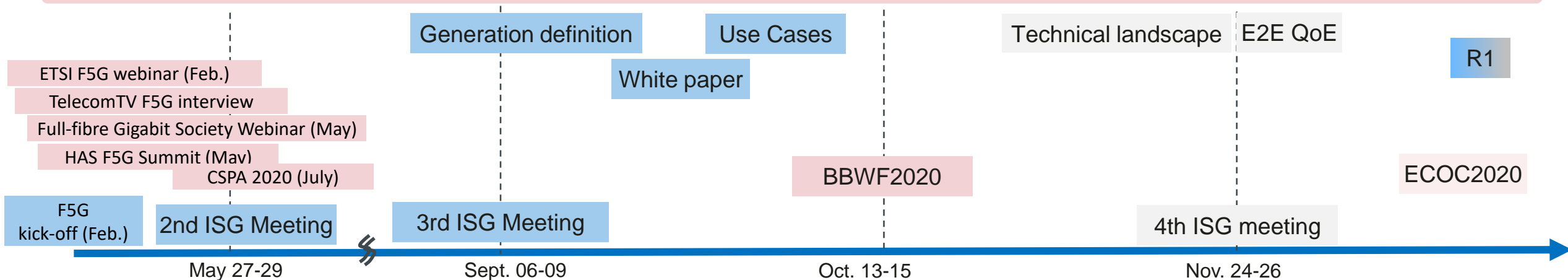
ISG F5G snapshot



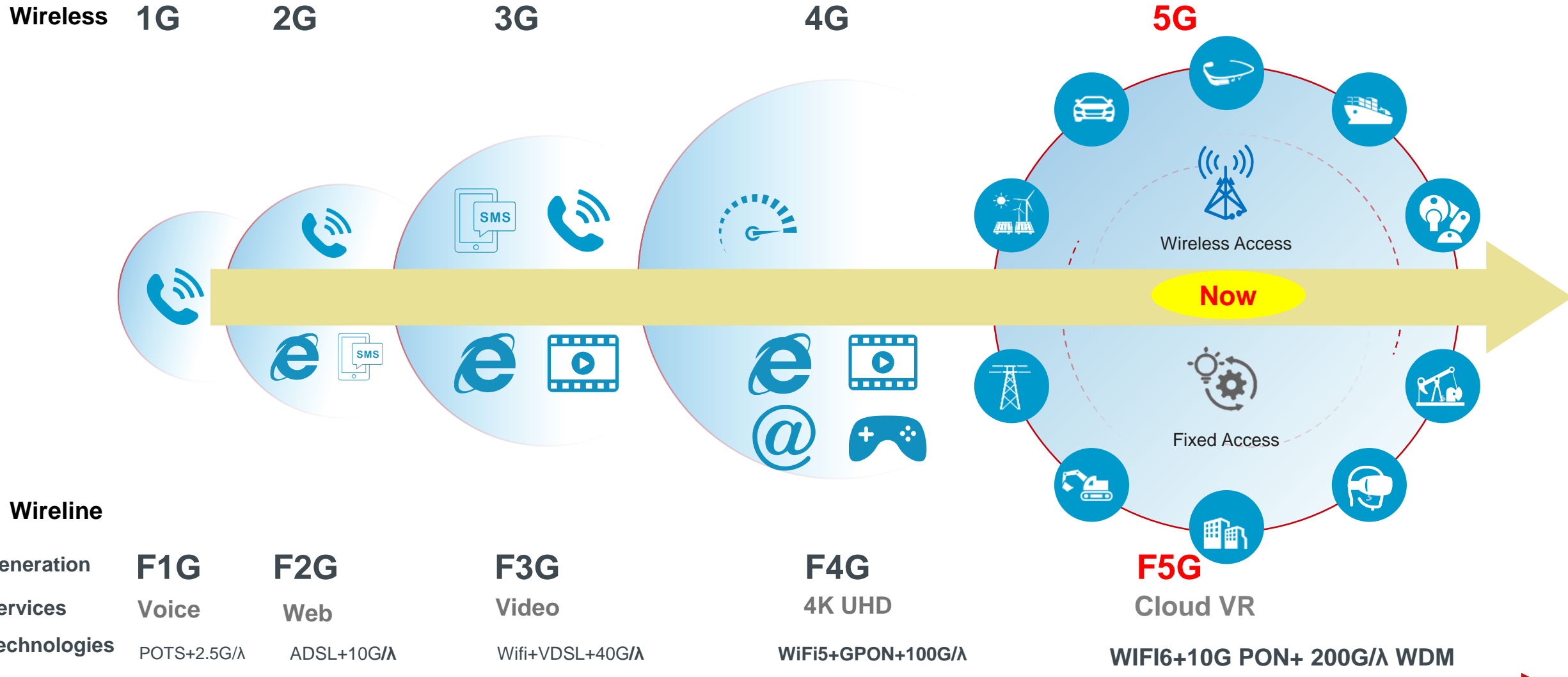
Membership: increasing from 10 founding members in Feb to 48 in Sep 2020



Work Plan: 3 documents finalized (WP and 2 deliverables) 2 more in progress for R1 (target 2020)



Identifying Generations for Fixed Network



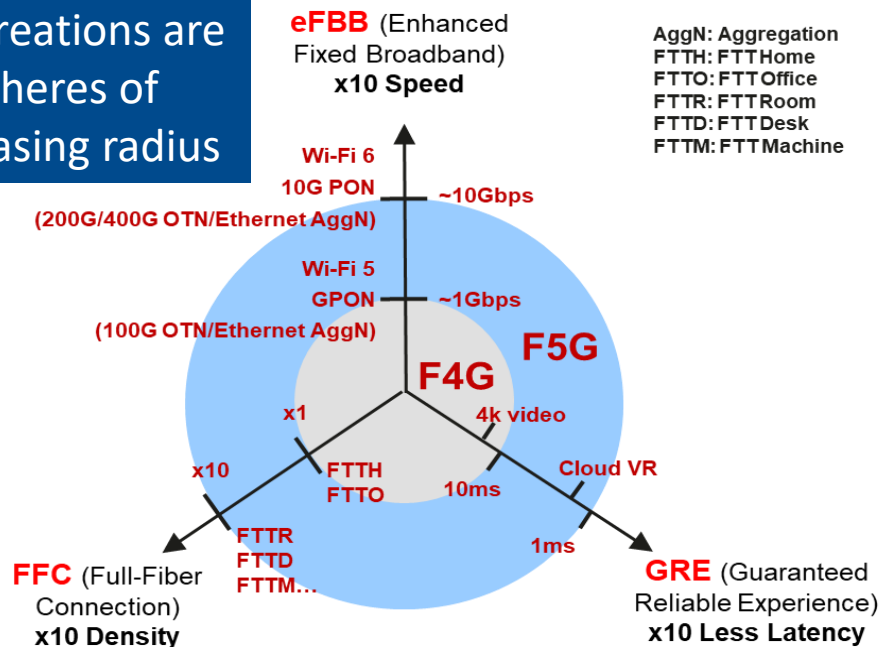
F5G together with 5G as cornerstones for new digital world

F5G: what does this generation deliver

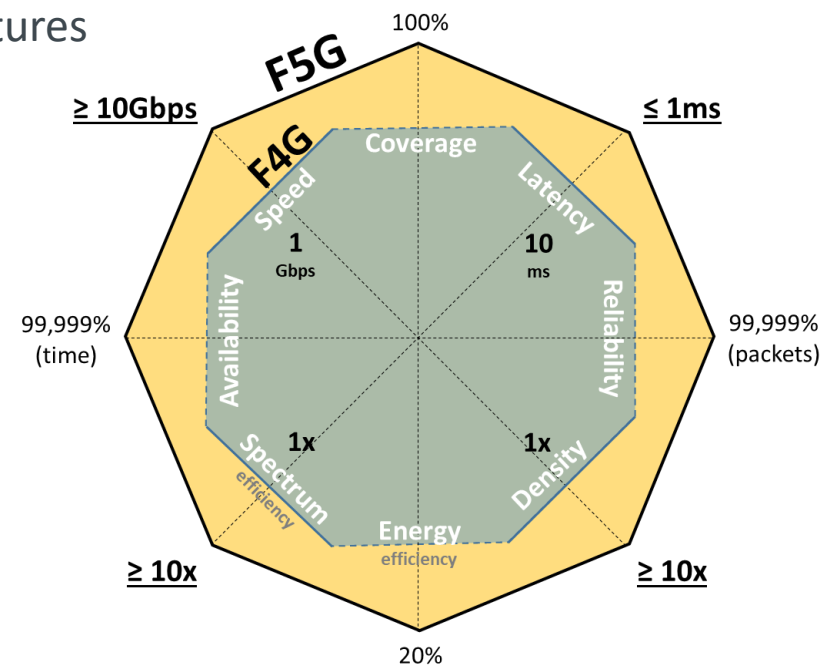
Represent the most important features in a 3 dimensional space:

- eFBB (enhanced Fixed BB): BB Line technology performance
- GRE (Guaranteed Reliable Experience): Service supported by minimum guaranteed latency
- FFC (Full Fibre Connectin density)

Generations are spheres of increasing radius



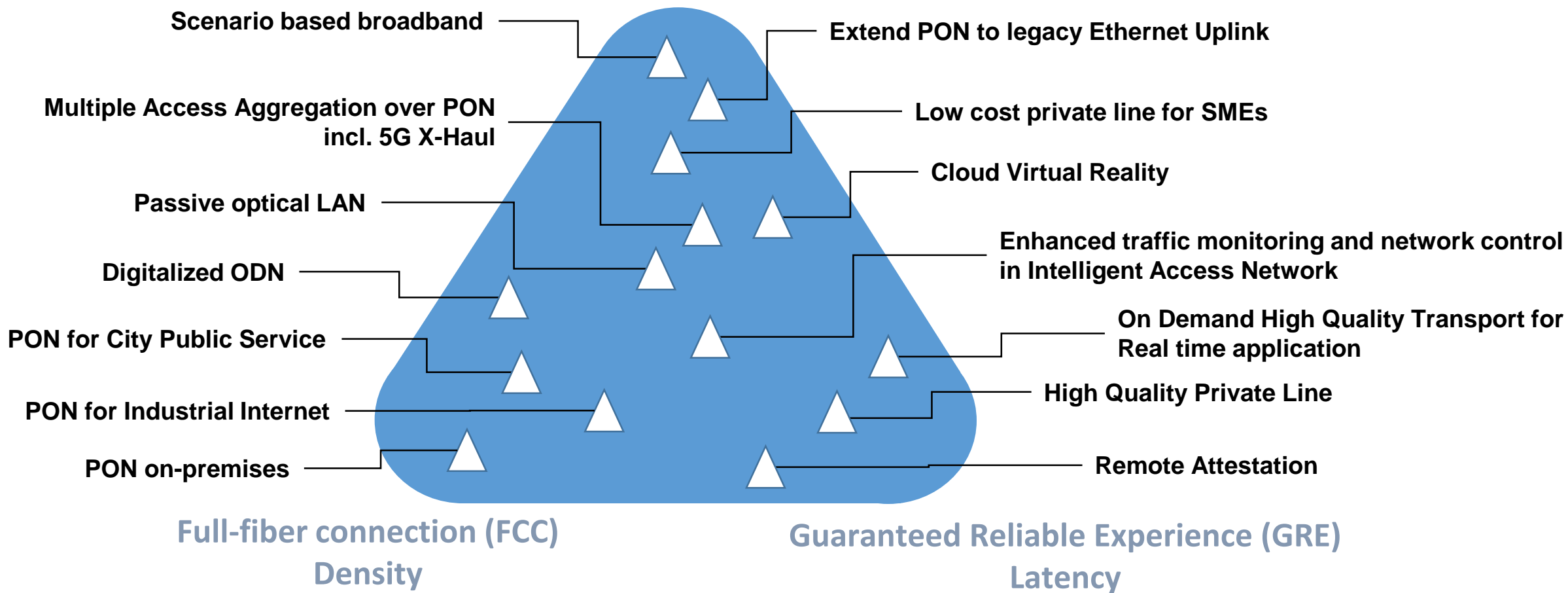
Increasing the number of parameters that F5G will address, (Energy Efficiency, Availability, Reliability, Spectrum Efficiency, Ceverage...) one can gets poligonal pictures



Use Cases

14 Accepted Use Cases for R1

Enhanced Fixed Broadband (eFBB)
Speed



F5G White Paper –Approved by ETSI



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<https://www.etsi.org/technologies/fifth-generation-fixed-network-f5g>

<https://www.etsi.org/media-library/white-papers>

Moving forward

Ongoing and short-medium term

- Group Specification of Technology Landscape, Gap Analysis, and F5G Requirements for R1
- Group Specification of the F5G Architecture, E2E Management, and Quality of Experience R2
- Group Report for Use cases and technology landscape for vertical and industrial scenarios (e.g. Industrial PON)

Long Term

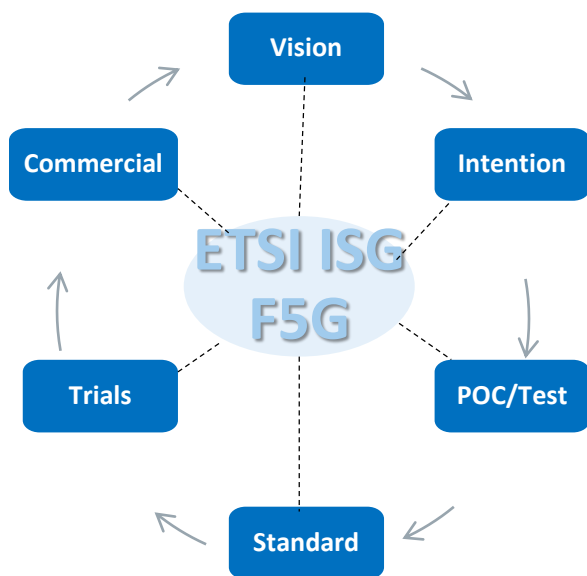
- Evolution to next generation

New Use Cases for growing the F5G eco-system are welcome!

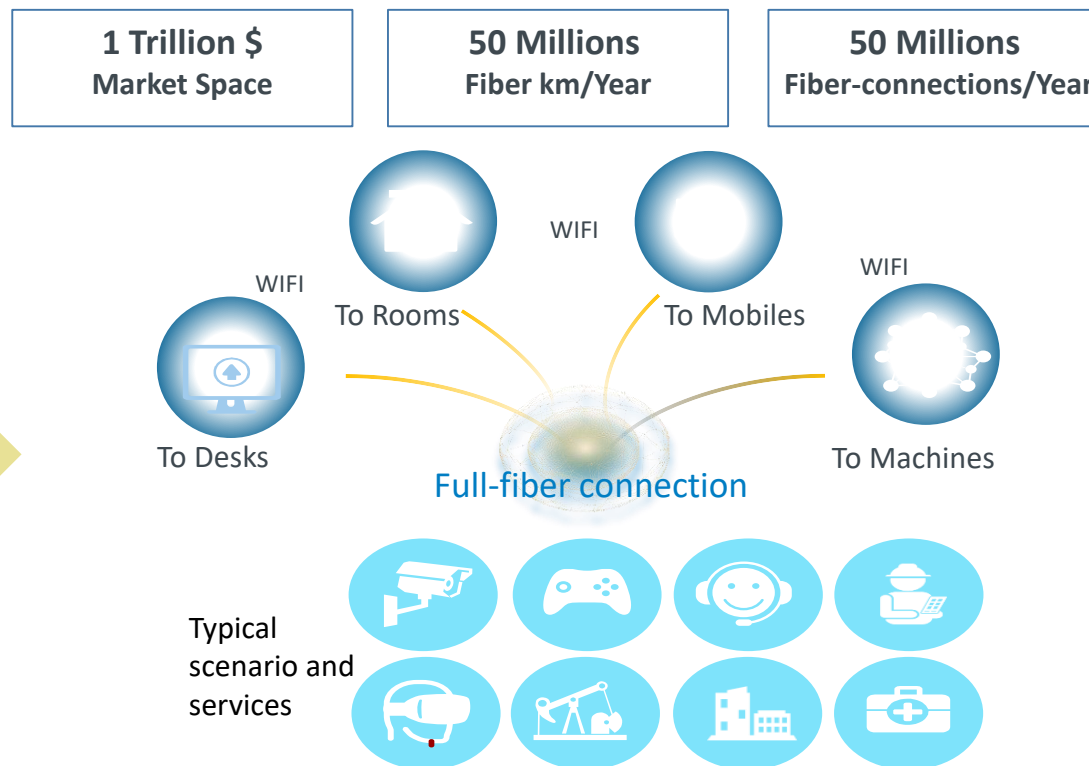
ISG F5G: a great potential for everyone

ISG F5G grows full-fiber industry

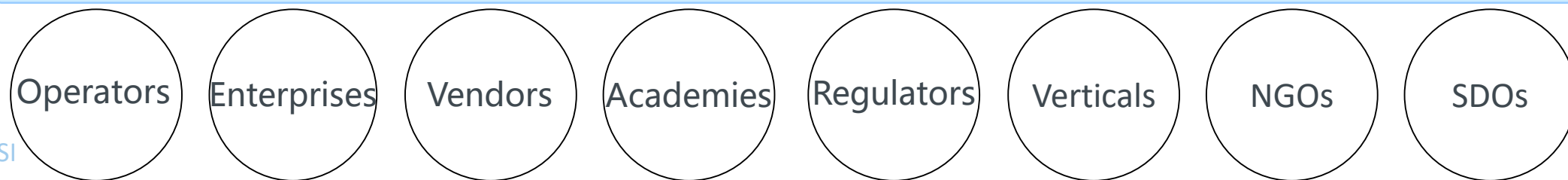
Target: leading global standards gathering to drive the 5th generation fixed network.



Fiber opens up a trillion \$ market space



F5G ISG: standards for the full-fiber ecosystem



Thank you!



Together, we make it happen.

