

Global mobile Suppliers Association

FUTURE SPECTRUM POLICY SUMMIT

UK SPF

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ERICSSON   HUAWEI intel. MEDIATEK NOKIA Qualcomm SAMSUNG ZTE

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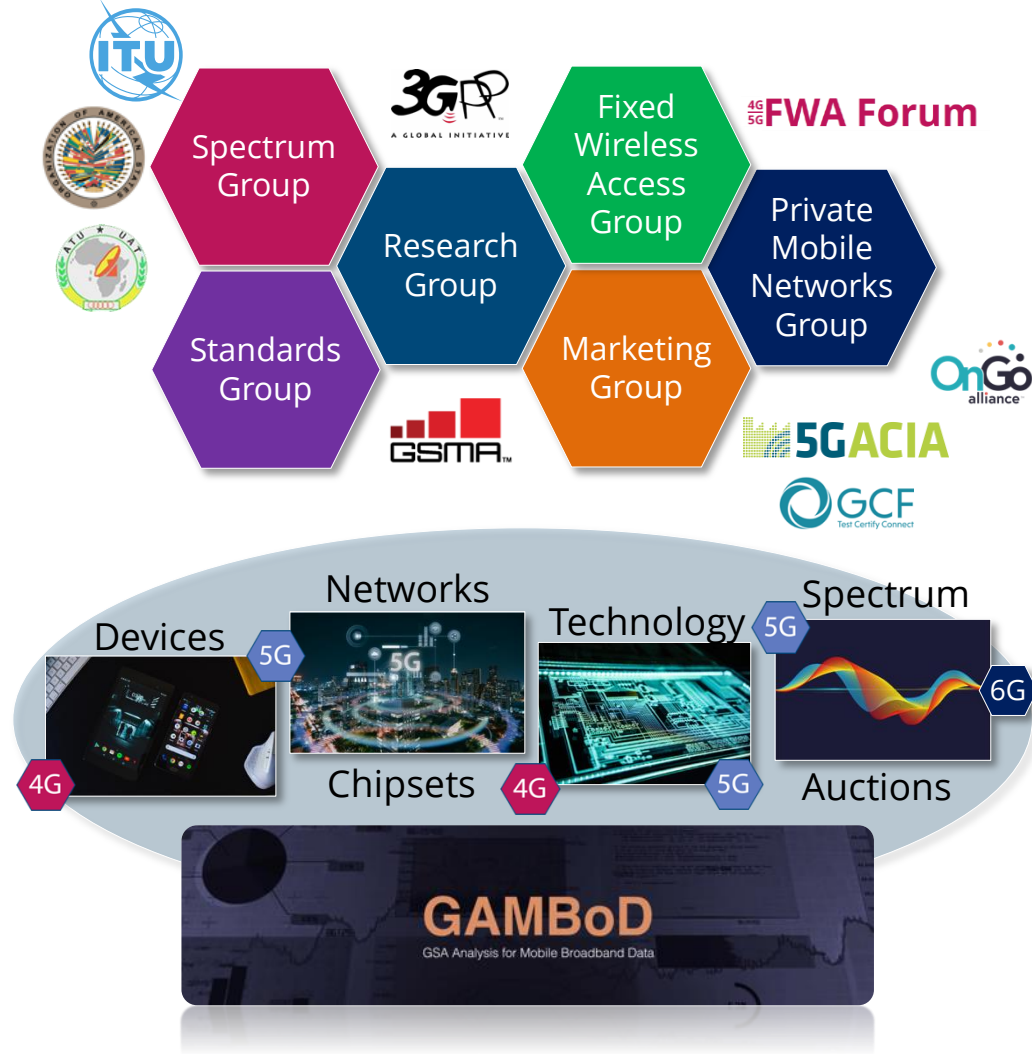
GSA 

About GSA

- Representing the global mobile ecosystem since 1998
- 9 Major Industry Executives



- Extensive research & database
 - Free industry reports
 - Member reports & GAMBoD Access
- GSA Spectrum Group
 - 185+ participants regionally grouped
- GSA Standards Group
 - 6G-Joint Working Group
- Focused Working Groups & Forums
- 90 Associates subscribing to GSA data
 - Regulators-Analysts-Operators etc.



5G spectrum for coverage, capacity and ultra experience

24.25 GHz to 29.5 GHz,
37.0 GHz to 43.5 GHz, etc

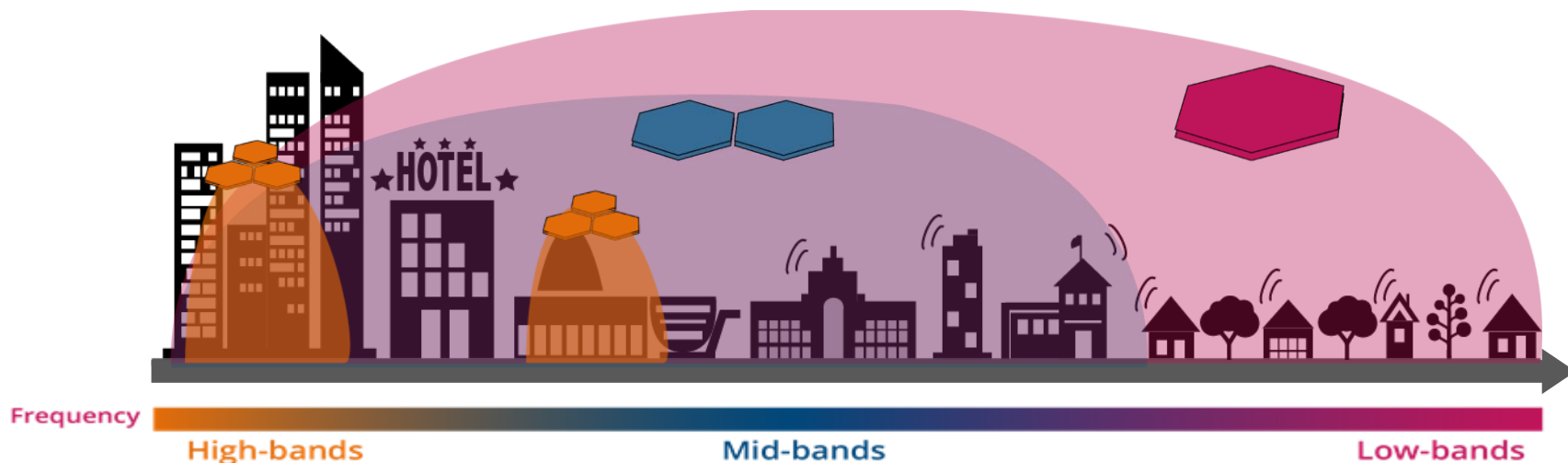
High-bands
Ultra experience layer

1.8 GHz, 2.3 GHz, 2.6 GHz, 3.3 GHz
to 4.2 GHz, 4.4 GHz to 5 GHz, etc

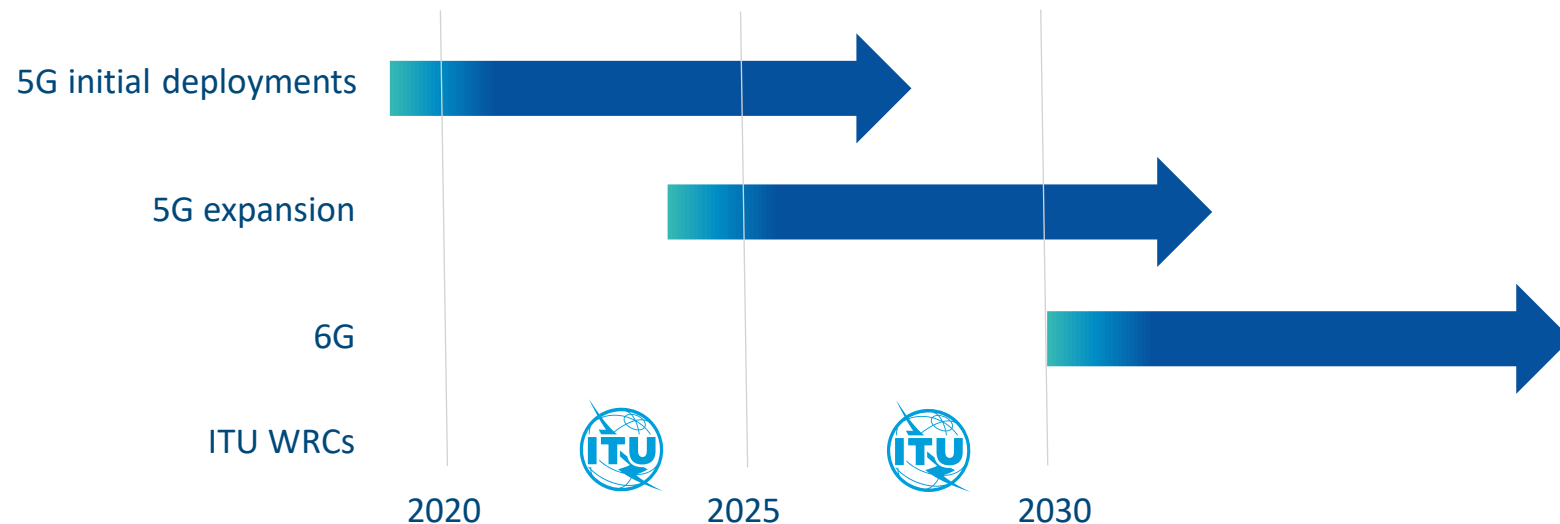
Mid-bands
Capacity-coverage layer

600 MHz, 700 MHz, 800 MHz, etc

Low-bands
Basic coverage layer

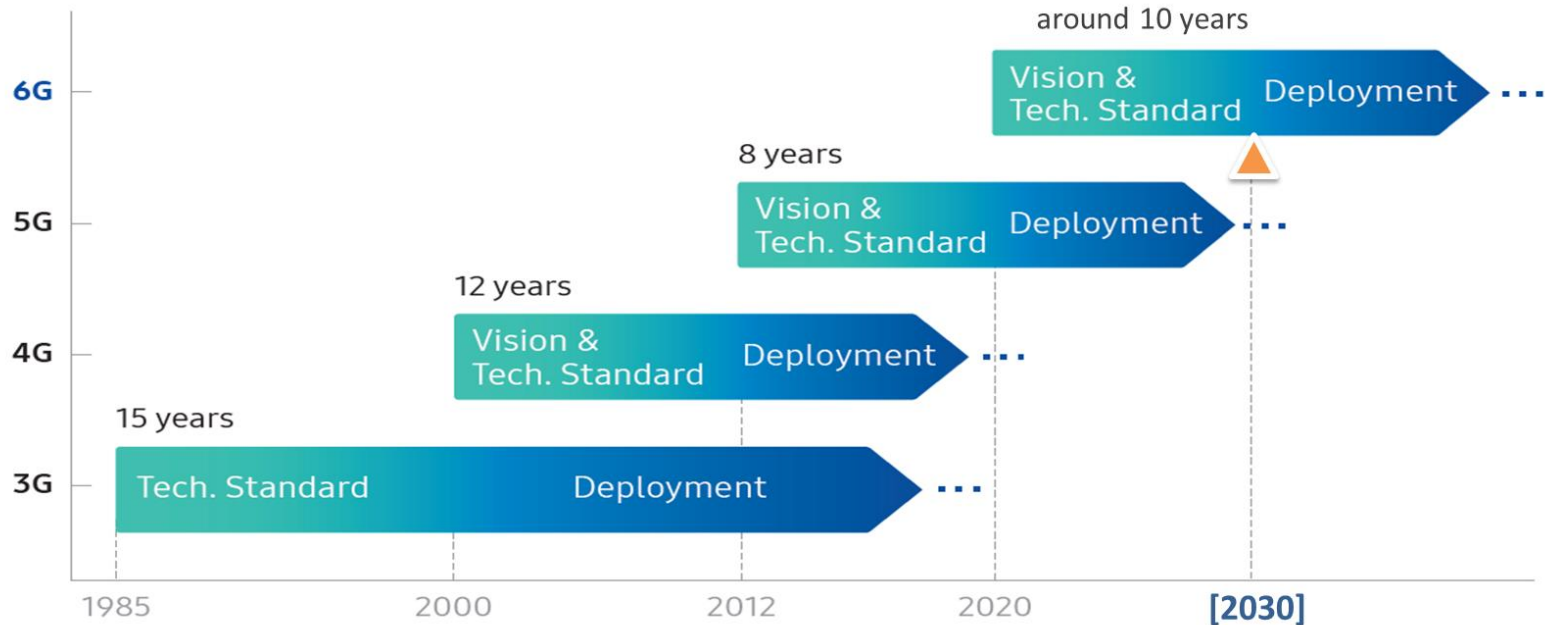


3GPP spectrum: 2020 to 2030

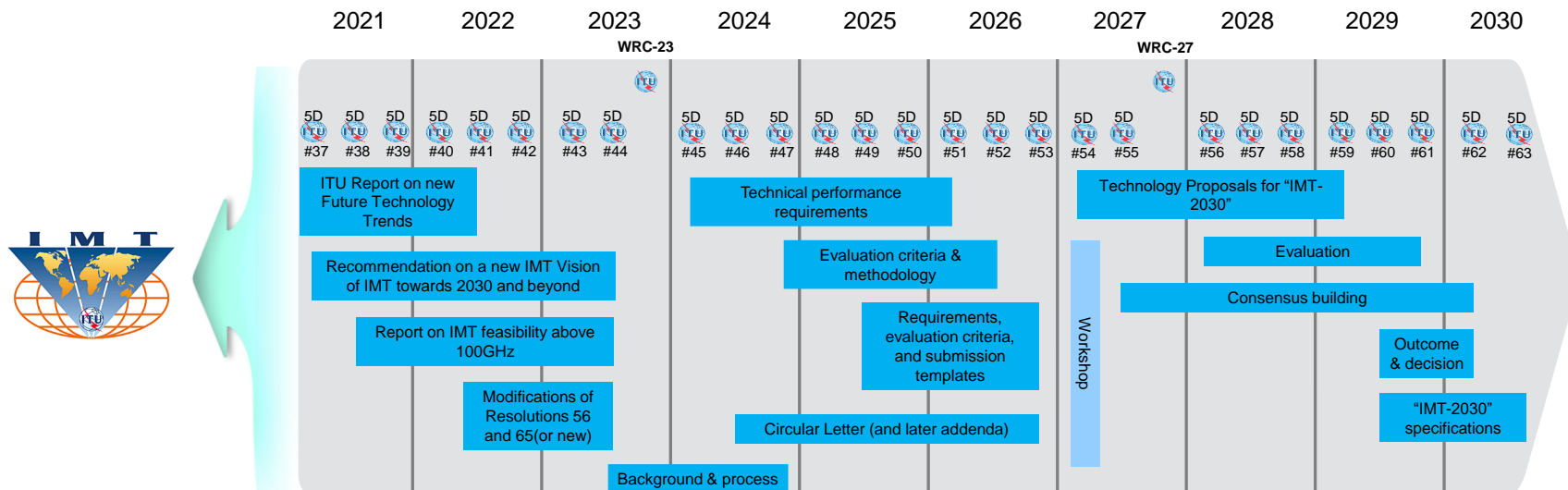


- 5G underway with licensing and roll-outs
- 5G expansion spectrum planning underway in some countries, with a timeframe from 2023/25
- 6G early research and planning discussions commencing, targeting a timeframe from 2030

6G: IMT-2030/3GPP vision and standards timeframe



Agreed* ITU-R IMT-2030 timeline



Note 1: Meeting 5D#59 will additionally organize a workshop involving the Proponents and registered IEGs to support the evaluation process

Note 2: While not expected to change, details may be adjusted if warranted. Content of deliverables to be defined by responsible WP 5D groups

Close collaboration between ITU-R and 3GPP as an external organisation for the development of 3GPP-2030



Global 6G research and framework

China



www.caict.ac.cn

Europe



www.hexa-x.eu

India



www.dot.gov.in

Japan



www.b5g.jp/en

Korea



Ministry of Science and ICT

www.msit.go.kr

ITU



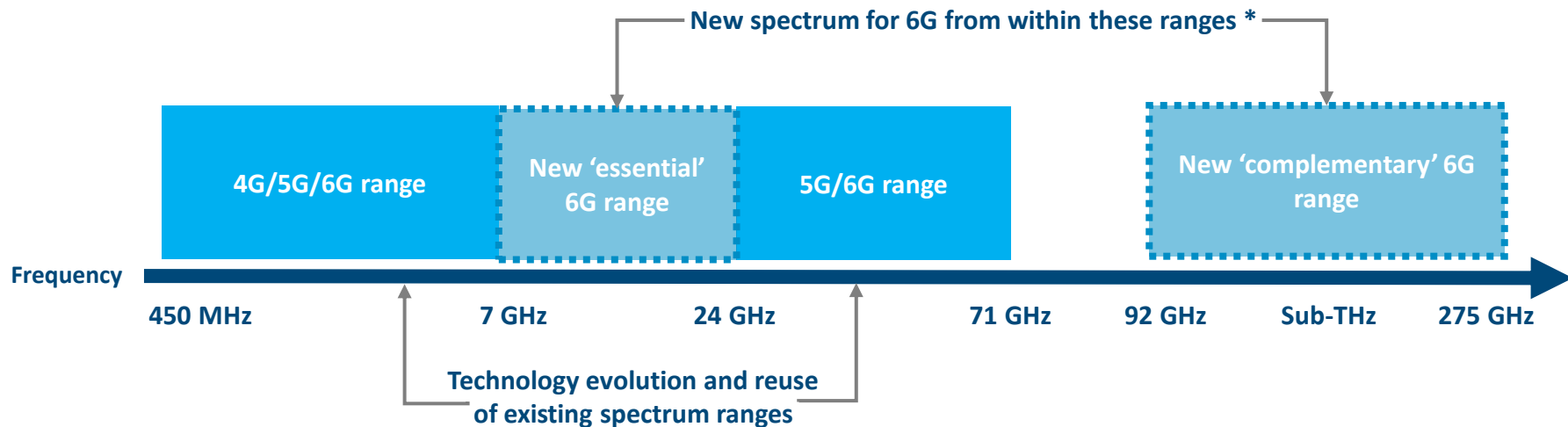
www.itu.int

USA



www.nextgalliance.org

Spectrum for 6G



* Frequency bands from within these ranges will need to be selected for further study, taking into account sharing possibilities of IMT with other Radiocommunication Services allocated on a primary basis.

* Existing users of mobile applications such as those supported by UWB should also be considered for relevant bands where applicable.

* The lower the frequency the better from within the 'essential range' in terms of propagation, cell size and economic network deployments.

* IMT Agenda Item for WRC-27 is a key step towards a successful device ecosystem and economies of scale

Summary

- 6G research is accelerating
- IMT-2030/6G standards to be completed by 2030. ITU-R WP5D Recommendation IMT-2030 radio interface(s) specifications planned to be completed by 2030 in cooperation with external organisations such as 3GPP
- Commercialization target around 2030 & onwards
- 6G will need the combination of all frequency ranges from low up to extremely high bands to meet coverage and enhanced capacity requirements as well as serve new emerging use cases
- In addition to existing spectrum, new spectrum from within the “essential” range 7-24 GHz and from within the “complementary” sub-THz frequency range is recommended to be considered
- Ofcom UK, is encouraged to consider a new agenda item for IMT towards WRC-27. GSA could assist, if needed, towards the development of such an IMT agenda item
- Global harmonisation, or at least regional harmonisation, remains critical

Global mobile Suppliers Association

The Industry Voice of the Global
Mobile Ecosystem

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