



WP7 - Deliverable 7.5

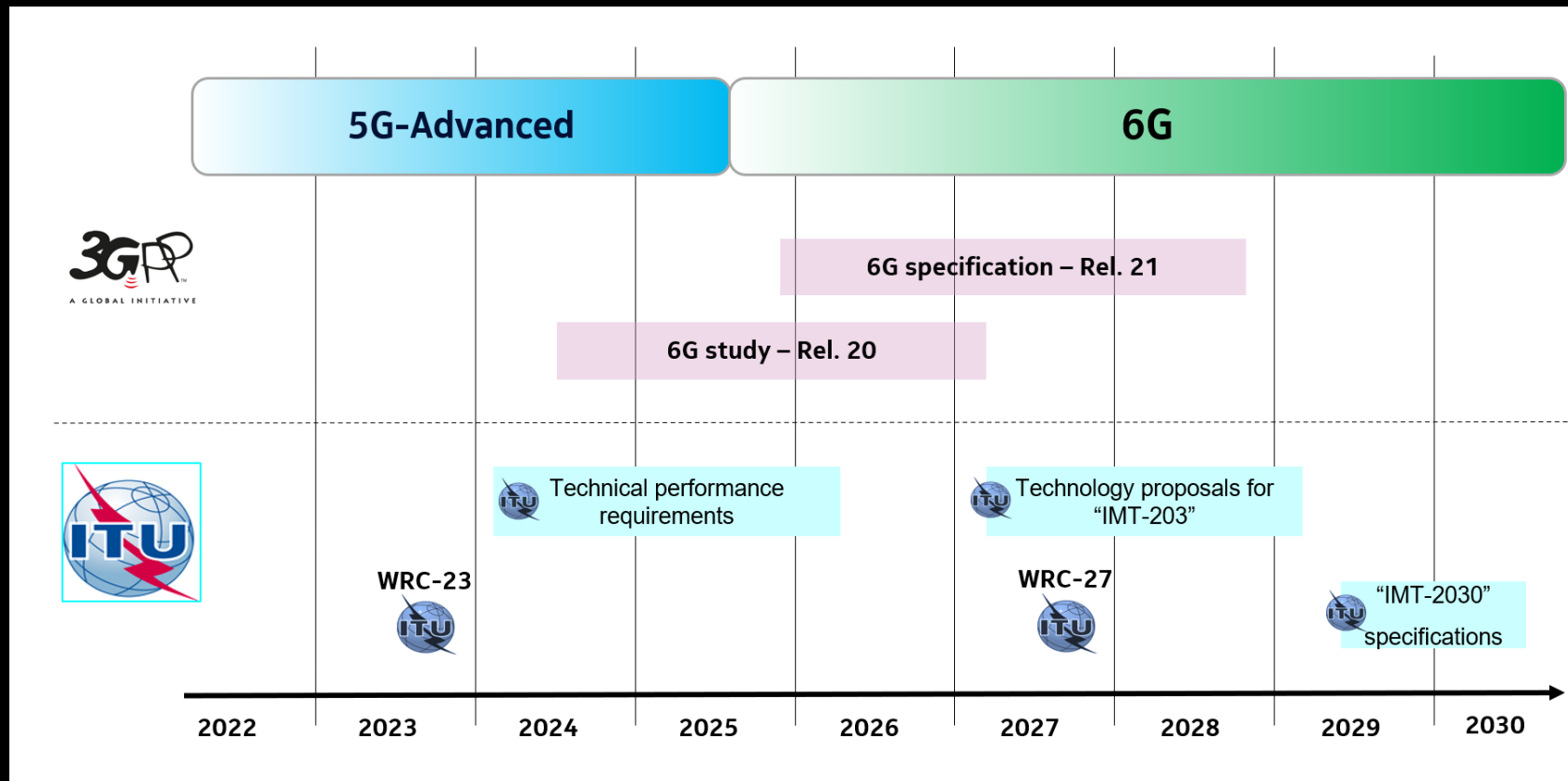
Impact to industry
activities, standardisation
and regulation -
intermediate release



6G standardization timeline



- **Standardization planning and estimated time plan:**
 - 3GPP Release 21 will contain the first 6G specifications by 3GPP.
 - It will be based 3GPP studies on 6G reported in Release 20



The main planned standardization activities



3GPP - R20/R21 releases onwards

- **SA1:** Use cases, corresponding requirements and key performance/value indicators
- **SA2:** Modular architecture, use of AI/ML, RAN-CN interface, etc.
- **SA3:** Security and privacy threats, and their impact on system resilience
- **SA5:** Flexible network configuration, sustainable and trustworthy AI/ML-based control
- **RAN (1,2,3,4):** Radio Interface architecture and protocols, the specification of the Radio Resource Control protocol and the Radio Resource Management procedures, Intelligent radio air interface design, flexible spectrum access solutions, Non-Terrestrial Networks (NTN) solutions , Joint communication and sensing , RedCap devices

ITU-R/T

- EMF, environment, climate action, sustainable digitalisation and circular economy.
- Flexible spectrum use and access, Spectrum management
- 6G vision and requirements
- Terrestrial services

ETSI

- **ZSM:** Security and privacy threats, Programmability, zero-touch automation, AI-based network management and orchestration, trustworthy management and integration fabric, interdomain network and service management
- **MEC:** Security and privacy threats, Edge computing, extreme edge computing
- **THz:** Channel modelling, sub-THz radio
- **NFV:** Cloud evolution e.g., dynamic discovery and monitoring different extreme edge nodes, Resource allocation
- **ISG SAI:** Understanding of the risks associated to widespread use and support to AI by networks, including the realisation of relevant proofs of concept
- **OSM:** Management and orchestration

The main planned standardization activities



NGMN

- Use cases, corresponding requirements and key performance/value indicators

O-RAN nGRG

- Use case and requirements, architecture aspects

IRTF

- AI-based orchestration

GSMA

- Use cases, corresponding requirements and key performance/value indicators

IETF

- Deterministic network (data plane) and orchestration (control plane)
- Mobility management
- Application of attestation techniques, quantum-safe technologies, and automated certificate and key management procedures to improve security and privacy in next-generation networks.

BEREC

- Environmental sustainability

Standard contributions of technical WPs of Hexa-X-II



Type	Targeted by the end of the project	Achieved
Standards and industry groups impacted	3GPP RAN, 3GPP SA, ITU, NGMN, ORAN nGRG, GSMA, BEREC, ETSI, TMFroum, IETF, IRTF	3GPP RAN, 3GPP SA, ITU, ETSI, IETF, IRTF
Total number of standards contributions by participants based on work in Hexa-X	More than 120	103



HEXA-X-II.EU //   



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