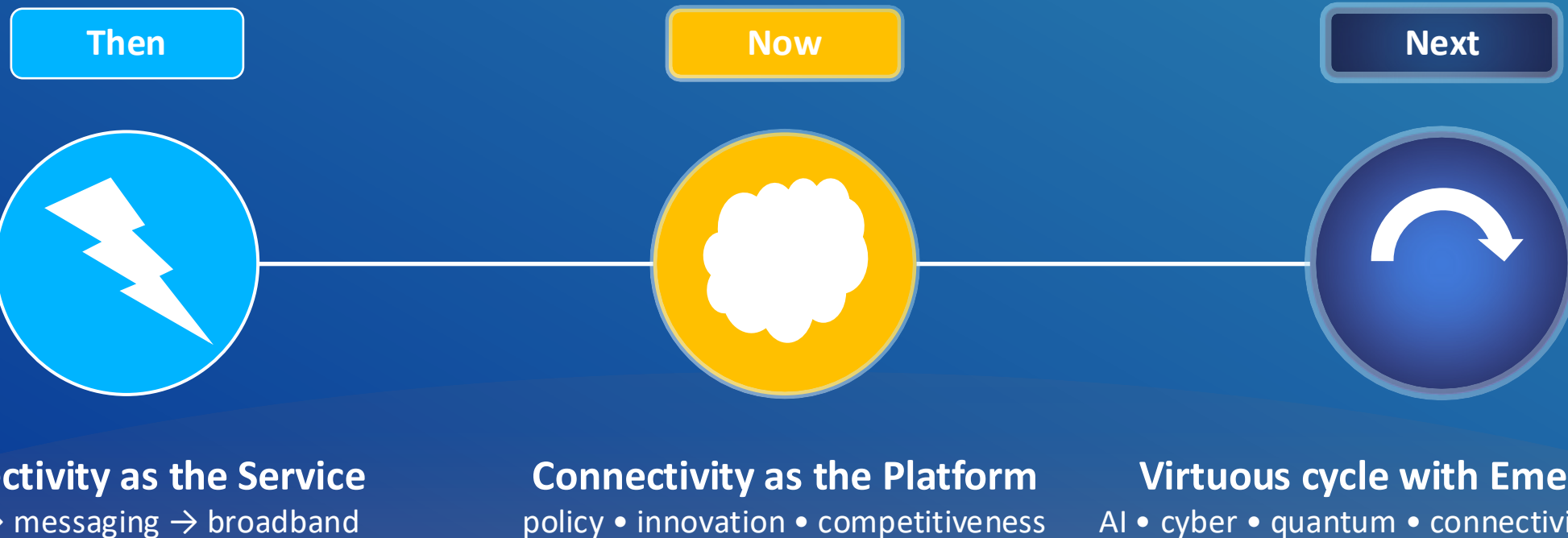


Setting the Standards for the Future Connectivity Ecosystem

Jan Ellsberger - Director General, ETSI

Connectivity: From Service to Critical Infrastructure



When connectivity becomes critical infrastructure, standards become strategic.

Economic Impact of Standards: Recent Evidence

20% of GDP Growth

Austria, GAW Institute 2025

6.5% of Annual Employment Growth

Austria, GAW Institute 2025

68% SMEs Gain Competitive Edge and 50% Reduced Time-to-Market

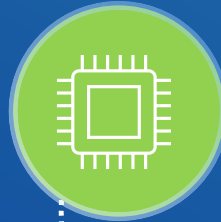
European Commission 2024

1.1T€ Annual Revenue enabled by 3GPP Standards

GSMA Mobile Economy Report 2024

The Evolving Standardisation Journey

35+ years at the heart of digital standardisation



From European roots to driving global standards



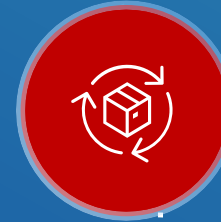
Over 900 members: direct participation and inclusiveness



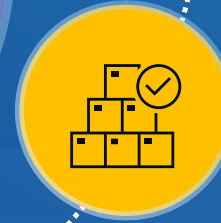
Global Reach and Partnerships



Independence and WTO/TBT principles



Flexible processes and Standards free of charge



Building on Success Stories

Examples of ETSI Success Stories



Wireless Systems

- GSM -> 3GPP (3G/4G/5G/6G)
- DECT, TETRA



Quantum-Safe Security

- Quantum Key Distribution
- Quantum-Safe Cryptography



Smart Card Platform

- SIM Cards, Payment Cards



Consumer IoT Security (e.g., ETSI EN 303 645)



Electronic Signatures, Identification and Trust Services (e.g., eIDAS series)



Accessibility of ICT Products and Services

Shaping Tomorrow's Standards Today

- 6G (3GPP)
- Trusted Data Framework & Data Sharing
- Quantum Technologies
- Cybersecurity and Cyber Resilience
- EU Digital Identity Wallet
- Trustworthy AI Systems
- EU Critical Communications System (EUCCS)

Focus on future challenges:

- Interoperability
- Security
- Energy efficiency
- Accessibility

ETSI's fostering of open competition and responsible IP practices ensures that innovation remains accessible, sustainable, and fair.

Evolving Paths for Standards



- From static documents → dynamic, ecosystem-driven frameworks.
- Agile methodologies and incremental updates.
- Software development and interoperability testing as integral parts.
- Modular, flexible standards enabled by digital tools and automation.

Ever Increasing Need for Standards

 Connectivity has become critical infrastructure — the platform for Europe's digital economy.

 Standards deliver growth, jobs and competitiveness.

 A virtuous cycle: emerging tech needs connectivity, and also upgrades it.

 Standards must evolve: faster, more modular, closer to software and testing.