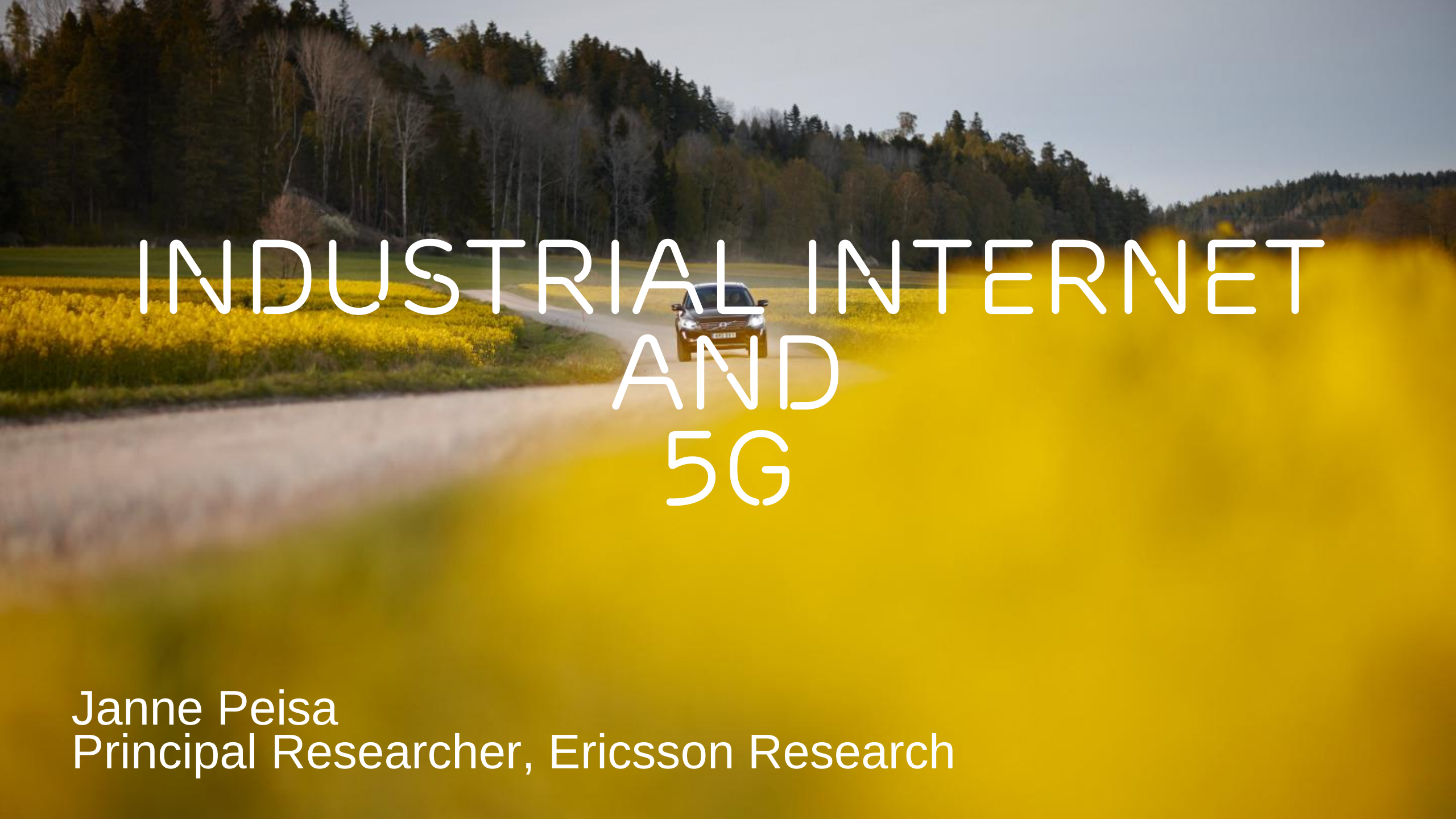
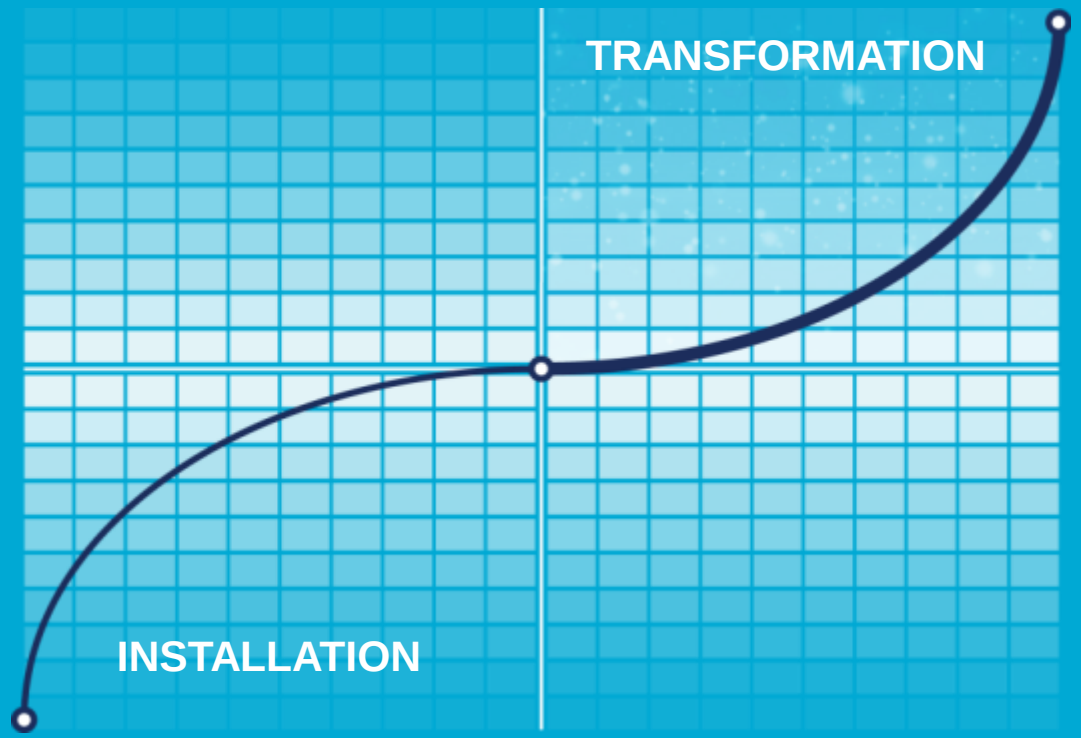


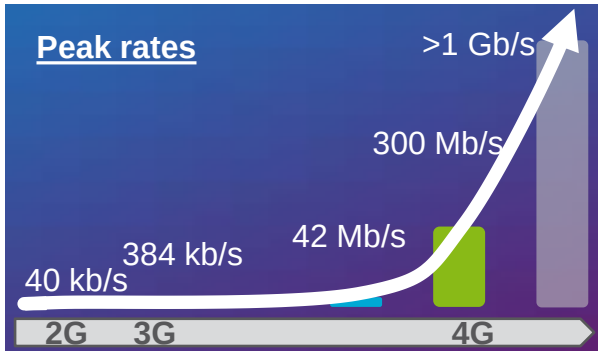
INDUSTRIAL INTERNET AND 5G

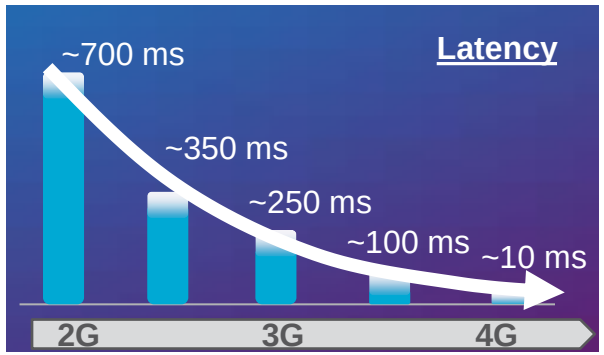
Janne Peisa
Principal Researcher, Ericsson Research

ICT BEYOND THE INFLECTION POINT



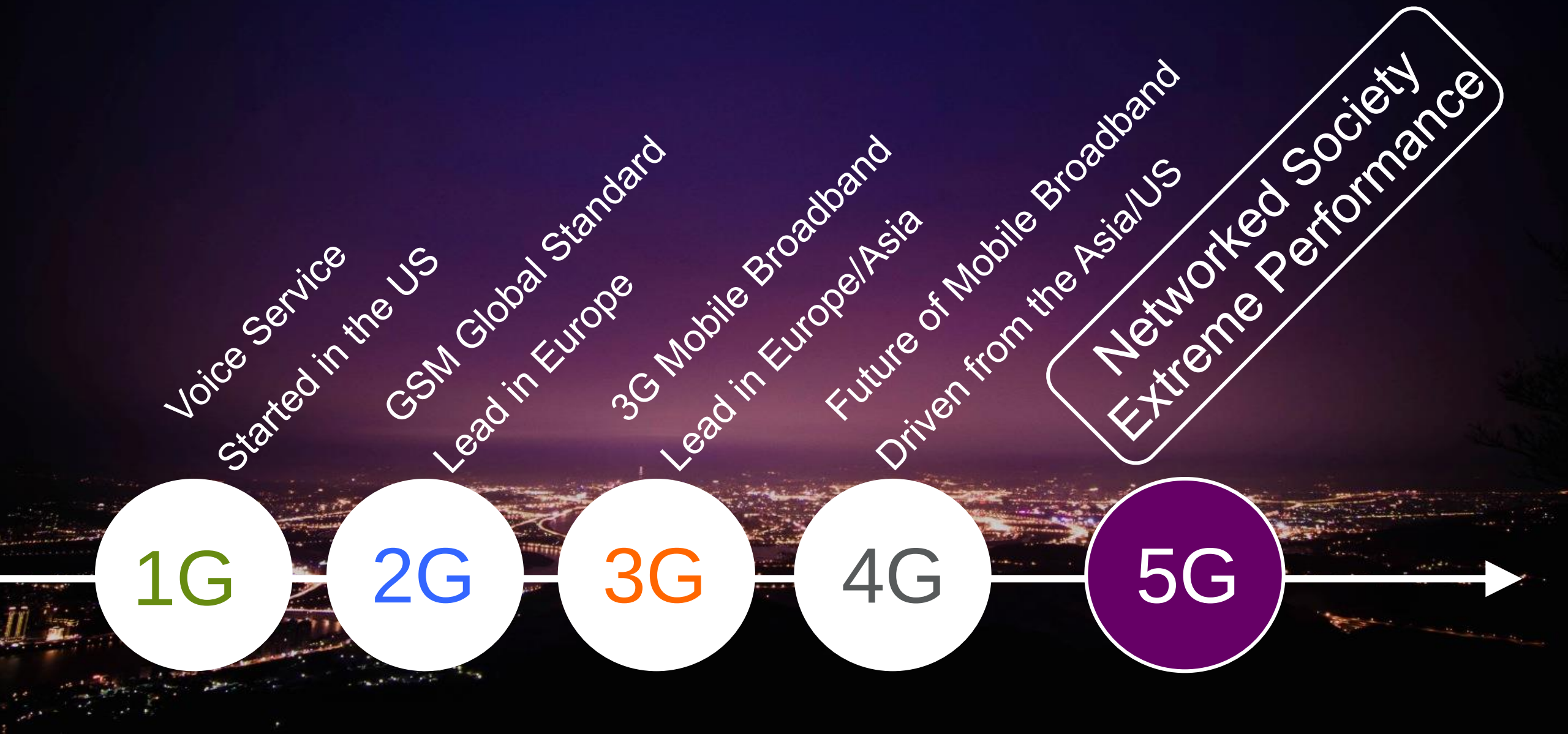
- Mobile communication has revolutionized personal communication
- Installed communication infrastructure
  - Ubiquitous availability at marginal costs
  - Broad capabilities and evolving





- Enabler for industry transformation with digitized processes

MOBILITY GENERATIONS



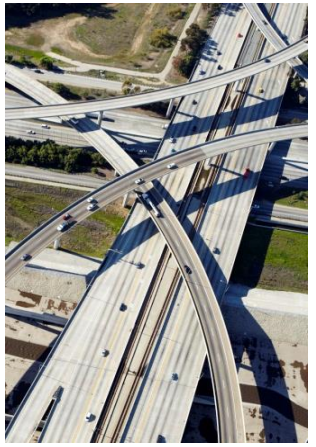
5G – BEYOND MOBILE BROADBAND

Broadband experience everywhere anytime

Mass market personalized media and gaming

Meters, sensors, “Massive MTC”

Remote controlled machines



Smart Transport Infrastructure and vehicles

Human / machines interaction

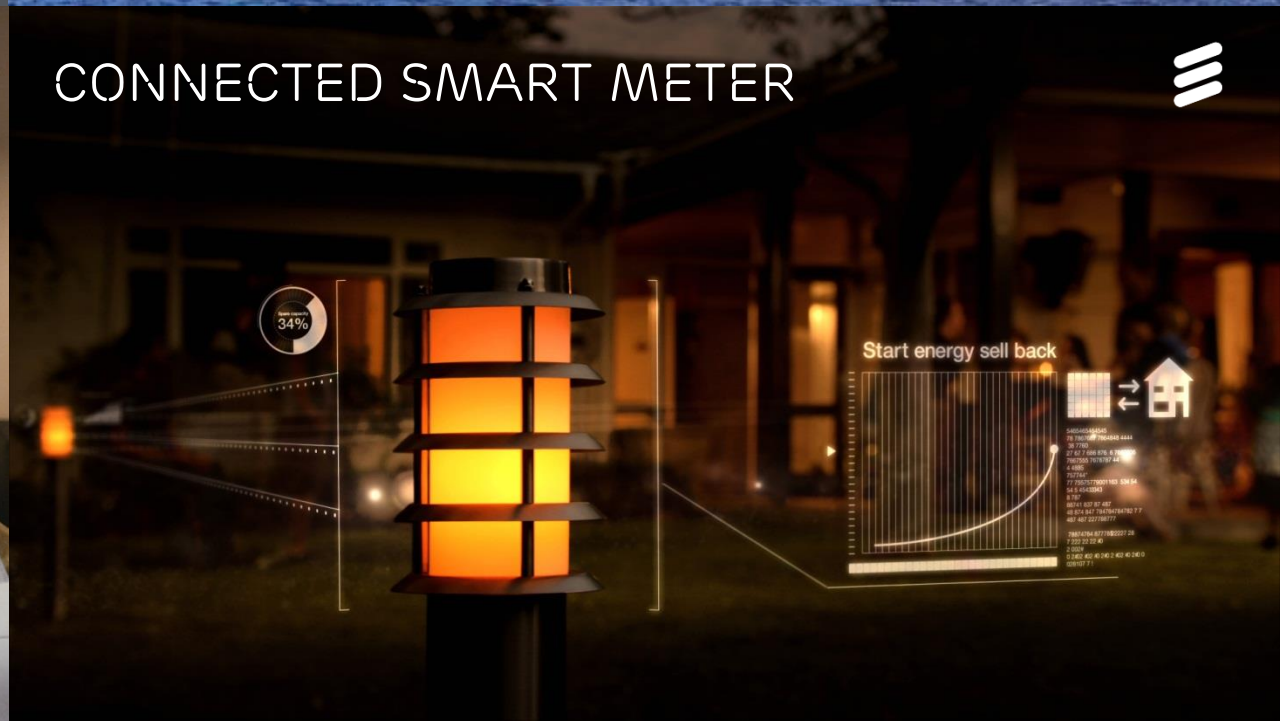
And much more!

New opportunities and flexibility for the unforeseen

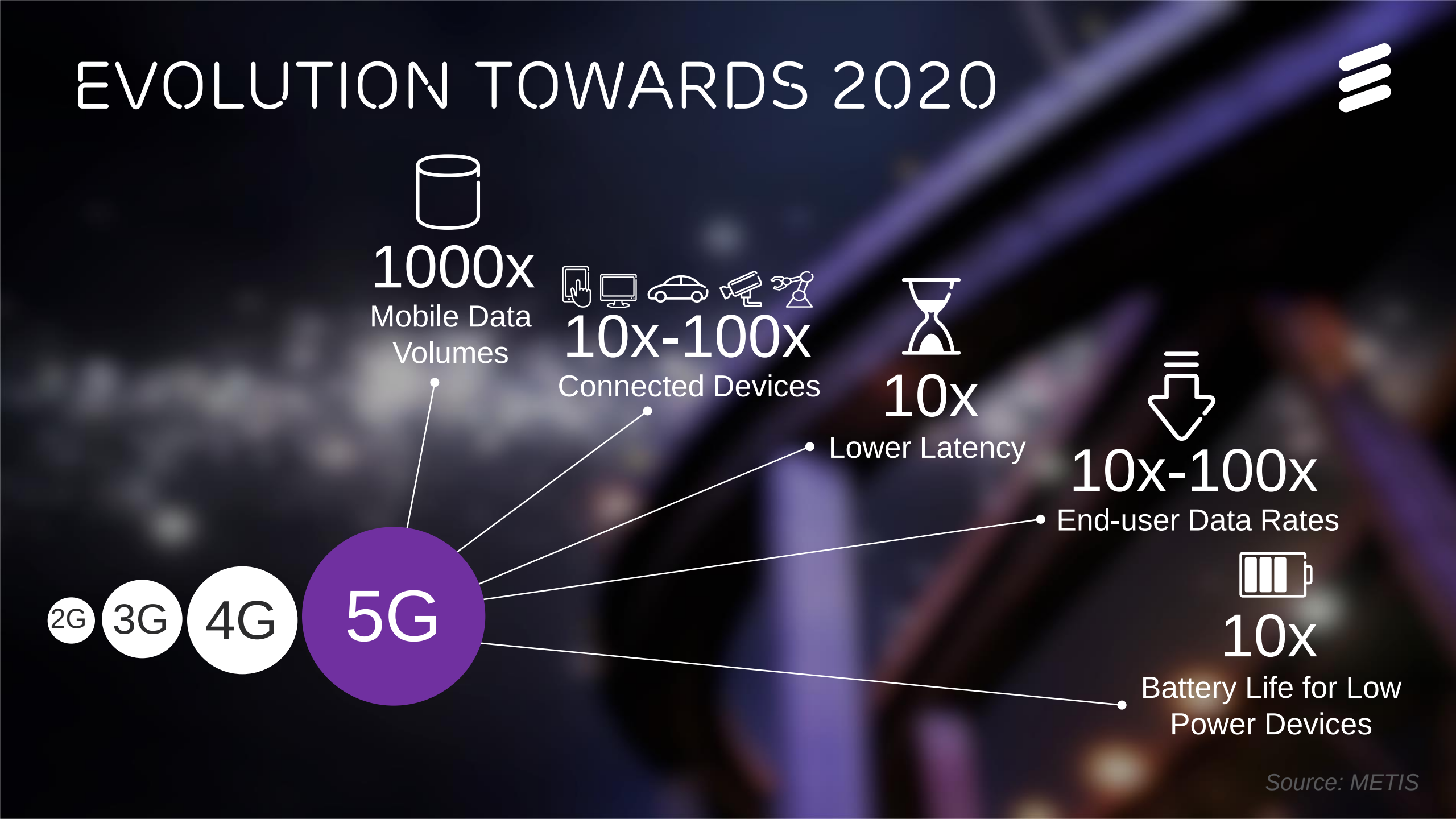

CONNECTED CAR


CONNECTED VESSEL
MAERSK LINE
Monitor and manage vessels
& connected devices onboard


CONNECTED MEDIA


CONNECTED SMART METER
34%
Start energy sell back

EVOLUTION TOWARDS 2020



Source: METIS

DATA RATES

More than 10 Gbps in specific scenarios

Several 100 Mbps available in urban/suburban scenarios

Multi-Mbps connectivity essentially everywhere

COVERAGE

Multi-Mbps connectivity essentially everywhere

LATENCY

Possibility for less than 1 ms end-to-end delay

FLEXIBILITY AND ROBUSTNESS

Flexibility

Open

Mobile

Programmable

Agile

Sustainable

Robustness

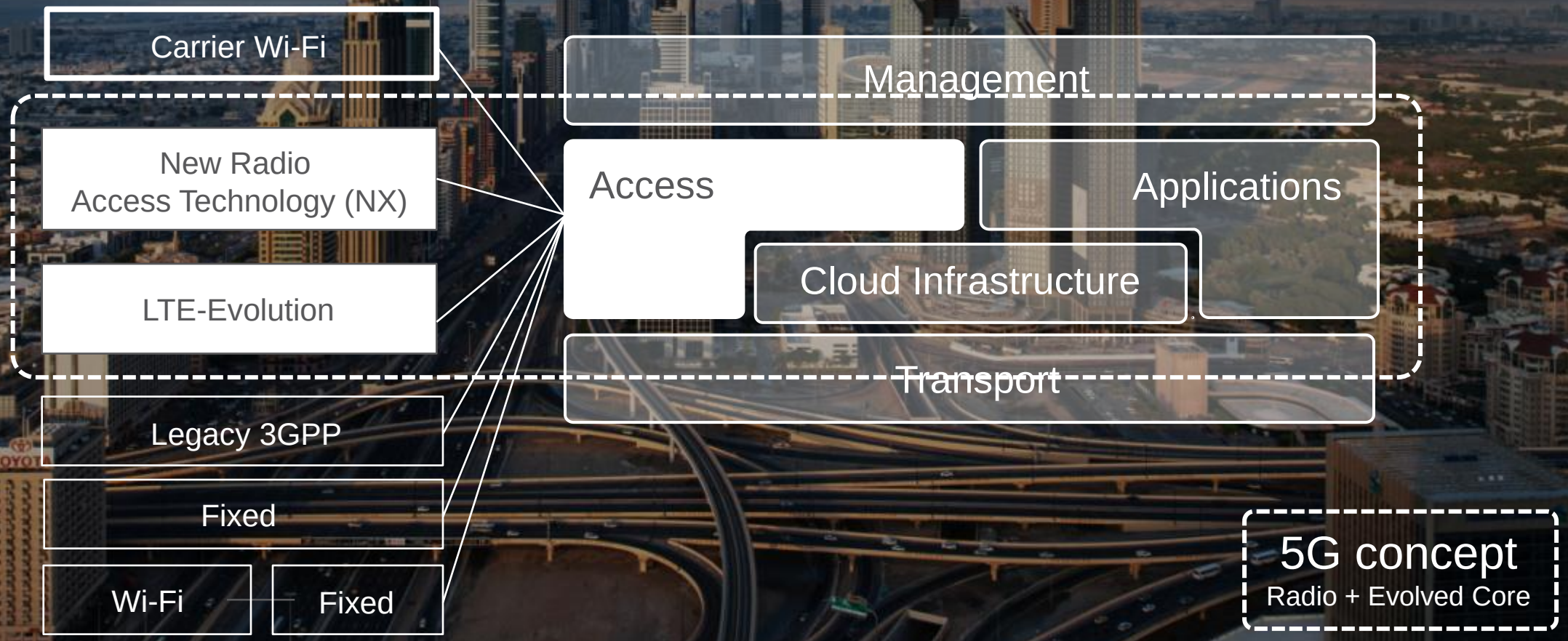
Scalable

Secure

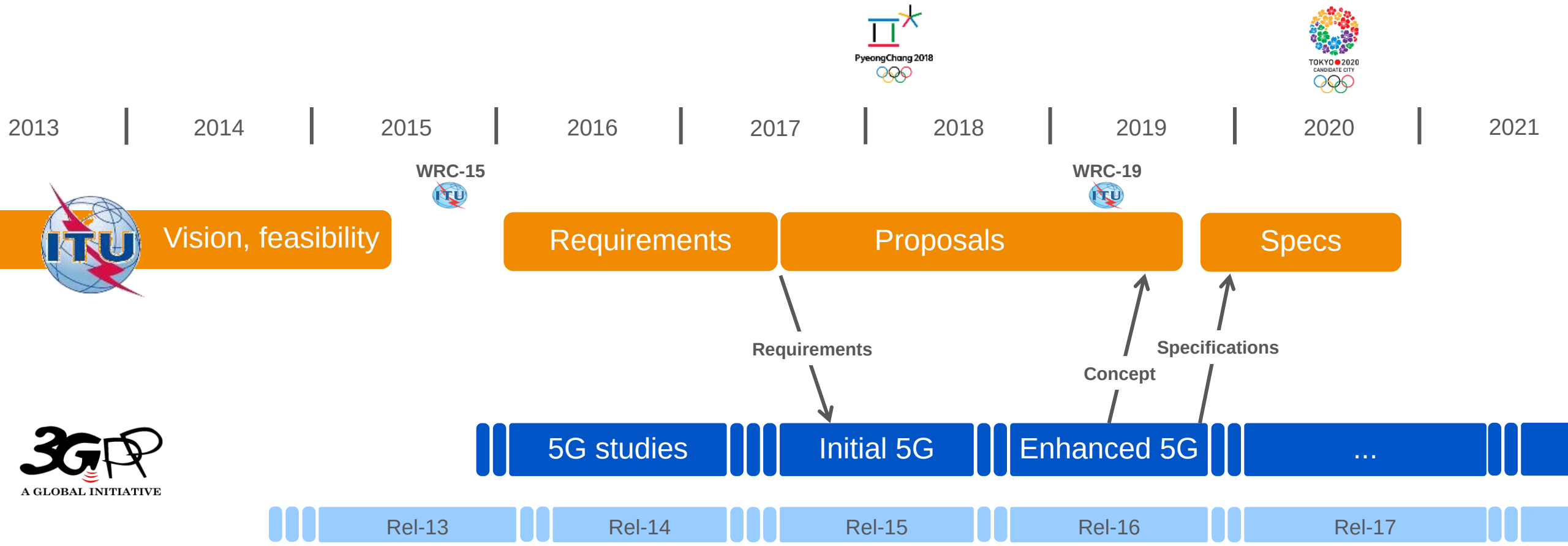
Reliable

Standardized

NETWORK BEYOND 2020



5G TIMEPLAN


PyeongChang 2018
TOKYO 2020
CANDIDATE CITY
2013
2014
2015
2016
2017
2018
2019
2020
2021
WRC-15
WRC-19
ITU
Vision, feasibility
Requirements
Proposals
Specs
Requirements
Concept
Specifications
3GPP
A GLOBAL INITIATIVE
5G studies
Initial 5G
Enhanced 5G
...
Rel-13
Rel-14
Rel-15
Rel-16
Rel-17

SUMMARY

- 5G systems enable both mobile broadband evolution and new use cases
- 5G systems based on both evolution of exising technologies and new technology
- First commercial systems expected ~2020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