



ERICSSON

HOW TO ENABLE CHANGE-MAKERS IN THE NETWORKED SOCIETY

5G

BUILDING 5G



One Network –
Multiple Industries

Industry Journey

Technology Evolution

Platform for 50 Billion
Open Innovation

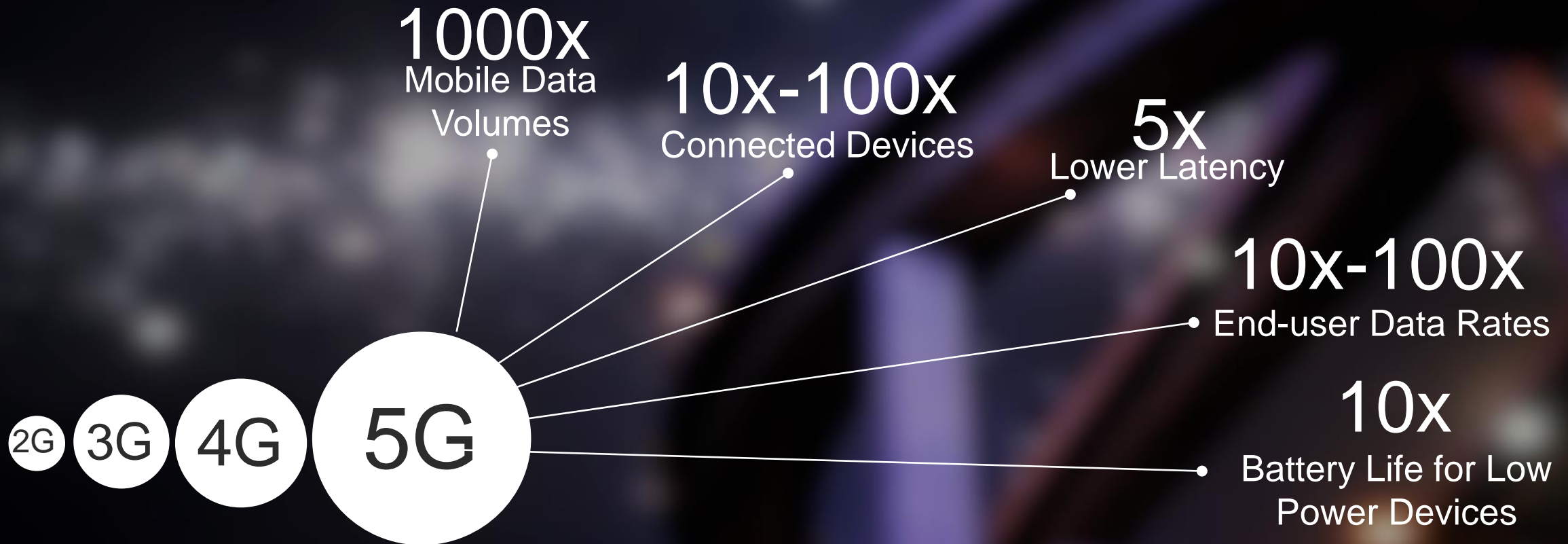
Global developments
Global standard

Milestones every year
Research & Development
5G System View

ONE NETWORK – MULTIPLE INDUSTRIES



EVOLUTION TOWARDS 2020



31

↓

07:09

☰

Ping

⋮

globo.com.br

PING

Ping globo.com.br

186.192.90.5

ICMP

From redirect.globo.com

5 ms

Sequence 1, size 64 bytes, ttl 250

From redirect.globo.com

6 ms

Sequence 2, size 64 bytes, ttl 250

From redirect.globo.com

6 ms

Sequence 3, size 64 bytes, ttl 250

Ping statistics:

3 transmitted, 3 received, 0% packet loss, time 3318 ms

Time statistics:

Min 5 \ avg 5 \ max 6 \ mdev 1 ms

Melhor Preço Para Viajar Baixe Já o App, é Grátis

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5

31

↓

07:10

☰

Ping

⋮

globo.com.br

PING

Ping globo.com.br

186.192.90.5

ICMP

From 186-192-90-5.ptr.globo.com

100 ms

Sequence 1, size 64 bytes, ttl 249

From 186-192-90-5.ptr.globo.com

96 ms

Sequence 2, size 64 bytes, ttl 249

From 186-192-90-5.ptr.globo.com

190 ms

Sequence 3, size 64 bytes, ttl 249

Ping statistics:

3 transmitted, 3 received, 0% packet loss, time 3696 ms

Time statistics:

Min 96 \ avg 128 \ max 190 \ mdev 53.2 ms

Melhor Preço Para Viajar Baixe Já o App, é Grátis

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31

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07:17

SPEEDTEST™

☰

PING

29 ms

SHARE

DOWNLOAD

31.57 Mbps

UPLOAD

10.31 Mbps

Chat with People Near You

Don't pay for dating apps. Join MeetMe for free!

Install

No thanks

SPEEDTEST

RESULTS

SETTINGS

ABOUT

◀

○

◻

WIDE RANGE OF REQUIREMENTS



MASSIVE COMMUNICATIONS



SMART BUILDING



LOGISTICS, TRACKING AND FLEET MANAGEMENT



SMART METER



SMART AGRICULTURE



CAPILLARY NETWORKS

CRITICAL COMMUNICATIONS



REMOTE HEALTH CARE



TRAFFIC SAFETY & CONTROL



REMOTE MANUFACTURING, TRAINING, SURGERY

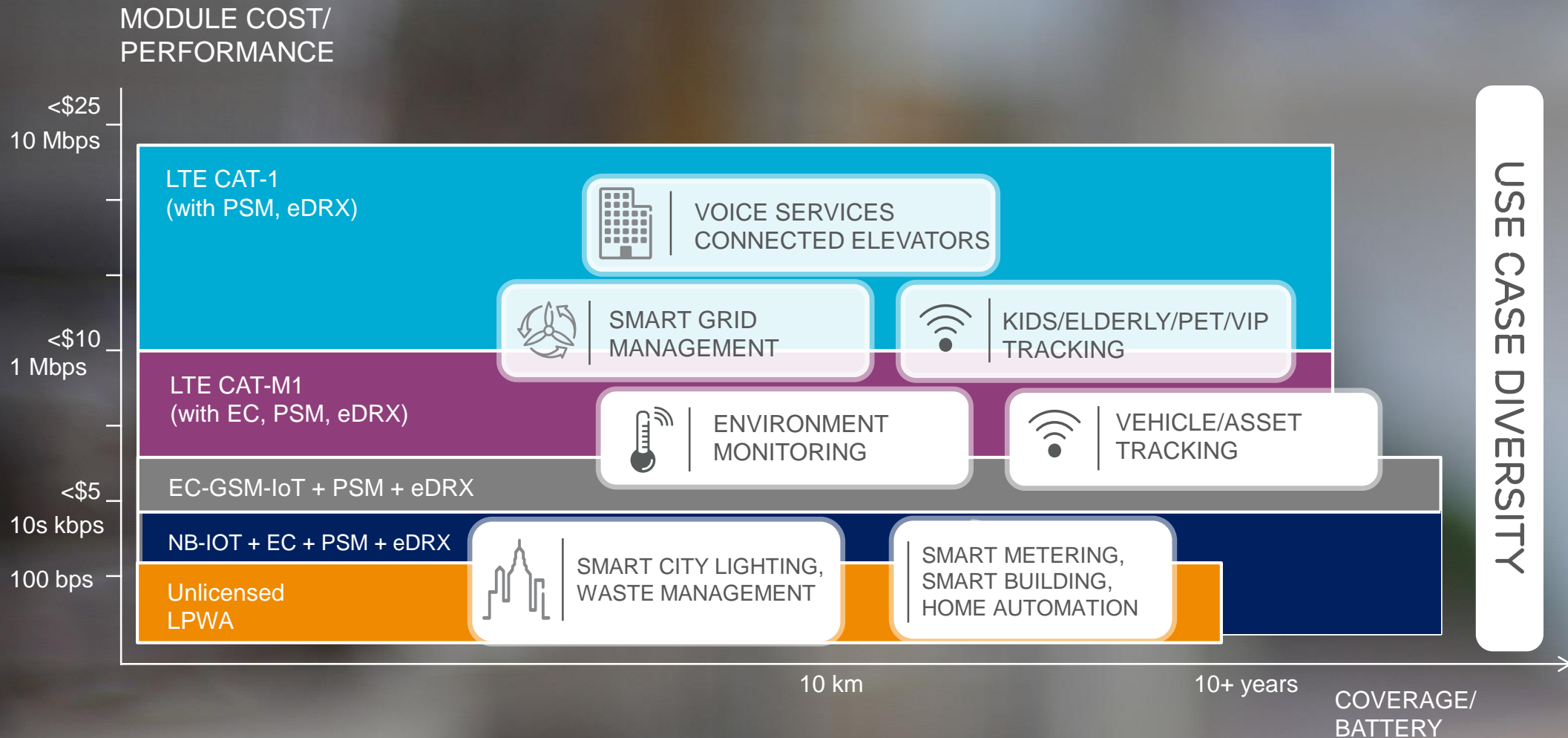


INDUSTRIAL APPLICATION & CONTROL

LOW COST, LOW ENERGY
SMALL DATA VOLUMES
MASSIVE NUMBERS

ULTRA RELIABLE
VERY LOW LATENCY
VERY HIGH AVAILABILITY

CELLULAR SERVES A DIVERSITY OF IOT USE CASES



MULTIPLE DIMENSIONS FOR DEVELOPMENT



Multi Layer

Multi Standard

Multi Band

5G

USE CASES



BROADBAND EXPERIENCE
EVERYWHERE, ANYTIME



SMART VEHICLES,
TRANSPORT & INFRASTRUCTURE



INTERACTION
HUMAN-IOT



CRITICAL CONTROL
OF REMOTE DEVICES



MEDIA
EVERYWHERE



CONNECTED CAR



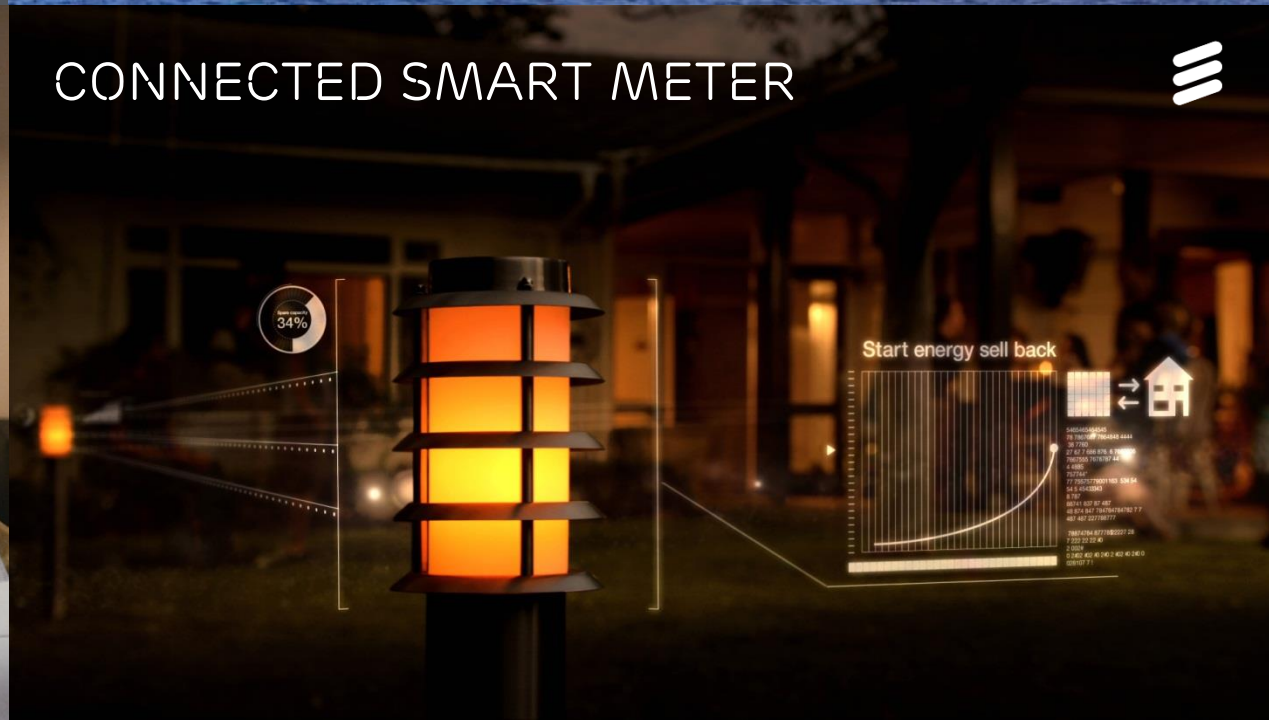
CONNECTED VESSEL



CONNECTED MEDIA



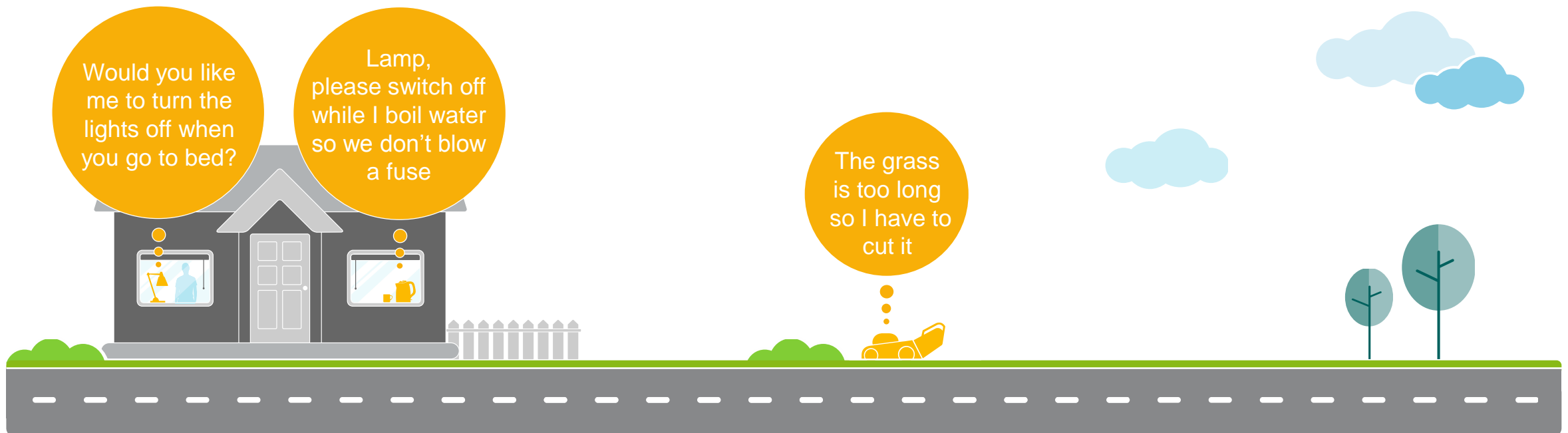
CONNECTED SMART METER



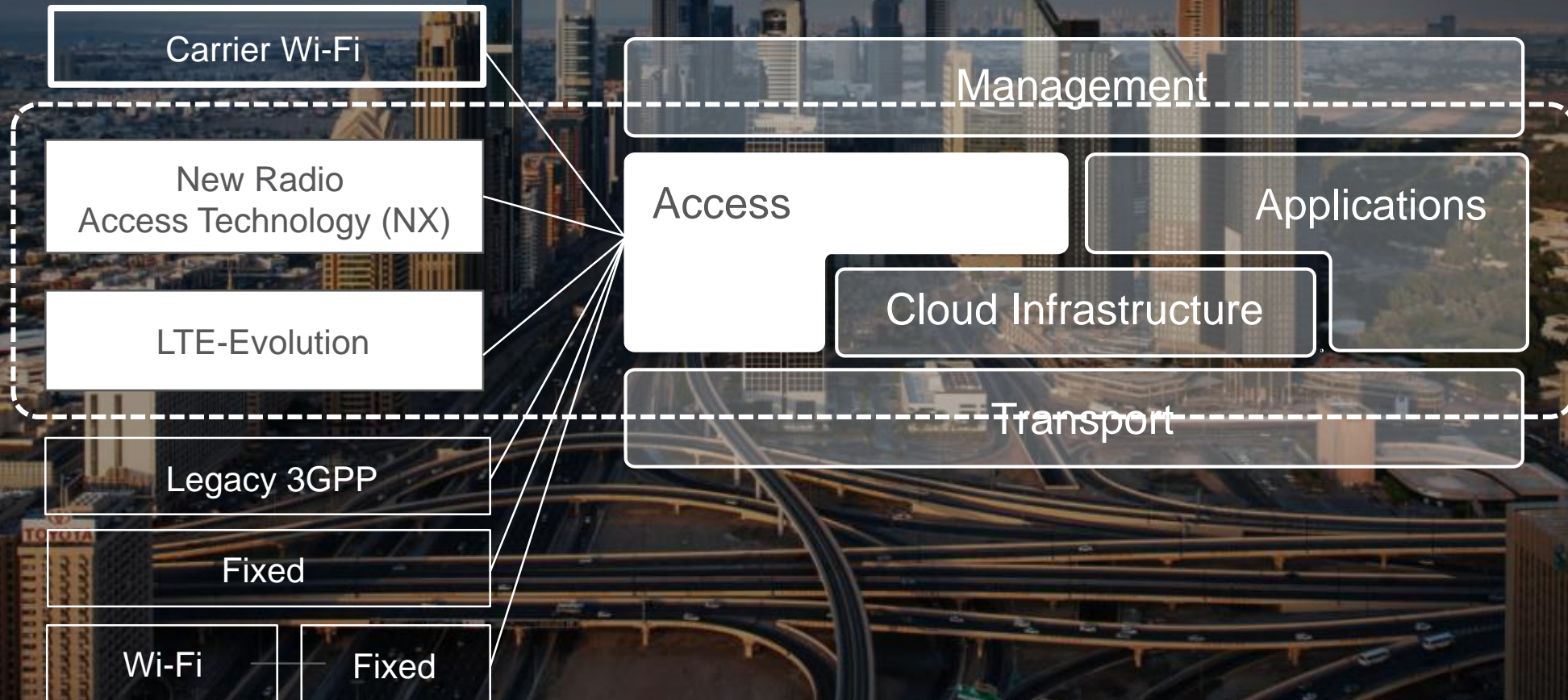
3. AI ENDS THE SCREEN AGE



- › Artificial intelligence will allow consumers to **interact with objects** around them without having to use a smartphone screen
- › Half of smartphone owners think they will be able **to talk to household appliances**



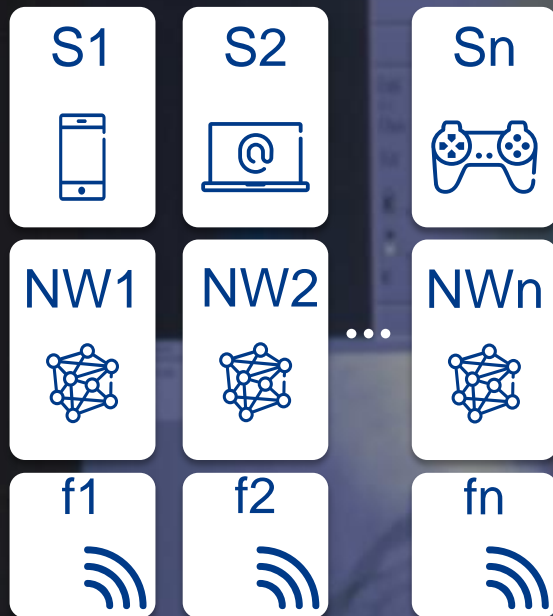
NETWORK BEYOND 2020



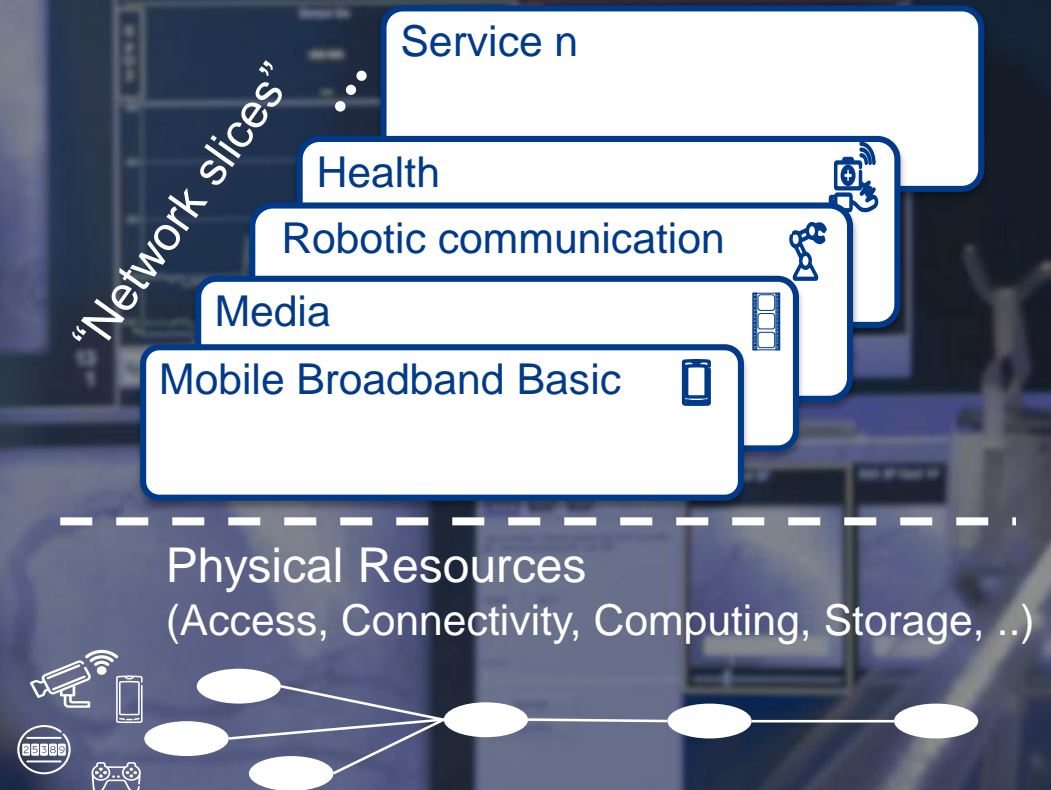
ONE NETWORK – MULTIPLE INDUSTRIES



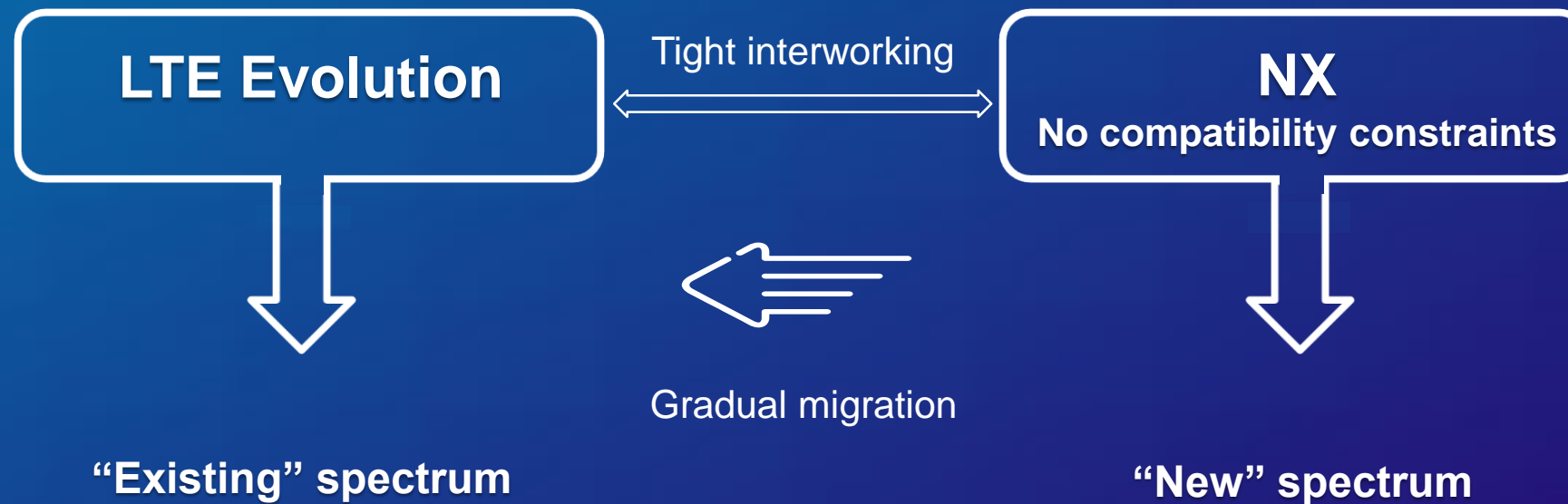
From dedicated physical networks and resources for different applications...



...to a “network factory” where new networks and architectures are “manufactured by software”



5G RADIO ACCESS ~2020



5G STANDARDIZATION FORUMS



Platform/components



Main forums



A GLOBAL INITIATIVE

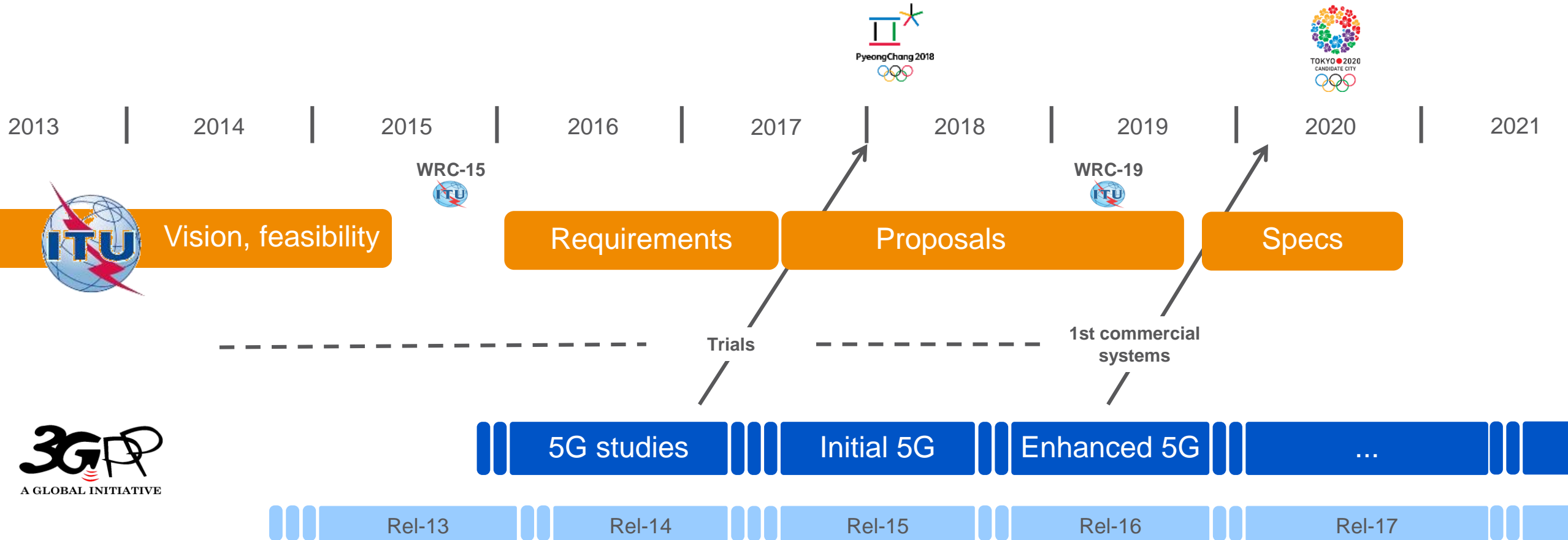


Supporting activities



3GPP = 3rd Generation Partnership Project
ITU = International Telecommunications Union
NGMN = Next Generation Mobile Networks
GSMA = The GSM Association
IEEE = Institute of Electrical and Electronics Engineers
IETF = Internet Engineering Task Force
MEF = Metro Ethernet Forum
TM Forum = TeleManagement Forum
OPNFV = Open Platform for NFV Project

5G TIMEPLAN





ERICSSON