5G-ENABLING INDUSTRY AND SOCIETY TRANSFORMATION

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ENABLING INDUSTRY AND SOCIETY TRANSFORMATION

5G

HYPER CONNECTED
CUSTOMER EXPERIENCE

NEW BUSINESS OPPORTUNITIES
AND BUSINESS MODELS

AGILE & LEAN NETWORK
OPERATIONS

TRENDS AND OUTLOOK

INCREASINGLY DIVERSE PLETHORA OF APPLICATIONS

Massive amounts of large-scale and niche applications, transforming industries and entire societies

SERVICE AGILITY

Quick creation, deployment and easy operation of new services

ULTRA-HIGH PERFORMANCE AT LOW COST

Tough and diverse performance requirements
How to deliver at competitive cost?

5G - A platform that enables quick development and easy operation of networked society applications, with the required performance

5G-THE NETWORKED SOCIETY PLATFORM

CONVERGED INFRASTRUCTURE

Hiding heterogeneity and complexity

Combined radio, transport and compute

AUTOMATED & PROGRAMMABLE

Bootstrapping a slice within minutes

Programmability at all layers

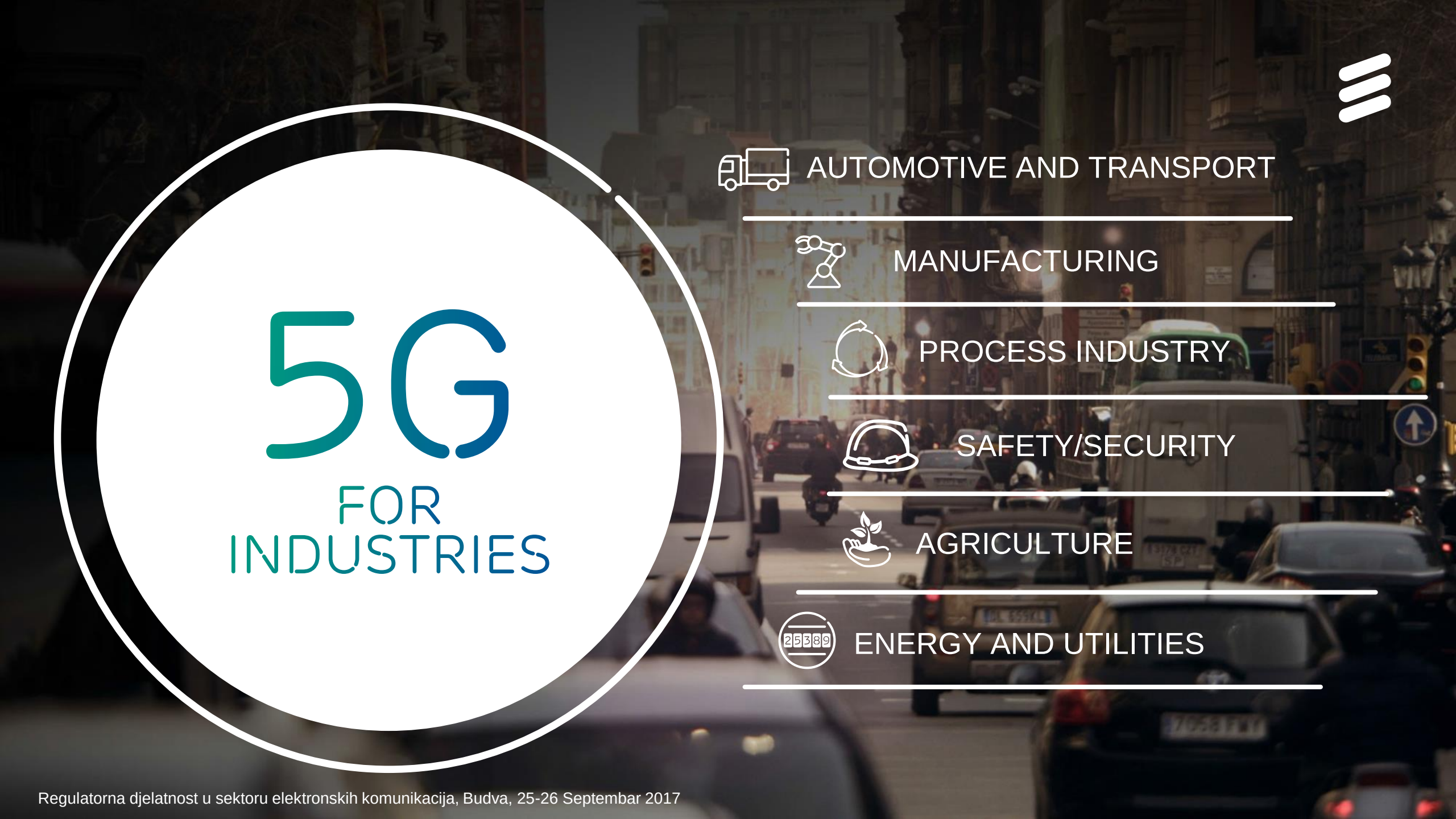
5G

INTEGRATED MACHINE INTELLIGENCE

Powering network and external applications, within low-latency control loops

PERFORMANCE FEATURES THROUGHOUT THE SYSTEM

Supporting highly diverse and demanding application requirements


5G
FOR
INDUSTRIES
AUTOMOTIVE AND TRANSPORT
MANUFACTURING
PROCESS INDUSTRY
SAFETY/SECURITY
AGRICULTURE
25389
ENERGY AND UTILITIES

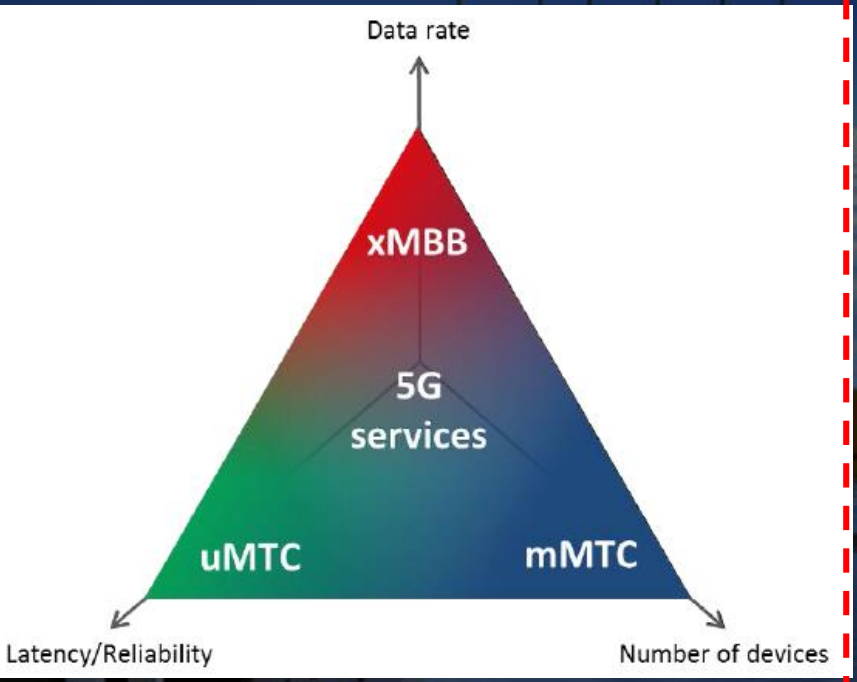
INDUSTRIAL CHALLENGES

› Examples of industrial requirements on 5G
  - Ultra reliable communication
  - Low latency
  - Ease of deployment
  - Security and resilience

Coverage

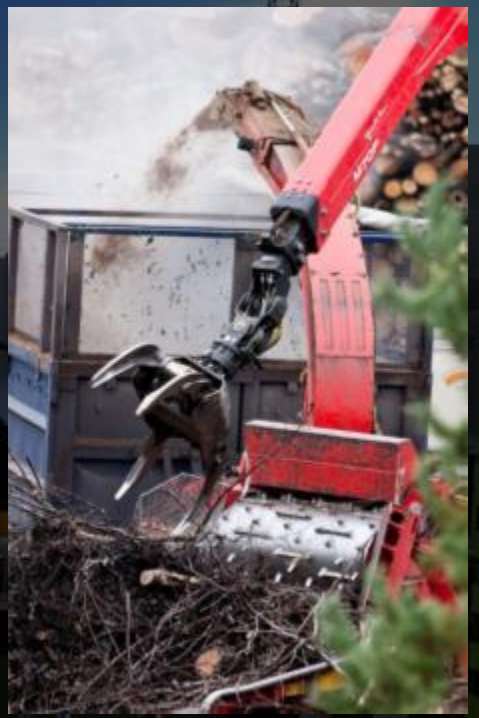
› Examples of mission critical industrial use cases
  - Factory and process automation
  - Remote operation of equipment
  - Smart grid communication

5G USE CASES



Broadband experience everywhere anytime

Massive Machine Type Communication



Critical Machine Type Communication

5G USE CASES

- BROADBAND AND MEDIA EVERYWHERE
- SMART VEHICLES, TRANSPORT
- CRITICAL SERVICES AND INFRASTRUCTURE CONTROL
- CRITICAL CONTROL OF REMOTE DEVICES
- HUMAN MACHINE INTERACTION
- SENSOR NETWORKS

5G ACCESS COMPLEXITIES

Use Case Technical Requirements Vary Widely

5G Use Cases

- Sensors Everywhere
- Broadband and Media Everywhere
- Smart Vehicles, Transport
- Infrastructure, Monitor and Control
- Critical Control of Remote Devices
- Interaction Human-IoT

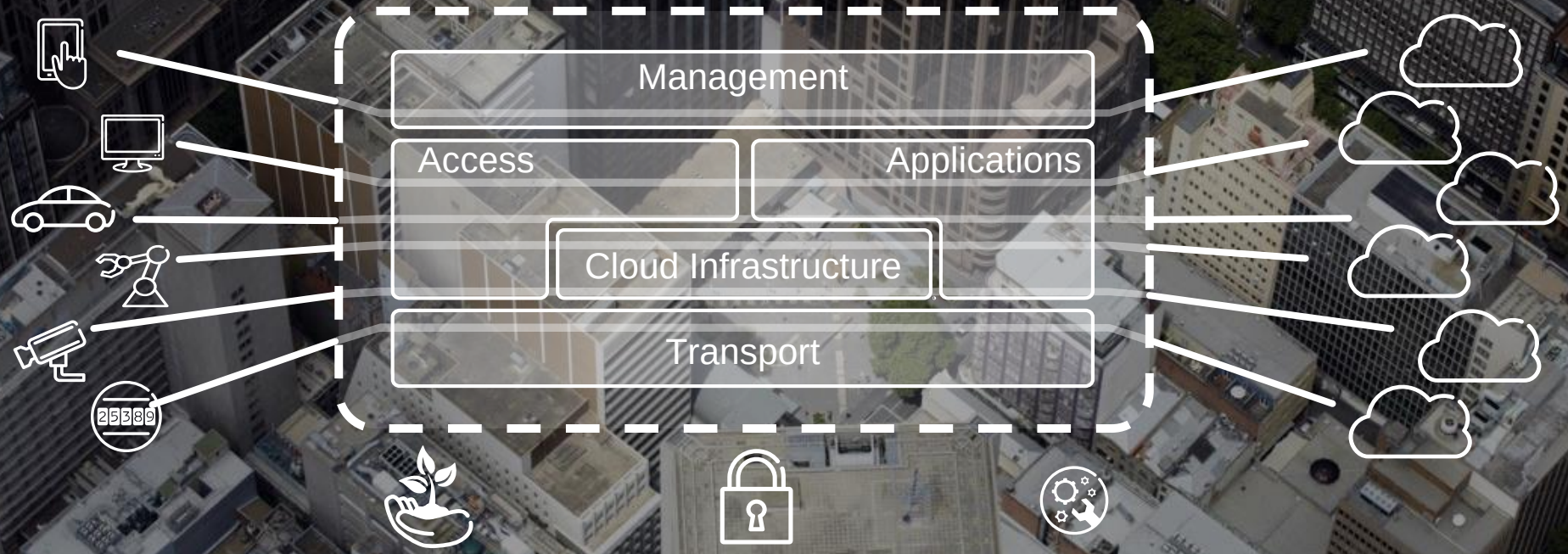
5G Technical Requirements

- High Density
- High Capacity
- Low Device Energy Consumption
- Good Cell Edge Performance
- Reduced Signaling
- Low Latency
- Access to New Spectrum
- Enhanced Radio Connection
- High Availability
- Quality Uplink

TECHNICAL EXPECTATIONS OF 5G

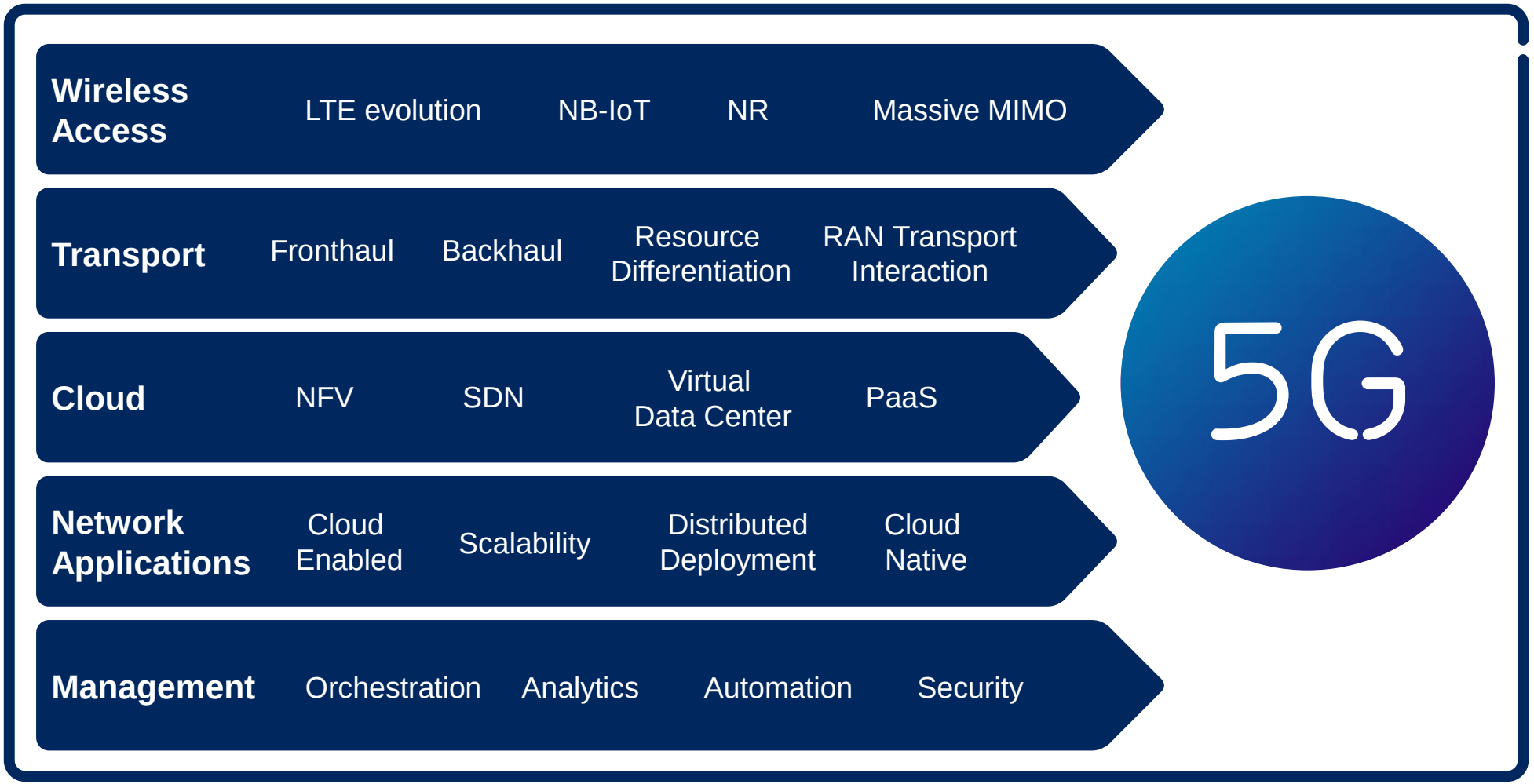
Network slicing

One common network platform



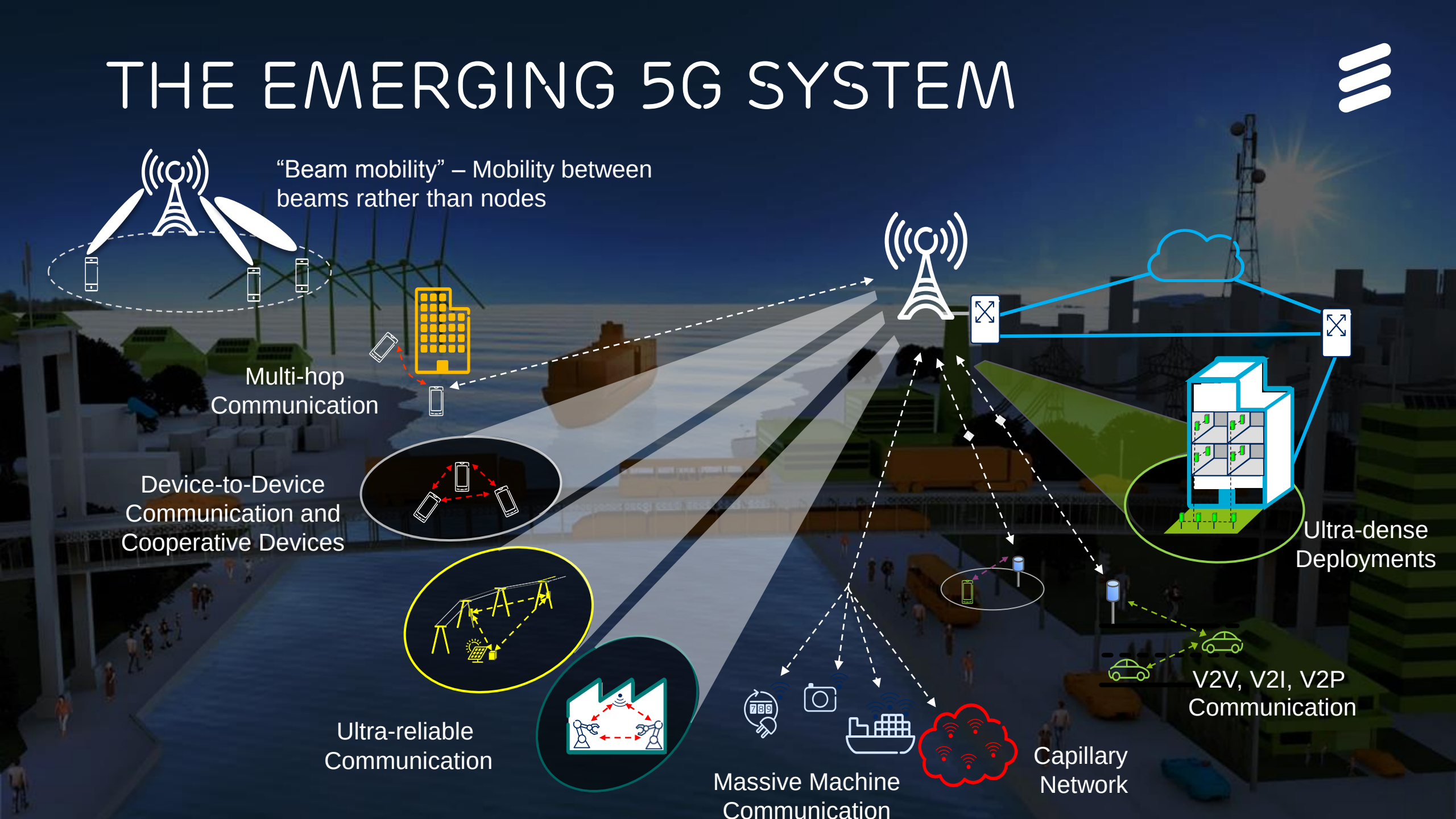
- 20 Gbps — END-USER DATA RATES
- 1000x — MOBILE DATA VOLUMES
- ~1ms — LOWER LATENCY
- 1M/km² — MORE DEVICES
- Cost — DEVICE COST REDUCTION
- 10+ — YEARS BATTERY LIFE
- +20dB — BETTER COVERAGE

5G MAIN COMPONENTS AND THEIR EVOLUTION



Source: Ericsson

THE EMERGING 5G SYSTEM



5G: THE ROAD AHEAD

ERICSSON ACCELERATING 5G

First movers are starting 2018

Working with
leading markets
5G Use cases possible now
5G Core & Radio Trials in 2017

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SIGNED 5G PARTNER AGREEMENTS

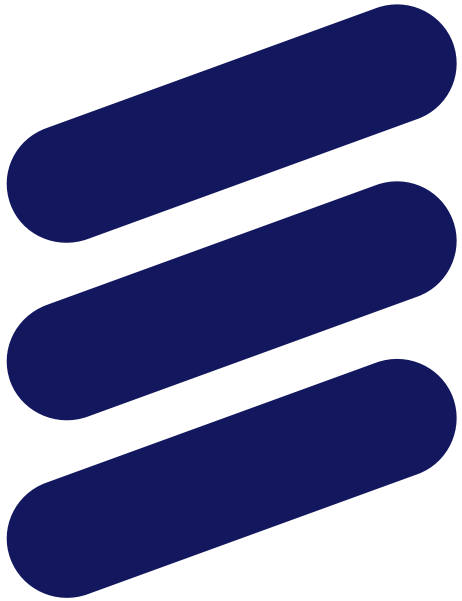
*As of Dec 2016

REGULATORY CHALLENGES

- Market access
- Vertical integration
- Dedicated spectrum assignments
- Network sharing
- Technology neutrality
- Spectrum sharing
- Coverage obligation

- Open Internet
- Indoor access
- Serving vertical industries
- Serving PPDR as an industry vertical
- User data
- Data protection and privacy

Source: CERRE, 5G Report final



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