

ERICSSON UPDATE ON IOT AND 5G GLOBAL DEPLOYMENT

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IOT & DIGITALIZATION

EVOLVING WITH WIDE RANGE OF USE CASES AND REQUIREMENTS



Massive MTC



SMART
BUILDING



LOGISTICS, TRACKING AND FLEET
MANAGEMENT



SMART
METER



SMART
AGRICULTURE



CAPILLARY NETWORKS

M2M Today

- Electricity meters
- Connected cars
- POS terminals
- ETC



Critical MTC



REMOTE HEALTH
CARE



TRAFFIC SAFETY &
CONTROL



REMOTE
MANUFACTURING,
TRAINING,
SURGERY



INDUSTRIAL APPLICATION
& CONTROL

Massive IoT Access

LOW COST, LOW ENERGY
SMALL DATA VOLUMES
MASSIVE NUMBERS

- > 400 million cellular M2M connections
- Majority over GPRS

4G Evolution & 5G

ULTRA RELIABLE
EXTREM LOW LATENCY
VERY HIGH AVAILABILITY

INDUSTRY DIGITALIZATION

HIGH EXPECTATIONS AS EVERY INDUSTRY GETS CONNECTED



5G
FOR INDUSTRIES



AUTOMOTIVE AND TRANSPORT



MANUFACTURING



PROCESS INDUSTRY



SAFETY/SECURITY



AGRICULTURE



ENERGY AND UTILITIES

10Gbps peak data rate

10Mbps-100Mbps everywhere

10x-1000x data volume

1ms latency

10 years battery lifetime

10x-100x connected devices

Wide range of new opportunities, use cases, requirements, and stake holders

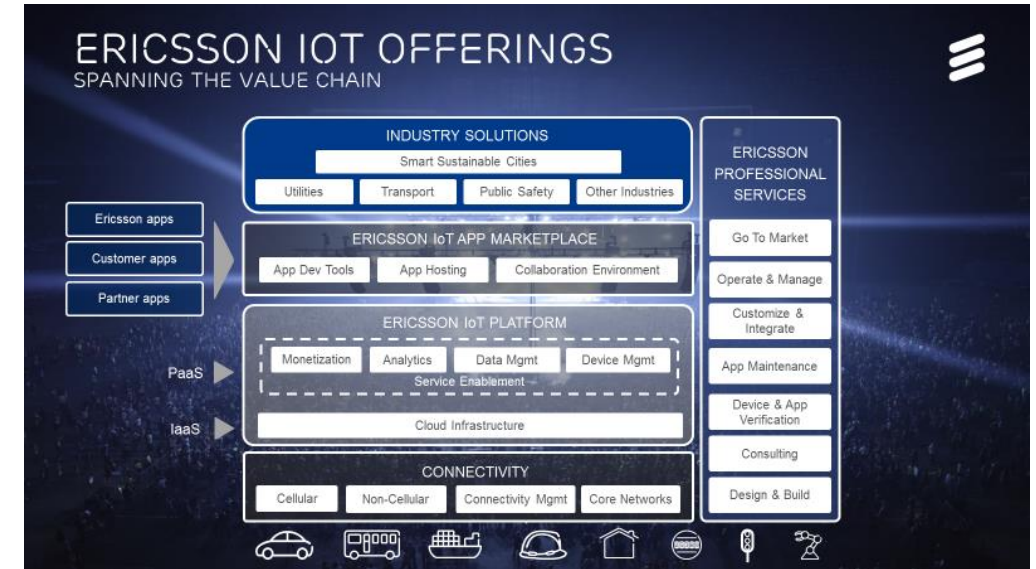
FOCUSED STRATEGY

IoT Innovation and Scale

- › IoT is at the heart of Ericsson's new business strategy
- › Ericsson brings unrivaled E2E capabilities and industry insights
- › Ericsson IoT Accelerator as the centerpiece of innovation, ecosystem collaboration and global partnerships

5G Technology Leadership and Ecosystem

- › Market leader - over 30 MoUs
- › Technical leadership - multiple world's firsts
- › Extensive industry ecosystem



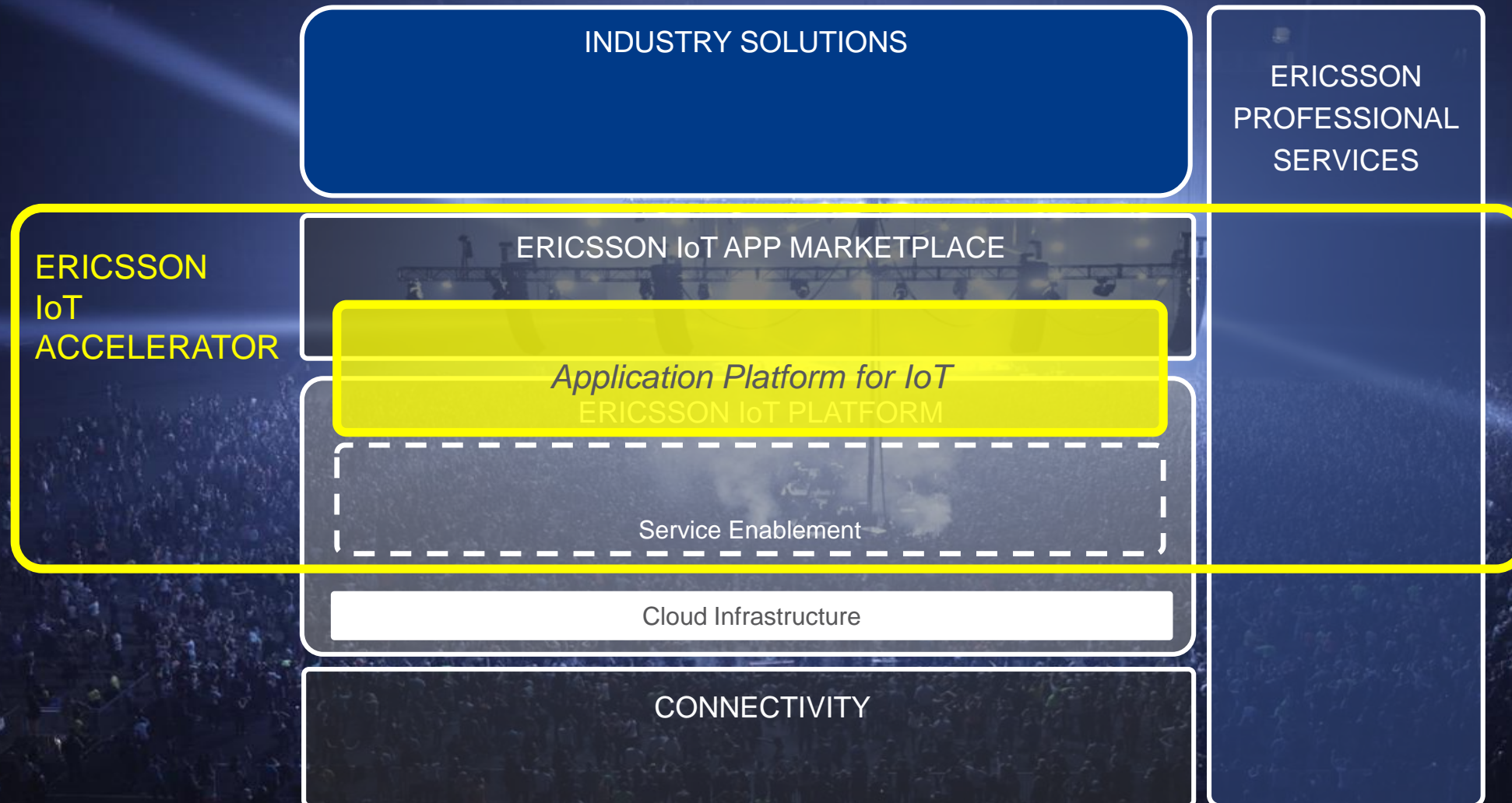
ERICSSON IOT OFFERINGS

ADDRESS THE VALUE CHAIN E2E



ERICSSON IOT OFFERINGS

ADDRESSING THE VALUE CHAIN E2E



ERICSSON APPLICATION PLATFORM FOR IOT



THINGS



DATA



APPLICATIONS

Deployment
app

Admin
portal



SDK

Soft
gateway



MANAGE
SENSORS,
DEVICES,
GATEWAYS



COLLECT,
STRUCTURE,
TRANSFORM,
CALCULATE,
DATA



MANAGE
RULES AND
DATA TO/FROM
APPLICATIONS
AND THINGS

SDK

Odata



- Registration
- Collect data
- Device management

- Visualization tools
- Mobile & Web apps
- 3rd party integration



CLOUDS



5G FOR INDUSTRIES

EXAMPLES



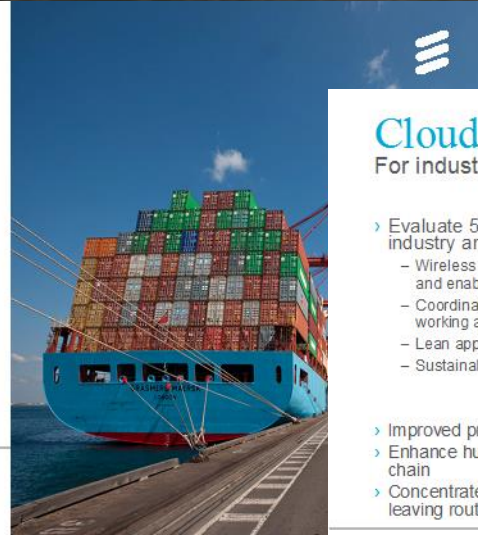
5G for Port Operations

Subtitle

- › Evaluate 5G technology in manufacturing industry
 - Wireless communication at high bandwidth and/or low latency
 - Intelligent Transport Systems (ITS)
 - Mission critical clouds (MCC)
 - Data analytics
 - Security and safety



› Enhance port operations



Cloud robotics

For industry and agriculture

- › Evaluate 5G technology with robots in industry and agriculture
 - Wireless connectivity (LTE/5G) to minimize wires and enable robot mobility in plant an in field
 - Coordination in cloud of operations between working areas/ground and robots
 - Lean approach to manufacturing and agriculture
 - Sustainability



- › Improved production/farming efficiency
- › Enhance human safety in production/farming chain
- › Concentrate human work to added value tasks, leaving routine to robots



Partners:



5GEM

5G-ENABLED WORLD CLASS MANUFACTURING

- Evaluate 5G technology in manufacturing industry
 - Wireless factory communication
 - Industrial Internet of Things (IIoT)
 - Mission critical clouds (MCC)
 - Data analytics



- Improved production efficiency
- Increased flexibility
- Excellent traceability



PIMM

PILOT FOR INDUSTRIAL MOBILE COMMUNICATION IN MINING

- Evaluate mobile communication infrastructure in an industrial context
- Consider strict requirements on safety and robustness in underground mining



- Improved Safety
- Increased productivity
- Industrial 5G requirements
- Understanding new eco system, business models, etc.



Photo: Boliden

ABB

REMOTE OPERATION OF ROBOTS

- Evaluate potential of mobile communication for industrial use
- Consider requirements from mission critical operation



- Industrial 5G requirements
- Transformation benefits
 - Central utilization of expertise
 - Minimize personnel in hazardous environments
 - Increased productivity



Photo: ABB





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