



ERICSSON

ONE NETWORK FOR A MILLION NEEDS



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FUTURE USE CASES



5G USE CASES



BROADBAND EXPERIENCE
EVERYWHERE, ANYTIME



MEDIA
EVERYWHERE



SMART VEHICLES,
TRANSPORT & INFRASTRUCTURE



CRITICAL CONTROL
OF REMOTE DEVICES



INTERACTION
HUMAN-IOT





 \$1.3T

IoT INVESTMENT

2019

2021

 \$11.1T

IoT ECONOMIC IMPACT

2025

 28B

CONNECTED DEVICES

13 BILLION

MOBILE PHONES, PC'S, LAPTOPS, TABLETS

15 BILLION IoT DEVICES




Source:
IDC
Machina Research
Ericsson
McKinsey
Ericsson Mobility Report, Nov 2015


5G – CLASSES OF USE CASES




MASSIVE MTC




SMART BUILDING




LOGISTICS, TRACKING AND FLEET MANAGEMENT



SMART METER




SMART AGRICULTURE




CAPILLARY NETWORKS


CRITICAL MTC



TRAFFIC SAFETY & CONTROL



INDUSTRIAL APPLICATION & CONTROL

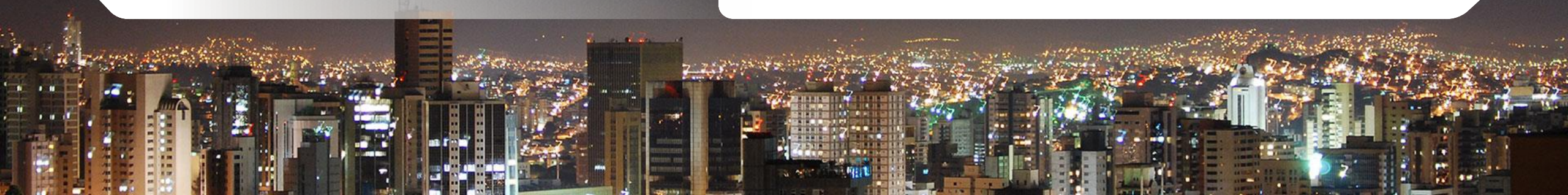


REMOTE MANUFACTURING, TRAINING, SURGERY

LOW COST, LOW ENERGY
SMALL DATA VOLUMES
MASSIVE NUMBERS

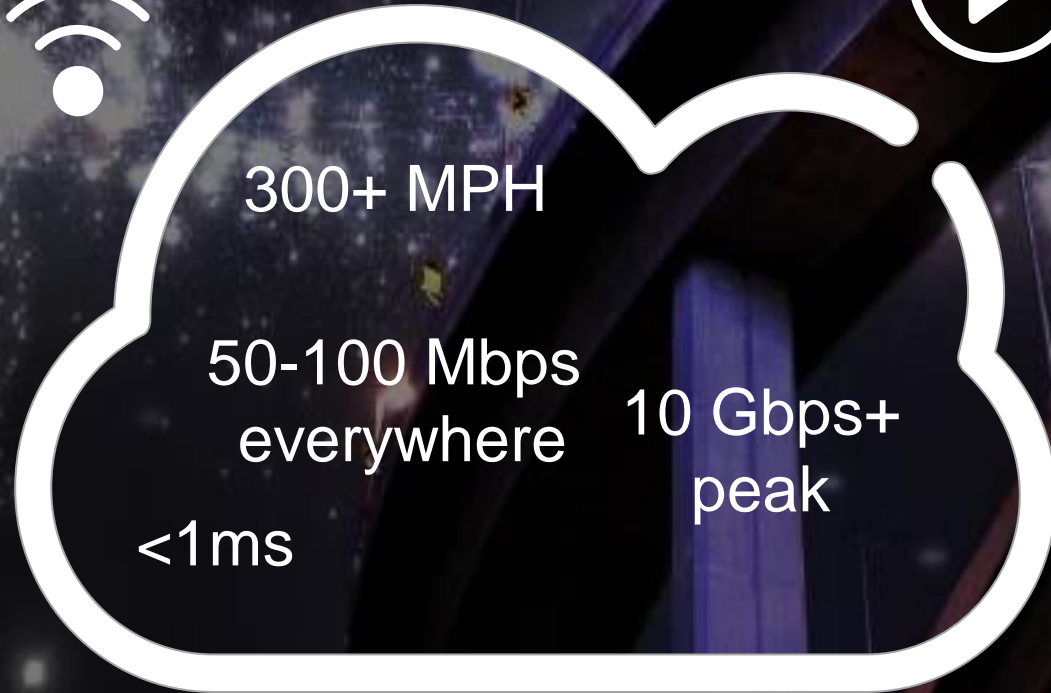
NOW

ULTRA RELIABLE
VERY LOW LATENCY
VERY HIGH AVAILABILITY



5G PERFORMANCE REQUIREMENTS

Enhanced MBB



Ultra-Reliable and Low Latency Communications

Massive Machine Type Communications

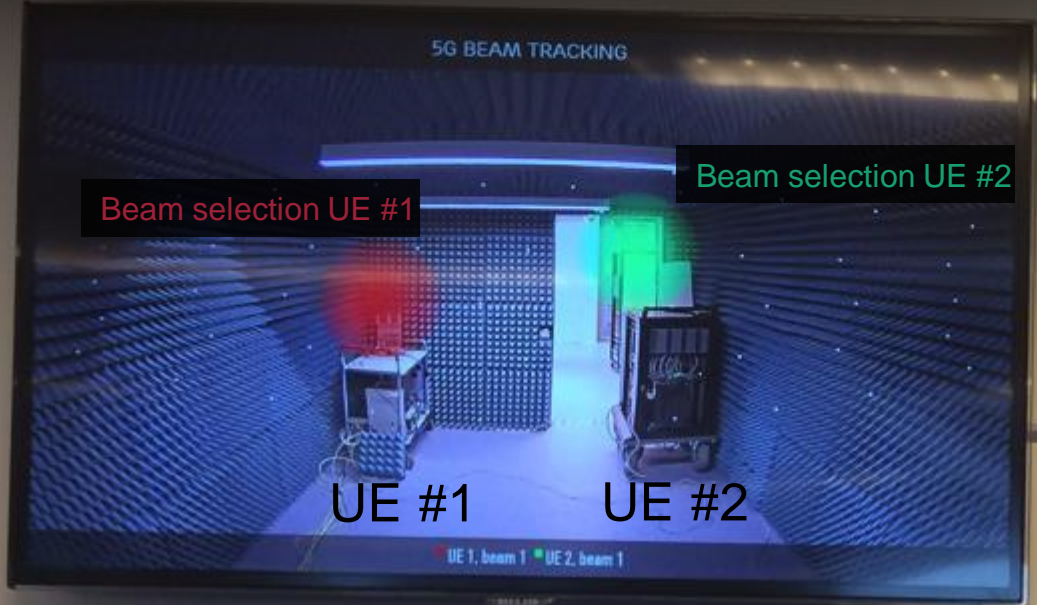
< 5ms e2e delay
99.999% reliability

>10 yrs battery lifetime
>80% cost reduction

Extreme Availability and Reliability

Scalability and flexibility

25 GBIT/S MU-MIMO



5G RADIO TESTBED

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25.2 GBIT/S

DOWNLINK THROUGHPUT



ONE NETWORK – MULTIPLE INDUSTRIES



A common network platform with
dynamic and secure Network Slices

ENGAGEMENT WITH INDUSTRY & SOCIETY



5G for Sweden

- › 5G program with industry and academic partners
- › Apply ICT in industrial processes, products & services
- › Pilot for industrial mobile communication in mining

5G for Europe

- › Delivering research, innovation and industrial pilots enabled by 5G
- › Including transport and automotive, IoT, utilities, public safety, public infrastructure and retail
- › 7 countries and 10 institutions

INDUSTRIAL MOBILE COMMUNICATION IN MINING

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



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



Photo: Boliden



JOURNEY TO 5G

› THE JOURNEY HAS STARTED

› 5G IS NOT THE BEGINNING OF THE END, IT IS JUST THE END OF THE BEGINNING !

- › 1 Gbps peak rate
- › App Coverage
- › Small cells / indoor

- › Enhancements for MTC
- › LTE for Vehicular / ITS solutions
- › License Assisted Access
- › NFV & SDN
- › Orchestration, Analytics & CEM
- › Increased data rates

Full IMT-2020
compliance







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