



Arrival of 5G. Risks and opportunities.

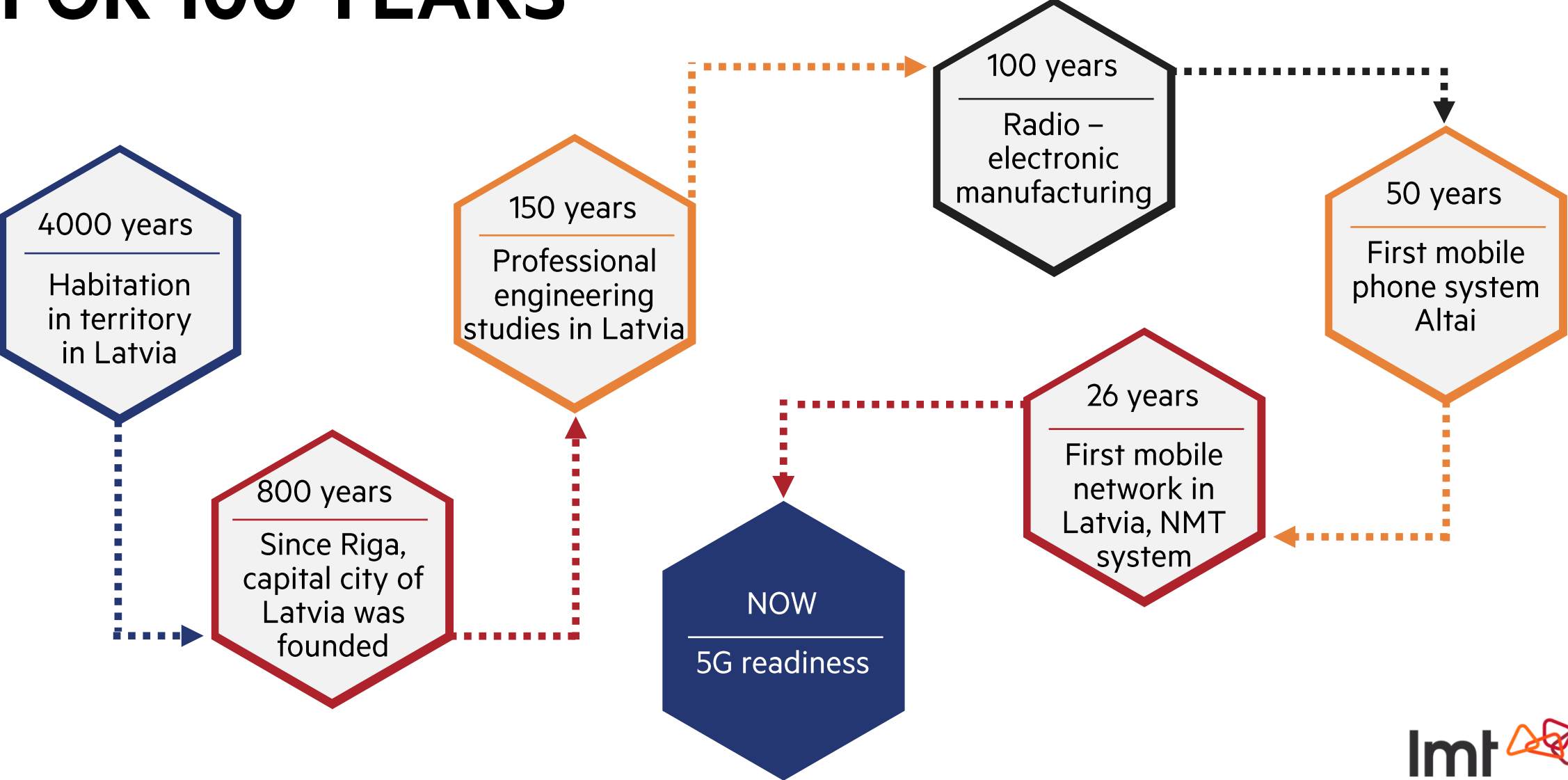
EGONS BUŠS
LMT SECURITY DIRECTOR



A close-up photograph of a person's hands working on a complex electronic device. The device is densely packed with numerous colorful wires (red, yellow, black, blue) and various components. The person's hands are visible, one holding a component and the other near a bundle of wires. The background is dark and out of focus.

TECHNOLOGIES ARE
MATERIALIZED KNOWLEDGE!

SUSTAINED TECHNOLOGY LEGACY FOR 100 YEARS



INDUSTRIAL REVOLUTIONS

1.0

Water and steam power is used to create mechanical production facilities



1800

1784 - First mechanical loom

2.0

Electricity lets us create a division of labor and mass production



1900

1870 - First assembly line

3.0

IT systems automate production lines further



2000

1969 - First programmable logic controller

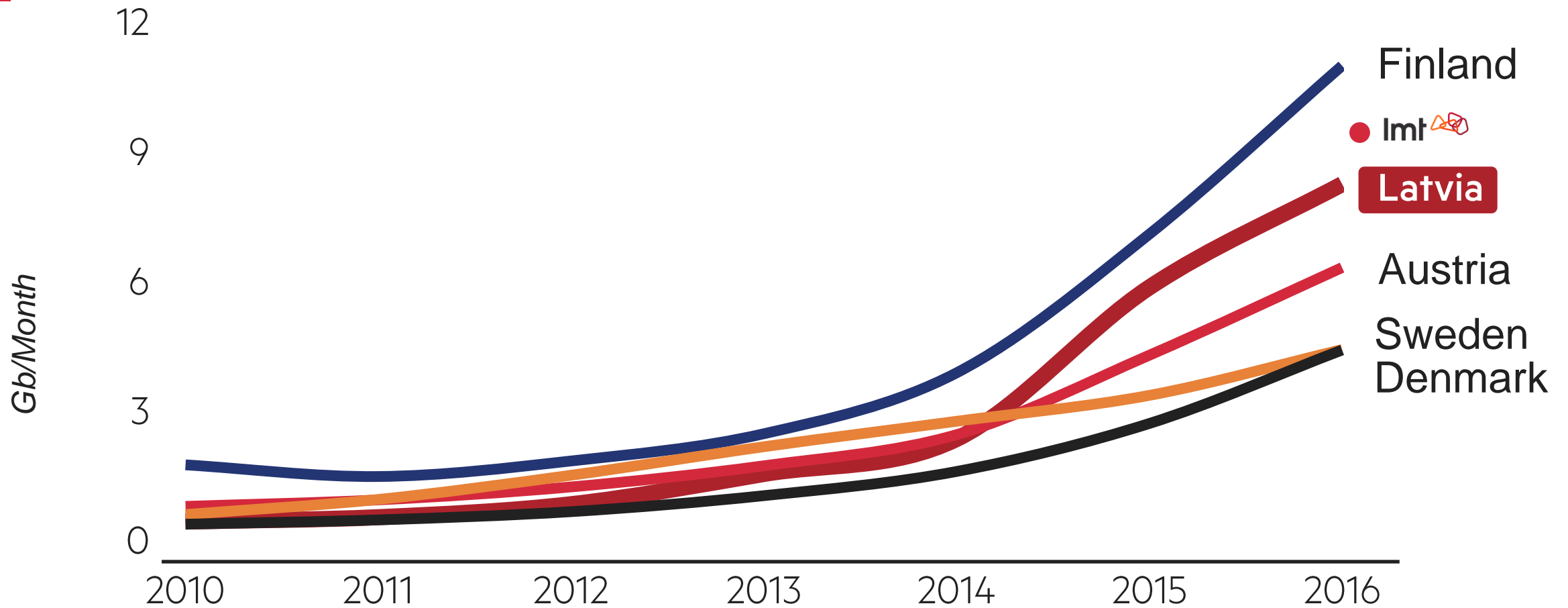
4.0

IoT and cloud technology automate complex tasks



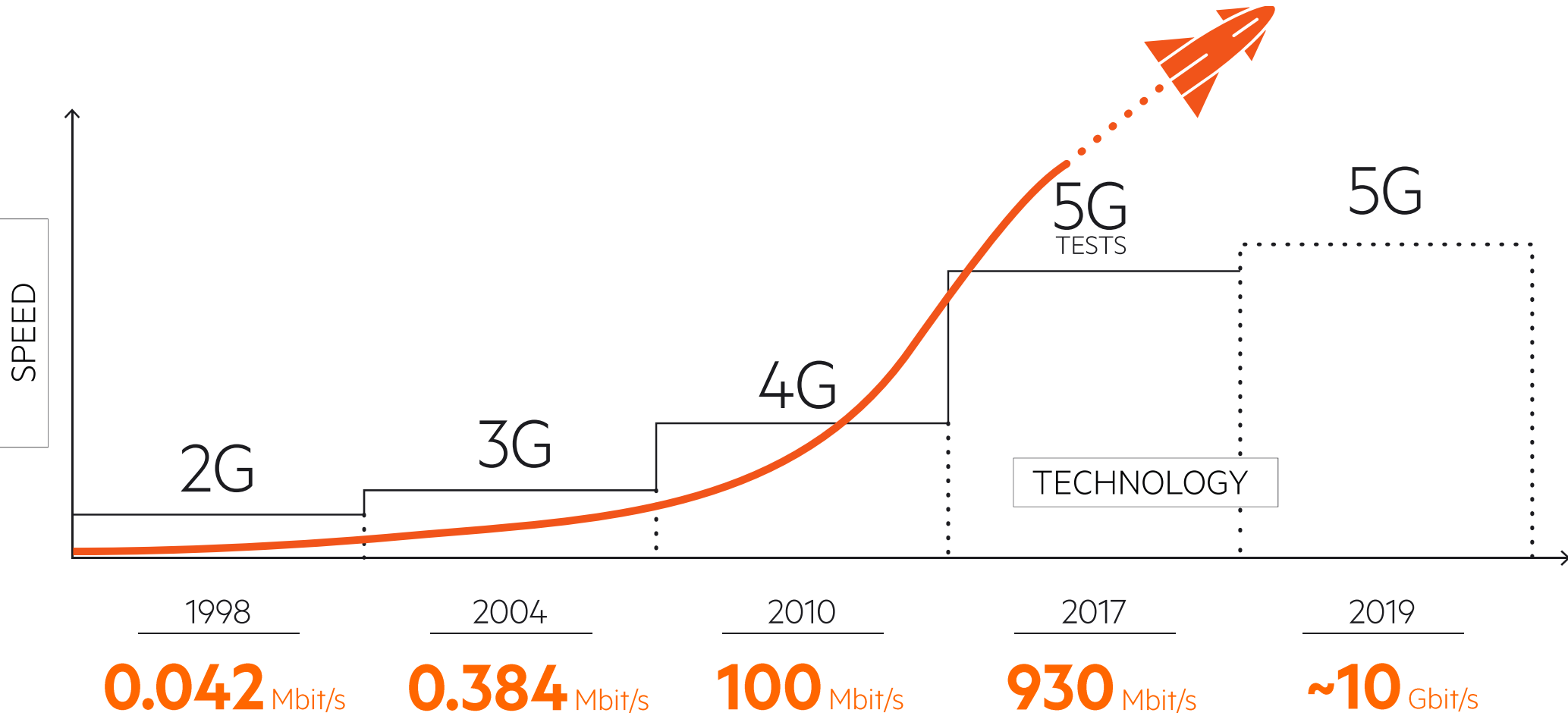
First commercial IoT technologies

LATVIA IS A REAL GIGABYTE SOCIETY



Source: OECD Digital Economy Outlook 2017

INTERNET DEVELOPMENT BY LMT

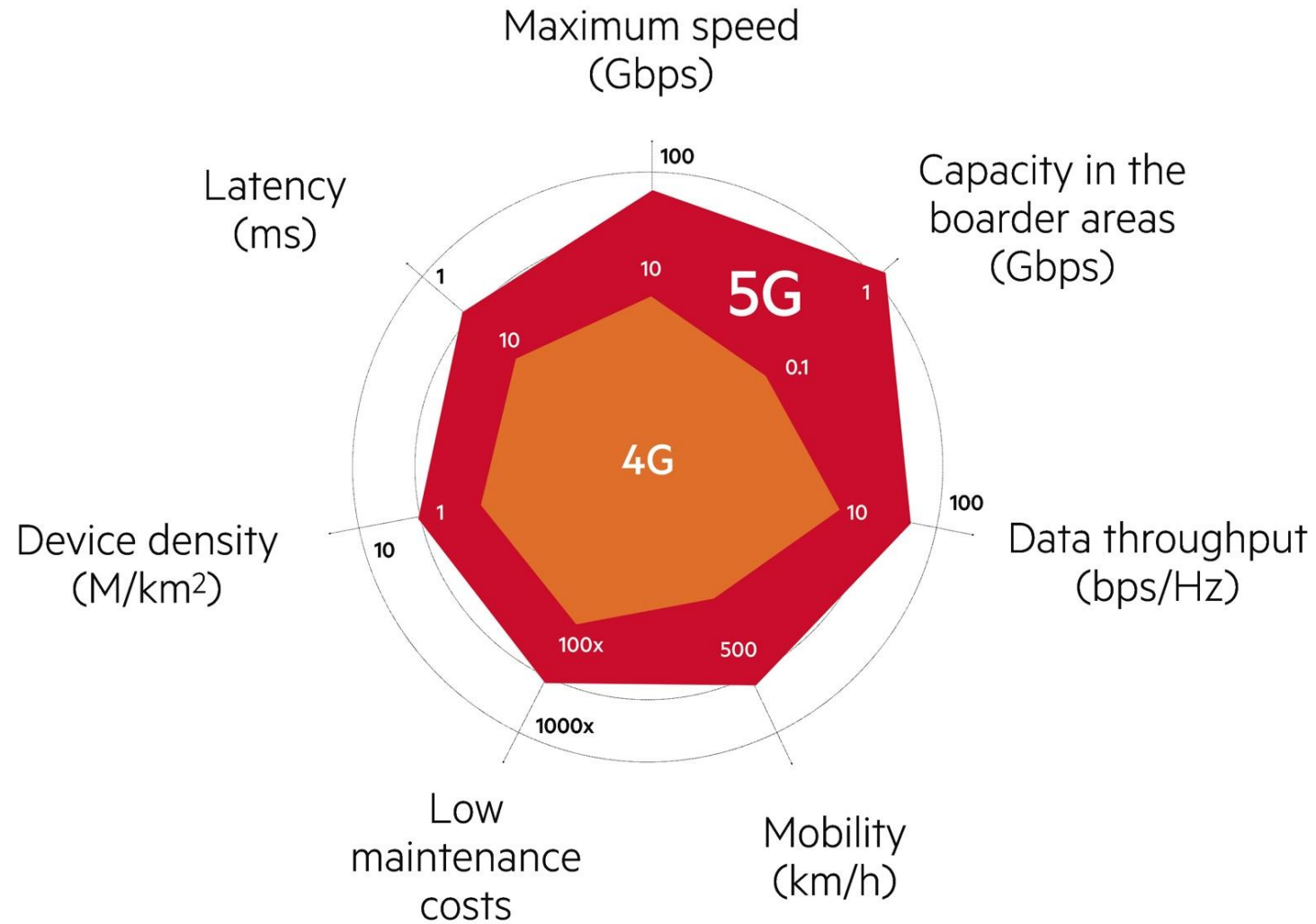


TEST@ 5G TECHRITORY 27.-28.09.2018.

1.4 Gbit/s
4 ms



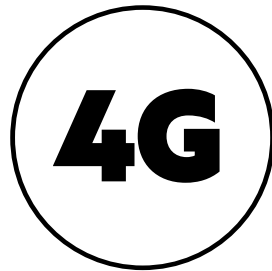
5G IS MORE THAN COVERAGE AND SPEED



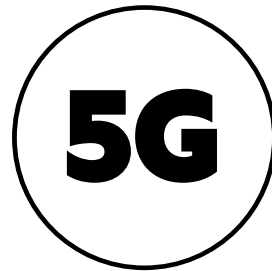
SUPER LOW LATENCY



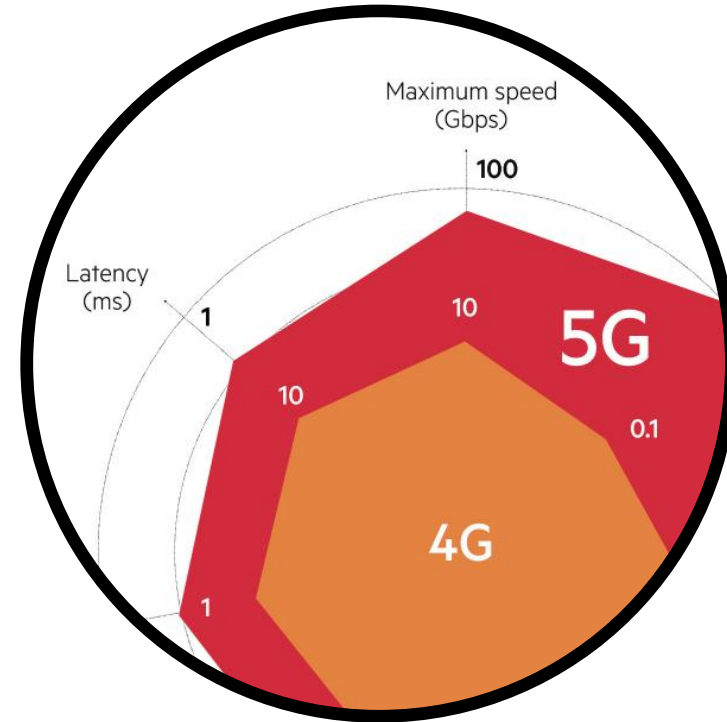
1s



30ms



1ms

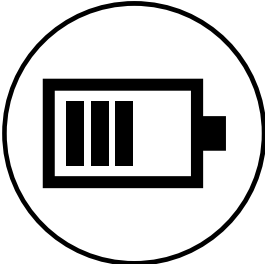


SELF-DRIVING CARS



Illustration: Renault EZ-GO @ Paris Mondial Auto 2018

LOW MAINTENANCE COSTS AND ENERGY EFFICIENCY

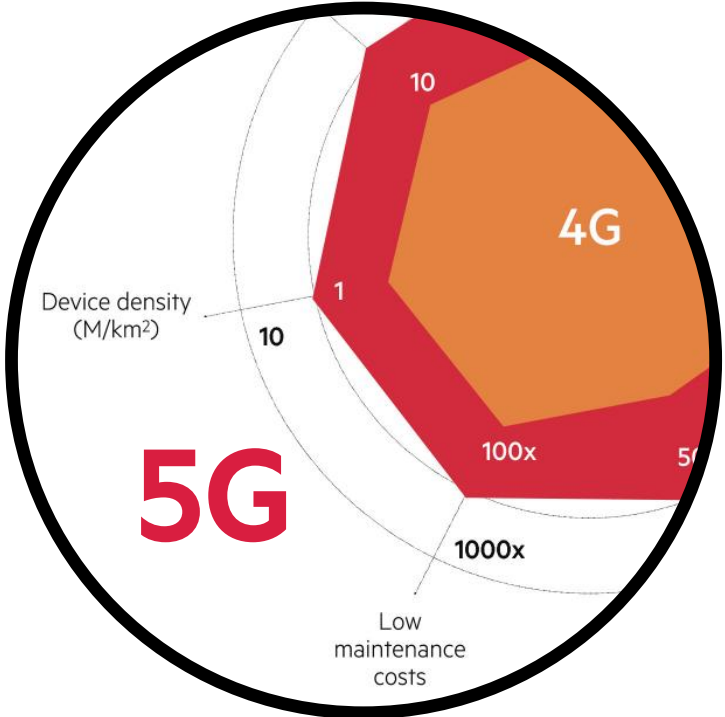


4G

1 year

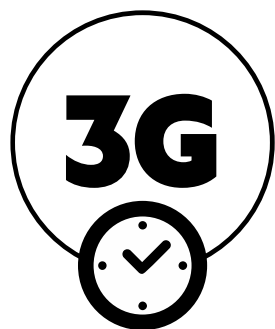
5G

10 years

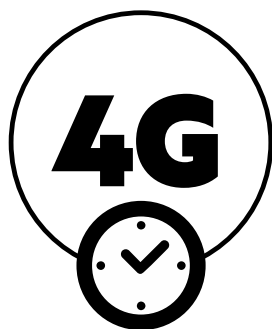


INTERNET SPEED

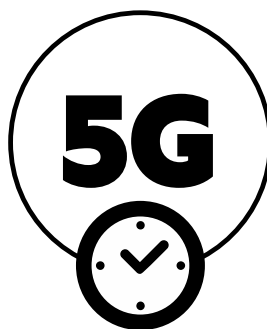
The required time to download
a two-hour long movie



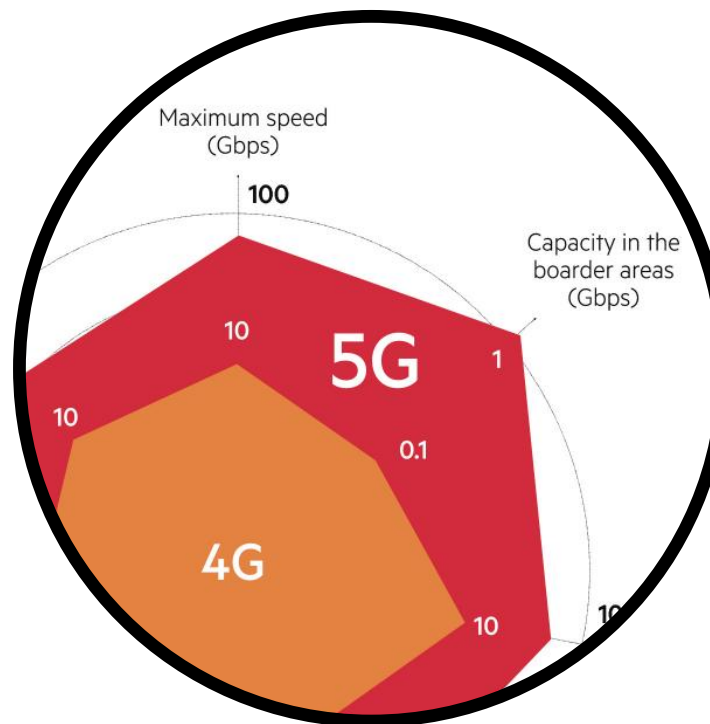
26 hours



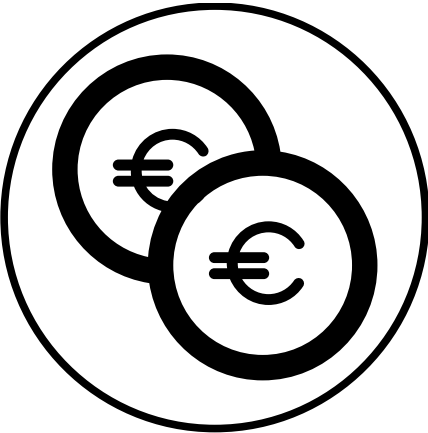
6 min



3.6 sek



BENEFITS



Money



Time



Productivity

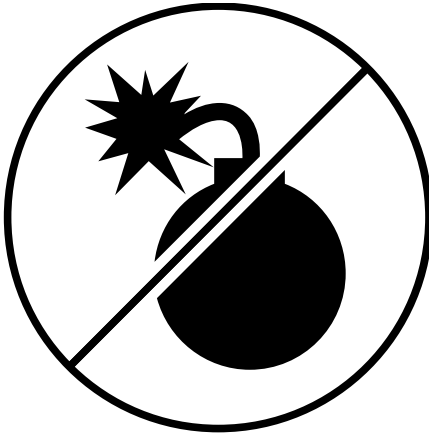
BRIGHTER FUTURE FOR HUMANS



No dull



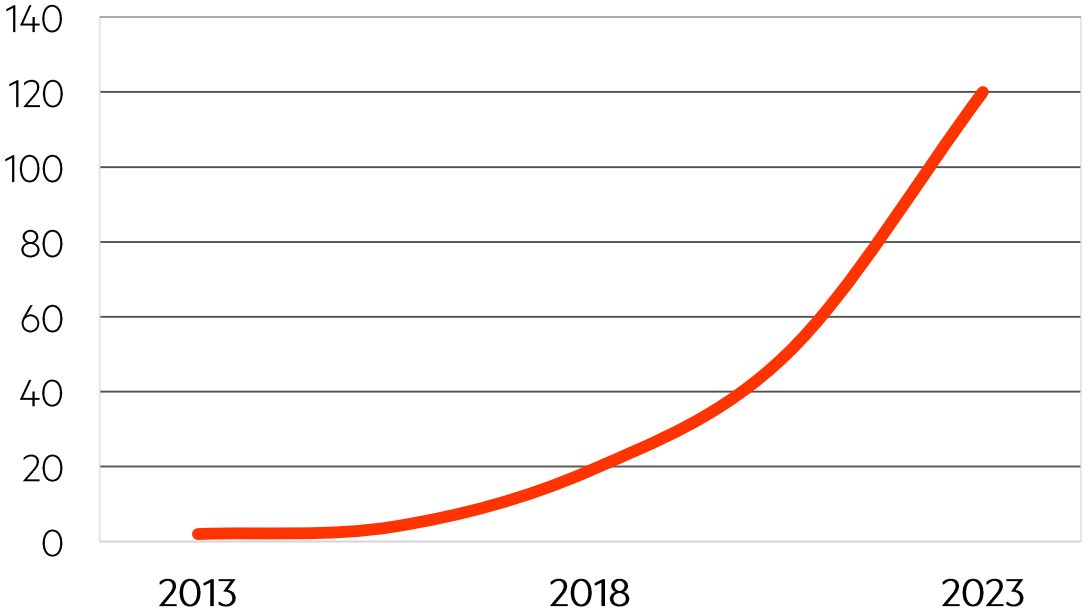
No dirty



No dangerous

FUTURE IS MOBILE

GLOBAL MOBILE DATA USAGE (EB/month)



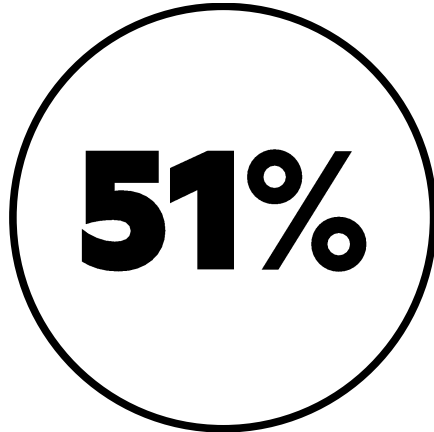
Ericsson Mobility Report, 2017

Year 2021



**Mobile and
Wireless
networks**

Cisco, 2017



**IOT
devices**



4G CHANGES LIFE...

5G RESHAPES SOCIETY

5G

4G

3G

2G

Deep convergence of Industries

OTT penetrates or
disrupts traditional industry

**INDUSTRIAL INTERNET
ARISE**

Telco used to do digital transformation
passively

INTERNET ARISE

A strategic point to
redefine future network

5G USE CASES



Enhanced mobile broadband

- Multi-Gbps data rates
- Extreme capacity
- Uniformity
- Deep awareness

Mission-critical services

- Ultra-low latency
- High reliability
- High availability
- Strong security

Massive Internet of Things

- Low cost
- Ultra-low energy
- Deep coverage
- High density



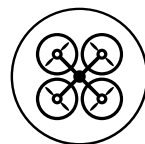
Mobile Devices



Networking



Automotive



Robotics



Health



Wearables

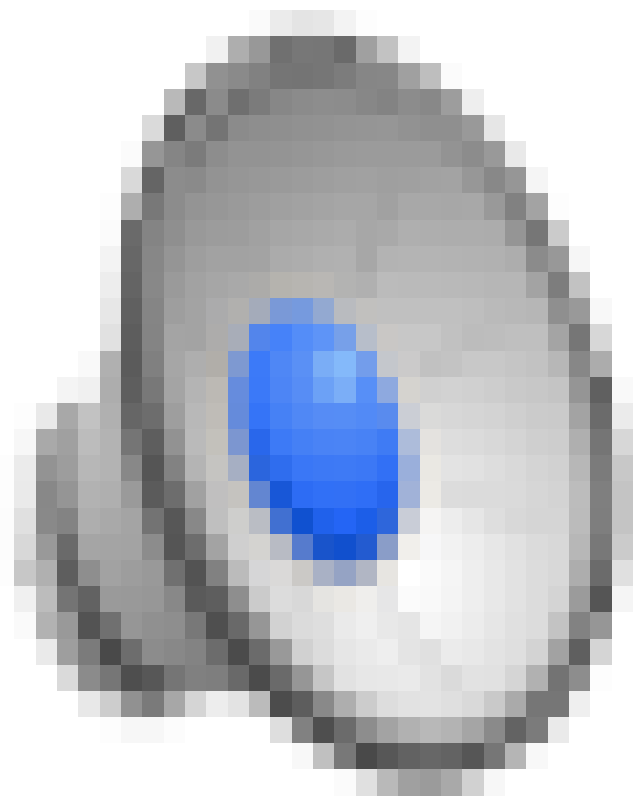


Smart Cities



Smart Homes

VIDEO





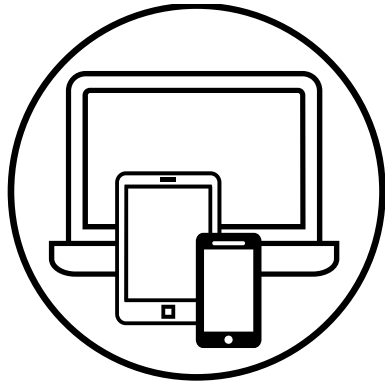
Imt 

**THE FUTURE
IS MOBILE
ONLY**



WHAT ABOUT SECURITY

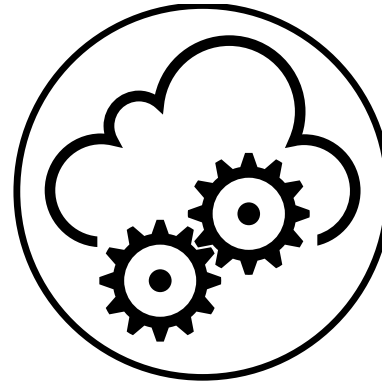
SECURITY RISKS



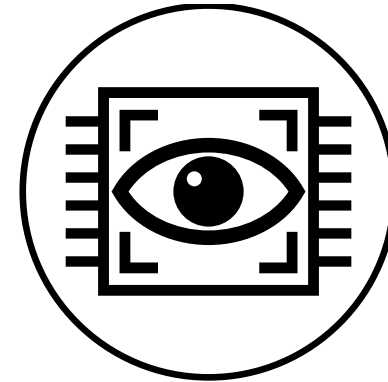
Devices



Density

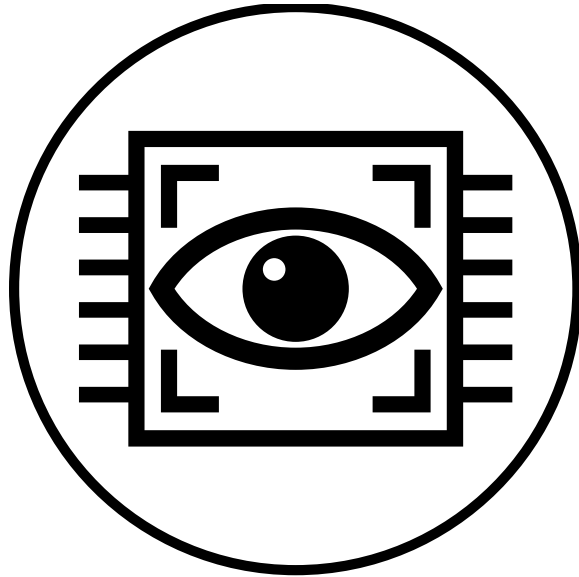


**Connectivity
[D2D & D2N]**



Ai

SECURITY RISKS



Ai



Humans



Imt 

**THE FUTURE
IS MOBILE
ONLY**

