

5G for Verticals in the New Economy

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Perspectives on Vertical Industries and Implications for 5G

by NGMN Alliance

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- ❖ Published on 19 Sep 2016
- ❖ Summarized NGMN comprehension of discussions with the real verticals
- ❖ 7 selected vertical industries
- ❖ Drivers of vertical industry change
- ❖ Use cases & required capabilities
- ❖ Assessment of roadmaps/ maturity
- ❖ Relevant telco roles
- ❖ External dependencies & outlook

http://ngmn.org/uploads/media/160922_NGMN_-_Perspectives_on_Vertical_Industries_and_Implications_for_5G_final.pdf

Automotive

- Assisted driving
- Autonomous/cooperative driving
- Tele-operated driving
- Info-mediation
- Infotainment
- Nomadic nodes

Transport & logistics

- Inventory & supply chain management
- Smart travel
- Smart airport
- Drone/ robot delivery service

Health & wellness

- Health & wellness monitoring
- Remote healthcare
- Assisted surgery
- Remote surgery
- Info-mediation

Smart cities & utilities

- Connected lighting
- Public safety
- Emergency service management
- Smart grid

Agriculture

- Data-oriented farming
- Automated farm machinery

Media & entertainment

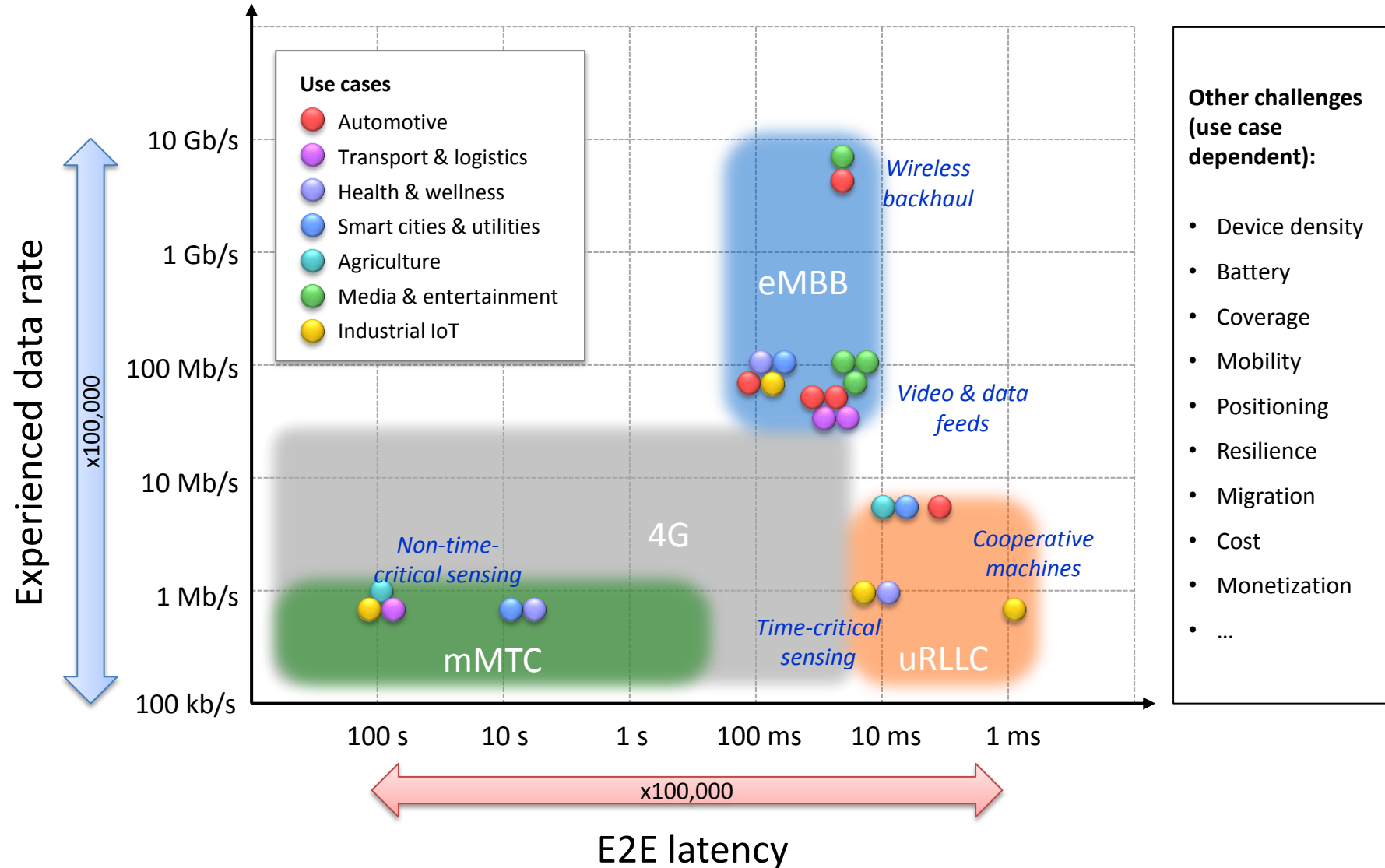
- Cooperative media production
- Collaborative gaming
- New media experience

Industrial IoT

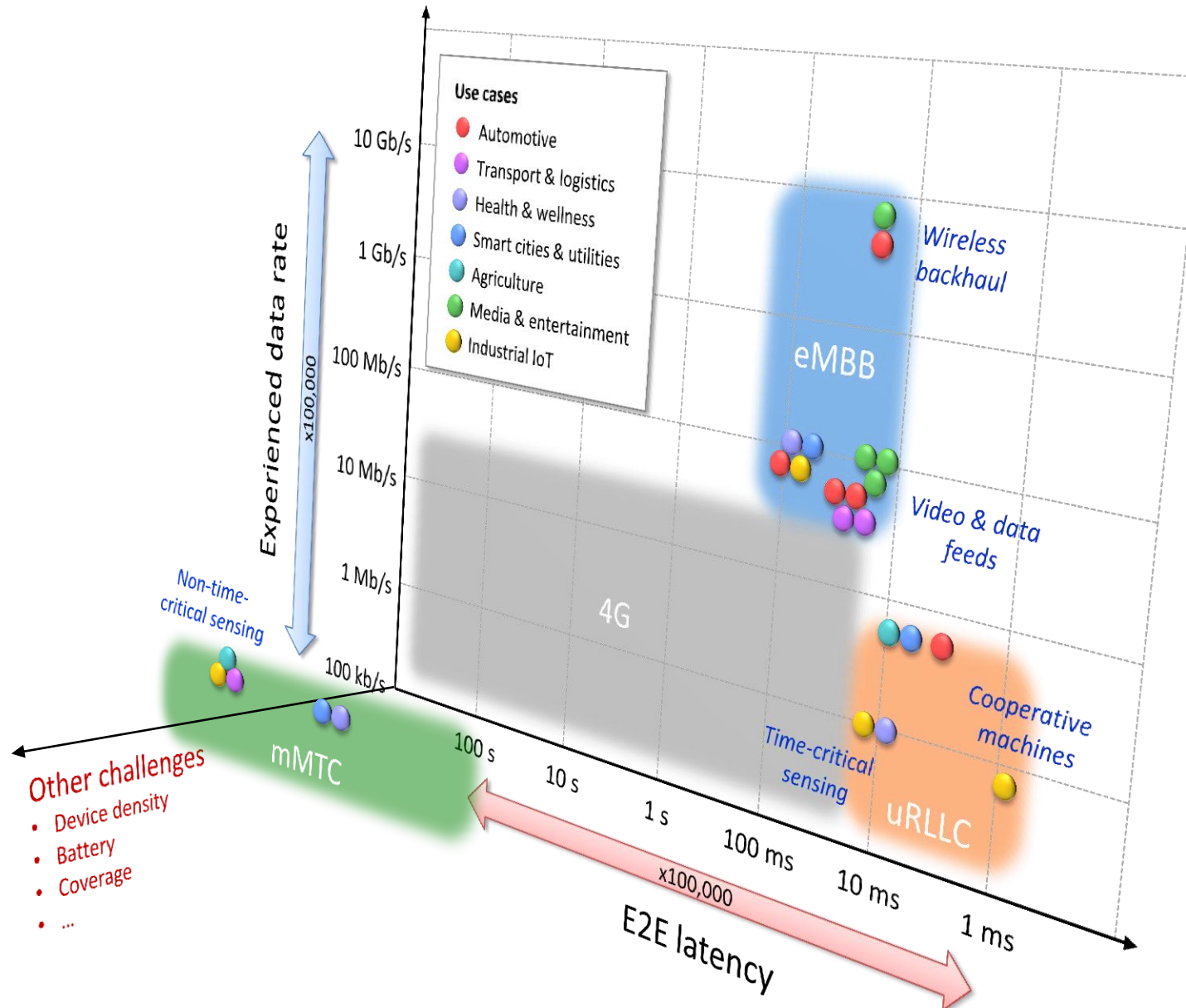
- Automated & programmable product line
- Process automation
- Supply chain optimization
- Remote human assistance

5G is drawing curiosity

Diverging requirements



Diverging requirements



Other challenges (use case dependent):

- Device density
- Battery
- Coverage
- Mobility
- Positioning
- Resilience
- Migration
- Cost
- Monetization
- ...

INTERMEDIARIES

SLA/ SLR, roaming, billing, security, ID mgmt, 3rd party service integration, consultation, ...

KSF: one-stop service, trusted relationship, co-creation

PLATFORM

data collection, storage, analyses, automation, artificial intelligence, ...

KSF: open interfaces, portable data formats

CONNECTIVITY

expanded capabilities (data rate, latency, device density, ...), intelligent slicing, ...

KSF: use of common infrastructure, flexibility

LEGAL FRAMEWORK

spectrum, data protection, liability, ...

THANK YOU!