



IOT THINGS WEEK
IOT THINGS GOES DIGITAL 17-27 MAY 2021

Are we EDGE Ready ?

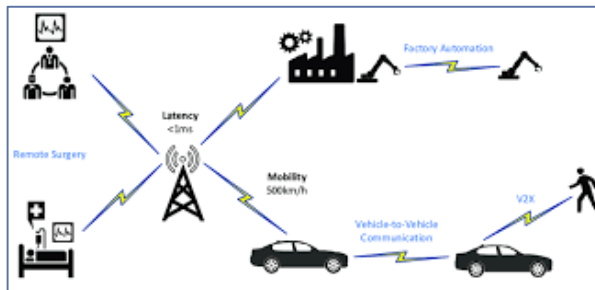
Pierpaolo Marchese
Independent Consultant

Innovability – Edge Forum , May 21 2021
Chair, Introductory Remarks





The EDGE hype



New Use Cases need edge frameworks

- Ultra Reliable and Low Latency Communication (URLLC)
- *Intelligent* IoT, towards “Internet of Sensing”
- *AI and Data* driven Applications (B2B and B2C)

New Network Infrastructure and Edge Technologies

- Cloud goes “Distributed” and local
- New communication models (Device 2 Device, hybrid networks)
- From IoT to Edge Computing

Disruptive forces

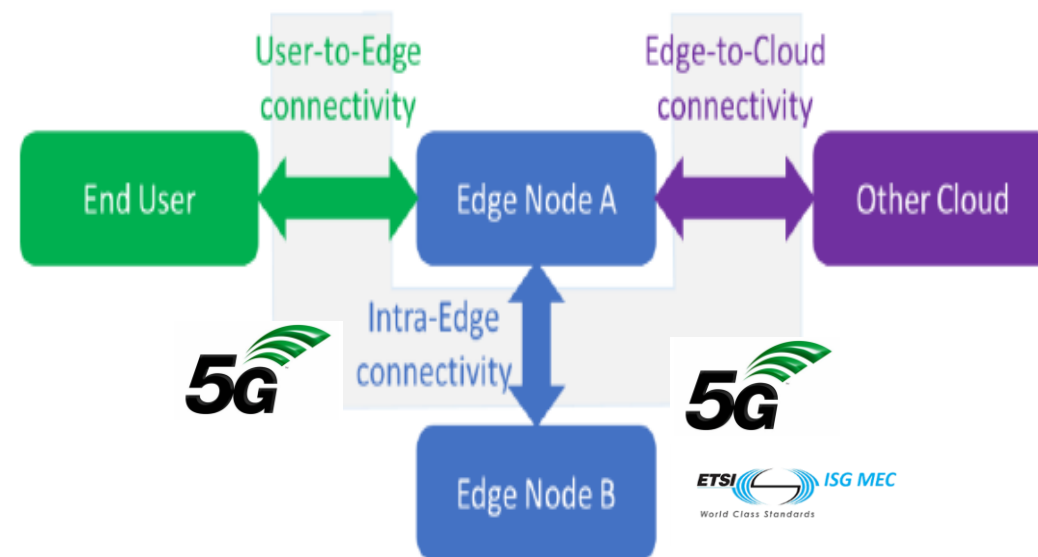
- Verticals and OTT joining the Telco pitch
- New actors (e.g. edge cloud aggregators, SME, ...)
- Data regulatory framework (GDPR, new ePrivacy Regulation (2022/3?))



The run to edge infrastructure

Edge Cloud Cooperation

- Edge for ... internal use (e.g. Open RAN)
- *Edge as a service*, eg
 - Telco edge platform (GSMA, Nov 2020)
 - Telco/OTT (e.g. Noovle, Jan 2021)
 - Vertical Platforms
- Multi Access Edge Computing (MEC) Maturity
- The ms challenge



Satellite is coming

- Starlink ground stations in 150 Google Edge cloud Data Centres (by 2021)
 - 1600 LEO satellites already launched
 - Starlink Average Latency 31-88 ms (Source: Ookla, May 2021)
- Similar initiatives from Microsoft and Amazon
 - Remote BB, Transport & Logistic, IoT, ... and more to come

<https://www.fiercetelecom.com/telecom/industry-voices-menon-satellite-mega-constellations-are-connectivity-s-new-frontier-post-5g>

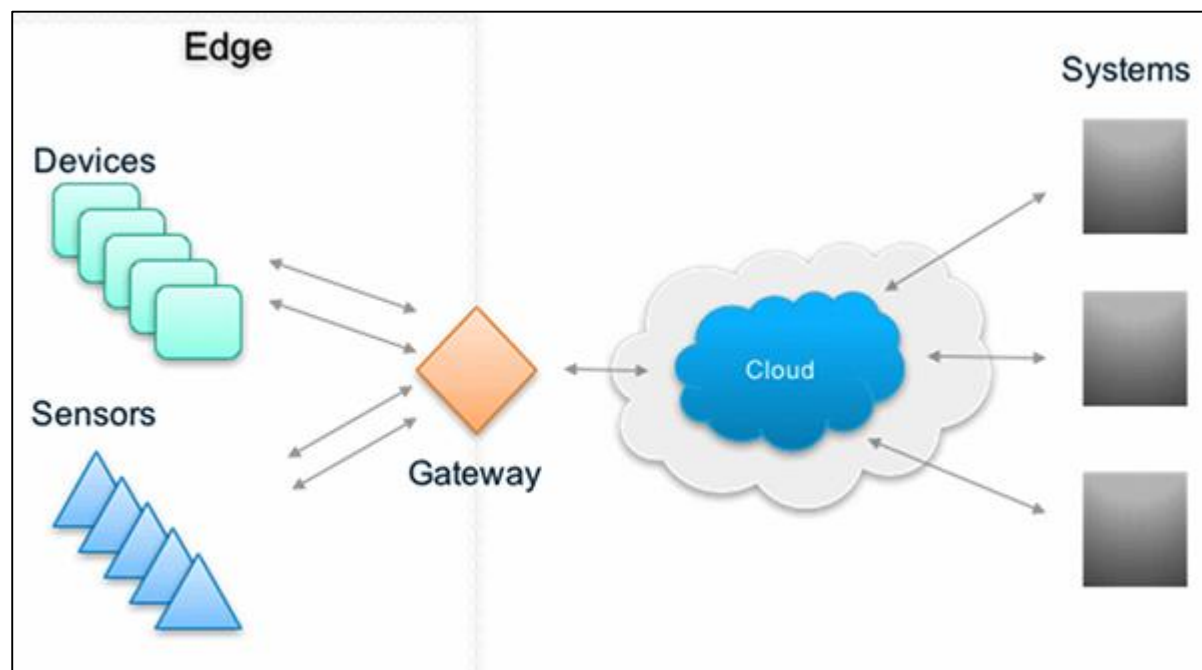


Edge and ... edge-IoT



Alliance for Internet of Things Innovation

*“ Edge computing has triggered a paradigm shift in cloud computing”
(IoT and Edge Computing Strategy Report - October 2020)*



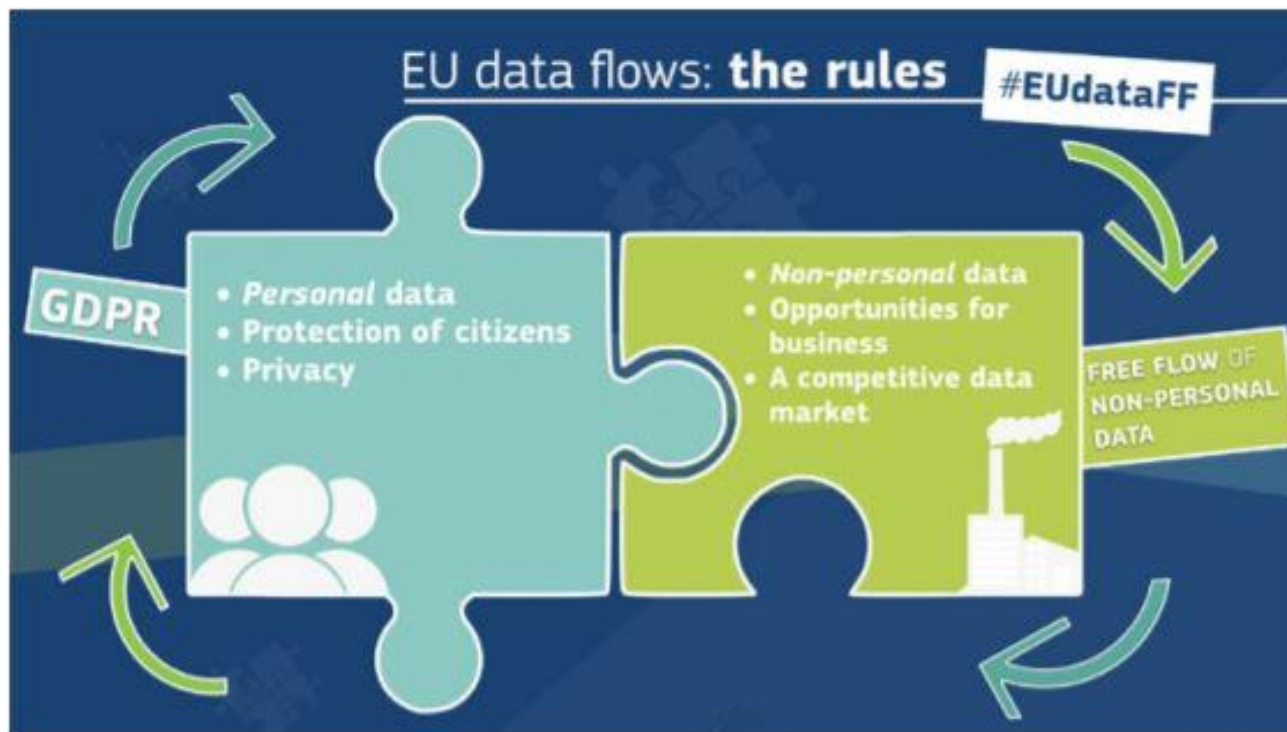
- 75% of enterprise-generated data created and processed outside of a traditional DC or the cloud in 2025 (2) Gartner)
- New Intelligent Edge Devices and Gateways
- New architectures,
- Cybersecurity
- Platforms, ecosystems, SME

(1) <https://aioti.eu/wp-content/uploads/2020/10/IoT-and-Edge-Computing-Published.pdf>

(2) <https://www.gartner.com/smarterwithgartner/what-edge-computing-means-for-infrastructure-and-operations-leaders/>



Edge is part of the EC Digital Strategy



<https://digital-strategy.ec.europa.eu/en/library/cloud-and-edge-computing-different-way-using-it->

European Alliance for Industrial Data, Edge and Cloud

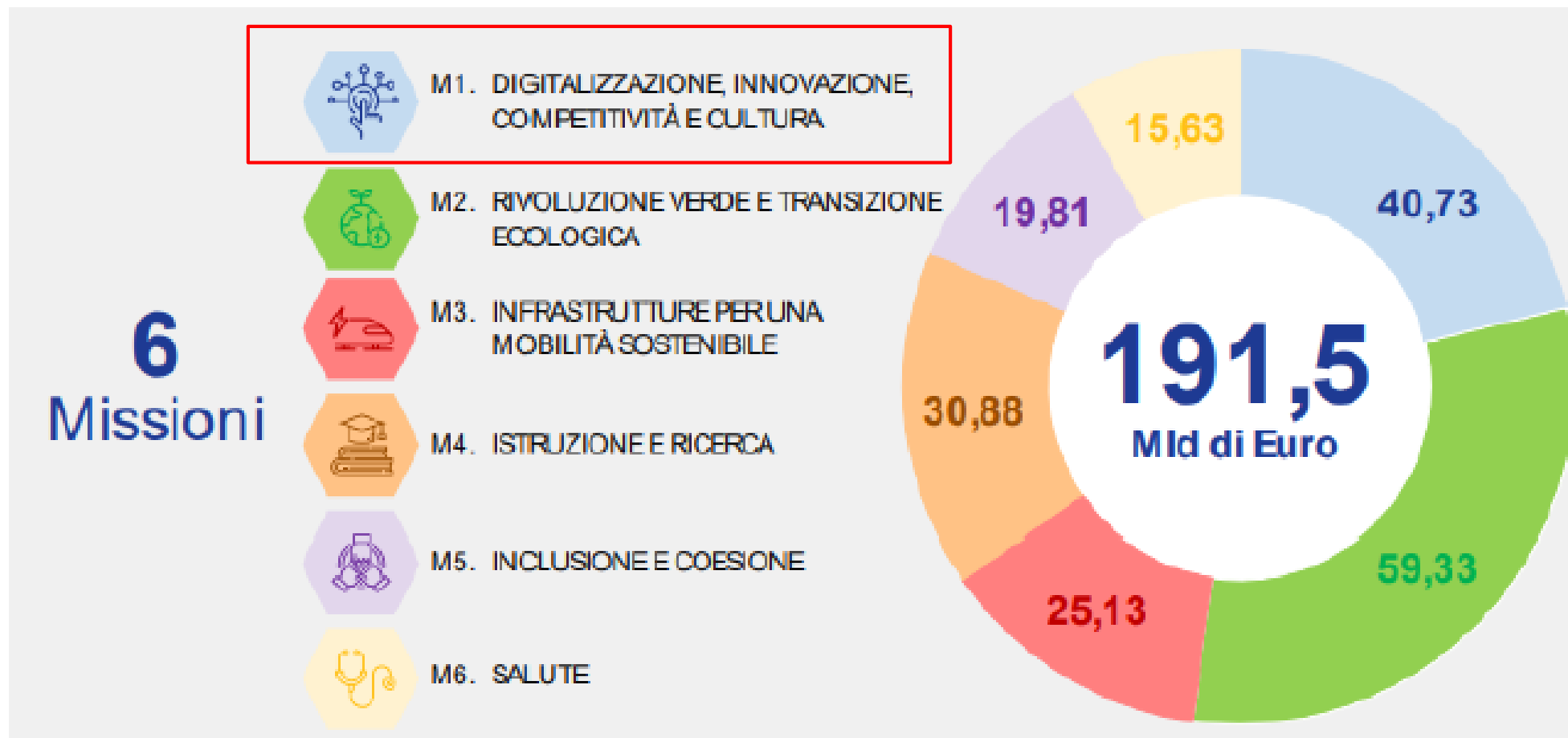
- **H2020 invested 300ME** in cloud-related R&D
More to come with Horizon Europe
- Free Flow of **non-personal Data** across EC
effective by **30 May 2021** (end of 2 year grace period)
- **EU Cloud Rulebook under preparation**
 - ENISA cloud cybersecurity **Certification** scheme (end 2021?)
 - Cloud Federation and **Cloud Portability**
 - **Green Cloud** Code of Conduct

BREAKING NEWS

- **Onboarding of 27 Leading Companies (May 7, 2021)**
- Proposals to drive EC Investment
- Target: deploy **10k green, highly secure edge nodes**



The National Recovery Fund



Digitalization is key... but “edge computing” is not mentioned in the overall description



EDGE Forum Key Speakes today

Edge computing ovvero l'alternativa democratica al Cloud Computing

Roberto Baldan, R&D Manager, EVCO

Riconoscimento vocale potenziato dall'edge computing

Samuele Vecchi, Line Manager e Partner, Kalpa

Intelligenza pervasiva: l'architettura Edge dipende dall'applicazione

Marco Svara, Chief Technology Officer, Gefran