A **NO**vel **R**adio **M**ultiservice adaptive network **A**rchitecture for 5G networks

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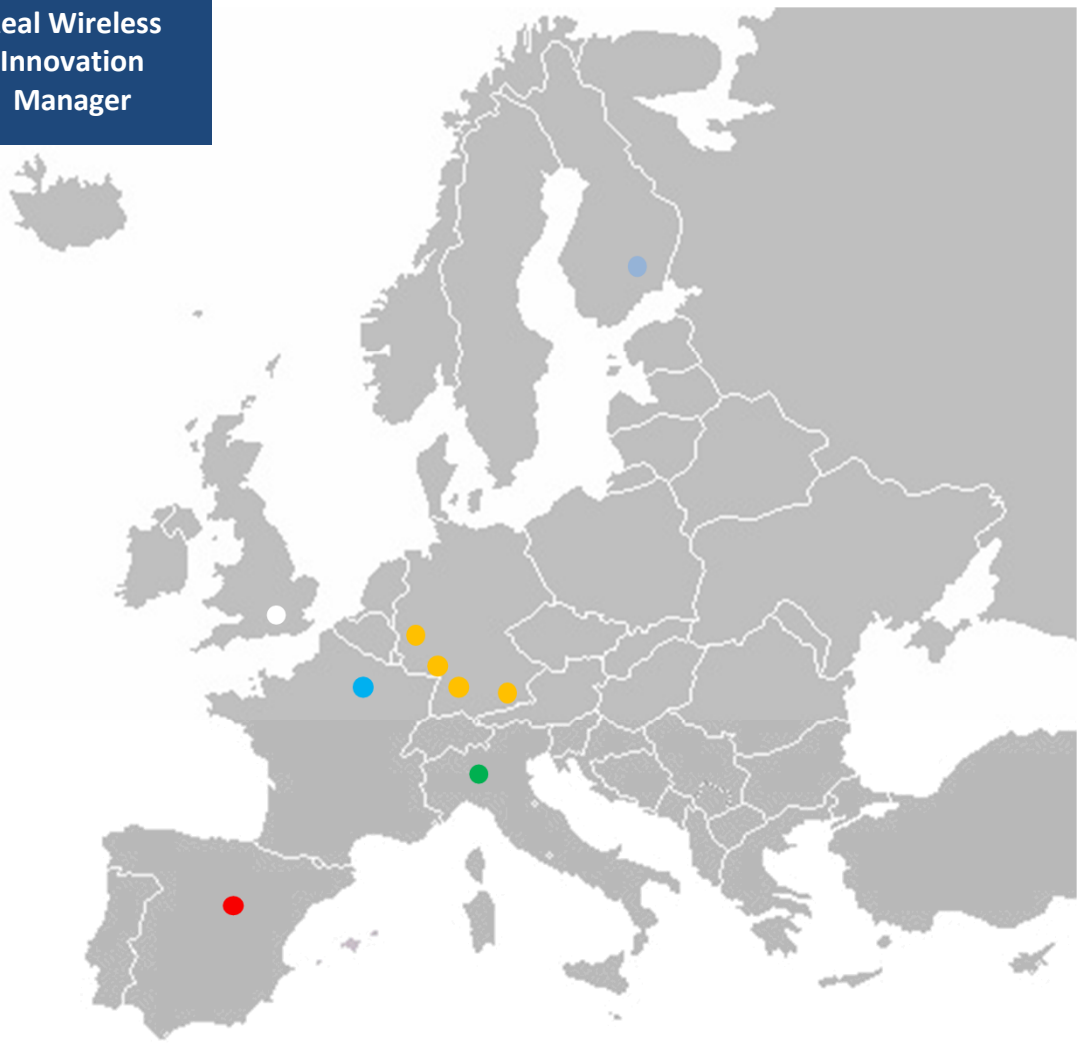


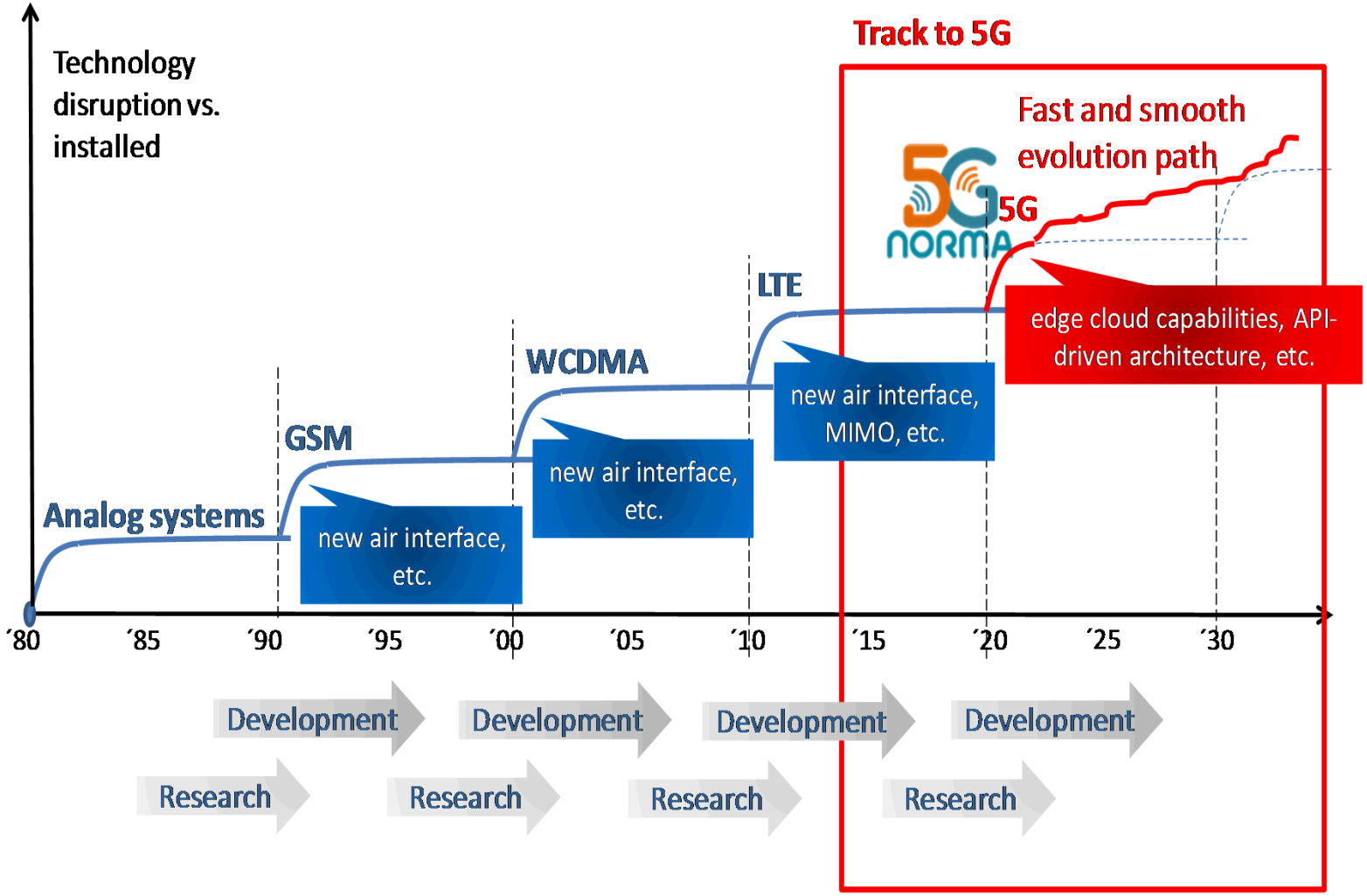
- **Finland**
  - Nokia Networks
- **France**
  - Alcatel-Lucent, Orange
- **Germany**
  - Alcatel Lucent, Deutsch Telekom, Nokia Networks, Nomor Research, Technische Universität Kaiserslautern
- **Italy**
  - Azcom Technology
- **Spain**
  - ATOS, Telefonica, Univerdidad Carlos III de Madrid
- **UK**
  - King´s College London, NEC, Real Wireless

- **3 vendors**: ALU, NEC, Nokia Networks
- **3 operators**: Deutsche Telekom, Orange, Telefonica
- **1 IT company**: ATOS
- **3 SMEs**: Azcom Technology, Nomor Research, Real Wireless
- **3 Academia**: King's College London, Technische Universität Kaiserslautern, Univerdidad Carlos III de Madrid

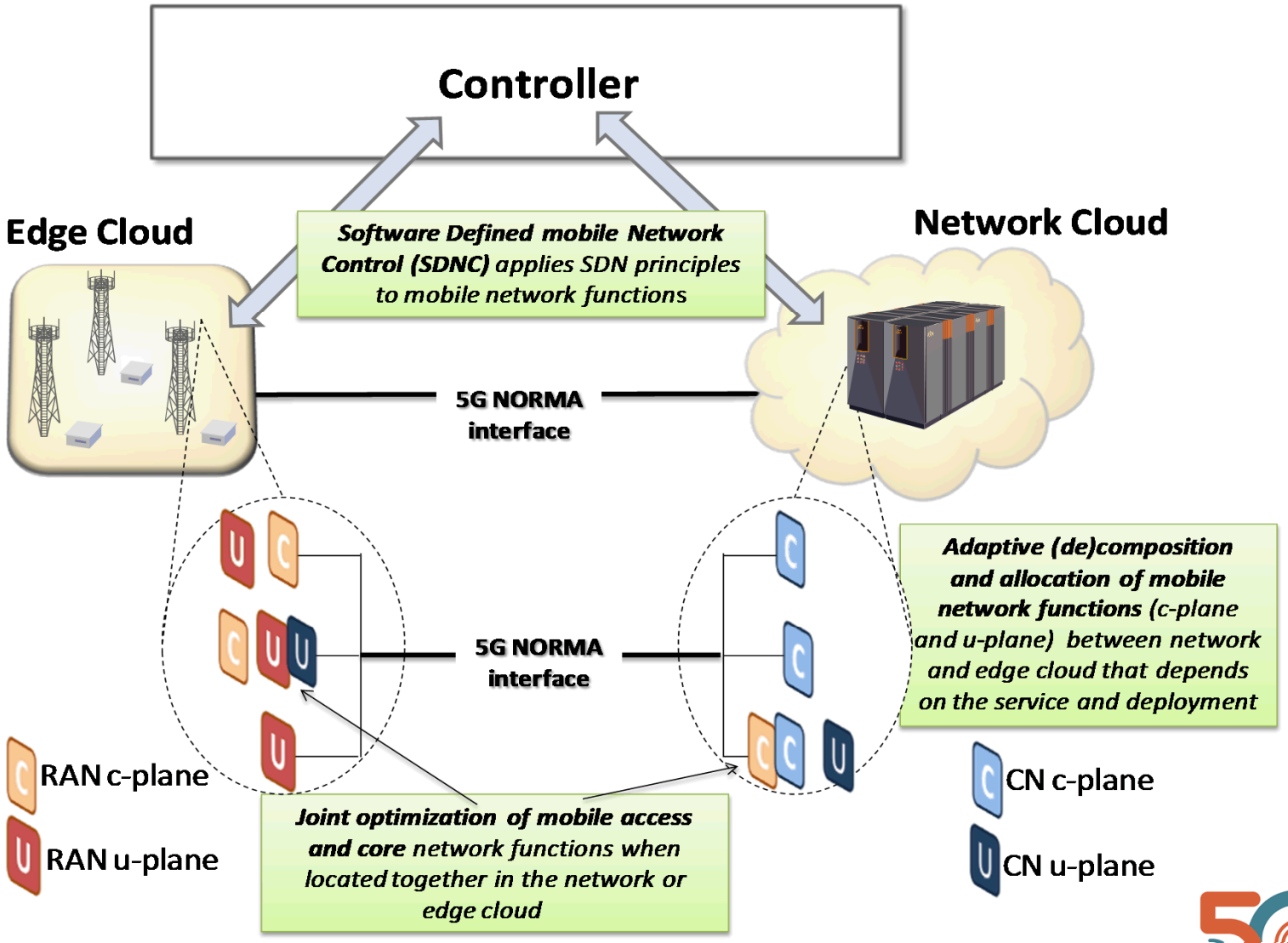
Motivation (1/2)

- Current and future 5G applications , e.g. e-health, public safety, public transportation, V2V, bring a lot of benefits to society; however they bring as well a lot of challenges to the network
- Today architectures do not provide the required flexibility to cope with requirements from new 5G applications, like low latency and high reliability
- 5G NORMA develops a conceptually novel, adaptive and future-proof 5G mobile network architecture.
  - the architecture is enabling unprecedented levels of network customisability, ensuring stringent performance, security, cost and energy requirements to be met;
  - as well as providing an API-driven architectural openness, fuelling economic growth through over-the-top innovation

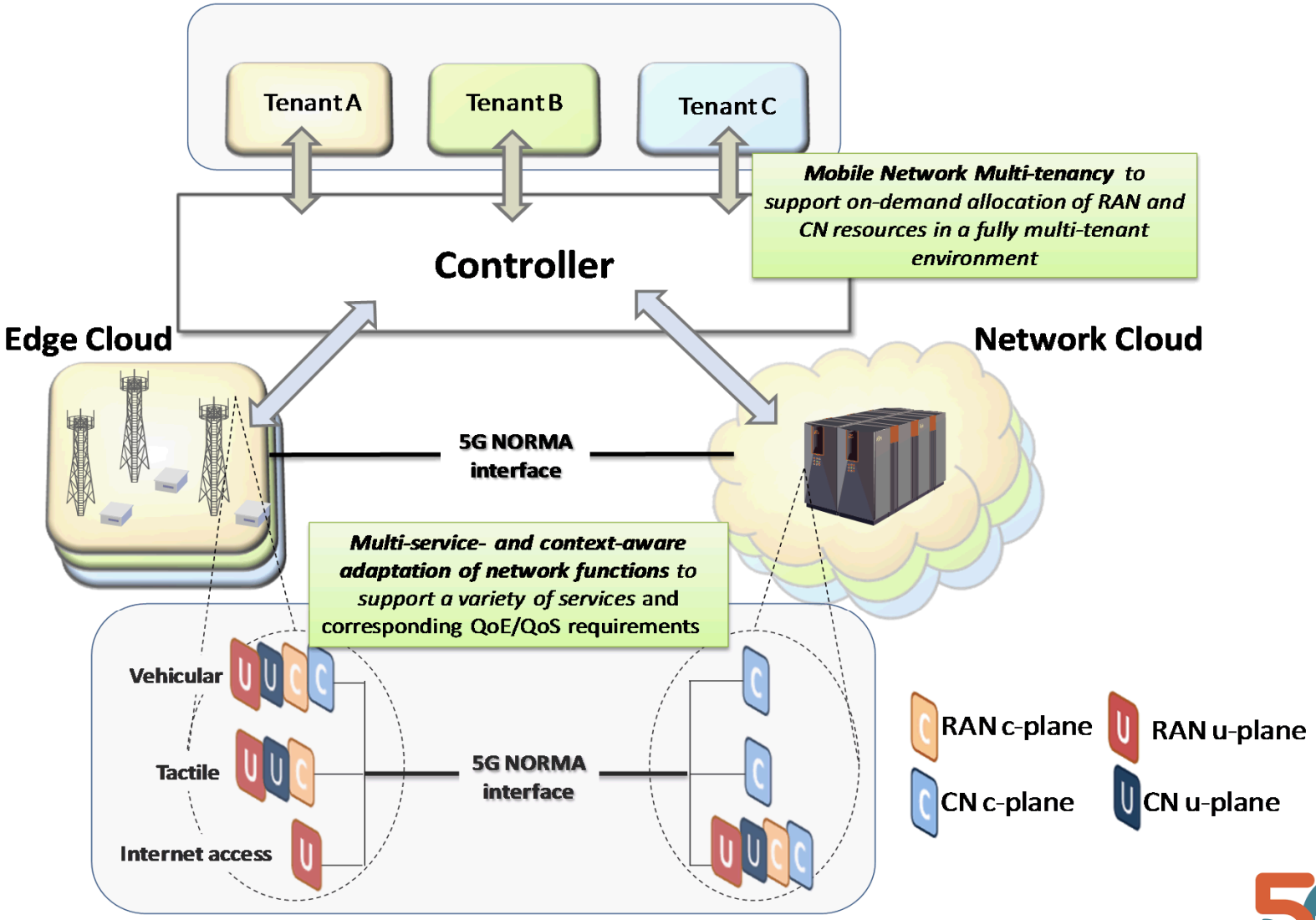
Motivation (2/2)



The “5” Innovations (1/2)



The “5” Innovations (2/2)



Demonstrators

SW Demo (Nomor)

Adaptive allocation of functions

PoC demo 1 (Azcom+ATOS)

Adaptive allocation of functionalities

PoC demo 2 (Azcom+IMDEA +ATOS)

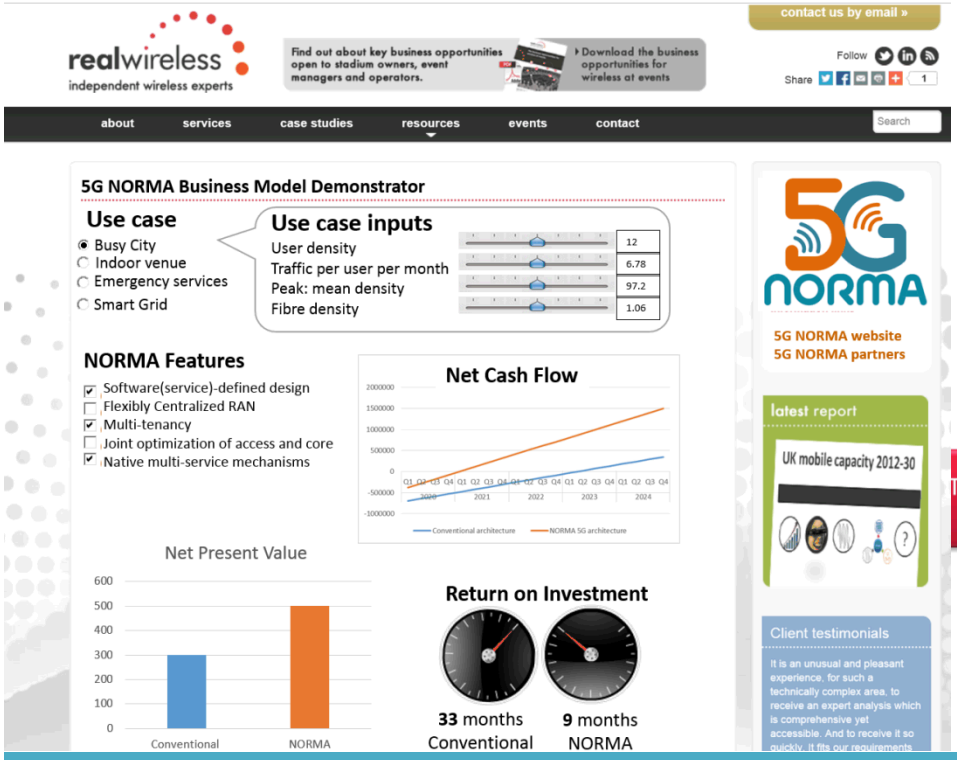
Tailored mobility

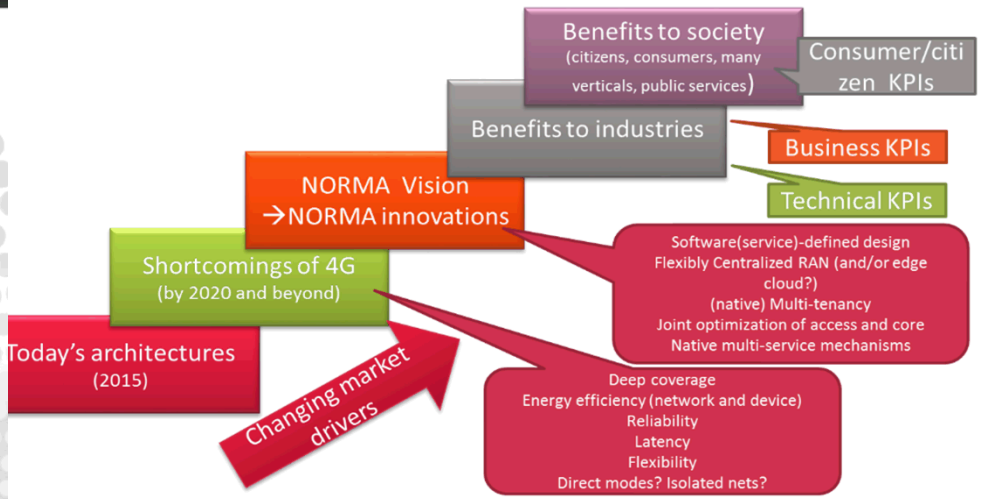
Testbed (IMDEA+ATOS)

QoE tailored mobility based on flow and service request

Socio-economic analysis

- Analysis of the **benefits of 5G NORMA innovations** to determine the value both to the wireless industry and to the users in society
- Analysis of the **business impact** of candidate mobile network concepts under discussion for 5G by translating technical KPIs to business KPIs of relevance to each sector, such as cost efficiency, return on investment, reduction in service creation time, etc





Thank You