From concept to deployment: the visions of the 5GCHAMPION and 5G-MiEdge projects

(Olympic Games are coming …)

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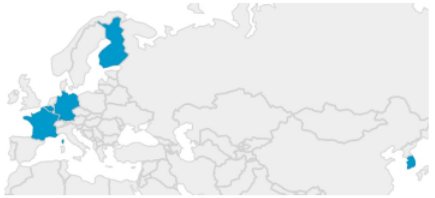
Intel

2017.04.27, COCORA 2017, Venice

5GCHAMPION (www.5g-champion.eu)

- *Project name: 5G Communication with a Heterogeneous, Agile Mobile network in the Pyeongchang Winter Olympic Competition*
- *Funding scheme: FP8, Europe-Korea co-funding*
- *Duration: 2016.06 – 2018.05*
- *Key Targets:*
  - The first 5G proof-of-concept in conjunction with the 2018 Korean Winter Olympics,
  - Synergize satellite and terrestrial technologies,
  - Strong impact on Standards bodies.



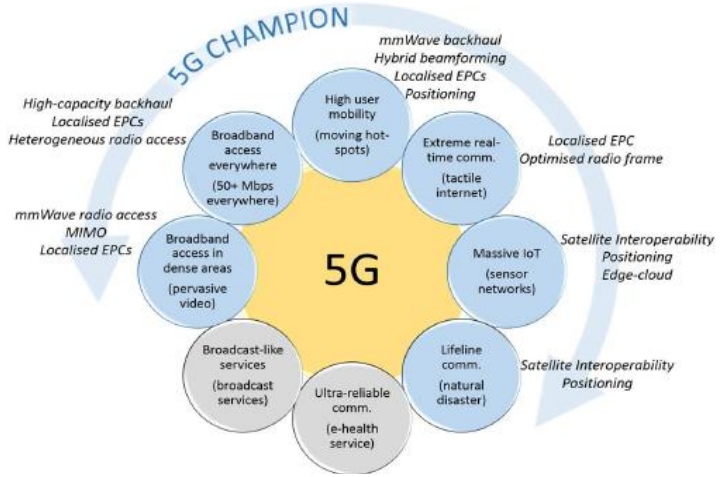
Europe

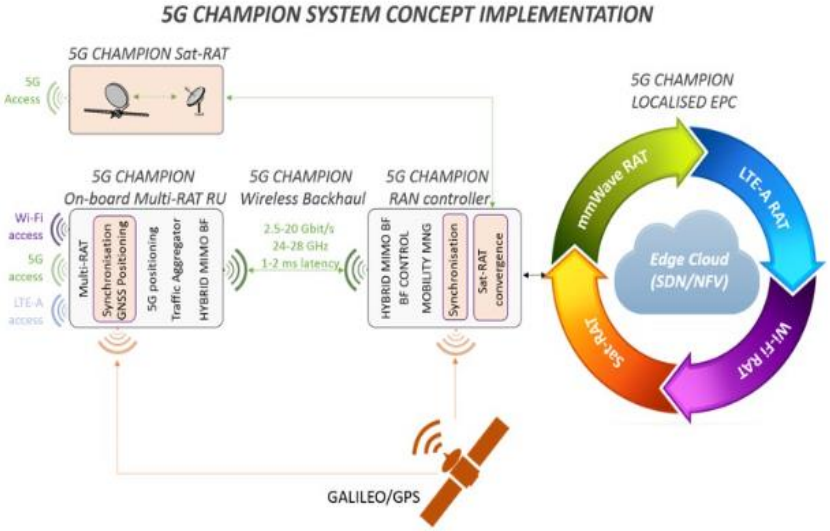
1. CEA-Leti (Coordinator), France
2. Nokia, Finland
3. Intel, Germany
4. Thales Alenia Space, France
5. University of Oulu, Finland
6. Fraunhofer HHI, Germany
7. Telespazio, France
8. iMinds, Belgium

Rep. of Korea

1. ETRI (Coordinator)
2. Seoul Metropolitant Rapid Transit
3. South Korea Telecom
4. HFR
5. Clever Logic
6. Seoul National University
7. Dankook University
8. Hanyang University
9. Korea Telecom
10. Eluon
11. InSoft
12. Mobigen
13. Gwangju Institute of Science and Technology

5GCHAMPION





- *Main technology enablers:*
  - mmWave Backhauling,
  - mmWave transceivers with reconfigurable antennas,
  - Localised evolved packet core supported by distributed or centralized mobile edge clouds with caching,
  - Media streaming functionalities,
  - Satellite radio access,
  - Satellite-terrestrial positioning.

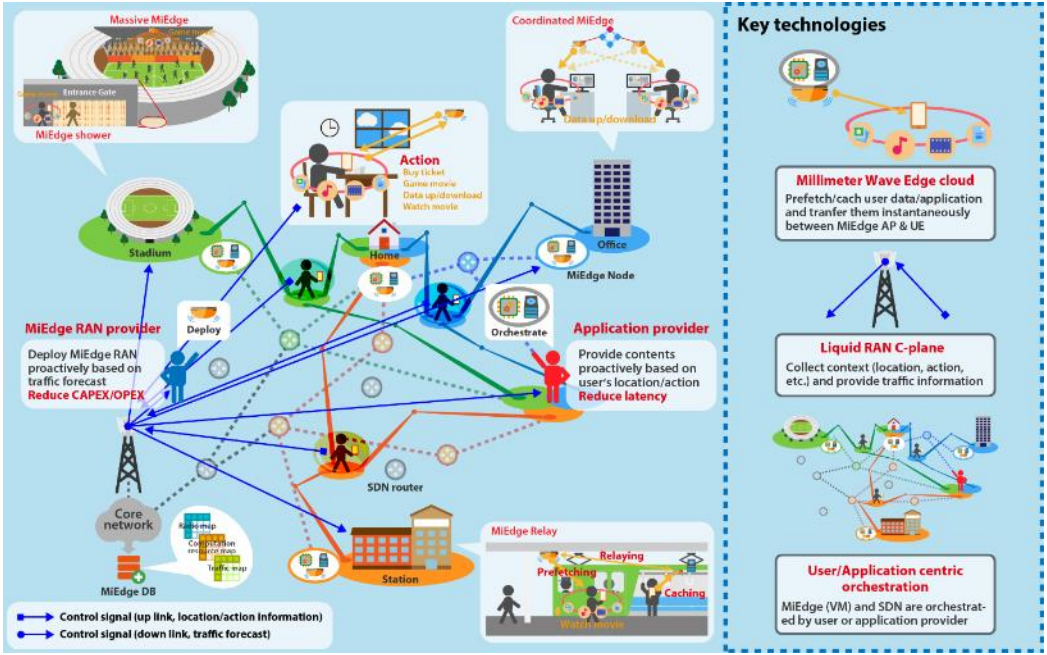
5G-MiEdge (5g-miedge.eu)

- Name: Millimeter-wave Edge Cloud as an Enabler for 5G Ecosystem

- Funding scheme: FP8, Europe-Japan co-funding, 2016.06 – 2019.05

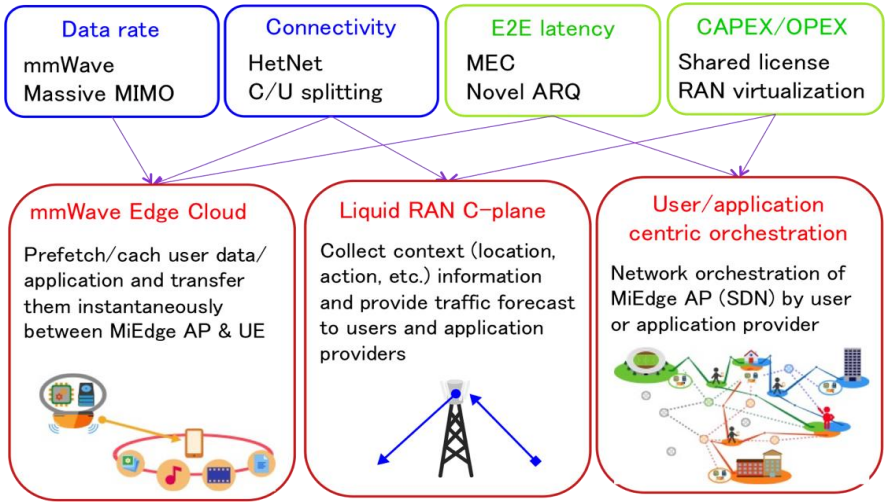
- *Key Target:*
  - 5G proof-of-concept in conjunction with the 2020 Japanese Summer Olympics.

- *Key technology enablers:*
  - mmWave Access & Backhaul,
  - User/Application Centric Orchestration,
  - Liquid RAN Control-plane:
    - novel ultra-lean and inter-operable control signaling over 3GPP LTE to provide liquid ubiquitous coverage in 5G networks, based on acquisition of context information and forecasting of traffic requirements.

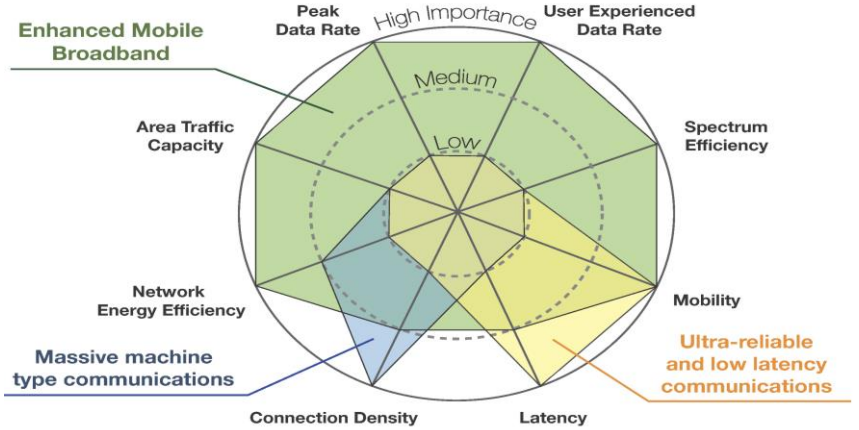


5G-MiEdge

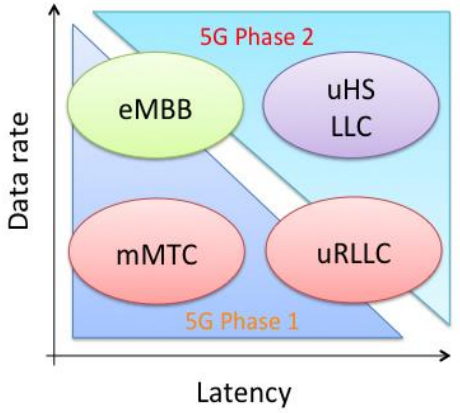
- Main research directions:
  - Focus on the ultra High-Speed and Low Latency Communications (uHSLLC) use cases and related technology enablers
  - Synergize between mmWave and MEC technologies



Technology enablers for uHSLLC and related KPIs



5G KPI defied in IMT-2020

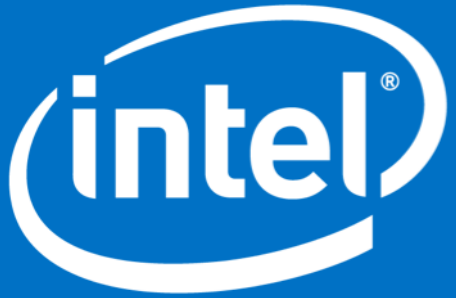


Q&A

➢Questions?

Disclaimers
5G-MiEdge: The research leading to these results are jointly funded by the European Commission (EC) H2020 and the Ministry of Internal affairs and Communications (MIC) in Japan under grant agreements N° 723171 5G MiEdge in EC and 0159-{0149, 0150, 0151} in MIC.

5GCHAMPION: The research leading to these results was supported by the Institute for Information & communications Technology Promotion (IITP) grant, funded by the Korea government (MSIP) (No.B0115-16-0001, 5GCHAMPION), and received funding from European Union H2020 5GPPP under grant n. 723247.



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