



Enabling environment for 5G deployment

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5G opens the door to a new world



- 5G promises the transformation of the networking landscape
 - Effect of 5G spans well beyond the advantages of the innovative 5G radio interface
- 5G has direct impact on verticals
 - Special attention for several industries
 - Vehicular, Industrial automation, etc.
- Hungarian specialties
 - Local R&D sites of world-leading vendors
 - Strong presence of the automotive industry
 - Multinational players among the service providers
 - Strong governmental will to support the digital transformation

Local background for 5G support



- BME, a prime actor in the Hungarian technical research scene
 - Education, Research, Know-how base and Knowledge transfer
 - Strong industrial cooperation
 - 25 years tradition of HSNLab
- BME and 5G
 - Long term, concerted activities to clarify important issues in future 5G deployment and operation
 - Goal: paving the way towards a successful 5G ecosystem

Step 1 – Designing the new world



The 5G Infrastructure Public Private Partnership

- 5G is a cloud native system
 - Both the network softwarization and the function virtualization aspects are important
- 5GPP project 5GEx
 - BME/TMIT/HSNLab and Ericsson
 - Inter-domain orchestration of services (and resources)
 - Prequel project: UNIFY, to unify the network control (SDN)
 - Building knowledge and cooperating with operators (5 large EU mobile operators) in the service creation process
 - Focusing on the wired domain
 - Orchestration of the VNFs



<http://www.5gex.eu>

Step 2 – Spreading the word



- 5G Coalition – consortium of the 5G stakeholders under the umbrella of DJP (Digital Welfare Program of the Hungarian Government)
 - Drafting a strategy for 5G policies
 - Covering many facets of the 5G ecosystem
 - Strong focus on verticals
 - Networking and dissemination, media events
 - Pilots and trials
 - International relations

Step 3 – Showing the way



- Applied research in 5G
 - Building a pilot infrastructure
 - Adapting and extending the mobile services to 5G
 - Experimenting and demonstrating novel use cases
 - Understanding how do verticals fit into this world

Summary



- Enabling the 5G deployment by "exploratory research"
 - Validating new use cases and offering feedback to vendors and operators
- Bridging the gap between verticals and operators
 - Supporting the verticals to take advantage of the new 5G world