Digital. Finland. GO!



Brussels, 8 February 2017 EPP IMCO / ITRE HEARING

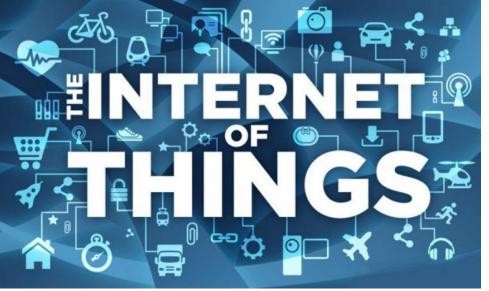
"How to Make the EU Succeed in the Platforms Economy?" – Research, Innovation and Funding Aspects

Mika Klemettinen, PhD Programme Manager



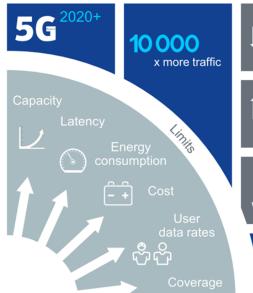
The Finnish Funding Agency for Innovation















x more devices

110 Gbit/s peak data rates

years M2M battery life

100 Mbit/s wherever needed

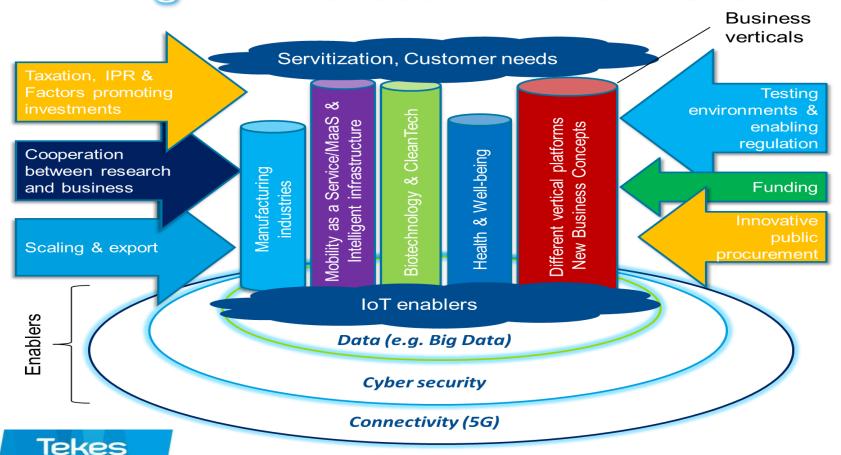
M2M ___ultra low cost

Ultra reliability

Low energy



Digital Innovation Environment

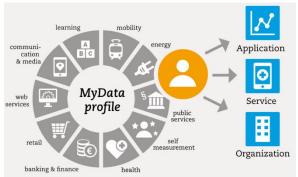


Digital Enablers

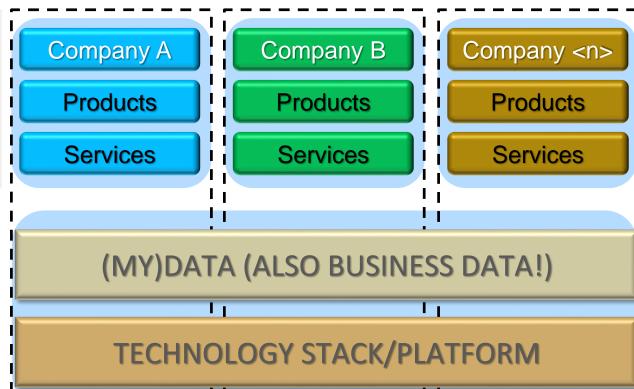
THEME	ANALYTICS+	SUPER IOT	5G
CONCEPT	SMART OPERATION	CONNECTED DEVICES	ULTRA-FAST EDGE
BENEFIT	INSIGHT FROM DATA SITUATION CONTEXT	INTEROPERABILITY SENSING BASED OPS	LOW-LATENCY REAL-TIME
SPEARHEAD	DATA AI	IOT	RADIO
FLEXIBILITY	ERVICES	RE, SYSTEMS & SI	SOFTWAF
RELIABILITY	PERABILITY	CURITY & INTERO	PRIVACY, SEC
DESIGN	SENSORS	, ELECTRONICS &	MATERIALS



MyData Centric Strategy for Platform Economy

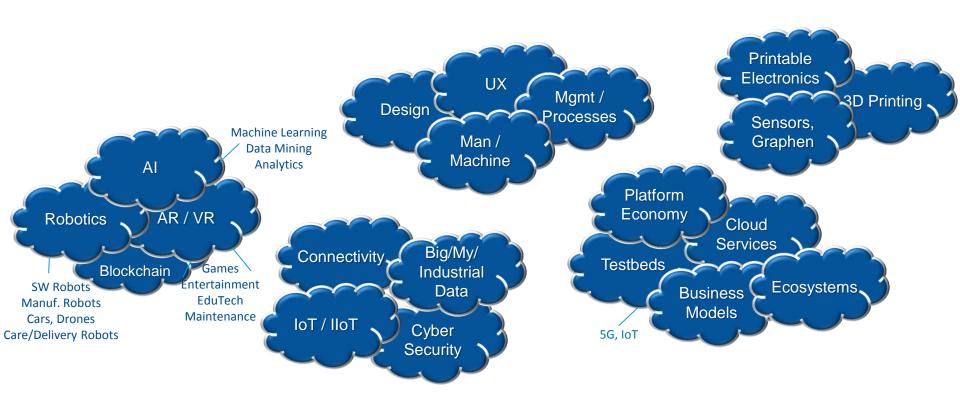






Tekes

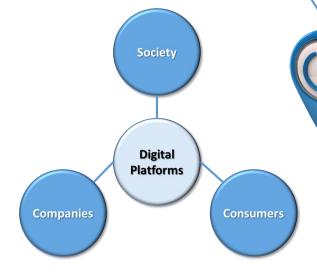
Key Technologies and Areas to Invest In





Public-Private-Partnerships

PLATFORMS (PPP)



TECHNOLOGIES

- · Wireless technologies, 5G
- · Cyber security and blockchain
- Internet of Things (IoT)
- · Sensors and printable electronics
- Big data and data value aggregating operators
- Service analytics
- · Artificial intelligence and robotics
- Augmented/virtual reality (AR/VR)

SOFTWARE

Long-term national program to develop research, education, best practices and industry

TEST BEDS

5G Test Network Finland, MaaS, Aurora, ...



Example case

/stems

BUSINESS (































Startups





Payment Engine



5G Test Network Finland





TYÖ- JA ELINKEINOMINISTERIÖ ARBETS- OCH NÄRINGSMINISTERIET















Example case

Open Testbeds

















































































Towards



and beyond:



5GTN

5G Test Network is a scalable environment enabling future business model piloting and service development in realistic real-life use cases. It also provides an opportunity for testing and development of key technology components forming the future 5G systems.

FUHF

The Future of UHF Frequency Band studies the changing media environment, long-term media consumption formats and their impact on business models for different actors in mobile communications and broadcasting ecosystems.

CORE++

CORE++ studies the influence of new spectrum sharing concepts on mobile communications from business, regulation, and technology perspectives in close collaboration between industry, research and public domains.

TAKE-5

The 5th Evolution Take of Wireless Communication Networks creates a multidisciplinary and open research platform for investigation and experimental evaluation of innovative ideas in networking, services and new business models for







Example case

More concrete business driven collaboration:

Autonomous Ships
...Factory
...Hospital
...School
...etc.

Innovative Public Procurement

In order to make things happen, we need...

- 1. National and EU level short and long-term investments in
 - □ digital platform economy, enabling technologies, testbeds and piloting, and
 - **□** general software skills.
- 2. Focus on open/collaborative platforms, MyData/OpenData, new ways of working (hackathons, experimentation, collaboration, etc.) and new business models.
- 3. Cross-fertilization over different industries and research disciplines with more concrete business driven collaboration
 - □ to open up short-term opportunities, and
 - **□** to give focus on longer-term research.
- 4. Flexible regulation/deregulation as well as innovative public procurement to boost development and to create references.

Digital. Finland. GO!



Name: Mika Klemettinen, PhD

Title: Programme Manager

Email: <u>mika.klemettinen@tekes.fi</u>

Phone: +358 50 5577 647

Twitter: @MikaKlemettinen

Web: <u>www.tekes.fi/5thGear</u>



The Finnish Funding Agency for Innovation

NATION IN THE WOLLD WE 5G