

On the 5G research, innovation and collaboration frameworks looking at a global agreement

A global perspective of the business priorities, opportunities, fundamental challenges, key enabling technologies and instruments for making the Advanced 5G Infrastructure a reality with the maximal level of stakeholders' consensus.

Dr David Soldani, Huawei European Research Centre

EuCNC 2014 – Panel discussion #01

Bologna, 24 June 2014

<http://network2020.eu/new-etp-events/>



Vision

“The smart phone is the extension of what we do and what we are, the mobile is the answer to pretty much everything”

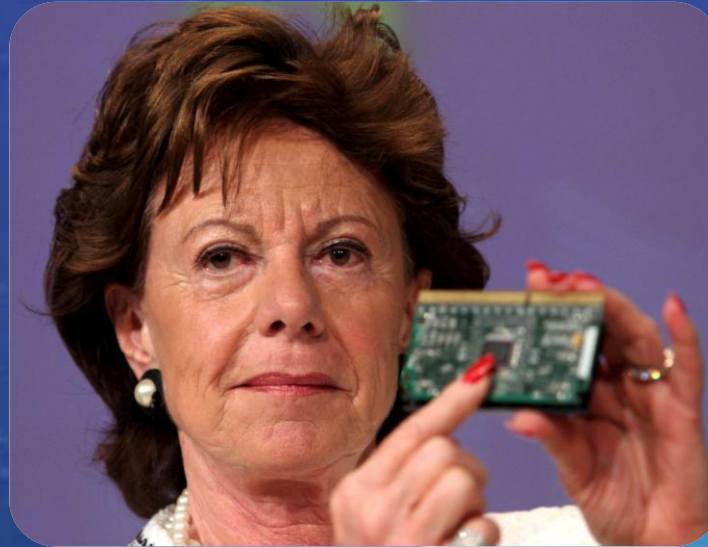
Eric Smith, Google, MWC 2010



2010

“Client Server”

→ Bit pipe and Free Communication Services



“5G will become the new lifeblood of the digital economy and digital society”

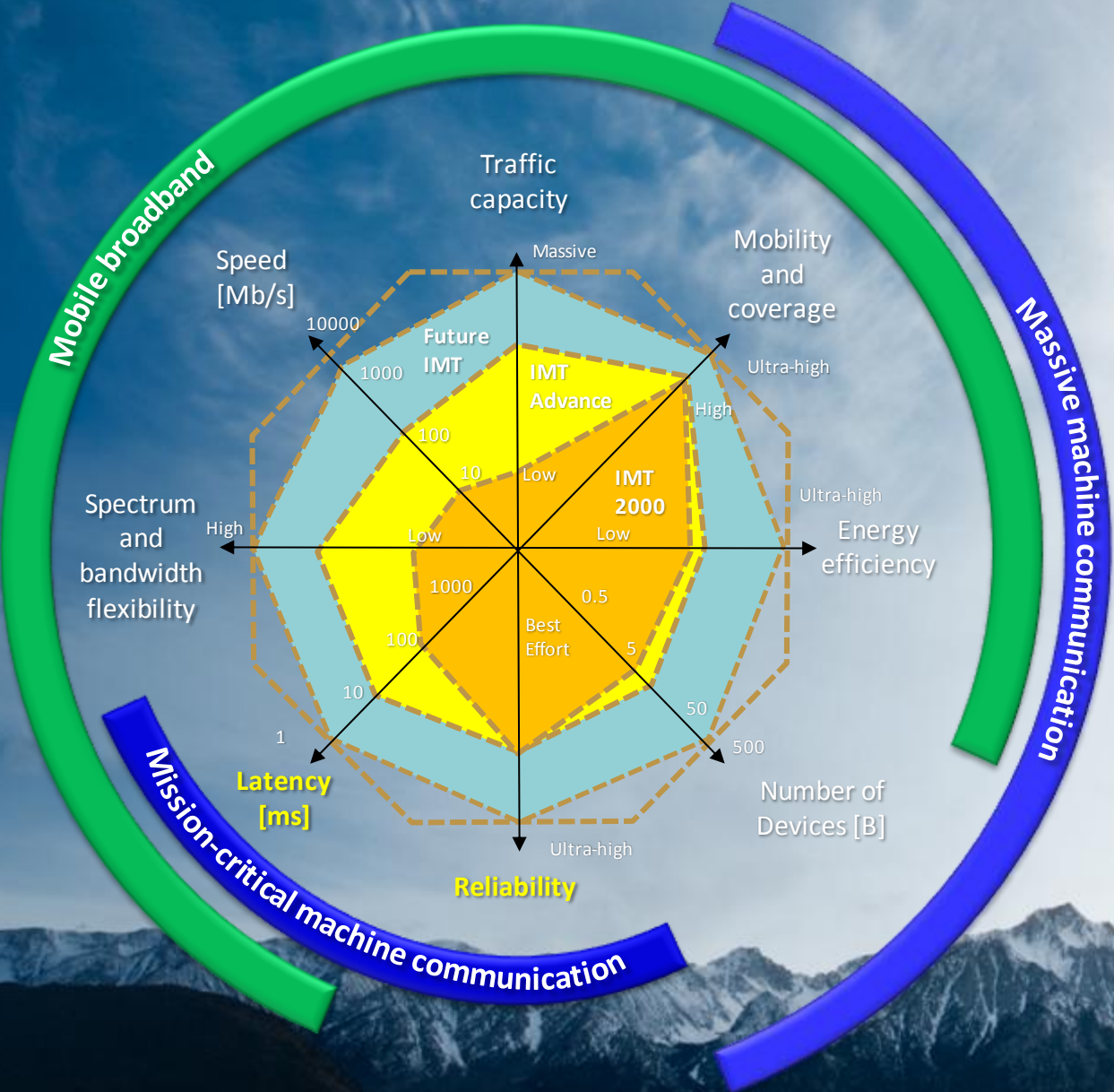
Neelie Kroes, VP European Commission

2020

“Bearer Graph”

→ Nervous system of the Digital Society

What is the target performance?



5G

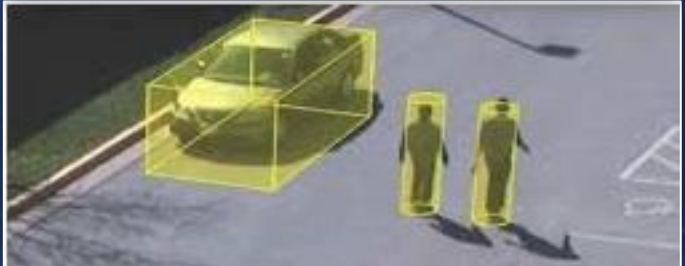
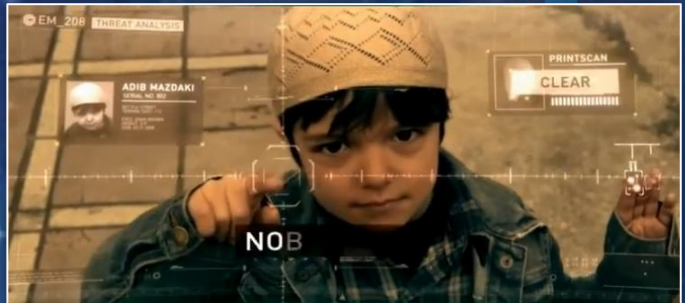
What capabilities are we talking about?

→ The true Digital Society!



5 Networking

<Match, Action> ≤ 1ms



(Cyber world)



Main research initiatives ongoing globally



EU

- Framework Program 7, e.g. METIS and 5GNow projects
- 5G PPP in Horizon 2020



UK

- 5GIC at University of Surrey



US

- Intel Strategic Research Alliance (ISRA)
- NYU Wireless Research Center
- 4G Americas



China

- 863 Research Program
- Future Forum
- IMT-2020 (5G) Promotion Group



Japan

- 2020 and Beyond Ad-Hoc Group under ARIB's Advanced Wireless Communications Study Committee



Korea

- 5G Forum as PPP

Distinguished speakers



**Werner
Mohr**

Nokia

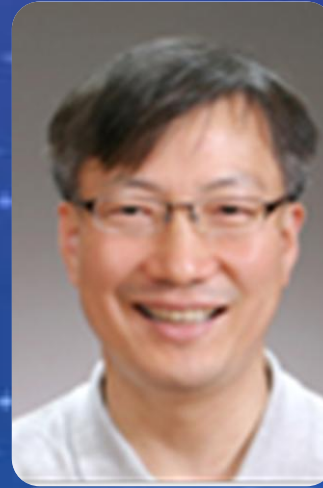
(Chairman of the Board of the 5G Infrastructure Association, **EU**)



**Takaharu
Nakamura**

Fujitsu

(2020 and Beyond Ad-Hoc Group under ARIB, **Japan**)



**HyunWoo
Lee**

**Dankook
University**

(5G Forum, **Korea**)



**Rahim
Tafazolli**

**University of
Surrey**

(Director of 5G Innovation Centre, **UK**)

Some discussion items ...



1. How to reach a global consensus on the broad definition, the **key functionalities** and **target time table for 5G**?
2. How to work together 1) to explore further possibilities in cooperating and implementing **joint research actions** in the field of 5G and 2) **towards global standards**?
3. How to facilitate the identification of a globally harmonized radio frequency band to meet the additional **spectrum requirements** for 5G?
4. How to **leverage the ongoing activities** and exchanges between industry associations dealing with 5G in EU and other regions?

... looking at a strategic cooperation in area of future mobile network



Thank you

www.huawei.com