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Implications of Brexit for EU27 innovation and deployment of 5G

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5G for Europe Action Plan (Sept 2016) Technology, business, and EU 27/UK geography intersect

- 5G new generation of network technologies:
 R&D & Standards?
- Prospects for new digital economic and business models: Actors?
- industrial transformations: Geography?
- New types of applications connecting devices and objects (the Internet of Things): Connectivity?



- 5G Standards: High level decision-making bodies outside the EU: No change for EU27
- ITU World Radio communication conferences
- Implementation of EU regulations on spectrum frequency bands and applications handled by European Conference of Postal and Telecommunications Administration (CEPT) and European Telecommunications Standards Institute (ETSI)
- ITU's IMT-2020 requirements anticipated with completion of 3GPP Release 16 in 2019



5G R&D: Mostly H2020 Research plan

- UK participants (quick qualitative survey)
 - Universities (Surrey, Bristol, ICL, ...)
 - BT, BBC
 - Vodafone, O2
 - UK based Industry research centers: NEC, Samsung, Interdigital
- Involvement of UK companies, operators and suppliers could be maintained?



5G Industry Actors

- 5G Operators: Largely transborder
 - Roaming issue
- Industry Geography: automotive FGAA continent wide and beyond





5G Vertical industries Actors

- Innovative business models across multiple sectors (e.g. transport, health, manufacturing, logistics, energy, media and entertainment):
- Diffentiated market and customs impacts as each industry has an EU27/UK specific value chain geography



5G Game changer Actors Connectivity

- Opportunity for new entrants: The European champions of tomorrow will rely on IoT data and IA
- New actors in logistics, smart cities, industry, retail, etc. will:
 - Collect massive data
 - Analyse realtime
 - Provide immediate management, logistics, maintenance,etc Feedback
- The bigger the seamless network, value chains and markets, the data pool, the bigger the efficiency gains

Risk of lose-lose situation for EU27 and UK



Issues

- EU 27 Vision for 5G: Worldwide leadership
- Conflicting views in the UK:
 - « Take back control » mantra v. Industry and R&D community vision
- Regulation EECC, BEREC/RSPG



Thank you!

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