

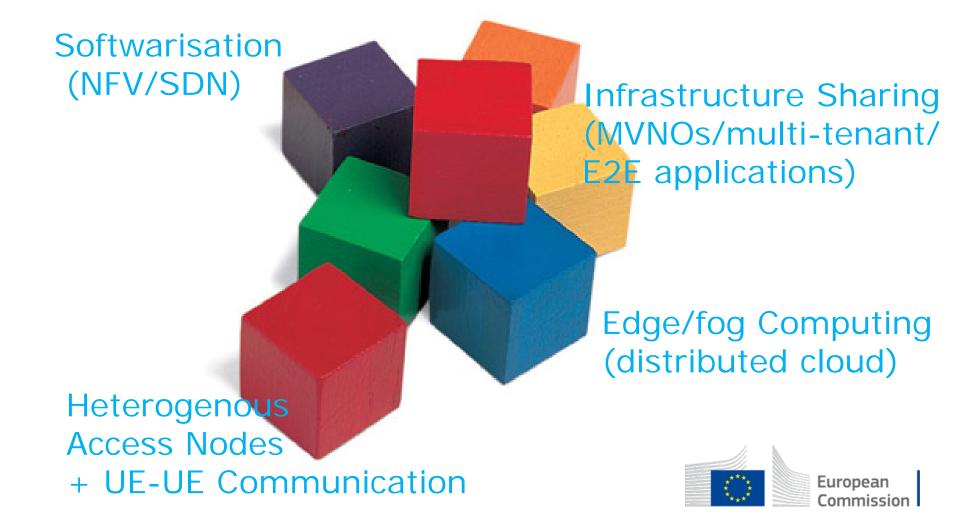
5G security and IoT



BEREC/ENISA Workshop
"Exploring the cybersecurity landscape of 5G and IoT"
Bratislava, March 7, 2018

Philippe Lefebvre, Head of Sector, 5G Deployment Strategy European Commission, DG CONNECT/E1

Key 5G "novelties" raising new security challenges



Relevant scope: Wider than IoT?...





Most relevant 5G Security Challenge Areas for IoT support

- 5G Security Architecture: Building upon 4G
- **5G Access Control**: Volume/signalling, cost, energy, heterogeneity, management
- Privacy: e.g. LI in a virtualised network context
- **Security management**: e.g. increased security of control plane to protect resources in a multi-slice/multi-tenancy environment, increased use of situational/behavioural context information (AI), coexistence PNF and VNF, etc
 - → degree of **standardisation** required?

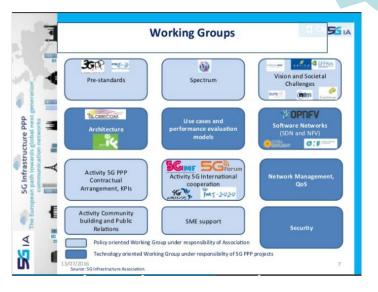


Key Influencers in EU 5G/IoT landscape



FCSO

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AIOTI

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Working Groups

WG 01	loT Research	ing Well								
WG 02	Innovation Ecosystems	Smart Living Environment for Ageing Well	od Security				nent			rchitecture
WG 03	IoT Standardisation	ng Environm	Smart Farming and Food Security		N.	oility	Smart Water Management	Smart Manufacturing	rgy	Smart Buildings and Architecture
WG 04	loT Policy	Smart Livir	Smart Farn	Wearables	Smart Cities	Smart Mobility	Smart Wat	Smart Mar	Smart Energy	Smart Buil
	SME Interests	WG 05	WG 06	WG 07	WG 08	WG 09	WG 10	WG 11	WG 12	WG 13

A few questions from EC perspective

... but don't trust my response ...

Can we share a common security architecture for 5G? Or should approaches be more specific to vertical use cases? Who has ultimate control? Impact on standardisation?

Should we make use of the EU Cybersecurity Certification Framework in this 5G IoT security context? Possible approaches?

What/How can a closer collaboration between Public-Private Partnerships on 5G and Cybersecurity (and AIOTI) achieve in advancing faster on research? Priorities? Key topics?

A wealth of technical expertise available

https://5g-ppp.eu/white-papers/

5G PPP Security Landscape - (White Paper) June 2017

This paper provide insights into how 5G security should be addressed in terms of "what" and "why".

https://aioti.eu/aioti-wg03-reports-on-iot-standards/

AIOTI WG03 Reports on IoT Standards

Download Identifiers in Internet of Things (IoT) Release 1.0 February 2018

Download High Level Architecture (HLA) Release 3.0 June 2017

Download IoT LSP Standard Framework Concepts Release 2.8 2017

Download Report on Workshop on Security & Privacy in IoT, 13 January 2017

Download Report on Workshop on Security and Privacy

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