

The future of Network Infrastructure research; Smart Networks in Horizon Europe

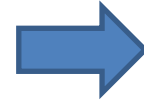
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Chairman of the Board 5G IA

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Introduction

5G PPP



A Success for Europe

- **Thousands of researchers and developers across Europe** have worked on innovative solutions for the definition of 5G
- **5G PPP main achievements:**
 - 5G System design & Evaluation aspects
 - 5G Air interface innovations
 - Network management & Security innovations
 - Virtualization & Service deployment innovations
- **5G PPP Projects have built pre-standards consensus** and provided 100s of contributions to standardization

2020 NOT THE END OF THE STORY
Society will not stop

5G PPP

The European path towards global next generation communication network

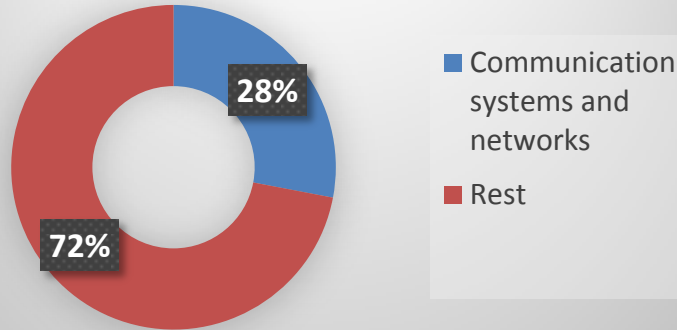
Introduction

- Communication networks provide the life blood to realize the digital society
- Connectivity has gone from a luxury to a critical human right
- Research, development and deployment of communication networks will be a key future economic differentiator
- 2020 does not mark the end of network infrastructure development We need a Smart Networks Partnership instrument in FP9 to continue European technology leadership

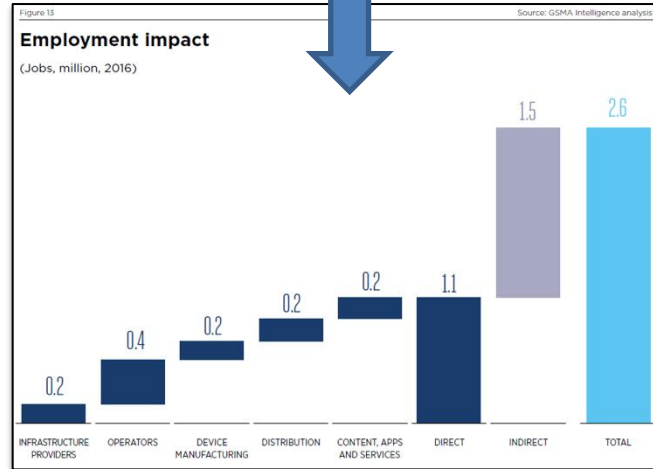
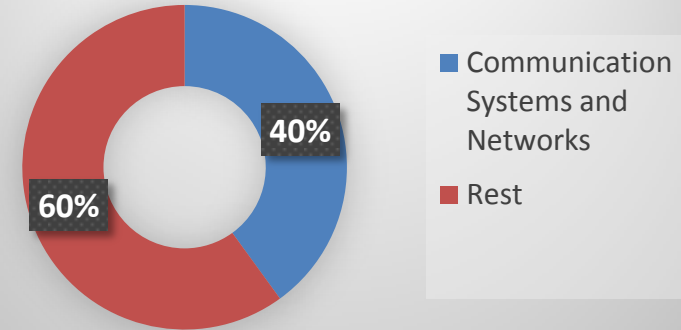


Strong Economic Contributor

ICT Employment



ICT Market Size



Employment impact of the mobile industry

Verticals Benefits	Automotive (€ mn)	Healthcare (€ mn)	Transport (€ mn)	Utilities (€ mn)	Total (€ mn)
Strategic	13,800	1,100	5,100	775	19,770
Consumer	13,900	207	-	3,000	17,110
Third Party	13,700	72	-	-	13,770
Total	42,200	5,530	8,300	6,470	62,500

Totals may not correspond due to rounding

Source: Identification and quantification of key socio-economic data to support strategic planning for the introduction of 5G in Europe. A study prepared for the European Commission DG Communications Networks

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Key Societal Needs

- Safety for all:
 - Personalised and perpetual protection
- Connectivity for all:
 - Massive amounts of things and systems need to be connected in a scalable and cost-efficient way.
- Service for all:
 - Global reach and optimised local service delivery capabilities
 - Cognitive operations making use of Artificial Intelligence and Machine Learning mechanisms
- Performance for all
 - Seemingly infinite network capacity
 - Imperceptible latencies

Recommendations

- Communication Infrastructures are critical to creating the future digital society, creating jobs and creating growth.
- Europe needs to continue the good work started by 5G PPP and retain communication infrastructure research leadership.
- Europe should establish a new key area in FP9 on **Smart Networks** with a significant budget allocation
- This activity should be implemented in a partnership instrument which provides a realistic timescale to ensure technology and expertise development

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Thank you for your attention

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