







The European path towards global next generation

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communication network



The 5G PPP is co-funded by the Horizon 2020 programme of the European Union

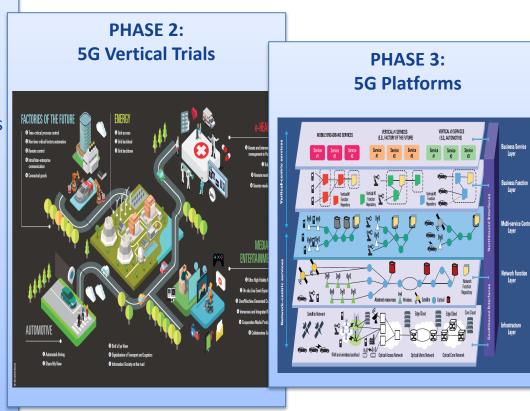






PHASE 1: 5G Core Research main achievements:

- 5G System design & Evaluation aspects
- 5G Air interface innovations
- Network management & Security innovations
- Virtualization & Service deployment innovations
- 100s of contributions to standardization













The true differentiator for 5G is the vertical markets. If we fail with the verticals, we fail with 5G.

Financial Benefit of Using 5G in Vertical Markets

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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					

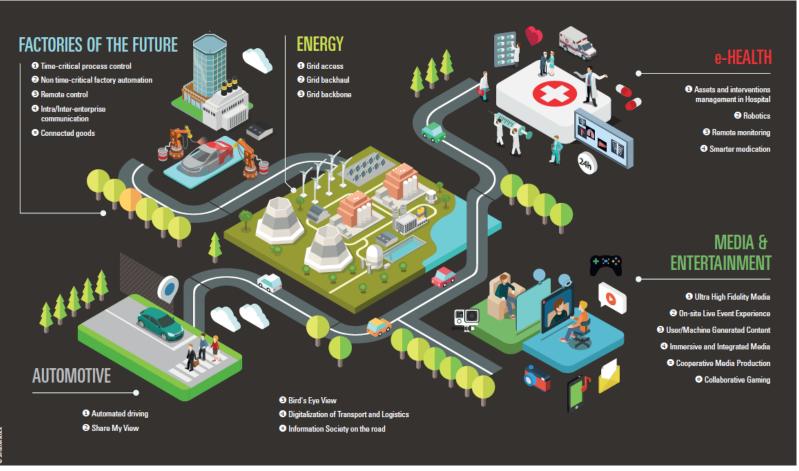
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Source: *Identification and quantification of key socio-economic data to support strategic planning for the introduction of 5G in Europe* A study prepared for the European Commission DG Communications Networks

European Smart Networks Strategy, October 2rd 2019



5G – A driver for industrial and societal changes Now and in the Future



Source: 5G Infrastructure Association: 5G Empowering vertical industries. White Paper, 2016, <u>https://5g-ppp.eu/wp-content/uploads/2016/02/BROCHURE 5PPP BAT2 PL.pdf</u>.

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Beyond 2020



- Communication networks provide the life blood to realize the digital society
- Connectivity has gone from a luxury to a critical human right

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- 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
 Horizon Europe to continue European
 technology leadership



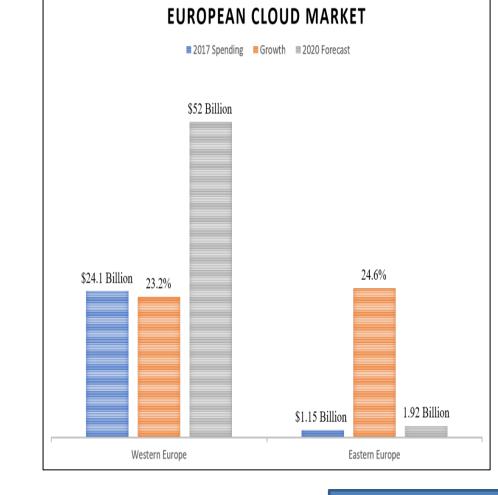


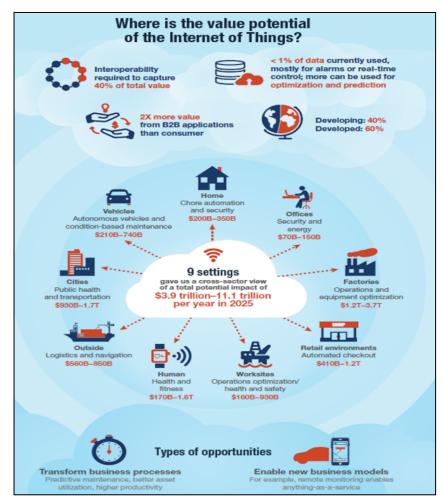




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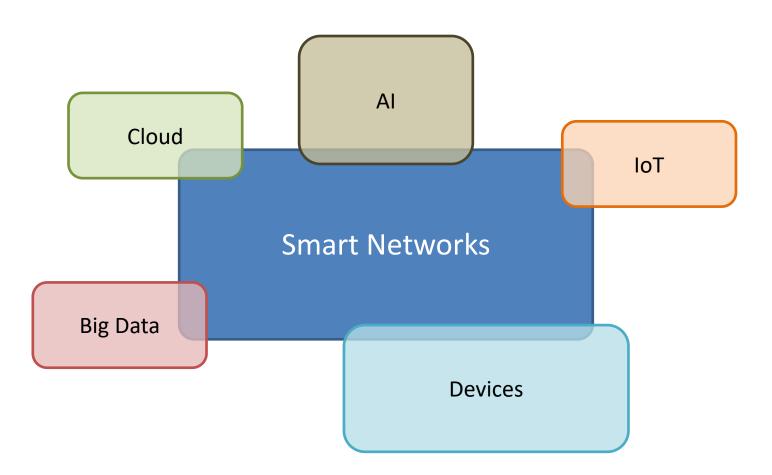




We Need end to end story

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Build on European Strengths



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-> Ensure Digital Autonomy





Conclusions

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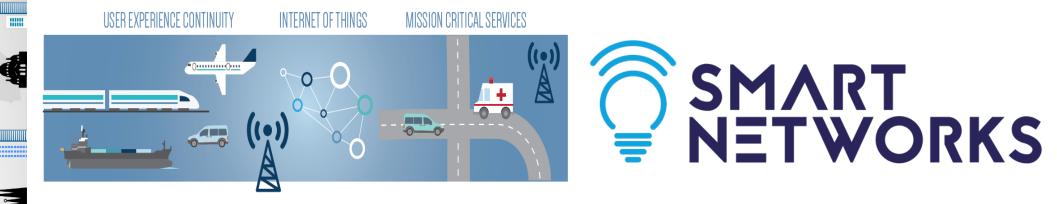
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- Europe should focus on being the first with "Full 5G" i.e. 5G to realize the full potential of the Vertical markets
- Europe should make substantial and sustained investment in Horizon Europe to retain network infrastructure technology leadership (Smart Networks & Services)
- SN&S needs to go beyond mobile communication
- Through collaboration and alignment we can strengthen other ICT sectors by leveraging European strength in the mobile communications domain