

# The 5G Infrastructure Association:

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The 5G Infrastructure Association

Chairman of the 5G IA Board



[www.5G-IA.eu](http://www.5G-IA.eu)

The VOICE of  
EUROPEAN INDUSTRY  
for the DEVELOPMENT  
and EVOLUTION of  
**5G**



## Opening Thought

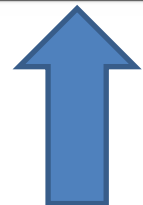
The true differentiator for 5G is the vertical markets.

If we fail with the verticals, we fail with 5G.

## Financial Benefit of Using 5G in Vertical Markets

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

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

## PHASE 1:

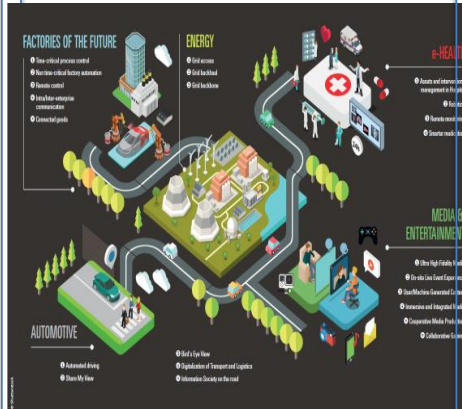
## 5G Core Research

## main achievements:

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

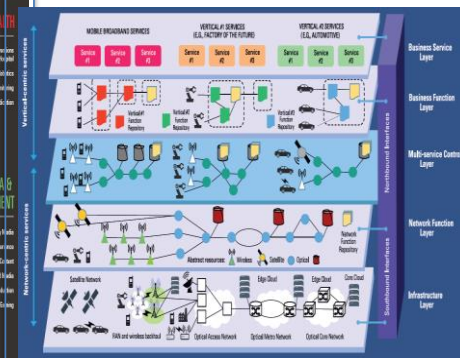
## PHASE 2:

## 5G Vertical Trials



### PHASE 3:

## 5G Platforms



2015

2016

2017

2018

2019

2020

- 62 R&I projects since the beginning of the Program
- 800+ contributions to standardization activities (Phase II and Phase III)
- Over 1300 scientific publications (Phase II and Phase III)
- Design, evaluated and validated multiple technological breakthroughs

# Verticals in 5G PPP Phase II

## Connected and Automated Mobility

## Smart Cities

## Industry 4.0

Projects	Vertical Stakeholders	ITU Service Types	Locations
		eMBB, URLLC	Montlhéry (FR)
	City councils of Barcelona, Bristol and Lucca	eMBB, URLLC (mMTC)	Barcelona (ES) Bristol (UK) Lucca (IT)
		eMBB	Watford (UK) Paris (FR) Madrid (ES)
		eMBB	Surrey (UK) Munich (DE) Turku (FI)
		eMBB	Egaleo (EL)
		eMBB	Athens (EL) Thessaloniki (EL) Madrid (ES) Rome (IT)
		eMBB, URLLC	Aveiro (PT) Athens (EL)
		URLLC	Turin (IT), Pisa (IT) Madrid (ES) Nice (FR)

Projects	Vertical Stakeholders	ITU Service Types	Locations
		mMTC	Hamburg (DE) Turin (IT)
		mMTC, URLLC, (eMBB)	Terni (IT)
		mMTC (URLLC)	Detmold (DE)
(Phase 1) 		URLLC	Brandenburg (DK)
		mMTC, URLLC, eMBB	Barcelona (ES) Bristol (UK)
		mMTC, URLLC	Paris, Grenoble (FR)
		URLLC, eMBB	Coventry (UK)
		URLLC (eMBB)	Genoa (IT) Ljubljana (SL)

## Consumer and Professional Services

## Transport

## Public Safety & Digital Divide

# Verticals in 5G PPP Phase III

	 Industry 4.0	 Agriculture & agri-food	 Automotive	 Transport & logistics	 Smart Cities & utilities	 Public Safety	 Smart (air)ports	 EnergyY	 eHealth & wellness	 Media & entertain.
5G EVE	✓		✓		✓	✓		✓	✓	✓
5GENESIS				✓	✓	✓				✓
5G VINNI	✓			✓		✓		✓		
5GIDRONES				✓		✓				✓
5G HEART		✓	✓	✓					✓	
5GROWTH	✓			✓				✓		
5G SMART	✓									
5G SOLUTIONS	✓				✓		✓	✓		✓
5G TOURS				✓	✓		✓		✓	✓
5G VICTORI	✓			✓				✓		✓

- Many SMEs present in vertical markets such as media, transportation, energy, smart cities, and public safety.
- With the Phase 3 of the 5G PPP, SME success stories are appearing. So far, most success stories focus on technology advancements. much more is expected to show up in a 2-5-year time frame,.
- 5G PPP has shown capability to demonstrate feasibility for SMEs to develop and deploy 5G innovative solutions in vertical markets.
- This will hopefully allow more SMEs to follow a similar path, increasing the European market share on a global scale and strengthen the chances for European SMEs to achieve sustainable growth.



# Thank you for your attention

For more information about EC 5G activities please visit  
<https://ec.europa.eu/digital-single-market/en/policies/5G/>