

5G Action Plan for Europe

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** Disclaimer: the views expressed are those of the author and cannot be regarded as stating an official position of the European Commission.*



The European 5G Framework

Connectivity package (09/16):

1. **New Gigabit broadband targets for 2025**

- ✓ ≥ 100 Mb/s (up to 1 Gb/s) access for all EU households
- ✓ Gb/s connectivity for main socio-economic drivers
- ✓ 5G connectivity for major paths and urban areas

2. **5G Action Plan for Europe (5GAP)**

3. **European Electronic Communications Code:** *'5G-ready' review of the telecom framework*

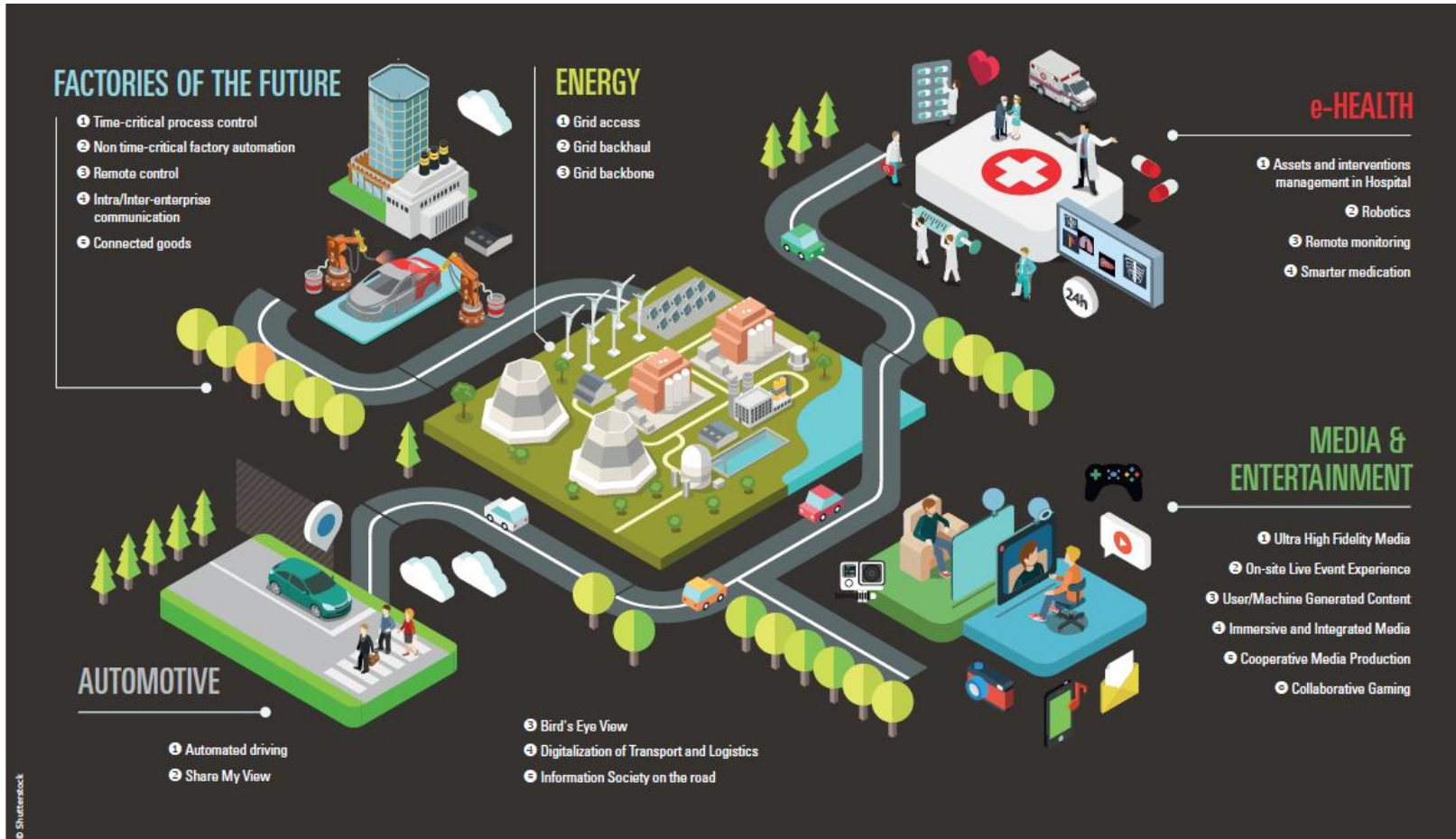
Sectorial initiatives:

- ✓ **R&D:** 5G-PPP (since 2013)
- ✓ **Transport:** C-ITS Strategy (11/16)
- ✓ ...

- ***Technology progress, novel services (IoT)***
- ***DSM-Strategy***
 - *digital transformation through connectivity*
 - *lessons learned (slower 4G take-up)*
- ***Operational shorter-term tasks (by ~2020)***
 - *Coordinated 5G introduction (~ 3G in 1998)*
- ***Acceleration of the international 5G agenda***

European Focus on 5G for 'Verticals'

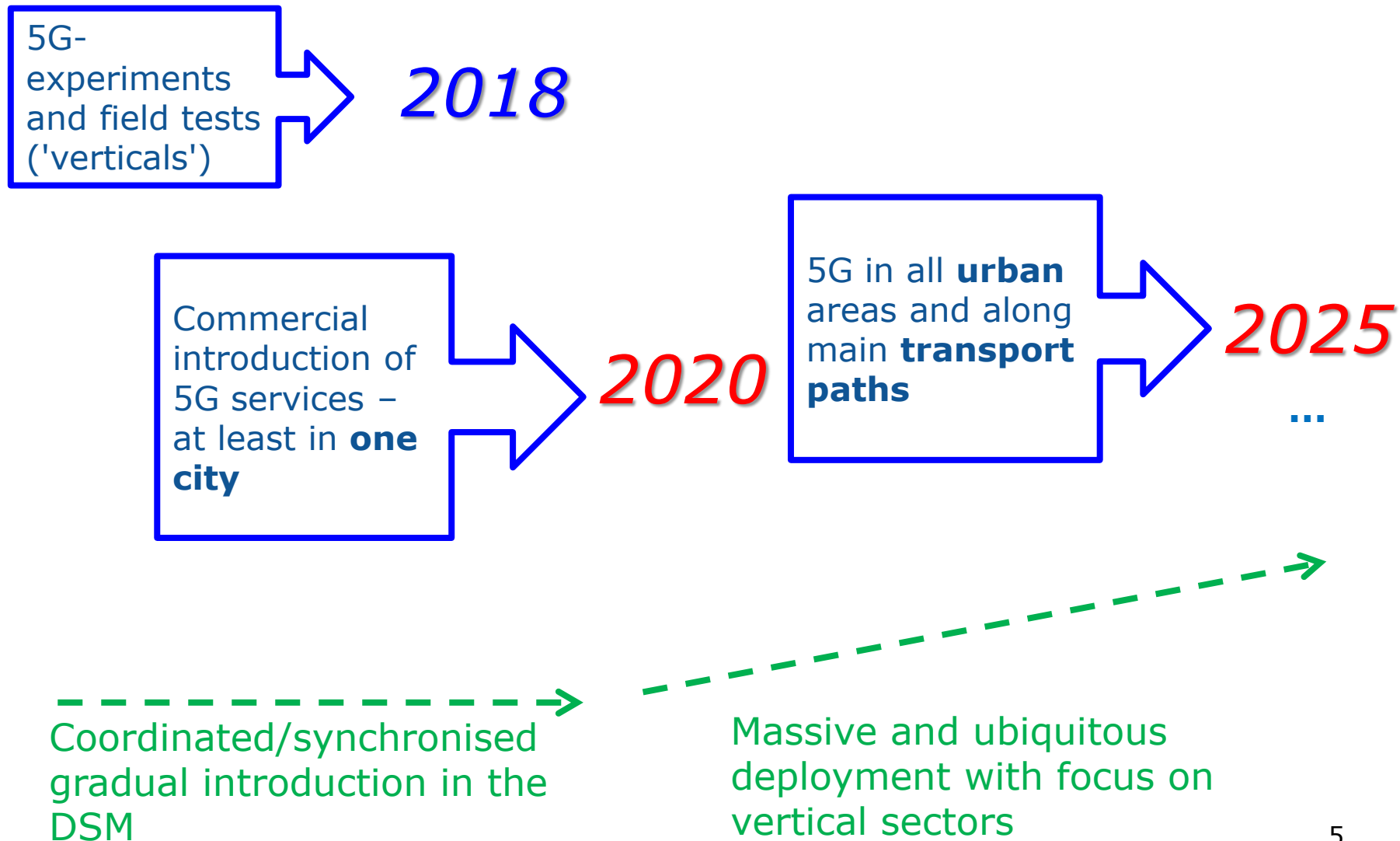
High-quality *wireless* connectivity with specific *per-service* parameters



Source: 5G-PPP



Single Market Approach to 5G Introduction

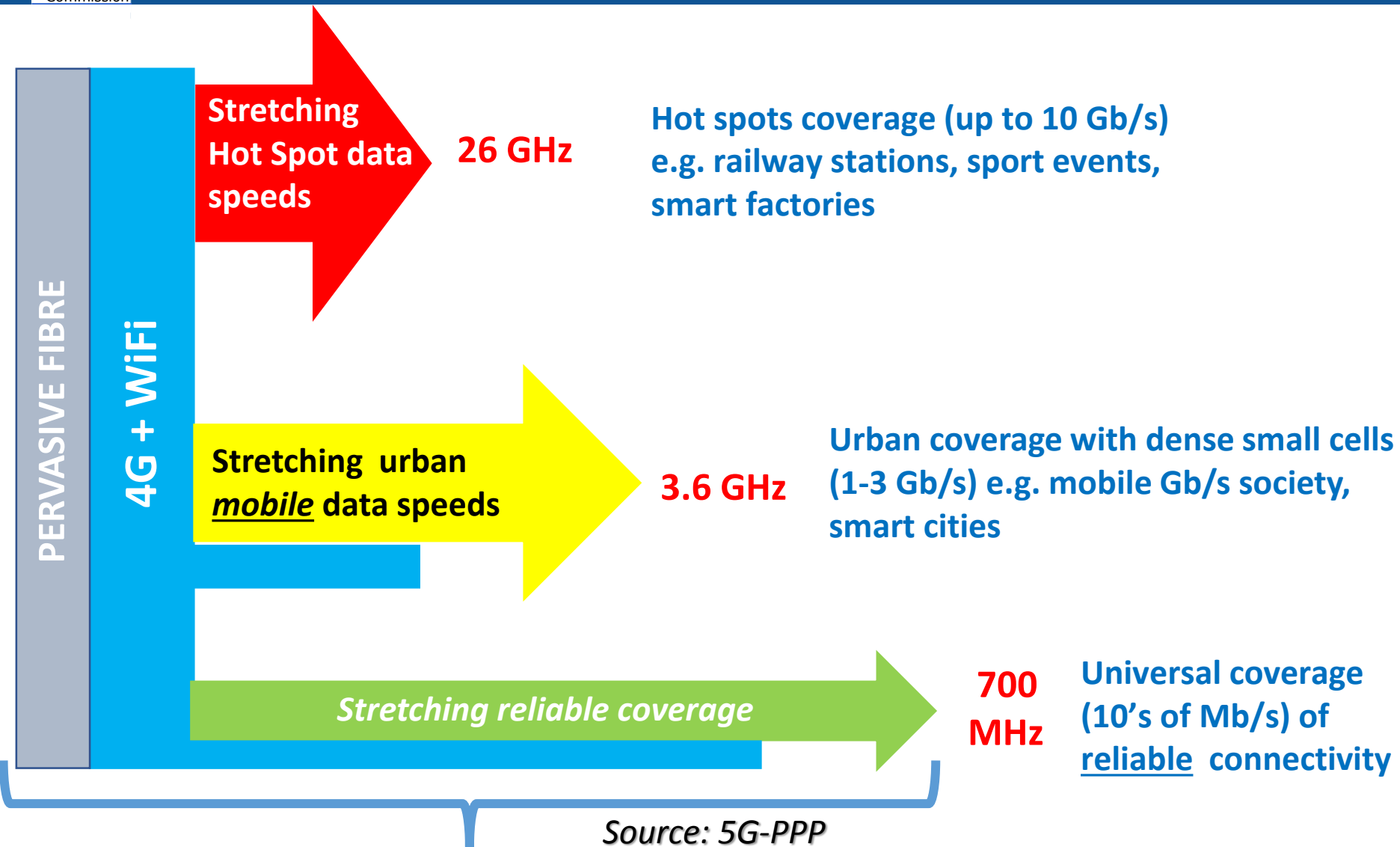


5G Coordination: 5 Areas, 8 Actions

Category	Specific Goals in 5GAP	A*
1) Alignment of 5G objectives and schedule across EU	<ul style="list-style-type: none"> • Common timetable to meet connectivity targets (2020 & 2025) • National 5G roadmaps (in broadband plans); • '5G-ready' cities; support for field tests 	1
2) Radio spectrum	<ul style="list-style-type: none"> • Band identification ('pioneer' bands and beyond) • Common authorisation models (>24 GHz) 	2 3
3) Dense networks	<ul style="list-style-type: none"> • Roll-out goals for fibre deployment (backhaul) • Administrative best practice for small cells 	4
4) Technology standards	<ul style="list-style-type: none"> • Basic standards by end 2019 • Broad approach: network access and core • Based on industry experiments involving vertical sectors (5G-PPP role) 	5
5) Business innovation (demand side)	<ul style="list-style-type: none"> • Industrial engagement ('focus group') on joint trials ('trial roadmaps') and ecosystem development with 'verticals' • Public sector as a primary user • Venture capital to foster innovation 	6 7 8

* Action number in the 5G Action Plan

5G 'Pioneer' Frequency Bands



Thank you!