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5G strategies, policies and implementation: A digital industry perspective

DIGITALEUROPE represents more than 35,000 businesses across Europe

We are the voice of digitising industries

Vision – A European Union that nurtures and supports digital technology industries, and that prospers from the jobs we provide, the innovation and economic benefits we deliver and the societal challenges we address.

Mission – To foster, on behalf of our members, a business, policy and regulatory environment in Europe that best realizes our vision. We will achieve this by working as positive partners with a wide range of stakeholders.

40
National trade associations (NTAs)
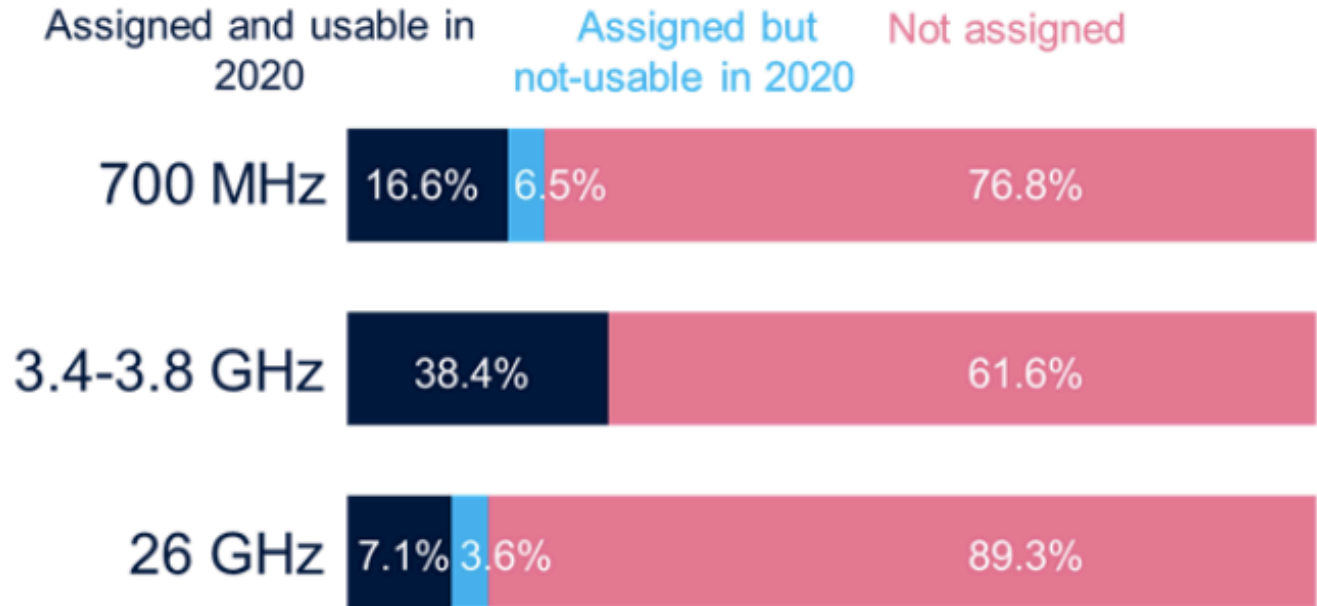
76
Corporate members

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Europe's connectivity gap

▸▸ EU Member States have reached 100% basic broadband penetration rate

▸▸ The coronavirus pandemic has shown how broadband roll-out, including 5G and enhanced Wi-Fi, constitutes a crucial element of ensuring ubiquitous connectivity for EU society and business – the basis for new digitisation capabilities, the creation of new markets and economic growth

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The 5G spectrum assignment gap

20.7% 5G spectrum assigned throughout the EU-27 plus the UK*

5G pioneer spectrum

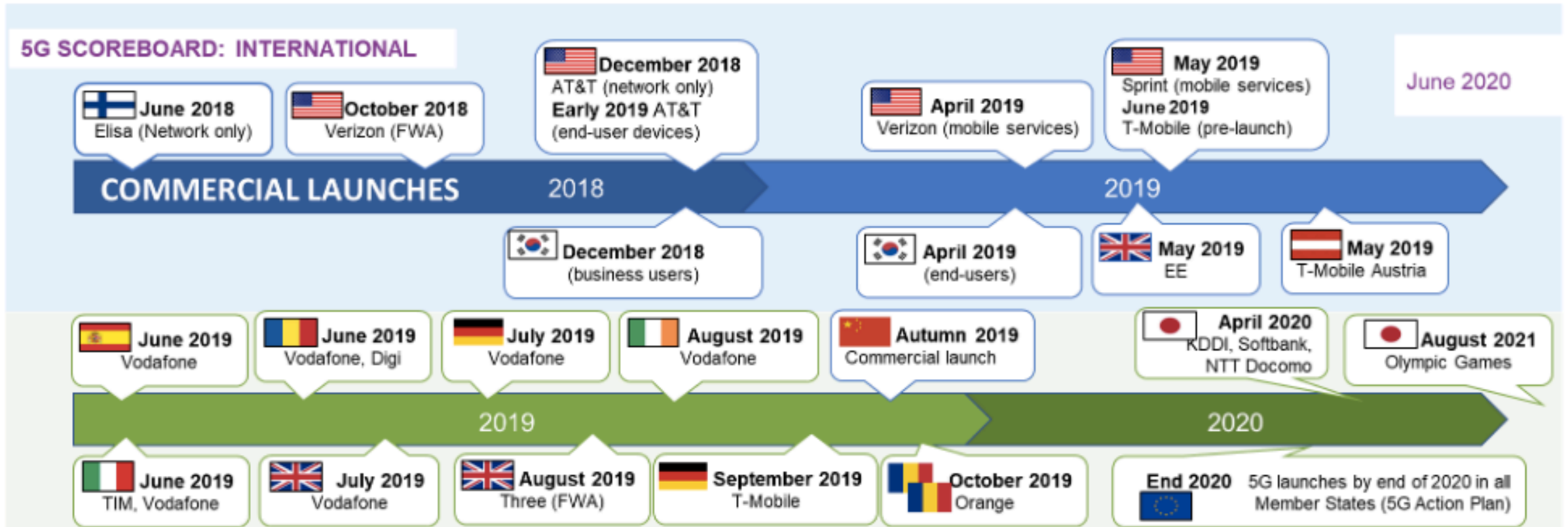|	Assigned and usable in 2020	Assigned but not-usable in 2020	Not assigned
700 MHz	16.6%	6.5%	76.8%
3.4-3.8 GHz	38.4%		61.6%
26 GHz	7.1%	3.6%	89.3%

* represents the total amount of spectrum assigned in all 27 Member States and in the UK. The figure is expected to increase following the recently updated EU telecom rules.

Source: IDATE DigiWorld, 5G Observatory Quarterly report #8

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The 5G commercial gap

5G SCOREBOARD: INTERNATIONAL

June 2020

COMMERCIAL LAUNCHES — 2018 · 2019

- 🇫🇮 **June 2018** Elisa (Network only)
- 🇺🇸 **October 2018** Verizon (FWA)
- 🇺🇸 **December 2018** AT&T (network only) / **Early 2019** AT&T (end-user devices)
- 🇰🇷 **December 2018** (business users)
- 🇺🇸 **April 2019** Verizon (mobile services)
- 🇰🇷 **April 2019** (end-users)
- 🇺🇸 **May 2019** Sprint (mobile services) / **June 2019** T-Mobile (pre-launch)
- 🇬🇧 **May 2019** EE
- 🇦🇹 **May 2019** T-Mobile Austria

2019 · 2020

- 🇪🇸 **June 2019** Vodafone
- 🇷🇴 **June 2019** Vodafone, Digi
- 🇩🇪 **July 2019** Vodafone
- 🇮🇪 **August 2019** Vodafone
- 🇨🇳 **Autumn 2019** Commercial launch
- 🇯🇵 **April 2020** KDDI, Softbank, NTT Docomo
- 🇯🇵 **August 2021** Olympic Games
- 🇮🇹 **June 2019** TIM, Vodafone
- 🇬🇧 **July 2019** Vodafone
- 🇬🇧 **August 2019** Three (FWA)
- 🇩🇪 **September 2019** T-Mobile
- 🇷🇴 **October 2019** Orange
- 🇪🇺 **End 2020** 5G launches by end of 2020 in all Member States (5G Action Plan)

Source: IDATE DigiWorld, 5G Observatory Quarterly report #8

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5G roll-out challenges

▶▶ **Swift and sufficient harmonised spectrum availability** – a mix of spectrum bands with different propagation characteristics to suit different purposes

▶▶ **Investment-friendly mechanisms to make spectrum available** – auction formats that incentivise quick network rollout with ambitious coverage targets over inflated short-term revenue for the state

▶▶ **Need for both licensed and unlicensed spectrum** – helping improve the connectivity experience for key 5G use cases such as online education, home office and video streaming

▶▶ **Simplified site access and planning permissions** – harmonising small cell deployment requirements, review of Broadband Cost Reduction Directive

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5G roll-out challenges, continued

▶▶ **Security of networks and applications** – certification and assurance, with harmonised technical conditions (e.g. certification schemes)

▶▶ **Fixed wireless access** – complementing fixed broadband networks as faster and more cost-effective alternative to provide broadband connectivity to homes and SMEs

▶▶ Electromagnetic fields (EMF) – providing **consistent, fact-based positions and fighting misinformation** regarding EMF health effects in the context of 5G and wireless technologies in general

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New business models and value chains

▶▶ 5G will play an essential role in digitising wider sectors of the economy, leading to improvements in automation, productivity and innovation. **All business models should be equally treated**, no one business model or sector should be favoured over others

▶▶ IoT- and 5G-driven innovations, boosted by the data and artificial intelligence, are largely international – **EU regulatory harmonisation** is therefore particularly timely and relevant

▶▶ Consistent application of **network slicing** to support the development of a Digital Single Market and commercial practices for all providers to invest, conduct business and innovate in Europe

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New business models and value chains, continued

▶▶ Encouraging **interoperability** – interoperable standards as an important vehicle to enable a broad range of use cases with positive spill-over effects in other network industries such as transport, energy, etc.

▶▶ Need to deploy **sustainable very high-capacity networks** to contribute to the new EU climate objectives – connectivity-enabled digital innovation can significantly contribute to making our society greener

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Thank you for your time!

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