

European Commission to harmonise the last pioneer frequency band needed for 5G deployment

The European Commission has just adopted an Implementing Decision to harmonise the radio spectrum in the 24.25-27.5 GHz (or 26 GHz) band, which is a big leap towards the deployment of 5G across Europe.



European Commission

5G deployment

The deployment of 5G networks requires the timely availability of a sufficient amount of harmonised spectrum. With this decision, the European Commission has delivered its commitment to harmonise the so-called 'pioneer bands' for 5G in a timely manner as foreseen in the 5G Action Plan.

What this decision means for Europe

Following this Implementing Decision, Member States can set common technical conditions and subsequently allow the use of the 26 GHz band for 5G systems by 31 December 2020 in line with the European Electronic Communications Code. The harmonised technical conditions seek to ensure spectrum usage by multiple 5G networks, while mitigating interference risks, and ensuring compatibility with incumbent radio services (such as satellite services) within the 26 GHz band and in adjacent bands.

All Member States can now authorise European 5G pioneer bands at national level under common

technical conditions. The 26 GHz band will also be a key discussion at the World Radiocommunications Conference (WRC-19) later this year and Member States can take a common position based on EU-harmonised technical conditions. Today's decision follows a positive opinion by the Member States in the Radio Spectrum Committee, which is chaired by the Commission.

What this means for users

The 26 GHz frequency band offers the highest amount of spectrum and thus the largest capacity of all three 'pioneer bands', identified at the EU level for initial 5G deployment pursuant to the 5G Action Plan. Its harmonisation therefore paves the way to a significant enhancement of available bandwidths to spectrum users enabling ultra-high wireless broadband speeds. With the rollout of 5G systems in the 26 GHz frequency band, Europe is set to move towards gigabit-speed wireless broadband, whereby new types of applications, e.g. connecting objects and devices, will be just one of the major innovations.

According to a study undertaken on behalf of the Commission (report to be published in the coming weeks), the first services that are likely to be deployed in the 26 GHz band will be Enhanced Mobile Broadband (eMBB) services for high capacity (Fixed Wireless Access (FWA), high-definition video communications, virtual, augmented and mixed realities. It is expected that progressive adoption of this band by 5G operators will initially be focused on congested hot-spots, major transport paths and industrial sites.

Background

The Commission's implementing decisions for the harmonisation of spectrum for wireless broadband electronic communications services are based on the principle of technology and service neutrality. Therefore, no exclusive use for 5G is mandated for the 26 GHz band. 5G will rely in its progressive deployment on the other two pioneer bands in the Union (700 MHz and 3.6 GHz) until 2020 as well as on further spectrum – both in existing EU-harmonised bands below 6 GHz and new spectrum in the so-called millimeter-wave bands. In the future, once the new EU Communications Code is implemented, radio spectrum will be assigned and coordinated even better at EU level than at the moment so that Europe can become a leader in the rollout of 5G networks. The UHF Decision (EU) 2017/899 in force foresees availability of the pioneer 700 MHz band across the Union by mid-2020 and the Implementing Decision (EU) 2019/235 in force foresees availability of the pioneer 3.6 GHz band across the Union by end-2020.

View the implementing decision on the harmonisation of the 26 GHz frequency band.

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