

ECC Decision (18)06

Harmonised technical conditions for Mobile/Fixed
Communications Networks (MFCN) in the band 24.25-
27.5 GHz¹

Approved 06 July 2018

Latest amended 20 November 2020

¹ Comparable technical specifications to those given in this ECC Decision are given in Commission Implementing Decision (EU) 2020/590 of 24 April 2020 amending Decision (EU) 2019/784 [1]. EU Member States and, if so approved by the EEA Joint Committee, Iceland, Liechtenstein and Norway are obliged to implement the EC Decision.

EXPLANATORY MEMORANDUM

1 INTRODUCTION

This ECC Decision on harmonised technical conditions for mobile/fixed communications networks (MFCN) in the 26 GHz (24.25-27.5 GHz) band reflects the objective of CEPT to harmonise the 24.25-27.5 GHz band for Europe for 5G.

Studies have taken into account the compatibility with and protection of all existing services, including their future deployments, in the same and adjacent frequency bands.

2 BACKGROUND

CEPT recognises the importance of a harmonised frequency arrangement for MFCN and the need of common and minimal Least Restrictive Technical Conditions (LRTC) for MFCN in the band 24.25-27.5 GHz, including to ensure protection of other services and applications.

The following principles have been considered to define the MFCN frequency arrangement:

- Facilitating roaming and cross-border coordination to achieve global economies of scale for equipment;
- Use of a 200 MHz block size approach which is in line with the mobile systems foreseen to be used in the 26 GHz band;
- Spectrum efficiency and high level of flexibility in order to adapt to national circumstances as well as to meet the changing need and demand for capacity in time and geography.

The implementation of this ECC Decision will encompass different stages at the national level (e.g. national consultation processes and update of existing authorisations as required) with a varying complexity depending on the legal and regulatory framework of each country. The harmonised technical conditions for MFCN set out in this decision have been developed on the basis that the authorisation regime is expected to be on an individual authorisation basis. Individual authorisation may cover both nationwide licensing and licensing on a smaller geographic basis than nationwide. ECC Report 317 [2] provides information and guidance to assist administrations who are considering authorisation regimes for 24.25-27.5 GHz other than individual rights of use.

In the 26 GHz band, MFCN will support mainly urban and suburban hotspot areas. The deployment of MFCN is expected to target only cells with a small range. Due to the characteristics of this frequency band, there is no expectation that it will be used for contiguous wide/nationwide coverage of MFCN areas. There may be a need for a limited number of hotspots in rural areas. MFCN at 26 GHz could be deployed indoor and outdoor.

The protection of the passive Earth Exploration-Satellite Service (EESS) requires the introduction of appropriate limits on unwanted emission power in the band 23.6-24 GHz, applying to MFCN operating in the band 24.25-27.5 GHz. Additionally, the protection of Radio Astronomy Service (RAS) observations in the 23.6-24.0 GHz band will require the implementation of suitable separation distances between RAS stations and MFCN transmitters on a case-by-case basis.

Based on the harmonised technical conditions included in this ECC decision, coexistence with satellite data relay systems (including EDRS - European Data Relay System), operating under inter-satellite service (ISS), and with FSS satellite service are feasible when considering assumed technical and operational characteristics for MFCN.

A regular assessment of the evolution of MFCN system characteristics, including network deployments, in a timeline consistent with the 5 years review process of the Decision, or sooner if necessary, will provide additional confidence that these LRTC ensure adequate protection of other services, in particular space services.

In a number of CEPT countries, fixed point-to-point and point-to-multipoint links are in operation in the 24.5-26.5 GHz band. The band is also heavily used in many countries to deploy fixed point-to-point backhaul links for cellular networks and governmental usage.

Coexistence issues between fixed links and MFCN in the 26 GHz frequency band will be managed at national level or through the cross-border coordination framework and do not impact the harmonised technical conditions as defined in this Decision. ECC Report 303 [3] provides guidance to administrations for coexistence between 5G and fixed links in the 26 GHz band ("Toolbox").

CEPT administrations need to maintain, with appropriate provisions in their authorisation for MFCN, the possibility for existing and future EESS/SRS earth stations in the 25.5-27 GHz band and FSS earth stations in the 24.25-25.25 GHz band to use their respective bands and to safeguard their future operations taking into account the Radio Regulations. ECC Recommendation (19)01 [4] provides a technical toolkit to support the introduction of 5G while ensuring, in a proportionate way, the use of existing and planned EESS/SRS receiving earth stations in the 26 GHz band and the possibility for future deployment of these earth stations. ECC Recommendation (20)01 [5] provides guidelines to support the introduction of 5G while ensuring, in a proportionate way, the use of existing and planned FSS transmitting earth stations in the frequency band 24.65-25.25 GHz and the possibility for future deployment of these earth stations.

For cases other than synchronised MFCN operations, administrations may define appropriate mitigation measures to be applied in case of unsynchronised or semi-synchronised operations, taking into account ECC Report 307 [6] which provides a Toolbox for the most appropriate synchronisation regulatory framework including coexistence of MFCN in 24.25-27.5 GHz in unsynchronised and semi-synchronised mode. Alternatively, administrations may further develop and use an appropriate block edge mask at national level.

ECC Report 309 [7] analysed usages of aerial UE in current MFCN harmonised bands. No studies have been done for the 26 GHz frequency band yet.

WRC-19 agreed a two-step approach for unwanted emission limits from IMT operated in the 26 GHz band into the 23.6- 24 GHz band. The approach is based on initial limits (-33 dBW/200 MHz TRP for base stations and -29 dBW/200 MHz TRP for terminal stations) for early deployments, followed by more stringent final limits (-39 dBW/200 MHz TRP for base stations and -35 dBW/200 MHz TRP for terminal stations) which apply to new installations after a specified date². The two-step approach is based on an assumption that mass-market deployments will not occur during the initial step and therefore the aggregate emissions from MFCN deployment will remain below the EESS protection requirement.

Those protection limits are less stringent than initial harmonised limits from this ECC Decision (July 2018). The application of first-stage limits in CEPT will ensure the timely availability of MFCN equipment and facilitate faster investments in infrastructure. Second-stage limits, together with the requirement (as described in Resolution 242 (WRC-19) [9]) that no high-density mobile systems including high-density fixed wireless access shall be deployed in an appropriate frequency range below 23.6 GHz, ensure an adequate protection of the EESS (passive) and RAS within the 23.6-24 GHz frequency band.

After the transition period, CEPT assumes that the final limits in Resolution 750 (Rev. WRC-19) [8] (-39 dBW/200 MHz TRP for base stations and -35 dBW/200 MHz TRP for terminal stations) will provide protection of the EESS (passive) in the band 23.6-24.0 GHz only on the condition that it can be ensured through regulatory provisions that there will be no deployment of high-density mobile systems including high-density fixed wireless access in the frequency band 22-23.6 GHz.

CEPT agreed on an earlier date of 1 January 2024 as transition from the initial limits to the final limits, in order to avoid the risk of interference to EESS (passive) from large-scale MFCN deployments and to provide regulatory certainty and a clear signal to industry of the target to develop solutions.

WRC-19 also agreed on some other conditions to ensure protection of incumbent services as outlined in Resolution 242 (WRC-19) [9].

² Resolution 750 (Rev. WRC-19) [7] specifies that the final unwanted emission limits apply to base stations and mobile stations brought into use after 1 September 2027

3 REQUIREMENT FOR AN ECC DECISION

The ECC recognises that implementation of MFCN including IMT-2020/5G systems in CEPT countries providing high data rate applications in the band 24.25-27.5 GHz based on a harmonised frequency arrangement and least restrictive technical conditions will reduce development and implementation costs of manufacturing equipment and will secure future long term investments by providing economies of scale. A harmonised frequency arrangement will reduce complexity in cross-border coordination. The opportunity to utilise larger channel bandwidths will assist the provision of high data rates.

The ECC recognises that for the continuation of the successful development of MFCN including IMT-2020/5G, the regulatory framework needs to provide the confidence and certainty for industry to make the necessary investment. ECC recognises that administrations need flexibility to adapt their use of the band 24.25-27.5 GHz to national circumstances due to the current fixed links usage. Furthermore, administrations need to maintain the possibility of existing and future earth stations (EESS/SRS and FSS) to operate.

The ECC also recognises the need to include relevant technical conditions for MFCN including IMT-2020/5G to ensure protection of the EEES (passive) sensors in the 23.6-24.0 GHz band, as well as ISS and FSS stations within the 24.25-27.5 GHz band. Additionally, the protection of RAS will require the implementation of suitable separation distances between RAS stations and MFCN transmitters on a case-by-case basis.

ECC DECISION OF 6 JULY 2018 ON HARMONISED TECHNICAL CONDITIONS FOR MOBILE/FIXED COMMUNICATIONS NETWORKS (MFCN) IN THE BAND 24.25-27.5 GHZ (ECC DECISION (18)06), CORRECTED 26 OCTOBER 2018, AND LATEST AMENDED 20 NOVEMBER 2020

“The European Conference of Postal and Telecommunications Administrations,

considering

- a) that MFCN for the purpose of this Decision includes IMT-2020/5G and other mobile and fixed communications networks;
- b) that harmonised technical conditions (including a harmonised frequency arrangement) will support the implementation of MFCN in this band and facilitate global roaming, economies of scale and reduce the cost of equipment;
- c) that the use of contiguous blocks of spectrum for MFCN reduces equipment complexity and provides a more efficient use of spectrum compared to the use of fragmented, non-contiguous blocks of spectrum;
- d) that for a single MFCN network a contiguous block of 800-1000 MHz is desirable to enable the full capabilities of IMT-2020/5G systems;
- e) that differences in the market demand for spectrum for MFCN and different authorisation regimes across CEPT countries is likely to lead to different timescales concerning the introduction of MFCN in the band 24.25-27.5 GHz;
- f) that some administrations may wish to implement MFCN in parts of this frequency band on a progressive basis depending on national market demand;
- g) that in many CEPT administrations the 26.5-27.5 GHz frequency range is less used by incumbent systems than the 24.5-26.5 GHz frequency range;
- h) that therefore, initial MFCN deployments in many CEPT administrations are expected in the 26.5-27.5 GHz frequency range;
- i) that the block edge mask (BEM) concept has been developed by CEPT to facilitate implementation of spectrum rights of use which are as technology neutral as possible;
- j) that the technical conditions related to coexistence with other services attached to this Decision have been developed on the assumption of an individual authorisation framework and ECC Report 317 [2] provides information and guidance to assist administrations who are considering authorisation regimes for 24.25-27.5 GHz other than individual rights;
- k) that it is beneficial to synchronise MFCN operating in the same location (avoid simultaneous uplink and downlink transmissions) since this would increase the efficient usage of spectrum;
- l) that the technical conditions for co-existence between adjacent MFCN systems in the 26 GHz band have been developed based on the assumption of synchronised operation and ECC Report 307 [6] provides a Toolbox for the most appropriate synchronisation regulatory framework including coexistence of MFCN in 24.25-27.5 GHz in unsynchronised and semi-synchronised mode;
- m) that the 26 GHz band will mainly be used for urban and suburban hotspot areas; however there may be a need for a limited number of hotspots in rural areas; it is not expected that the band will be used for contiguous wide/nationwide coverage of MFCN;
- n) that a regular assessment of the evolution of MFCN system characteristics, including network deployments, in a timeline consistent with the 5 years review process of the Decision, or sooner if necessary, will provide additional confidence that these LRTC ensure adequate protection of other services, in particular space services (see Resolution 242 (WRC-19) [9]);

- o) that ECC Recommendation (19)01 [4] provides a technical toolkit to support the introduction of 5G while ensuring, in a proportionate way, the use of existing and planned EESS/SRS receiving earth stations in the 26 GHz band and the possibility for future deployment of these earth stations;
- p) that ECC Recommendation (20)01 [5] provides guidelines to support the introduction of 5G while ensuring, in a proportionate way, the use of existing and planned FSS transmitting earth stations in the frequency band 24.65-25.25 GHz and the possibility for future deployment of these earth stations;
- q) that most sharing studies have shown that Fixed-Satellite Service (FSS) and the Inter-Satellite Service (ISS) would be protected with a margin of more than 12 dB, based on agreed assumptions, and it will be necessary to ensure that these services remain protected (see considering n);
- r) that for outdoor base stations the pointing elevation of the main beam should normally be below the horizon, and also the mechanical pointing needs to be at or below the horizon;
- s) that coexistence issues between fixed links and MFCN in the 26 GHz frequency band will be managed at national level or through the cross-border coordination framework;
- t) that the protection of the Earth Exploration-Satellite Service (EESS) (passive), requires the introduction of appropriate limits of unwanted emission power in the band 23.6-24 GHz, applying to MFCN operating in the band 24.25-27.5 GHz; additionally the protection of RAS will require the implementation of suitable separation distances between RAS stations and MFCN transmitters on a case-by-case basis;
- u) that WRC-19 introduced global unwanted emission limits ('protection limits') applicable in two stages to IMT base stations and IMT mobile stations in the 26 GHz frequency band for the protection of the EESS (passive) in the 23.6-24.0 GHz frequency band;
- v) that there is need for an earlier transition from the initial limits to the final limits in order to avoid the risk of interference to EESS (passive) from large-scale MFCN deployments in that band and to provide regulatory certainty and a clear signal to industry of the target to develop solutions;
- w) that in order to ensure the appropriate protection of the EESS (passive) and the RAS in the 23.6-24.0 GHz frequency band, Resolution 242 (WRC-19) [9] recognises that the frequency bands immediately below the passive frequency band 23.6-24 GHz are not intended to be used for high-density mobile applications;
- x) that the protection of the EESS (passive) in the band 50.2-50.4 GHz and 52.6-54.25 GHz is ensured by the existing generic spurious limits of -30 dBm/MHz applying to base stations;
- y) that the coverage of outdoor hotspots has been assumed in sharing studies to be achieved with the deployment of base stations communicating with terminals on the ground and a very limited number of indoor terminals with positive elevation, resulting in an elevation of the main beam of outdoor base stations normally below the horizon, thus with high discrimination towards the satellites;
- z) that ECC Report 309 [7] analyses the usage of aerial UEs for communication in current MFCN harmonised frequency bands, but has not studied the 24.25-27.5 GHz frequency band. Due to its specific characteristics and usage, the 24.25-27.5 GHz MFCN band is not to be used for connectivity from base stations to aerial UEs. In addition, the connectivity from aerial UEs to base stations may have a significant impact, e.g. on separation distance from EESS/SRS earth stations, which requires further study. These aerial UE operations should not be an obstacle to the deployment of future EESS/SRS earth stations;
- aa) that in EU/EFTA countries the radio equipment that is under the scope of this Decision shall comply with the RE Directive [10]. Conformity with the essential requirements of the RE Directive may be demonstrated by compliance with the applicable harmonised European standard(s) or by using the other conformity assessment procedures set out in the RE Directive.

DECIDES

1. that CEPT administrations shall designate the frequency band 24.25-27.5 GHz for MFCN on a non-exclusive basis to Mobile/Fixed Communications Networks (MFCN) taking into account *considerings j), n), o) and p)*;
2. that CEPT administrations shall make available by the end of 2020 at least 1 GHz for MFCN in this band, subject to market demand;
3. that CEPT administrations wishing to introduce MFCN in the band 24.25-27.5 GHz shall apply the frequency arrangement and technical conditions according to decides 5, 6 and 8;
4. that CEPT administrations shall avoid deployment of high-density mobile systems including high-density fixed wireless access in the 22.0-23.6 GHz frequency band;
5. that the MFCN frequency arrangement in the band 24.25-27.5 GHz is an unpaired Time Division Duplex (TDD) frequency arrangement as provided in Annex 1;
6. that the Least Restrictive Technical Conditions (LRTC) specified in Annex 2 shall apply to the MFCN systems;
7. that this Decision does not preclude the use of the band by other services to which the band is allocated;
8. that MFCN in the 24.25-27.5 GHz band shall not be used for connectivity from base stations to aerial UEs and may only be considered for connectivity from aerial UEs to base stations after completion of coexistence studies that demonstrate compatibility with incumbent services (see considering z) ;
9. that this Decision **enters into force** on 20 November 2020;
10. that the preferred **date for implementation** of this Decision shall be 20 May 2021;
11. that CEPT administrations shall communicate the **national measures** implementing this Decision to the ECC Chairman and the Office when the Decision is nationally implemented.

Note:

Please check the Office documentation database <https://docdb.cept.org/> for the up to date position on the implementation of this and other ECC Decisions.

ANNEX 1: HARMONISED FREQUENCY ARRANGEMENT FOR THE BAND 24.25–27.5 GHZ

- The frequency arrangement is a TDD arrangement with a block size of 200 MHz;
- This block size could be adjusted to narrower blocks (multiples of 50 MHz) adjacent to other users, to allow full use of spectrum, if required (see Annex 2);
- If blocks need to be offset to accommodate other uses, this shift should be done in 10 MHz steps.

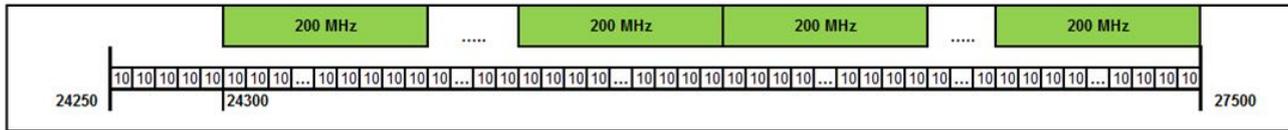


Figure 1: Example of possible frequency arrangements for MFCN in the 24.25-27.5 GHz band

ANNEX 2: LEAST RESTRICTIVE TECHNICAL CONDITIONS (LRTC) FOR THE MFCN SYSTEMS

The technical conditions presented in this annex have been developed on the basis that the authorisation regime is expected to be on an individual authorisation basis. These conditions include provisions related to the coexistence between MFCN systems in the form of block edge masks (BEMs), i.e. related to spectrum licensing and the avoidance of interference between users of spectrum, as well as provisions related to the coexistence with EESS (passive) in the form of unwanted emission limits in the bands 23.6-24 GHz.

A BEM is an emission mask that is defined, as a function of frequency, relative to the edge of a block of spectrum that is licensed to an operator. It consists of components which specify the permitted emission levels in adjacent blocks (transitional region 0-50 MHz below or above operator block) and non-adjacent blocks in the band.

The technical conditions derived below for the frequency range 24.25-27.5 GHz are optimised for, but not limited to, fixed/mobile communications networks (two-way). Therefore, they are derived both for base stations (BS) and terminal stations (TS). The BEMs have been developed to ensure coexistence with other MFCN blocks, as well as other services and applications in adjacent bands. Additional measures may be required at a national level to achieve coexistence with other services and applications.

A2.1 BASE STATION

The MFCN Base Station (BS) BEM consists of a baseline level, designed to protect the spectrum of other MFCN operators as well as emission limits to protect adjacent services (additional baseline level(s)), and transitional levels for coexistence between MFCN networks in adjacent blocks.

Table 1 contains the different elements of the BS BEM, and Table 2 to Table 4 contain the power limits for the different BEM elements.

To obtain a BS BEM for a specific block the BEM elements that are defined in Table 1 are used as follows:

- Transitional regions are determined, and corresponding power limits are used;
- For remaining spectrum assigned to MFCN, baseline power limits are used;
- For protection of services in adjacent bands, additional baseline is used.

For MFCN base stations, baseline requirements and requirements for transitional regions in Table 2 and Table 3 assume synchronised operation. Operators of mobile/fixed communications networks (MFCN) in the 24.25-27.5 GHz band may agree, on a bilateral or multilateral basis, less stringent technical parameters provided that they continue to comply with the technical conditions applicable for the protection of other services, applications or networks and with their cross-border obligations. Administrations should ensure that these less stringent technical parameters can be used, if agreed among all affected parties.

Table 1: MFCN BS BEM elements

BEM element	Definition
Baseline	Applies in spectrum used for MFCN, except from the operator block in question and corresponding transitional regions.
Transitional region	These are the regions adjacent to an operator block.
Additional baseline	Additional baseline limits apply in adjacent bands where specific limits for other services are necessary.

Table 2: MFCN BS transitional region requirements for coexistence between MFCN networks in adjacent blocks (assuming synchronised operation, see note 1)

Frequency range	Maximum Total Radiated Power (TRP)	Measurement Bandwidth
0-50 MHz below or above operator block	12 dBm	50 MHz
Note 1: Administrations may define appropriate mitigation measures to be applied in case of unsynchronised or semi-synchronised operations, taking into account ECC Report 307 on a toolbox for coexistence of MFCN in unsynchronised or semi-synchronised operations [6]. Alternatively, administrations may further develop and use an appropriate block edge mask at national level.		

Table 3: MFCN BS baseline requirements for coexistence with MFCN networks in other (non-adjacent) blocks in the band (assuming synchronised operation, see note 1)

Frequency range	Protected frequency range	Maximum Total Radiated Power (TRP)	Measurement bandwidth
In-band baseline	24.25-27.5 GHz	4 dBm	50 MHz
Note 1: Administrations may define appropriate mitigation measures to be applied in case of unsynchronised or semi-synchronised operations, taking into account ECC Report 307 on a toolbox for coexistence of MFCN in unsynchronised or semi-synchronised operations [6]. Alternatively, administrations may further develop and use an appropriate block edge mask at national level.			

Table 4: MFCN BS additional baseline requirement: maximum emissions into the 23.6-24.0 GHz band

Frequency range	Maximum Total Radiated Power (TRP) (see note 1)	Measurement bandwidth	Entry into force
23.6-24.0 GHz	-33 dBW	200 MHz	Date of adoption of amended ECC Decision (18)06
	-39 dBW	200 MHz	1 January 2024 (Note 2)
Note 1: This level requirement applies for BS for all foreseen modes of operation (i.e. maximum in-band power, electrical pointing, carrier configurations)			
Note 2: The limit of -39 dBW/(200 MHz) applies to base stations brought into use after 1 January 2024. This limit does not apply to base stations that have been brought into use prior to that date. For those base stations, the limit of -33 dBW/(200 MHz) continues to apply after 1 January 2024. CEPT administrations shall consider additional measures to assess and mitigate the aggregate impact of those base stations on EESS (passive). Such measures include adaptation of the size of assigned blocks, the antenna configuration, the in-block power or the penetration of equipment			

Table 5: Conditions applying to the pointing of the main beam of 5G AAS outdoor base stations

Requirement on pointing of the main beam of 5G AAS outdoor base stations
When deploying outdoor base stations, it shall be ensured that each antenna is normally transmitting only with main beam pointing below the horizon and in addition the antenna shall have mechanical pointing below the horizon except when the base station is only receiving

This requirement refers to the elevation of the main beam of 5G AAS outdoor base stations to ensure coexistence with space station receivers.

A2.2 TERMINAL STATION

Table 6: MFCN terminal station maximum emissions into the 23.6-24.0 GHz band

Frequency range	Maximum Total Radiated Power (TRP) (see note 1)	Measurement bandwidth	Entry into force
23.6-24.0 GHz	-29 dBW	200 MHz	Date of adoption of amended ECC Decision (18)06
	-35 dBW	200 MHz	1 January 2024 (Note 2)
<p>Note 1: This level requirement applies for terminal station for all foreseen modes of operation (i.e. maximum in-band power, electrical pointing, carrier configurations)</p> <p>Note 2: Note: The limit of -35 dBW/(200 MHz) applies to terminal stations brought into use after 1 January 2024. This limit does not apply to terminal stations that have been brought into use prior to that date. For those terminal stations, the limit of -29 dBW/(200 MHz) continues to apply after 1 January 2024.</p>			

ANNEX 3: LIST OF REFERENCES

This annex contains the list of relevant reference documents.

- [1] Commission Implementing Decision (EU) 2020/590 of 24 April 2020 amending Decision (EU) 2019/784 as regards an update of relevant technical conditions applicable to the 24,25-27,5 GHz frequency band
- [2] ECC Report 317: "Additional work on 26 GHz to address spectrum use under authorisation regimes other than individual rights of use: Technical toolkit to assist administrations", approved July 2020
- [3] ECC Report 303: "Guidance to administrations for Coexistence between 5G and Fixed Links in the 26 GHz band ("Toolbox")", approved July 2019
- [4] ECC Recommendation (19)01: "Technical toolkit to support the introduction of 5G while ensuring, in a proportionate way, the use of existing and planned EESS/SRS receiving earth stations in the 26 GHz band and the possibility for future deployment of these earth stations", approved March 2019
- [5] ECC Recommendation (20)01: "Guidelines to support the introduction of 5G while ensuring, in a proportionate way, the use of existing and planned FSS transmitting earth stations in the frequency band 24.65-25.25 GHz and the possibility for future deployment of these earth stations", approved March 2020
- [6] ECC Report 307: "Toolbox for the most appropriate synchronisation regulatory framework including coexistence of MFCN in 24.25-27.5 GHz in unsynchronised and semi-synchronised mode", approved March 2020
- [7] ECC Report 309: "Analysis of the usage of aerial UEs for communication in current MFCN harmonised bands", approved July 2020
- [8] Resolution 750 (Rev. WRC-19): "Compatibility between the Earth exploration-satellite service (passive) and relevant active services"
- [9] Resolution 242 (WRC-19): "Terrestrial component of International Mobile Telecommunications in the frequency band 24.25-27.5 GHz"
- [10] Directive 2014/53/EU of the European Parliament and of the Council of 16 April 2014 on the harmonisation of the laws of the Member States relating to the making available on the market of radio equipment and repealing Directive 1999/5/EC (Radio Equipment Directive)