

Prague, 1 June 2021
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Based on the results of a public consultation held under Section 130 of the Act No. 127/2005 Coll., on Electronic Communications and on Amendment to Certain Related Acts (the Electronic Communications Act), as amended (hereinafter “the Act”) and the decision of the Council of the Czech Telecommunication Office (hereinafter “the Office”) under Section 107(9)(b)(2) of the Act and to implement Section 16(2) of the Act, the Office as the competent administration authority under Section 108(1)(b) of the Act and Section 10 of the Act No. 500/2004 Coll., the Code of Administrative Procedure, as amended, hereby issues this Measure of General Nature

**Part No. PV-P/6/06.2021-6 of the Radio Spectrum Utilisation Plan
for the frequency band 1900–2200 MHz.**

Article 1
Introductory provision

This part of the Radio Spectrum Utilisation Plan sets down the technical characteristics and conditions for the use of radio spectrum in the frequency band from 1900 MHz to 2200 MHz by radiocommunication services. This part of the Radio Spectrum Utilisation Plan is a follow-up to the Common part of the Radio Spectrum Utilisation Plan.¹⁾

Part 1
General information on the frequency plan

Article 2

Frequency band characteristics

(1) The national allocation of frequency bands for radiocommunication services²⁾ and their utilisation is in line with the harmonisation plan.³⁾ The primary allocation for the fixed service and secondary allocation of the 2170–2200 MHz band for the mobile service is an exception.

(2) According to the footnote of the Radio Regulations⁴⁾ and the ITU-R Recommendation,⁵⁾ the frequency bands 1885–2025 MHz and 2110–2200 MHz are globally

¹⁾ Common part of the Radio Spectrum Utilisation Plan No. PV/10.2005-35, as amended.

²⁾ Government Decree No. 413/2017 Coll., amending Government Decree No. 105/2010 Coll., on the plan of frequency bands allocation (National table of frequency allocation)

³⁾ ERC Report 25: European Table of Frequency Allocations and Applications in the frequency range 8.3 kHz to 3000 GHz, rev. 2020.

⁴⁾ Footnote 5.388 of the RR.

⁵⁾ Recommendation ITU-R M.1036-6 - Frequency arrangements for implementation of the terrestrial component of International Mobile Telecommunications (IMT) in the bands identified for IMT in the RR.

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designated for utilisation by the IMT mobile communications system.⁶⁾ The bands 1980–2010 MHz and 2170–2200 MHz are designated for the development of IMT satellite component, fully in accordance with decisions of the European Commission⁷⁾ and CEPT.⁸⁾

(3) The bands 1900–1930 MHz and 2025–2110 MHz are shared with non-civil utilisation, in accordance with the Government Decree.²⁾

(4) The information stated in this Article are further specified in parts setting the specific conditions for the use of the band in individual radiocommunication services and bands.

Article 3 International obligations

(1) Provisions of the Radio Regulations⁹⁾ (hereinafter "RR"), European Commission (hereinafter "Commission) harmonisation documents, and provisions of the HCM¹⁰⁾ Agreement apply to operation and coordination.

(2) Where it is stated in this Part of the Radio Spectrum Utilisation Plan that a footnote of the RR applies, the text of a footnote of the RR stated in Section III. of the Government Decree²⁾ shall apply.

Part 2 Mobile service

Article 4 Current conditions in the mobile service

(1) The 1900–1920 MHz sub-band can be used based on a short-term authorisation for the use of radio frequencies only or based on an individual authorisation for the use of radio frequencies for experimental purposes.

(2) In accordance with the Commission Implementing Decision¹¹⁾ and the CEPT Decision,¹²⁾ the sub-bands 1920–1980 / 2110–2170 MHz are designated for the use by terrestrial systems for provision of electronic communications and it applies:

- a) The operation mode is duplex with FDD¹³⁾ frequency division and the spacing is 190 MHz;

⁶⁾ The abbreviation IMT, in accordance with ITU-R 56-2 Resolution, stands for the mobile communications systems – International Mobile Telecommunications and it covers the group of IMT-2000, IMT-Advanced and IMT-2020 systems.

⁷⁾ Commission Decision 2007/98/EC of 14 February 2007 on the harmonised use of radio spectrum in the 2 GHz frequency bands for the implementation of systems providing mobile satellite services.

⁸⁾ Decision CEPT ECC/DEC/(06)09 on the designation of the bands 1980–2010 MHz and 2170–2200 MHz for use by systems in the Mobile-Satellite Service including those supplemented by a Complementary Ground Component (CGC).

⁹⁾ Radio Regulations, International Telecommunication Union, Geneva, 2016.

¹⁰⁾ HCM Agreement – Agreement between the Administrations of Austria, Belgium, the Czech Republic, Germany, France, Hungary, the Netherlands, Croatia, Italy, Liechtenstein, Lithuania, Luxembourg, Poland, Romania, the Slovak Republic, Slovenia and Switzerland on the co-ordination of frequencies between 29.7 MHz and 43.5 GHz for the fixed service and the land mobile service.

¹¹⁾ Commission Implementing Decision 2020/667/EU of 6 May 2020 amending Decision 2012/688/EU as regards an update of relevant technical conditions applicable to the frequency bands 1 920-1 980 MHz and 2 110-2 170 MHz.

¹²⁾ Decision CEPT ECC/DEC/(06)01 of 24 March 2006, amended 8 March 2019, on the harmonised utilisation of the bands 1920–1980 MHz and 2110–2170 MHz for mobile/fixed communications network (MFCN) including terrestrial IMT systems.

¹³⁾ The abbreviation FDD stands for Frequency Division Duplex.

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- b) The 1920–1980 sub-band MHz is designated for terminals' transmission based on general authorisation;¹⁴⁾
- c) The 2110–2170 MHz sub-band is designated for base stations' transmission based on conditions set in Section C of the Annex of the Commission Decision;¹¹⁾
- d) There are twelve paired blocks of 5 MHz width delimited in the duplex sub-band and the lowest frequency of the allocated block in the lower 1920–1980 MHz band matches with the lower level of this band with the frequency 1920 MHz, or is distant from it by multiples of 5 MHz. The lowest frequency of the allocated block in upper 2110–2170 MHz band matches with the lower level of this band with the frequency 2110 MHz, or is distant from it by multiples of 5 MHz
- e) The arrangement of three paired block allocations of the radio frequencies valid before the day of effect of this part of the plan is 1920.3–1940.1/2110.3–2130.1 MHz, 1940.1–1959.9/2130.1–2149.9 MHz and 1959.9–1979.7/2149.9–2169.7 MHz, when the protective sub-bands that cannot be utilised are 1920–1920.3 MHz, 1979.7–1980 MHz, 2110–2110.3 MHz and 2169.7–2170 MHz. This arrangement remains valid at least until 1 January 2026, or until decision on change, or until issuing of new block allocations with arranging the paired blocks according to Point d);
- f) The number of rights is limited, and the allocated paired blocks can be utilised by the allocation holder of the particular paired block for operation of nationwide network providing publicly available electronic communications service;
- g) The minimal transferable unit is the right to the use of one paired frequency block consisting of 2x5 MHz;
- h) The national coordination is carried out by the block allocation holders; the international harmonisation is carried out by the Office.

(3) The sub-bands 1920–1980 / 2110–2170 MHz may be used, in accordance with Commission Implementing Decision,¹⁵⁾ for operation of systems providing mobile communications services on board aircrafts (MCA services¹⁶⁾) and the following conditions shall apply:

- a) Regarding the aircraft registered in the Czech Republic, the operation of stations installed on board is possible based on an individual authorisation and conditions of the operation of the MCA services shall be in accordance with the annex of the Decision;¹⁵⁾
- b) If the technical conditions of the Decision¹⁵⁾ are met for aircrafts registered in other states, no additional authorisations within the meaning of corresponding Recommendation¹⁷⁾ are required for the operation of MCA services above the Czech Republic territory;
- c) The use of terminals is possible based on the General Authorisation.¹⁴⁾

(4) The use of the paired sub-bands 1980–2010 / 2170–2200 MHz by stations of the mobile service which are an inseparable part of the mobile-satellite system and are controlled by the satellite resources and network management system, is described in Article 9.

(5) The use of 2010–2025 MHz sub-band by PMSE applications is described in Article 6.

¹⁴⁾ General Authorisation No. VO-R/1/12.2020-12 for the operation of the users' terminals of the radio networks of the electronic communications.

¹⁵⁾ Commission Implementing Decision 2013/654/EU of 12 November 2013 amending Decision 2008/294/EC to include additional access technologies and frequency bands for mobile communications services on board aircraft (MCA services).

¹⁶⁾ The abbreviation MCA stands for Mobile Communication on board Aircraft.

¹⁷⁾ Recommendation of the European Commission 2008/295/EC of 7 April 2008 on authorisation of mobile communication services on board aircraft (MCA services) in the European Community.

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(6) The 2025–2070 MHz band has no civil use in the mobile service, in accordance with the footnote of Government Decree.¹⁸⁾

(7) The footnote of the RR¹⁹⁾ allows the use of the bands 1885–1980 MHz, 2010–2025 MHz and 2110–2170 MHz by high altitude platform stations operating as base stations to provide IMT.

Article 5

Information on future development in the mobile service

(1) The conditions for harmonised use of the 1900–1920 MHz band in Europe are subject to studies of CEPT.²⁰⁾

(2) Based on the conducted studies²¹⁾ and the harmonisation which has been prepared within the EU, the 1900–1910 MHz sub-band will be used for FRMCS.²²⁾

Part 3

Fixed service

Article 6

Current conditions in the fixed service

(1) The 2010–2025 MHz band is in accordance with Commission Implementing Decision²³⁾ designated for portable or mobile stations for wireless audio-visual links and cordless cameras used for program making and special events (PMSE²⁴⁾) and following conditions apply:

- a) max. e.i.r.p. for cordless cameras is -7 dBW;
- b) max. e.i.r.p. for audio-visual link of portable stations is +16 dBW;
- c) max. e.i.r.p. for audio-visual link of mobile stations is +10 dBW.

(2) The 2025–2110 MHz band can be utilized within the fixed service by links of electronic news gathering / outside broadcasting ENG/OB,²⁵⁾ alternatively by other auxiliary services in radio and television broadcasting SAP/SAB,²⁶⁾ in the 2025–2070 MHz sub-band, with regard to its non-civil utilisation, based on the approval of Ministry of Defence of the Czech Republic.

(3) The fixed service has no civil utilisation in the Czech Republic, except for the sub-bands described in paragraphs 1 and 2.

¹⁸⁾ Footnote CZ6 of the Government Decree No. 423/2017 Coll.

¹⁹⁾ Footnote 5.388A of RR.

²⁰⁾ CEPT Report 52 – Report from CEPT to the European Commission in response to the Mandate “To undertake studies on the harmonised technical conditions for the 1900–1920 MHz and 2010–2025 MHz frequency bands (“Unpaired terrestrial 2 GHz bands”) in the EU”.

²¹⁾ ECC Report 318 – Compatibility between RMR and MFCN in the 900 MHz range, the 1900-1920 MHz band and the 2290-2300 MHz band, CEPT Report 74 on spectrum for the future railway mobile communications system, ECC/DEC/(20)02 on Railway Mobile Radio (RMR) and CEPT Report 76 on the future railway mobile communications system.

²²⁾ The abbreviation FRMCS stands for Future Railway Mobile Communication System.

²³⁾ Commission Implementing Decision 2016/339/EU of 8 March 2016 on the harmonisation of the 2010–2025 MHz frequency band for portable or mobile wireless video links and cordless cameras used for programme making and special events.

²⁴⁾ The abbreviation PMSE stands for Program Making and Special Events.

²⁵⁾ Abbreviation ENG/OB stands for Electronic News Gathering / Outside Broadcasting from areas outside of radio and television studios.

²⁶⁾ Abbreviation SAP/SAB stands for Service Ancillary for Program/ Service Ancillary for Broadcasting.

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Article 7

Information on future development in the fixed service

A change of allocation of the bands for fixed service from primary to secondary, except for the 2025–2110 MHz band, is assumed, in accordance with the ERC Report.³⁾

Part 4

Mobile-satellite service

Article 8

Current conditions in the mobile-satellite service

(1) The bands 1980–2010 MHz (Earth-to-space) and 2170–2200 MHz (space-to-Earth) are allocated to the mobile-satellite service on a primary basis. According to the CEPT Decision,⁸⁾ the bands are designated for utilisation by systems in the mobile-satellite service as well as for systems with the complementary ground components. In accordance with the footnote of RR,²⁷⁾ the bands may be used by IMT satellite component and in accordance with the footnote of the RR,²⁸⁾ the utilisation is subject to coordination, pursuant to the provision of RR²⁹⁾ and Resolution of ITU-R.³⁰⁾

(2) In accordance with Commission Implementing Decision,⁷⁾ the bands 1980–2010 MHz (Earth-to-space) and 2170–2200 MHz (space-to-Earth) are designated for the systems providing mobile-satellite services, i.e. the systems enabling the provision of radiocommunication services between a mobile earth station and one or more satellite stations, or between mobile earth stations by means of one or more satellite stations, or between a mobile earth station and one or more complementary ground components³¹⁾ at fixed location and following conditions apply:

- a) Two paired blocks, 1980–1995/2170–2200 MHz and 1995–2010/2185–2200 MHz, are designated for operation of networks providing the publicly available electronic communications services;
- b) The number of rights is limited to two corresponding paired blocks. The paired blocks can be utilised only by the allocation holders, who can only be operators of the mobile-satellite services authorised in the EU by the Commission Decision.³²⁾ The block allocation holder carries out the coordination on national and international levels;
- c) Based on an individual authorisation, the allocation holders are authorised to use frequencies from the block allocation for operation of the complementary ground components at fixed location which shall be an integral part of the mobile-satellite system and shall be controlled by the satellite resources and network management system. They shall use the same direction of transmission and the same portion of frequency bands as associated satellite stations and shall not increase the spectrum requirements for its associated mobile-satellite system. The complementary ground components (CGC³³⁾ are considered to be stations in the mobile service and shall not cause harmful interference to the stations operated in adjacent bands;

²⁷⁾ Footnote 5.351A of RR.

²⁸⁾ Footnote 5.389A of RR.

²⁹⁾ Provision No. 9.11A of RR.

³⁰⁾ Resolution No. 716 ITU-R (rev. WRC-2012).

³¹⁾ In accordance with provision 1.69 of RR, the land station is the mobile station which is not designated for use during motion.

³²⁾ Commission Decision 2009/449/EC of 13 May 2009 on the selection of operators of pan-European systems providing mobile satellite services (MSS).

³³⁾ The abbreviation CGC stands for Complementary Ground Components.

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- d) The 1980–2010 MHz sub-band is designated for transmission of the mobile terminals (of the mobile earth stations). The use of radio frequencies by the terminals is possible based on the General Authorisation.¹⁴⁾

Article 9

Information on future development in the mobile-satellite service

The possibility of a new allocation of the 2010–2025 MHz band for the mobile-satellite service for future IoT³⁴⁾ applications is now subject to negotiations in the ITU World Radiocommunication Conference WRC-23.

Part 5

Space operation service, space research service and Earth exploration-satellite service

Article 10

Current conditions in the space operation, space research and Earth exploration- satellite services

The 2025–2110 MHz band is allocated to the services on a primary basis, and to the space research service is also allocated the 2110–2120 MHz band. These services are not utilised in the Czech Republic.

Article 11

Information on future development in the space operation, space research and Earth exploration-satellite services

Changes in the utilisation of the band by these radiocommunication services are not expected at international or national level.

Part 6

Final provisions

Article 12

Repealing provisions

The Measure of General Nature part No. PV-P/6/06.2018-6 of the Radio Spectrum Utilisation Plan for the frequency band 1900–2200 MHz of 26 June 2018 shall be repealed.

Article 13

Effect

This part of the Radio Spectrum Utilisation Plan shall come into effect on 1 July 2021.

³⁴⁾ The abbreviation IoT stands for Internet of Things.

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Explanatory memorandum

To implement Section 16(2) of the Act, the Office issues the Measure of General Nature Part No. PV-P/6/06.2021-6 of the Radio Spectrum Utilisation Plan (hereinafter “the part of the plan”), laying down the technical parameters and conditions of the use of radio spectrum in the frequency band from 1900 MHz to 2200 MHz by radiocommunication services.

The part of the plan is based on the principles stipulated in the Act and in European legislation, especially in Directive (EU) 2018/1972 establishing the European Electronic Communications Code and in Decision No. 676/2002/EC of the European Parliament and of the Council on a regulatory framework for radio spectrum policy in the European Community (Radio Spectrum Decision) as well as on principles determined in the Common Part of the Radio Spectrum Utilisation Plan No. PV/10.2005-35, as amended. The purpose of issuing this part of the plan is to ensure the transparency of conditions for radio spectrum use and the ability to anticipate the future decisions of the Office.

The reason of new issuing of the measure is especially the implementation of conditions set by Commission Implementing Decision 2020/667/EU¹¹⁾ amending Decision 2012/688/EU on update of relevant technical conditions applicable to the frequency bands 1920-1980 MHz and 2110-2170 MHz. The determined technical conditions for the use of radio frequencies allow to utilise these bands as 3G and 4G, and newly also as 5G by changing their arrangements and the spectral block edge masks.

Article 2 contains information on conformity of the national conditions for frequencies utilisation with the European harmonisation, and also a reference to the significance of the current utilisation of the band for terrestrial IMT communications. Part of the band is designated for IMT satellite systems. Information stated in this article are further detailed in parts setting specific conditions for the use of the band in individual radiocommunication services and bands.

Article 3 contains international obligations of the Czech Republic for the radio spectrum management, what in case of the band in question means setting conditions for the use of the band in accordance with the ITU RR, Commission documents and the HCM Agreement.

Part 2 sets conditions for mobile service which includes also the operation of nationwide terrestrial mobile networks for the provision of publicly available electronic communications services. Article 4 of this part reflects the change of the Commission Decision 2012/688/EU by Commission Implementing Decision 2020/667/EU¹¹⁾ which regards substituting the Decision's annex with new wording. This new wording of the annex, based on the CEPT Report,³⁵⁾ sets relevant spectral block edge masks and removes existing protective sub-bands of 300 kHz width at the lower and upper edge of the frequency bands with the objective to support the accessibility of the 2 GHz band for deploying the 5G networks.³⁶⁾ Therefore, 2x60 MHz is, as a defined target, now available for the mobile networks. This corresponds to 12 paired blocks of 5 MHz width of the future 5G networks. The number of rights to the use of radio frequencies in the band is limited. The rights are transferable in accordance with Section 23 of the Act.

By the date of effect of this Measure of General Nature, the block allocation holders shall utilise³⁷⁾ radio frequencies in arrangement corresponding to the allocated rights for use valid in the time when the Commission Implementing Decision came into effect. The Office will

³⁵⁾ CEPT Report 72 – Review of technical conditions in the paired terrestrial 2 GHz and the 2.6 GHz frequency bands, and the usage feasibility of the 900 MHz and 1800 MHz frequency bands.

³⁶⁾ CEPT Report 72 – Recital 9.

³⁷⁾ The utilisation of the radio frequencies in arrangement corresponding to the allocated rights for use valid in the time when the Commission Implementing Decision 2020/667/EU came into effect is allowed until 1 July 2026, at the latest, but only if the exercise of the rights does not prevent utilisation of the band in accordance with the annex of the Commission Implementing Decision, and there is no demand to utilise it in such way.

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conduct the change of the paired blocks arrangement until 1 January 2026, at the latest, by decision on change, or by issuing new radio frequencies block allocations by procedure according to the Act. The Office assumes cooperation of all affected block allocation holders including for the procedure pursuant to the provision set in Paragraph 2(h) on national coordination. Such change will not affect users of the radio spectrum in the adjacent bands.

Article 5 of the Part 2 informs about the future utilisation in the mobile service. The utilisation of non-paired 1900–1920 MHz band is now subject to analyses on the European level. To support the designation of radio spectrum for the future railway mobile radiocommunication systems in the European Union, in 2018, the Commission issued mandate for CEPT which served as a basis to write CEPT Report 74 and CEPT Report 76. These documents together with ECC/DEC/(20)02 and ECC Report 338 designated suitable frequency bands and technical conditions for the future railway communication systems. Based on the CEPT's work results, the Commission is preparing an Implementing Decision on frequency bands for railway mobile radiocommunications and one of the bands is also the 1900–1910 MHz band. This is stated in Article 5.

Part 3 lays down conditions for the utilisation of fixed radiocommunication service. In accordance with Commission Decision²³⁾ on harmonisation of the 2010–2025 MHz frequency band for audio-visual transmissions, new technical conditions for PMSE stations are set in Article 6(2). Together with the adjacent 2025–2110 MHz band designated for reportage links, the contiguous sub-band of 100 MHz (2010–2110 MHz) is reserved for PMSE with the designation of the 2025–2070 MHz sub-band for non-civil utilisation in the mobile service laid down in footnote CZ6 of the National Table of Frequency Allocation.²⁾

Part 4 concerns the mobile satellite service. The bands 1980–2010 MHz and 2170–2200 MHz were designated for systems providing the mobile satellite services in accordance with the Commission decision.⁷⁾ European Commission decided on selection of the operators³²⁾ of the pan-European systems. Complementary Ground Components (CGC) at fixed locations, which aim to increase the accessibility of mobile-satellite service on places, where existing satellite stations cannot ensure connection with the required quality, can utilise frequencies based on an individual authorisation for the use of frequencies.

Article 9 contains information on the future development in the mobile-satellite service and informs about the point 1.18 of the WRC-23 agenda which will discuss the allocation of the 2010–20255 MHz band to the mobile-satellite service for the future Internet of Things (IoT) applications.

Part 5 presents in brief information on block allocation of the bands to space services and the Earth exploration satellite service.

Article 12 contains the repealing provision and legal effect of this part of the plan is set down in Article 13 in accordance with Section 124 of the Act.

Based on the Section 130 of the Act and in accordance with the Rules of the Czech Telecommunication Office for Consultations at the Discussion Site, the Office published a draft of Measure of General Nature part No. PV-P/6/XX.2021-Y of the Radio Spectrum Utilisation Plan together with a call for comments at the discussion site on 13 April 2021. During public consultation, the Office received one comment proposing to keep the original table in Article 2. The comment was not acknowledged, because the informative value of the table was minimal, given the duplicity with National Table of Frequency Allocation and other information resources.

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The settlement table published at the discussion site presents, in accordance with the Rules of the Czech Telecommunication Office for Consultations at the Discussion Site, wording of the comment and its settlement by the Office, including reasons.

On behalf of the Council of the Czech
Telecommunication Office
Hana Továrková
Chair of the Council
of the Czech Telecommunication Office

<signed>