

Prague 15 December 2022
Ref.: ČTÚ-48 388/2021-619

Based on the result 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/11/12.2021-16 of the Radio Spectrum Utilisation Plan
for the frequency band 27.5–33.4 GHz.**

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 27.5 GHz to 33.4 GHz 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 band

Article 2

Frequency band characteristics

(1) The band is utilised in the Czech Republic particularly in the fixed service by point-to-point fixed links. In relation to the deployment and development of satellite networks, the importance of the band is increasing also in the fixed-satellite service.

(2) Allocation of frequency bands to radiocommunication services listed in the National Table of Frequency Allocations²⁾ complies with the European harmonisation target³⁾

(3) Sharing of the 27.5–29.5 GHz band by fixed and fixed-satellite services on a primary basis was amended by CEPT Decision.⁴⁾

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

²⁾ Government Decree No. 423/2017 Sb. amending the Decree No. 105/2010 Coll., on the Frequency Band Allocation Plan (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⁾ Decision CEPT/ECC/DEC/(05)01 on the use of the band 27.5–29.5 GHz by the Fixed Service and uncoordinated Earth stations of the Fixed-Satellite Service (Earth-to-space).

This is an unofficial translation. The legally binding text is the original Czech version.

(4) The 29.5–31 GHz band is utilised by satellite services.

(5) The bands 31–31.3 GHz and 31.8–33.4 GHz are used in the fixed service by low, medium and high capacity fixed links.

(6) In the bands 30–31GHz and 31.8–33.4 GHz, the radio frequencies have a civil utilisation equally with non-civil utilisation in accordance with the Decree.²⁾

(7) The 31.3–31.5 GHz band is designated for passive utilisation and all transmission in this band is prohibited compliant to RR footnote.⁵⁾

(8) Information stated in this Article are further detailed in Parts laying down the specific conditions for the band utilisation in individual radiocommunication services and bands.

Article 3 International obligations

(1) Provisions of the Radio Regulations⁶⁾ (hereinafter only “RR”) and provisions of the HCM⁷⁾ Agreement apply to the use and coordination frequencies.

(2) Where there is stated in this part of the Radio Spectrum Utilisation Plan that a footnote of the Radio Regulations applies, the text of a footnote of Radio Regulations stated in Part III of the Decree is to be applied.²⁾

Article 4 Information on Future Development

(1) The current utilisation of the bands 27.8285–27.9405 GHz and 27.9405–28.2205 GHz/28.9485-29.2285 GHz in fixed service by point-to-point fixed links will be terminated and it will be then possible to utilise the bands by fixed links of point-to-point type with radio channels of 224 MHz width.

(2) Within the point 1.16, the World Radiocommunications Conference WRC-23 will discuss the conditions to use the bands 27.5–29.1 GHz and 29.5–30 GHz by Earth stations on mobile platforms operated in fixed-satellite service (Earth-to-space).

(3) The allocation of the 27.5–28.5 GHz band to the mobile service on a secondary basis, which is not compliant to the harmonisation target,³⁾ is not utilised and the Office expects its repealing when amending the Decree.²⁾

Part 2 Conditions of Utilisation

Article 5 Fixed service

(1) The sub-bands 27.8285–28.4445 GHz and 28.9485–29.4525 GHz are in accordance with CEPT Decision⁴⁾ designated in the Czech Republic for use in the fixed service.

⁵⁾ Footnote 5.340 of RR.

⁶⁾ Radio Regulations, International Telecommunication Union, Geneva, 2012.

⁷⁾ 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.

This is an unofficial translation. The legally binding text is the original Czech version.

(2) The 27.8285–27.9405 GHz sub-band is designated for operation of point-to-multipoint fixed links under following conditions:

- a) time division duplex operation;
- b) channel separation is 28 MHz, whereas centre frequency f_n [MHz] of particular operating channels is in relation to the reference frequency $f_0 = 28\,500.5$ MHz given by formula

$$f_n = f_0 - 966 + 28n,$$

where $n = 11, 12$ up to 14,

or 14 MHz, whereas centre frequency f_n [MHz] of particular operating channels is in relation to the reference frequency $f_0 = 28\,500.5$ MHz given by formula

$$f_n = f_0 - 959 + 14n,$$

where $n = 21, 22$ up to 28.

The arrangement is in accordance with ITU-R⁸⁾ and CEPT⁹⁾ Recommendations.

(3) Duplex sub-bands 27.9405–28.4445/28.9485–29.4525 GHz are designated for operation of point-to-point fixed links. Transmitting radio equipment shall meet following conditions:

- a) Frequency division duplex operation with separation of transmitting and receiving frequency of 1008 MHz;
- b) Channel separation is 112 MHz and centre frequencies f_n and f_n' [MHz] of particular operational channels are in relation to reference frequency $f_0 = 28\,500.5$ MHz given by formula:

$$f_n = f_0 - 1008 + 112n \text{ in the lower part of the band and}$$
$$f_n' = f_0 + 112n \text{ in the higher part of the band,}$$

where $n = 5$ up to 8;

or 56 MHz and centre frequencies f_n and f_n' [MHz] of particular operational channels are in relation to reference frequency $f_0 = 28\,500.5$ MHz given by formula:

$$f_n = f_0 - 980 + 56n \text{ in the lower part of the band and}$$
$$f_n' = f_0 + 28 + 56n \text{ in the higher part of the band,}$$

where $n = 8, 9$ up to 16;

or 28 MHz and centre frequencies f_n and f_n' [MHz] of particular operational channels are in relation to reference frequency $f_0 = 28\,500.5$ MHz given by formula:

$$f_n = f_0 - 966 + 28n \text{ in the lower part of the band and}$$
$$f_n' = f_0 + 42 + 28n \text{ in the higher part of the band,}$$

where $n = 15, 16$ up to 32;

or channel separation is 14 MHz and centre frequencies f_n and f_n' [MHz] of particular operational channels are in relation to reference frequency $f_0 = 28\,500.5$ MHz given by formula:

$$f_n = f_0 - 959 + 14n \text{ in the lower part of the band and}$$
$$f_n' = f_0 + 49 + 14n \text{ in the higher part of the band,}$$

where $n = 29, 30$ up to 64.

⁸⁾ Recommendation ITU-R F.748-4 – Radio frequency arrangements for systems of the fixed service operating in the 25, 26 and 28 GHz bands.

⁹⁾ Recommendation CEPT/ERC/REC T/R 13-02 – Preferred channel arrangements for fixed services in the range 22.0–29.5 GHz.

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The arrangement is in accordance with ITU-R⁸⁾ and CEPT⁹⁾ Recommendations. In accordance with the CEPT Recommendation,⁹⁾ two adjacent channels of 112 MHz width can be merged into one channel of 224 MHz width. The centre frequency of such channel is then equal to the value of radio frequency corresponding to a frequency laying at the common boundary of these adjacent channels.

c) Maximum power delivered to antenna feeder of radio equipment operated in sub-bands described in Paragraphs 2 and 3 is limited to +35 dBm. The Office carries out national as well as international frequency coordination.

(4) The band 31–31.3 GHz is designated for operation of point-to-point links in the fixed service in accordance with CEPT Recommendation¹⁰⁾ under following conditions:

- a) Duplex separation is 140 MHz;
- b) Maximum power delivered into antenna feeder of radio equipment is limited to 0 dBW;
- c) Channel separation is 28 MHz and centre frequencies f_n and f_n' [MHz] of particular operational channels are in relation to reference frequency $f_0 = 31\ 150$ MHz given by formula:

$$\begin{aligned} f_n &= f_0 - 147 + 28n \text{ in the lower part of the band and} \\ f_n' &= f_0 - 7 + 14n \text{ in the higher part of the band,} \\ &\text{where } n = 1, 2 \text{ up to } 4; \end{aligned}$$

or 14 MHz and centre frequencies f_n and f_n' [MHz] of particular operational channels are in relation to reference frequency $f_0 = 31\ 150$ MHz given by formula:

$$\begin{aligned} f_n &= f_0 - 140 + 14n \text{ in the lower part of the band and} \\ f_n' &= f_0 + 14n \text{ in the higher part of the band,} \\ &\text{where } n = 1, 2 \text{ up to } 8; \end{aligned}$$

or 7 MHz and centre frequencies f_n and f_n' [MHz] of particular operational channels are in relation to reference frequency $f_0 = 31\ 150$ MHz given by formulas:

$$\begin{aligned} f_n &= f_0 - 136.5 + 7n \text{ in the lower part of the band and} \\ f_n' &= f_0 + 3.5 + 7n \text{ in the higher part of the band,} \\ &\text{where } n = 1, 2 \text{ to } 16; \end{aligned}$$

- d) the use of the 31–31.3 GHz band is in accordance with RR footnote¹¹⁾ subject to provisions of ITU Resolution¹²⁾ on protection of operation of passive stations in the Earth exploration-satellite service using adjacent 31.3–31.5 GHz band;
- e) the national and international coordination is carried out by the Office.

(5) The 31.8–33.4 GHz band is duplex band designated in the fixed service for operation of point-to-point links. Operated transmitting radio equipment shall meet following conditions:

- a) Duplex separation is 812 MHz;
- b) Channel separation is 112 MHz and centre frequencies f_n and f_n' [MHz] of particular operational channels are in relation to reference frequency $f_0 = 32\ 599$ MHz given by formula:

¹⁰⁾ Recommendation CEPT/ECC/REC/(02)02 – Preferred channel arrangements for fixed service systems (point-to-point and point-to-multipoint) operating in the frequency band 31.0–31.3 GHz.

¹¹⁾ Footnote 5.338A of RR.

¹²⁾ Resolution 750 of RR.

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$$f_n = f_0 - 784 + 112n \text{ in the lower part of the band and}$$
$$f_n' = f_0 + 28 + 112n \text{ in the higher part of the band,}$$

where $n = 1, 2$ up to 12;

or 56 MHz and centre frequencies f_n and f_n' [MHz] of particular operational channels are in relation to reference frequency $f_0 = 32\,599$ MHz given by formulas:

$$f_n = f_0 - 756 + 56n \text{ in the lower part of the band and}$$
$$f_n' = f_0 + 56 + 56n \text{ in the higher part of the band,}$$

where $n = 1, 2$ up to 12;

or channel separation is 28 MHz and centre frequencies f_n and f_n' [MHz] of particular operational channels are in relation to reference frequency $f_0 = 32\,599$ MHz given by formulas:

$$f_n = f_0 - 798 + 28n \text{ in the lower part of the band and}$$
$$f_n' = f_0 + 14 + 28n \text{ in the higher part of the band,}$$

where $n = 1, 2$ up to 27;

or channel separation is 14 MHz and centre frequencies f_n and f_n' [MHz] of particular operational channels are in relation to reference frequency $f_0 = 32\,599$ MHz given by formulas:

$$f_n = f_0 - 791 + 14n \text{ in the lower part of the band and}$$
$$f_n' = f_0 + 21 + 14n \text{ in the higher part of the band,}$$

where $n = 29$ up to 54.

Arrangement is in accordance with CEPT Recommendation;¹³⁾

- c) In the band 31.8–33.4 GHz, interference between stations of the fixed service and airborne stations of the radionavigation service may occur. In accordance with RR footnote,¹⁴⁾ the Office takes note of the operational needs of the radionavigation service and pursuant to particular situation, the Office may set down further operational conditions to decrease risk of mutual interference;¹⁵⁾
- d) The use of 31.8–33.4 GHz band by stations with high density of applications in the fixed service is subject to, in accordance with RR footnote,¹⁶⁾ the provision of Resolution of ITU¹⁷⁾ which designates the 31.8–32.3 GHz sub-band for deep space research.
- e) The Office carries out the national and international coordination.

Article 6

Fixed-satellite service

- (1) The 27.5–31 GHz band can be utilised by coordinated Earth stations.

¹³⁾ Recommendation CEPT/ERC/REC/(01)02 – preferred channel arrangements for fixed service systems operating in the frequency band 31.8–33.4 GHz.

¹⁴⁾ Footnote 5.547A of RR.

¹⁵⁾ Recommendation ITU-R F.1571 – Mitigation techniques for use in reducing the potential for interference between airborne stations in the radionavigation service and stations in the fixed service in the band 31.8–33.4 GHz.

¹⁶⁾ Footnote 5.547 of RR.

¹⁷⁾ Resolution 75 of RR.

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(2) In the 27.5–30 GHz band, there are sub-bands designated for the use by uncoordinated Earth stations in the fixed-satellite service in the Earth-to-space direction as follows:

- a) The sub-bands 27.5–27.8285 GHz, 28.4445–28.9485 GHz and 29.4525–29.5 GHz are designated in accordance with the CEPT Decision⁴⁾ for the use by uncoordinated Earth stations in the fixed-satellite service;
- b) The sub-band 29.5–30 GHz is designated for the use by uncoordinated Earth stations according to CEPT Decision¹⁸⁾ and furthermore by LEST¹⁹⁾ and HEST²⁰⁾ stations according to CEPT Decision;^{21), 22)}
- c) The sub-bands stated in paragraphs a) and b) can be used also by the stations on mobile platforms²³⁾ under conditions listed in the CEPT Decision;^{24) 25)}
- d) The Earth stations in the fixed-satellite service shall employ automatic control of transmitting power;²⁶⁾
- e) The uncoordinated Earth stations shall not use sub-bands of 10 MHz width adjacent to the sub-bands allocated to the fixed service;
- f) The General Authorisation²⁷⁾ sets down the factual conditions of the use of radio frequencies including technical parameters by aforementioned Earth stations.

(3) The 27.5–30 GHz band can be used according to RR footnote²⁸⁾ by the fixed-satellite service (Earth-to-space) for feeder links in the broadcasting-satellite service.

(4) The use of the bands 27.5–28.6 GHz and 29.5–30 GHz (Earth-to-space) by systems using non-geostationary orbits in the fixed-satellite service in the course of coordination with other non-geostationary satellite systems in the fixed-satellite service is subject to, in accordance with RR footnote,²⁹⁾ application of RR provision.³⁰⁾

(5) The bands 27.5–27.501 GHz and 29.999–30 GHz are, according to RR footnote,³¹⁾ additionally allocated on a primary basis to the fixed-satellite service (space-to-Earth) for transmitting reference signals for up-link power control. These transmissions in space-to-Earth direction shall not exceed value of +10 dBW e.i.r.p. in directions to neighbouring satellites on geostationary orbit.

¹⁸⁾ Decision CEPT/ECC/DEC/(05)08 of 8 March 2013 on the availability of frequency bands for high density applications in the Fixed-Satellite Service (space-to-Earth and Earth-to-space).

¹⁹⁾ Abbreviation LEST stands for Low E.i.r.p. Satellite Terminals.

²⁰⁾ Abbreviation HEST stands for High E.i.r.p. Satellite Terminals.

²¹⁾ Decision CEPT/ECC/DEC/(06)02 of 24 March 2006 on Exemption from Individual Licensing of low e.i.r.p. satellite terminals (LEST) operating within the frequency bands 10.7–12.75 GHz or 19.7–20.2 GHz (space-to-Earth) and 14.0–14.25 GHz or 29.5–30.0 GHz (Earth-to-space).

²²⁾ Decision CEPT/ECC/DEC/(06)03 of 24 March 2006 on Exemption from Individual Licensing of high e.i.r.p. satellite terminals (HEST) operating within the frequency bands 10.7–12.75 GHz or 19.7–20.2 GHz (space-to-Earth) and 14.0–14.25 GHz or 29.5–30.0 GHz (Earth-to-space).

²³⁾ Abbreviation ESOMPs stands for Earth Stations on Mobile Platforms which are intended to be used while in motion as land based, airborne and vessel stations.

²⁴⁾ Decision CEPT/ECC/DEC/(13)01 of 8 March 2013 on the harmonized use, free circulation and exemption from individual licensing of Earth Stations On Mobile Platforms (ESOMPs) within the frequency bands 17.3–20.2 GHz and 27.5–30.0 GHz.

²⁵⁾ Decision ECC/DEC/(15)04 on the harmonised use, free circulation and exemption from individual licensing of Land, Maritime and Aeronautical Earth Stations On Mobile Platforms (ESOMPs) operating with NGSO FSS satellite systems in the frequency ranges 17.3-20.2 GHz, 27.5-29.1 GHz and 29.5-30.0 GHz.

²⁶⁾ The abbreviation ATPC stands for Automatic Transmitter Power Control.

²⁷⁾ General Authorisation No. VO-R/1/12.2020-12 for the operation the users' terminals of the radio networks of the electronic communications.

²⁸⁾ Footnote 5.539 of RR.

²⁹⁾ Footnote 5.484A of RR.

³⁰⁾ Provision No. 9.12 of RR.

³¹⁾ Footnote 5.538 of RR.

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(6) The 27.501–29.999 GHz band is, according to RR footnote,³²⁾ also additionally allocated on secondary basis to the fixed-satellite service (space-to-Earth) for transmission of reference signals for up-link power control.

(7) According to RR footnote,³³⁾ the utilisation of the 28.6–29.1 GHz band (Earth-to-space) by the systems with geostationary and non-geostationary satellites in the fixed-satellite service is subject to RR provision,³⁴⁾ and RR provision³⁵⁾ does not apply in this case.

(8) According to RR footnote,³⁶⁾ the geostationary systems operating in the band 29.1–29.4 GHz shall use adaptive power control or other methods of fading compensation.

(9) The use of the 29.1–29.5 GHz band by the fixed-satellite service is, according to RR footnote,³⁷⁾ limited to both geostationary systems and the feeder links of non-geostationary systems in the mobile-satellite service.

(10) The fixed-satellite service has no civil utilisation in the Czech Republic in the 30–31 GHz band.

Article 7 **Mobile-satellite service**

(1) It is possible to utilise allocation to the mobile-satellite service in the 29.5–29.9 GHz band on a secondary basis and the 29.9–30 GHz band on a primary basis. In accordance with RR footnote,³⁸⁾ RR provision³⁹⁾ does not apply for the mobile-satellite service in the 29.5–30 GHz band. Specific conditions for the use of radio frequencies by Earth stations of the land mobile-satellite service, including the technical parameters, are set by the General Authorisation.²⁷⁾

(2) The mobile-satellite service has no civil use in the 30–31 GHz band in the Czech Republic.

Article 8 **Mobile service**

Article 11 **Current conditions in the mobile service**

In the Czech Republic, the band is not used in this service.

Article 9 **Radionavigation service**

The 31.8–33.4 GHz band, in which interference between stations in the fixed service and airborne stations of the radionavigation service may occur, is allocated to the service. According to RR footnote,¹⁴⁾ the Office will take into account the needs of the radionavigation service.

³²⁾ Footnote 5.540 of RR.

³³⁾ Footnote 5.523A of RR.

³⁴⁾ Provision No. 9.11A of RR.

³⁵⁾ Provision No. 22.2 of RR.

³⁶⁾ Footnote 5.541A of RR.

³⁷⁾ Footnote 5.535A of RR.

³⁸⁾ Footnote 5.527 of RR.

³⁹⁾ Provision No. 4.10 of RR.

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Article 10

Earth exploration-satellite service

(1) According to RR footnote,⁴⁰⁾ in the 28.5–30 GHz band, the Earth exploration-satellite service is limited to data transfer between stations, not for primary data collection by means of active or passive sensors.

(2) The 29.95–30 GHz band may be, according to RR footnote,⁴¹⁾ used on a secondary basis for space-to-space links in the Earth exploration-satellite service for purposes of telemetry, remote tracking and control.

Article 11

Space research service

For the space research service in the 31–31.3 GHz band, according to RR footnote,⁴²⁾ the limitation of the power flux density according to RR Article⁴³⁾ applies. The RR footnote⁴⁴⁾ applies in the 31.8–32.3 GHz band. The service is not utilised in the Czech Republic.

Article 12

Radio astronomy service

(1) Radio astronomy service is passive radiocommunication service based on the reception of the radio waves of cosmic origin. Due to low level of received signals, the operation of this service depends on protection against interference from other radiocommunication services.

(2) According to RR footnote,⁴⁵⁾ the users of the bands 31.2–31.3 GHz and 31.5–31.8 GHz must take all practicable steps to protect radio astronomy service against interference from their transmitting radio equipment.

(3) The band 31.3–31.5 GHz is exclusively allocated for passive utilisations and according to RR footnote,⁵⁾ all transmissions are forbidden in this band.

(4) These bands are not used by any radio astronomy observatory station in the Czech Republic.

Article 13

Inter-satellite service

The 32.3–33 GHz band is allocated to the inter-satellite service, whereas use of the band is subject to RR footnote.⁴⁴⁾ The service is not utilised in the Czech Republic.

⁴⁰⁾ Footnote 5.541 of RR.

⁴¹⁾ Footnote 5.543 of RR.

⁴²⁾ Footnote 5.544 of RR.

⁴³⁾ Article 21 of RR, table 21-4.

⁴⁴⁾ Footnote 5.548 of RR.

⁴⁵⁾ Footnote 5.149 of RR.

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Part 3
Final provisions

Article 14
Transitional provisions

Utilisation of the duplex sub-bands 27.9405–28.4445/28.9485–29.4525 GHz, based on individual authorisations for point-to-multipoint fixed links that were issued before change of this part of the plan took effect, is made possible until the end of validity of the respective individual authorisations. Change of technical parameters of these individual authorisations is possible and the Office will set the validity period of the new individual authorisation until the validity period set in the original individual authorisation at the longest, or until 23 February 2025 when the validity period of individual authorisation is longer.

Article 15
Repealing provisions

This is to repeal the part of the Radio Spectrum Utilisation Plan No. PV-P/11/07.2015-5 for the frequency band 27.5–33.4 GHz of 29 July 2015.

Article 16
Effect

This part of the Radio Spectrum Utilisation Plan is effective from 30 December 2021.

Explanatory memorandum

To implement Section 16(2) of the Act, the Office issues the Measure of General Nature Part No. PV-P/11/12.2021-16 of the Radio Spectrum Utilisation Plan (hereinafter “the part of the plan”), laying down the technical characteristics and conditions of the use of radio spectrum in the frequency band from 27.5 GHz to 33.4 GHz by radiocommunication services.

This part of the plan is based on the principles embedded in the Act and in European legislation, especially in Directive (EU) 2018/1972 of the European Parliament and of the Council 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. The purpose of this part of the plan is to ensure the transparency of conditions for radio spectrum use, and to anticipate the future decisions of the Office.

The reason for changes in this part of the Radio Spectrum Utilisation Plan is to stop limiting the number of rights in duplex sub-bands 28.2205–28.4445/29.2285–29.4525 GHz in fixed service based on a previous review,⁴⁶⁾ furthermore to set the termination of FWA networks operation in the bands 27.8285–28.2205/28.9485–29.2285 GHz, to release more frequencies in fixed service and to introduce new conditions allowing operation of point-to-point fixed links with channel width up to 224 MHz.

The Office launched a review of the reasons for limiting the number of rights in paired duplex sub-bands 28.2205–28.4445/29.2285–29.4525 GHz in fixed service on 26 June 2020 and published the results on 5 November 2021.⁴⁶⁾ During the review, the Office analysed a number of areas. In the review, the Office also recalled that the original limiting of number of rights in the 28 GHz band was closely linked to the situation related to deployment of new mobile telecommunications services with high transmission speeds. Related to the deployment of the first nationwide mobile data network, a need was expected to ensure capacity connection of base stations of the UMTS network which was not sufficiently developed through fibre networks during the preparatory time to grant allocations for UMTS networks. This is why allocation of sub-bands from the 28 GHz band, designated solely to ensure the UMTS networks infrastructure, was part of the Tender to grant radio frequency allocations for UMTS networks. However, the expected quick development of UMTS networks did not happen in the Czech Republic environment and from the same reason the expected intensive utilisation of the allocated sub-bands in fixed service in the 28 GHz band did not happen. The given radio frequencies are utilised only very rarely, marginally, regarding their nationwide allocations, and compared to the utilisation of other bands by the fixed radiocommunication service, this utilisation is fully negligible. When comparing the intensity of utilisation, the Office considered also the adjacent bands in fixed service which are utilised more intensively compared to the bands within 28 GHz. For example, in paired sub-bands 27.8285–28.2205/28.9485–29.2285 GHz, utilised by FWA networks, the number of rights was not limited and there were circa 70 point-to-multipoint links operated during the period of the review. In fact, also this utilisation was significantly lower than utilisation of different sub-bands of the fixed services with similar parameters of radio spectrum propagation. The efficient use of frequencies in the 28 GHz band was also limited by guard sub-bands between the radio frequencies block allocation holders. On the other hand, in connection with the current development of high-speed networks, the Office considers supporting the very wide channels as a good opportunity because they are suitable for e.g., 5G backhaul or for any other utilisations, such as by local access or private networks operators. But introducing the wide channels would not be possible without

⁴⁶⁾ <https://www.ctu.cz/sdeleni-ceskeho-telekomunikacniho-uradu-o-ukonceni-prezkoumani-podle-ss-20-odst-3-4-zakona-o>
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the complex band reorganisation. Therefore, the Office decided to create conditions for such purposes, to reach meaningful and efficient band utilisation based on termination of limiting the number of rights and on reorganisation of the 28 GHz band. Because a transition period allowing to continue the operation of already operated fixed links was introduced, the competition of the current users is not endangered. On contrary, the new conditions will allow to create new opportunities to support and develop competition in the whole electronic communications sector. The new conditions are compliant with the current European harmonisation.

Based on the above findings, the Office came to a decision that it is no longer necessary to limit the number of rights within the 28 GHz band. Based on the published results, the Office repeals the limiting of number of rights, in accordance with Section 20(3) of the Act. The Office will further decide on the utilisation of the given frequencies within the validity period of the authorisations issued earlier. To provide explanation to the repealing of the number of rights' limitation, the Office refers to the published results of the review.⁴⁶⁾

Through this part of the plan and based on the above listed findings, the Office sets single conditions for the whole spectrum range covering 2×504 MHz in total. It is allowed to operate point-to-point links with radio channel width up to 224 MHz in the duplex sub-bands 27.9405–28.4445/28.9485–29.4525 GHz. The new conditions allow to continue utilisation of the radio frequencies by stations whose individual authorisations were issued before the date of effect of this part of the plan until the end of validity period of these individual authorisations. At the same time, the Office allowed holders of the current individual authorisations', which do not fulfil the new conditions for the use of radio frequencies, to change them. By such change, the authorisation holder can react to current operational needs provided that the change will not extend the validity period.

Further, conditions allowing to use point-to-point links of channel width up to 28 MHz in the 31–31.3 GHz band and up to 112 MHz in the 31.8–33.4 GHz band were newly introduced. Based on operational experience with sharing the 31.8–33.4 GHz band between fixed service and radionavigation service, more radio channels in fixed services were released in this band.

Article 2 presents characteristic of the band and generally informs about the spectrum utilisation by stations in the fixed service and uncoordinated Earth stations in the fixed-satellite service.

The international obligations are listed in Article 3 which means for this band the Radio Regulations of the International Telecommunication Union and HCM Agreement.

Article 4 contains information on the future development of utilisation in the range of radio frequencies described by this part. The fixed links where users indicated interest to use wider channels of point-to-point fixed links will remain the most significant utilisation.

Article 5 sets the conditions for the use of the bands by fixed service. The 27.8285–27.9405 GHz sub-band, not used until now, is newly designated to operated point-to-point fixed links with time division duplex operation. New utilisation conditions are set in the 27.9405–28.4445/28.9485–29.4525 GHz duplex sub-bands. The sub-bands are designated for point-to-point fixed links with channel width up to 224 MHz and with frequency division duplex operation. The newly set conditions allow to continue the use by point-to-multipoint fixed links stations operated based on individual authorisations issued earlier, until the validity period termination of these authorisations, as stated in the transitional provisions in Article 14. Based on the interest to operate fixed channels utilising wide channels, the Article 5 further newly allows to use also channels up to 28 MHz width in 31–31.3 GHz band and up to 112 MHz width in the 31.8–33.4 GHz band.

Article 6 sets the conditions for fixed-satellite service, where a link to CEPT Decision related to satellite networks at non-geostationary orbit was added.

This is an unofficial translation. The legally binding text is the original Czech version.

Articles 7 to 13 set the conditions of the use of frequencies by other radiocommunication services to which the band is allocated. The conditions correspond with provisions of RR.

The transitional provisions of Article 14 allow to continue operation of the current fixed links in duplex sub-bands 27.9405–28.4445/28.9485–29.4525 GHz until the end of validity period of the individual authorisations. Article 15 refers to the repealing provisions and the effect of the part of plan is laid down in Article 16.

Based on the Section 130 of the Act and in accordance with the Czech Telecommunication Office Rules for Conducting Consultations at the Discussion Site, the Office published on its discussion site a draft of the Measure of General Nature Part No. PV-P/11/XX.2021-Y of the Radio Spectrum Utilisation Plan on 12 November 2021 together with a call for comments. The Office received no objections during the public consultation, only one comment.

On behalf of the Council of the
Czech Telecommunication Office

Hana Továrková
Chair of the Council
of the Czech Telecommunication Office
<signed>