Prague 19 October 2011 Ref.: ČTÚ-64 825/2011-605

On the basis of public consultation 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 according to Section 10 of the Act No. 500/2004 Coll., the Administrative Regulations, as amended, and on the basis of the decision of the Council of the Czech Telecommunications Office (hereinafter "the Office") under Section 107(8)(b)(2) of the Act, and in order to implement Section 16(2) of the Act, the Office, as the appropriate state administration body under Section 108(1)(b) of the Act, hereby issues this Measure of General Nature

Part No. PV-P/8/10.2011-14 for the frequency band 14.5–15.35 GHz

Article 1 Introductory provision

This part of the Radio Spectrum Utilisation Plan sets down technical characteristics and conditions of use of radio spectrum in the frequency band from 14.5 GHz to 15.35 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 plan

Article 2 Frequency bands

Band	Current conditions		Future harmonisation ²)	
(GHz)	Allocation	Utilisation	Allocation	Utilisation
14.5–14.62	FIXED	Fixed links	FIXED	Fixed links
	Mobile		Mobile	Scientific
	Space research		Radio astronomy	applications
14.62–14.8	FIXED	MD	FIXED	MD
	MOBILE		MOBILE	

Common part of the Radio Spectrum Utilisation Plan No. PV/10.2005-35 published in Telecommunication Journal 14/2005.

²) ERC Report 25: The European Table of Frequency Allocations and Utilisations in the frequency range 9 kHz to 3000 GHz, rev. Kyiv, 2009.

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

14.8–15.23	FIXED MOBILE	MD	FIXED MOBILE Radio astronomy ³)	MD Scientific applications
15.23–15.35	FIXED Mobile	Fixed links	FIXED Mobile Radio astronomy ³)	Fixed links Scientific applications

Article 3 Frequency band characteristics

The band is characterised by utilisation of civil and non-civil applications in fixed and mobile services. The band 14.62-15.23 GHz is harmonised for non-civil utilisation. Part of the band is allocated to space research and Earth exploration-satellite services.

Article 4 International obligations

Provisions of the Radio Regulations⁵) (hereinafter only "RR") and provisions of HCM⁶) Agreement apply to operation and coordination.

Part 2 **Fixed service**

Article 5 Current conditions in fixed service

- (1) The bands 14.5-14.62 GHz and 15.23-15.35 GHz are designated for the operation of point-to-point fixed links and following conditions apply:
 - a) duplex spacing is 728 MHz;
 - b) channel separation is 28 MHz, whereas centre frequencies fn a fn' [MHz] of particular operating channels are in relation to the reference frequency f_0 = 14 924 MHz given by formulas:

 $f_n = f_0 - 437 + 28n$, in the lower half of the band and $f_n' = f_0 + 291 + 28n$, in the upper half of the band, where n = 1, 2 to 4 (preferred 4 or 3):

c) or channel separation is 14 MHz, whereas centre frequencies f_n a f_n' [MHz] of particular operating channels are in relation to the reference frequency f_0 = 14 924 MHz given by formulas:

> $f_n = f_0 - 423 + 14n$, in the lower half of the band and $f_0' = f_0 + 305 + 14n$, in the upper half of the band,

Footnote 5.339 of Radio Regulations.

Recommendation CEPT/ERC/REC 12-07E - Harmonised radio frequency channel arrangements for digital terrestrial fixed systems operating in the bands 14.5-14.62 GHz paired with 15.23-15.35 GHz.

Radio Regulations, International Telecommunication Union, Geneva, 2008. 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 coordination of frequencies between 29.7 MHz and 43.5 GHz for the fixed service and the land mobile service, Zagreb, 30 September 2010.

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where n = 1, 2 to 8 (preferred 8, 7, 6 or 5);

d) or channel separation is 7 MHz, whereas centre frequencies f_n a f_n [MHz] particular operating channels are in relation to the reference frequency $f_0 = 14~924$ MHz given by formulas:

 $f_n = f_0 - 426,5 + 7n$, in the lower half of the band and $f_n' = f_0 + 301,5 + 7n$, in the upper upper of the band, where n = 1, 2 to 16 (preferred 1 to 8).

Channel arrangement is in accordance with recommendations CEPT⁷) and ITU-R⁸).

- (2) The band 14.62–15.23 GHz is harmonised for the use by non-civil applications in the fixed service on a primary basis.
- (3) Due to the allocation of the band 14.62–15.23 GHz to non-civil use, the Office carries out the frequency coordination of the operational channels at edge of the band on national level with Ministry of Defence of the Czech Republic before the individual authorisation is granted. In order to avoid possible mutual harmful interference, the use of frequencies of civil and non-civil adjacent channels is limited to the minimum.
 - (4) The international frequency coordination is carried out by the Office.

Article 6 Information on future development in the fixed service

No changes in utilisation of the band by the fixed service on international and national level are expected.

Part 3 Mobile service

Article 7 Current conditions in the mobile service

The band 14.62–15.23 GHz is allocated to the mobile service on a primary basis. The mobile service is not used in the band for civil utilisation.

Recommendation CEPT/ERC/REC 12-07 – Harmonised radio frequency channel arrangements for digital terrestrial fixed systems operating in the bands 14.5–14.62 GHz paired with 15.23–15.35 GHz.

⁸) Recommendation ITU-R F.636-3 – Radio-frequency channel arrangements for fixed wireless systems operating in the 15 GHz (14.4–15.35 GHz) band.

Article 8 Information on future development in the mobile service

No changes in utilisation of the band by the mobile service on international and national level are expected.

Part 4 Space research service and Earth exploration-satellite service

Article 9

Current conditions in the space research service and the Earth exploration-satellite service

- (1) The band 14.5–14.62 GHz is allocated to the space research service on a secondary basis.
- (2) In accordance with RR footnote³), the band 15.2–15.35 GHz is allocated to the space research service and the Earth exploration-satellite service on a secondary basis for the passive use.

Article 10

Information on future development in the space research service and the Earth exploration-satellite service

The harmonisation intentions of Report ERC²) suppose, in the frame of possible future allocation of the parts of the band 14.5–15.35 GHz to the radio astronomy service, the passive utilisation compatible with primary services. Such utilisation consists in observations based on VLBI⁹) radio astronomy interferometry.

Part 5 Final provision

Article 11 Repealing provisions

This is to repeal the Measure of General Nature part No. PV-P/8/10.2005-38 of the radio Spectrum Utilisation Plan for the frequency band 14.5–15.35 GHz of 18 October, 2005.

Article 12 Effect

This part of the Radio Spectrum Utilisation Plan is effective from 1 December, 2011.

⁹⁾ Abbreviation VLBI stands for Very Long Baseline Interferometry.

Explanatory memorandum

To implement Section 16(2) of the Act, the Office issues the Measure of General Nature Part No. PV-P/8/10.2011-14 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 14.5 GHz to 15.35 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 2002/21/EC of the European Parliament and of the Council on a common regulatory framework for electronic communications networks and services (Framework Directive)* and *Decision No. 676/2002/EC of the European Parliament of the Council on regulatory framework for radio spectrum policy in the European Community (Radio Spectrum Decision)*. It also refers to principles determined in the Common part of the Radio Spectrum Utilisation Plan No. PV/10.2005-35.

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.

This part of the plan amends the part of the Radio Spectrum Utilisation Plan No. PV-P/8/10.2005-38 for the frequency band 14.5–15.35 GHz. The reason of issuing of this part of the plan is particularly to update references to provision of Radio Regulations of the International Telecommunication Union and review of all articles.

Article 2 presents current status of allocations to radiocommunication services that corresponds with the plan of allocations of frequency bands (National Table of Frequency Allocations) including their use by applications. The reference with information on the sharing of civil and non-civil use of the part of the band 15.229–15.23 GHz in the fixed service is added due to the frequency overlap of the lowest operational channels from the part of the band 15.23–15.35 GHz which is allocated to the civil utilisation. Information form the European Table of Frequency Allocations and Utilisations – ERC Report 25 – complements general overview of harmonisation intentions in radio spectrum. In the parts of the bands 14.5–15.35 GHz currently allocated according to Radio Regulations to the passive scientific services, the possible future allocation to the radio astronomy service on a secondary basis was added in accordance with ERC Report 25 (passive use of the band is compatible with primary services).

Article 3 presents brief characteristic of the described band that is typical by shared civil and non-civil utilisation.

Article 4 presents international obligations represented for described band by Radio Regulation of the International Telecommunication Union and HCM Agreement.

Articles 5 and 6 describe current utilisation and future assumptions of utilisation of frequencies in the fixed service. Information on the non-civil use of the harmonised band 14.62–15.23 GHz is added to this. Due to close frequency proximity of the operational channels in the band 14.62–15.23 GHz which are allocated to non-civil use, and in the upper adjacent band, which is allocated to the civil use, the paragraph 3 informs on coordination of neighbouring channels in cooperation with Ministry of Defence of the Czech Republic. Paragraph 4 informs on the international coordination.

Articles 7 and 8 relate to the mobile service which has no civil use due to harmonisation allocation of the band 14.62–15.23 GHz to non-civil applications.

In articles 9 and 10, the current and future development of the space research service and the Earth exploration-satellite service is described. The information on

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expected radio astronomy observations to be intended for space and Earth research is mentioned here.

Repealing provision is stated in Article 11. In accordance with Section 124 of the Act, the effect of this part of plan is set down in Article 12.

In accordance with Section 130 of the Act and with the Czech Telecommunication Office's Rules (hereinafter only "Rules") for conducting consultations with the entities concerned at the Discussion Site, the Office published at the Discussion Site a draft Part No. PV-P/8/XX.2011-Y of the Radio Spectrum Utilisation Plan together with a call for comments on 5 August 2011. During the public consultation, the Office did not receive any comment submitted in accordance with procedure described in article 6 of Rules.

On behalf of the Council of the Czech Telecommunication Office

Pavel Dvořák
Chairman of the Council
of the Czech Telecommunication Office
<signed>