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

Prague 14 July 2006
Ref.: 40 410/2006–605

On the basis of public consultation under Section 130 of Act No. 127/2005 Coll., on electronic communications and on amendments 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/25/07.2006-25 of the Radio Spectrum Utilisation Plan for the frequency band 43.5–52.6 GHz

Article 1
Introductory provision

This part of the Radio Spectrum Utilisation Plan sets down the technical characteristics and conditions of use of radio spectrum in the frequency band from 43.5 GHz to 52.6 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 bands

Band (GHz)	Current conditions		Future harmonisation[2])	
	Allocation	Utilisation	Allocation	Utilisation
43.5–45.5	MOBILE MOBILE-SATELLITE	MD	MOBILE MOBILE-SATELLITE	MD

[1]) Common part of the Radio Spectrum Utilisation Plan Nr. PV/10.2005-35 published in the Telecommunication Journal 14/2005 .

[2]) ERC Report 25: European Table of Frequency Allocations and Utilisations covering the frequency range 9 kHz to 275 GHz, rev. Nice, 2007.

45.5–47	MOBILE MOBILE-SATELLITE RADIONAVIGATION RADIONAVIGATION-SATELLITE		MOBILE MOBILE-SATELLITE RADIONAVIGATION RADIONAVIGATION-SATELLITE	
47–47.2	AMATEUR AMATEUR-SATELLITE	Amateur and amateur-satellite applications	AMATEUR AMATEUR-SATELLITE	Amateur and amateur-satellite applications
47.2–47.5	FIXED FIXED-SATELLITE (Earth-to-space) MOBILE		FIXED FIXED-SATELLITE (Earth-to-space) MOBILE	Feeder links Fixed-satellite service applications HAPS SAP/SAB
47.5–47.9	FIXED FIXED-SATELLITE (Earth-to-space) (space-to-Earth) MOBILE		FIXED FIXED-SATELLITE (Earth-to-space) (space-to-Earth) MOBILE	Feeder links Fixed-satellite service applications SAP/SAB
47.9–48.2	FIXED FIXED-SATELLITE (Earth-to-space) MOBILE		FIXED FIXED-SATELLITE (Earth-to-space) MOBILE	Feeder links Fixed-satellite service applications HAPS SAP/SAB
48.2–48.54	FIXED FIXED-SATELLITE (Earth-to-space) (space-to-Earth) MOBILE		FIXED FIXED-SATELLITE (Earth-to-space) (space-to-Earth) MOBILE	Feeder links Fixed-satellite service applications SAP/SAB
48.54–49.44	FIXED FIXED-SATELLITE (Earth-to-space) MOBILE [3])		FIXED FIXED-SATELLITE (Earth-to-space)) MOBILE [3])	Feeder links Fixed-satellite service applications Fixed links Radioastronomy SAP/SAB
49.44–50.2	FIXED FIXED-SATELLITE (Earth-to-space) (space-to-Earth) MOBILE		FIXED FIXED-SATELLITE (Earth-to-space) (space-to-Earth) MOBILE	Feeder links Fixed links SAP/SAB
50.2–50.4	EARTH EXPLORATION-SATELLITE (passive) SPACE RESEARCH (passive)	Passive scientific applications Transmissions prohibited	EARTH EXPLORATION-SATELLITE (passive) SPACE RESEARCH (passive)	Passive scientific applications Transmissions prohibited

[3]) According to the footnote 5.555 of the Radio Regulations is the band 48.94–49.04 GHz additionally allocated to the radio astronomy service on primary basis.

Naformátováno: Angličtina (USA)

50.4–51.4	FIXED FIXED-SATELLITE (Earth-to-space) Mobile-satellite (Earth-to-space)	MD	FIXED FIXED-SATELLITE (Earth-to-space)¨ Mobile-satellie (Earth-to-space)	MD
51.4–52.6	FIXED MOBILE		FIXED MOBILE	Fixed links

Article 3
Frequency band characteristics

(1) With regard to the character of radio waves propagation in the described part of the radio spectrum the prevailing use is focused on links in the fixed and fixed-satellite service and is in a developing stage.

(2) According to footnote of the Radio Regulations[4]) (hereinafter only "RR") transmissions from airborne stations in the band 48.94–49.04 GHz are prohibited and in the band 50.2–50.4 GHz all transmissions are prohibited.

Article 4
International obligations

Provisions of RR apply to operation and coordination.

Part 2
Mobile service

Article 5
Current conditions in the mobile service

(1) Bands 45.5–47 GHz, 47.2–50.2 GHz and 51.4–52.6 GHz are designated for civil use in the mobile service.

(2) According to RR footnote[5]), the stations in the land mobile service may operate in the band 43.5–47 GHz provided they do not cause harmful interference to the space radiocommunication services to which this band is allocated, and pursuant to provision of RR[6]) cannot claim protection from harmful interference caused by the space radiocommunication services.

(3) The band 47.2–50.2 GHz may by used by links from wireless cameras within SAP/SAB application[7]) in accordance with Recommendation CEPT[8]).

[4]) Footnote 5.340 of the Radio Regulations, International Telecommunication Union, Geneva, 2004.
[5]) Footnote 5.553 of RR.
[6]) Provision 5.43 of RR.
[7]) Abbreviation SAP/SAB stands for Service Ancillary for Program / Service Ancillary for Broadcasting.
[8]) Recommendation CEPT/ERC/REC 25-10 Frequency ranges for the use of temporary terrestrial audio and video SAP/SAB links (incl. ENG/OB).

Article 6
Information on future development in the mobile service

The ERC Report[2]) in its footnote[9]) mentions for the band 48.54–50.2 GHz the limitation of the mobile service to SAP/SAB[8]) applications only.

Part 3
Mobile-satellite service

Article 7
Current conditions in the mobile-satellite service

In accordance with RR footnote[10]), the satellite links connecting land stations at specified fixed points, provided that they are used in conjunction with mobile-satellite service, may operate in the band 43.5–47 GHz.

Article 8
Information on future development in the mobile-satellite service

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

Part 4
Radionavigation service and radionavigation-satellite service

Article 9
Current conditions in the radionavigation service and in the radionavigation-satellite service

(1) The band 45.5–47 GHz is allocated to the radionavigation service and radionavigation-satellite service on a primary basis.

(2) Pursuant to RR footnote[10)], the satellite links connecting land stations at specified fixed points, provided that they are used in connection with radionavigation-satellite service, may operate in the band 43.5–47 GHz.

Article 10
Information on future development in the radionavigation service and in the radionavigation-satellite service

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

[9]) Footnote EU17A of the ERC Report 25
[10]) Footnote 5.554 of RR.

Part 5
Fixed service

Article 11
Current conditions in the fixed service

(1) Bands 47.2–50.2 GHz and 50.4–52.6 GHz are allocated to the fixed service.

(2) Allocations in the bands 47.2–47.5 GHz and 47.9–48.2 GHz to the fixed service are, according to RR footnote[11]), designated for use by HAPS stations[12]) located on high altitude platforms. Utilisation of bands by these stations is governed by provisions of ITU Resolution[13]).

(3) Fixed links may be operated in the band 48.5–50.2 GHz

a) with channel separation 28 MHz, whereas centre frequency f_n and f_n' [MHz] of particular operating channels are in relation to the reference frequency f_0 = 49 350 MHz given by formulas

$f_n = f_0 – 848 + 28n$ in the lower part of the band and
$f_n' = f_0 + 36 + 28n$ in the upper part of the band,
where n = 1, 2 up to 28;

b) with channel separation 14 MHz, whereas centre frequency f_n and f_n' [MHz] of particular operating channels are in relation to the reference frequency f_0 = 49 350 MHz given by formulas

$f_n = f_0 – 841 + 14n$ in the lower part of the band and
$f_n' = f_0 + 43 + 14n$ in the upper part of the band,
where n = 1, 2 up to 56;

c) with channel separation 7 MHz, whereas centre frequency f_n and f_n' [MHz] of particular operating channels are in relation to the reference frequency f_0 = 49 350 MHz given by formulas

$f_n = f_0 – 837.5 + 7n$ in the lower part of the band and
$f_n' = f_0 + 46.5 + 7n$ in the upper half of the band,
where n = 1, 2 up to 112;

d) with channel separation 3.5 MHz, whereas centre frequency f_n and f_n' [MHz] of particular operating channels are in relation to the reference frequency f_0 = 49 350 MHz given by formulas

$f_n = f_0 – 835.75 + 3.5n$ in the lower part of the band and
$f_n' = f_0 + 48.25 + 3.5n$ in the upper half of the band,
where n = 1, 2 up to 224.

Setting down of the channel separations corresponds to a CEPT Recommendation[14]).

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[11]) Footnote 5.552A of RR.
[12]) Abbreviation HAPS stands for High Altitude Platform Station.
[13]) Resolution 122 of RR.
[14]) Recommendation CEPT/ERC/REC 12-10 – Harmonised radio frequency arrangements for digital systems operating in the band 48.5-50.2 GHz.

(4) The band 51.4–52.6 GHz is according to RR footnote[15]) designated for use by high density applications in the fixed service.

(5) Fixed links may be operated in the band 51.4–52.6 GHz

a) with channel separation 56 MHz, whereas centre frequency f_n and f_n' [MHz] of particular operating channels are in relation to the reference frequency f_0 = 51 412 MHz given by formulas

$f_n = f_0 + 56n$ in the lower part of the band and
$f_n' = f_0 + 616 + 56n$ in the upper part of the band,
where n = 1, 2 up to 9;

b) with channel separation 28 MHz, whereas centre frequency f_n and f_n' [MHz] of particular operating channels are in relation to the reference frequency f_0 = 51 412 MHz given by formulas

$f_n = f_0 + 14 + 28n$ in the lower part of the band and
$f_n' = f_0 + 630 + 28n$ in the upper part of the band,
where n = 1, 2 up to 18;

c) with channel separation 14 MHz, whereas centre frequency f_n and f_n' [MHz] of particular operating channels are in relation to the reference frequency f_0 = 51 412 MHz given by formulas

$f_n = f_0 + 21 + 14n$ in the lower part of the band and
$f_n' = f_0 + 637 + 14n$ in the upper part of the band,
where n = 1, 2 up to 36;

d) with channel separation 7 MHz, whereas centre frequency f_n and f_n' [MHz] of particular operating channels are in relation to the reference frequency f_0 = 51 412 MHz given by formulas

$f_n = f_0 + 24.5 + 7n$ in the lower part of the band and
$f_n' = f_0 + 640.5 + 14n$ in the upper part of the band,
where n = 1, 2 up to 72;

e) with channel separation 3.5 MHz, whereas centre frequency f_n and f_n' [MHz] of particular operating channels are in relation to the reference frequency f_0 = 51 412 MHz given by formulas

$f_n = f_0 + 26.25 + 3.5n$ in the lower part of the band and
$f_n' = f_0 + 642.25 + 3.5n$ in the upper part of the band,
where n = 1, 2 up to 144.

Setting down of the channel separations corresponds to ITU-R Recommendation[16]) and CEPT Recommendation[17]).

[15]) Footnote 5.547 of RR.
[16]) Recommendation ITU-R F.1496.
[17]) Recommendation CEPT/ERC/REC 12-11 Radio frequency channel arrangement for fixed service systems operating in the band 51.4–52.6 GHz.

Article 12
Information on future development in the fixed service

Utilisation of the band in the fixed service will evolve subject to availability of particular transmitting equipment.

Part 6
Fixed-satellite service

Article 13
Current conditions in the fixed-satellite service

(1) The band 47.2–49.2 GHz is, according to a RR footnote[18]), designated for feeder links of the broadcasting-satellite service.

(2) In accordance with RR footnote[19]) are the bands 47.5–47.9 GHz, 48.2–48.54 GHz and 49.44–50.2 GHz designated for use by high density applications (HDFSS) in the fixed-satellite service in space-to-Earth direction. This identification does not preclude the use of these bands by other applications of fixed-satellite service or by other services, with which they share primary allocation on co-primary basis and does not establish any priority among users of the bands.

(3) In accordance with RR footnote[20]) is utilisation of bands 47.5–47.9 GHz, 48.2–48.54 GHz and 49.44–50.2 GHz by fixed-satellite service (space-to-Earth) limited to geostationary satellites.

Article 14
Information on future development in the fixed-satellite service

No changes in the utilisation of the band by the service are currently considered on the national or international level.

Part 7
Space research and Earth exploration-satellite service

Article 15
Current conditions in the space research and Earth exploration-satellite service

The band 50.2–50.4 GHz is allocated to the space research service and Earth exploration-satellite service for passive utilisation. Use of the band by these services shall not excessively limit use of adjacent bands.

[18]) Footnote 5.552 of RR.
[19]) Footnote 5.516B of RR
[20]) Footnote 5.554A of RR

Article 16
Information on future development in space research and Earth exploration-satellite service

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

Part 8
Radio astronomy service

Article 17
Current conditions in the radio astronomy service

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

(2) According to a footnote of RR[3]) the band 48.94–49.04 GHz is also additionally allocated to the radio astronomy service on a primary basis. According to RR footnote[21]) shall users of this band take all practicable steps to protect the radio astronomy service.

Article 18
Information on future development in the radio astronomy service

The ERC Report) assumes radio astronomy observations in the band 51.4–54.25 GHz. In case of interest the Office will consider in accordance with RR footnote[22]) a national arrangement of use of this band by radio astronomy service.

Part 9
Amateur service and amateur-satellite service

Article 19
Current conditions in amateur and amateur-satellite service

(1) The band 47–47.2 GHz is allocated to amateur service and amateur-satellite service on a primary basis.

(2) Operation of amateur and amateur-satellite service is governed by the special legal measure[23]).

Article 20
Information on future development in the amateur and amateur-satellite service

No changes in the utilisation of the band by the service are currently considered on the national or international level.

[21]) Footnote 5.149 of RR.
[22]) Footnote 5.556 of RR.
[23]) Decree No. 156/2005 Coll., on the technical and operating conditions of the amateur radio communication service.

Part 10
Final provision

Article 21
Effect

This part of the Radio Spectrum Utilisation Plan comes into effect on 1 September 2006.

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

Explanatory memorandum

To implement Section 16(2) of the Act, the Office issues the Measure of General Nature Part No. PV-P/25/07.2006-25 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 43.5 GHz to 52.6 GHz by radiocommunication services.

The 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 of 7 March 2002 on a common regulatory framework for electronic communications networks and services (Framework Directive) and Decision No 676/2002/EC of the European Parliament and of the Council of 7 March 2002 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 the ability to anticipate the future decisions of the Office.

Article 2 consists of information from National Table of Frequency Allocations and information on current utilisation by applications. Column "Future harmonisation" presents future intentions, i.e. allocation to services and utilisation by applications according to ERC Report 25: European Table of Frequency Allocations and Utilisations. More details about applications are in relevant articles on individual radiocommunication services.

Article 3 presents characteristics of the frequency band and Article 4 contains international obligations, determined in this case by the Radio Regulations of the International Telecommunication Union.

Utilisation of the band is described in the Part 2. For the time being there is no significant utilisation of the band and its evolvement is still anticipated.

On the basis of Section 130 of the Act and in accordance with the Czech Telecommunication Office's Rules for conducting consultations with the entities concerned at the Discussion Site, the Office published at the Discussion Site its draft Part No. PV-P/25/XX.2006-Y of the Radio Spectrum Utilisation Plan on 16 June 2006 together with a call for comments. During the public consultation the Office did not receive any comment.

PhDr. Pavel Dvořák, CSc.
Chairman of the Council
of the Czech Telecommunication Office
<signed>