Hungary

Government Decree

No. 221/1999 (XII.29.)Korm.

on the Establishment of the National Table of Frequency Allocations

On the basis of the authorisation given by Section 3, subsection (1), paragraph *d)*, and Section 6, subsection (1) of Act LXII of 1993 on Frequency Management, the Government decrees as follows:

Section 1

The Government decrees to apply the National Table of Frequency Allocations and its Annexes, being the *Annex* to this Decree.

Section 2

In the frequency bands termed “reserved” in Annex 3 to the Table, the fulfilment of the conditions of the frequency utilisation will be published in a bulletin by the Ministry of Transport, Communications and Water Management in its official journal. The frequency management authority may assign frequencies from the band for the purpose identified by the footnote, on the basis of this bulletin.

Section 3

(1) This Decree comes into force on 1 January 2000, at the same time the Government Decree No. 204/1997 (XI.19.)Korm. on the Establishment of the National Table of Frequency Allocations as well as its amendment, the Government Decree No. 215/1998 (XII.24.)Korm., are repealed.

(2) With respect to the European Agreement signed on 16 December 1991 in Brussels on the establishment of an associated status between the Republic of Hungary and the European Communities and its member states and in conformity with Section 3 of Act I of 1994 on the promulgation of this Agreement, this Decree contains regulations which may be harmonised with the following legislation of the European Communities:

a) Council Directive 87/372/EEC on the frequency bands to be reserved for the coordinated introduction of public pan-European cellular digital land-based mobile communications in the Community;

b) Council Directive 90/544/EEC on the frequency bands designated for the coordinated introduction of pan-European land-based public radio paging in the Community;

c) Council Directive 91/287/EEC on the frequency bands to be designated for the coordinated introduction of digital European cordless telecommunications (DECT) into the Community;

d) Council Resolution 90/C 166/02 on the strengthening of the Europe-wide cooperation on radio frequencies, in particular with regard to services with a pan-European dimension;

e) Council Resolution 92/C 318/01 on the implementation in the Community of the European Radiocommunications Committee Decisions.

(signed) *Viktor Orbán*

Prime Minister

Annex to Government Decree No. 221/1999 (XII.29.)Korm.

NATIONAL TABLE OF FREQUENCY ALLOCATIONS

9 kHz-400 GHz

INTERNATIONAL ALLOCATION				ALLOCATION IN THE REPUBLIC OF HUNGARY		
RADIO REGULATIONS			RR ALLOCATION RELEVANT TO THE REPUBLIC OF HUNGARY	GOVERNMENTAL	CIVIL	COMMON
REGION 1	REGION 2	REGION 3				
Below 9 kHz	(Not allocated)		**Below 9 kHz** (Not allocated)	**Below 9 kHz**	**Below 9 kHz**	**Below 9 kHz** (Not allocated)
	S5.53 S5.54		S5.53 S5.54	H1 H2	H1 H2	S5.53 S5.54
9-14 kHz	RADIONAVIGATION		**9-14 kHz** RADIONAVIGATION	**9-14 kHz**	**9-14 kHz**	**9-14 kHz** RADIONAVIGATION H3
				H4	H4	
14-19.95 kHz	FIXED MARITIME MOBILE S5.57		**14-19.95 kHz** FIXED MARITIME MOBILE S5.57	**14-19.95 kHz**	**14-19.95 kHz**	**14-19.95 kHz** FIXED
	S5.55 S5.56		S5.56	H4 H5	H4 H5	
19.95-20.05 kHz	STANDARD FREQUENCY AND TIME SIGNAL (20 kHz)		**19.95-20.05 kHz** STANDARD FREQUENCY AND TIME SIGNAL (20 kHz)	**19.95-20.05 kHz**	**19.95-20.05 kHz** STANDARD FREQUENCY AND TIME SIGNAL (20 kHz)	
				H4 H5	H4 H5	
20.05-70 kHz	FIXED MARITIME MOBILE S5.57		**20.05-70 kHz** FIXED MARITIME MOBILE S5.57	**20.05-70 kHz**	**20.05-70 kHz**	**20.05-70 kHz** FIXED
	S5.56 S5.58		S5.56	H4 H5 H6 H7	H4 H5 H6 H7	
70-72 kHz RADIONAVIGATION S5.60	**70-90 kHz** FIXED MARITIME MOBILE S5.57 MARITIME RADIONAVIGATION S5.60 Radiolocation	**70-72 kHz** RADIONAVIGATION S5.60 Fixed Maritime mobile S5.57 S5.59	**70-72 kHz** RADIONAVIGATION S5.60	**70-72 kHz** H4 H5 H6 H7	**70-72 kHz** H4 H5 H6 H7	**70-72 kHz** RADIONAVIGATION S5.60

INTERNATIONAL ALLOCATION				ALLOCATION IN THE REPUBLIC OF HUNGARY		
RADIO REGULATIONS			RR ALLOCATION RELEVANT TO THE REPUBLIC OF HUNGARY	GOVERNMENTAL	CIVIL	COMMON
REGION 1	REGION 2	REGION 3				
72-84 kHz FIXED MARITIME MOBILE S5.57 RADIONAVIGATION S5.60 S5.56		**72-84 kHz** FIXED MARITIME MOBILE S5.57 RADIONAVIGATION S5.60	**72-84 kHz** FIXED MARITIME MOBILE S5.57 RADIONAVIGATION S5.60 S5.56	**72-84 kHz** H4 H5 H6 H7	**72-84 kHz** H4 H5 H6 H7	**72-84 kHz** FIXED RADIONAVIGATION S5.60
84-86 kHz RADIONAVIGATION S5.60		**84-86 kHz** RADIONAVIGATION S5.60 Fixed Maritime mobile S5.57 S5.59	**84-86 kHz** RADIONAVIGATION S5.60	**84-86 kHz** H4 H5 H6 H7	**84-86 kHz** H4 H5 H6 H7	**84-86 kHz** RADIONAVIGATION S5.60
86-90 kHz FIXED MARITIME MOBILE S5.57 RADIONAVIGATION S5.56	S5.61	**86-90 kHz** FIXED MARITIME MOBILE S5.57 RADIONAVIGATION S5.60	**86-90 kHz** FIXED MARITIME MOBILE S5.57 RADIONAVIGATION S5.56	**86-90 kHz** H4 H5 H6 H7	**86-90 kHz** H4 H5 H6 H7	**86-90 kHz** FIXED RADIONAVIGATION
90-110 kHz	RADIONAVIGATION S5.62 Fixed S5.64		**90-110 kHz** RADIONAVIGATION S5.62 Fixed S5.64	**90-110 kHz** H4 H5 H6 H7	**90-110 kHz** H4 H5 H6 H7	**90-110 kHz** RADIONAVIGATION S5.62 H3 Fixed S5.64
110-112 kHz FIXED MARITIME MOBILE RADIONAVIGATION S5.64	**110-130 kHz** FIXED MARITIME MOBILE MARITIME RADIONAVIGATION S5.60 Radiolocation	**110-112 kHz** FIXED MARITIME MOBILE RADIONAVIGATION S5.60 S5.64	**110-112 kHz** FIXED MARITIME MOBILE RADIONAVIGATION S5.64	**110-112 kHz** H4 H5 H6 H7	**110-112 kHz** H4 H5 H6 H7	**110-112 kHz** FIXED RADIONAVIGATION H3 S5.64
112-115 kHz RADIONAVIGATION S5.60		**112-117.6 kHz** RADIONAVIGATION S5.60 Fixed Maritime mobile	**112-115 kHz** RADIONAVIGATION S5.60	**112-115 kHz** H4 H5 H6 H7	**112-115 kHz** H4 H5 H6 H7	**112-115 kHz** RADIONAVIGATION S5.60 H3
115-117.6 kHz RADIONAVIGATION S5.60 Fixed Maritime mobile S5.64 S5.66		S5.64 S5.65	**115-117.6 kHz** RADIONAVIGATION S5.60 Fixed Maritime mobile S5.64	**115-117.6 kHz** H4 H5 H6 H7	**115-117.6 kHz** H4 H5 H6 H7	**115-117.6 kHz** RADIONAVIGATION S5.60 H3 Fixed S5.64

INTERNATIONAL ALLOCATION			RR ALLOCATION RELEVANT TO THE REPUBLIC OF HUNGARY	ALLOCATION IN THE REPUBLIC OF HUNGARY		
RADIO REGULATIONS				GOVERNMENTAL	CIVIL	COMMON
REGION 1	REGION 2	REGION 3				
117.6-126 kHz FIXED MARITIME MOBILE RADIONAVIGATION S5.60 S5.64		**117.6-126 kHz** FIXED MARITIME MOBILE RADIONAVIGATION S5.60 S5.64	**117.6-126 kHz** FIXED MARITIME MOBILE RADIONAVIGATION S5.60 S5.64	**117.6-126 kHz** H4 H5 H6 H7	**117.6-126 kHz** H4 H5 H6 H7	**117.6-126 kHz** FIXED RADIONAVIGATION S5.60 H3 S5.64
126-129 kHz RADIONAVIGATION S5.60		**126-129 kHz** RADIONAVIGATION S5.60 Fixed Maritime mobile S5.64 S5.65	**126-129 kHz** RADIONAVIGATION S5.60	**126-129 kHz** H4 H5 H6 H7	**126-129 kHz** H4 H5 H6 H7	**126-129 kHz** RADIONAVIGATION S5.60 H3
129-130 kHz FIXED MARITIME MOBILE RADIONAVIGATION S5.60 S5.64	S5.61 S5.64	**129-130 kHz** FIXED MARITIME MOBILE RADIONAVIGATION S5.60 S5.64	**129-130 kHz** FIXED MARITIME MOBILE RADIONAVIGATION S5.60 S5.64	**129-130 kHz** H4 H5 H6 H7	**129-130 kHz** H4 H5 H6 H7	**129-130 kHz** FIXED RADIONAVIGATION S5.60 H3 S5.64
130-148.5 kHz FIXED MARITIME MOBILE S5.64 S5.67	**130-160 kHz** FIXED MARITIME MOBILE S5.64	**130-160 kHz** FIXED MARITIME MOBILE RADIONAVIGATION S5.64	**130-148.5 kHz** FIXED MARITIME MOBILE S5.64	**130-148.5 kHz** H4 H5 H6 H7	**130-148.5 kHz** H4 H5 H6 H7 H9	**130-148.5 kHz** FIXED S5.64 H8
148.5-255 kHz BROADCASTING S5.68 S5.69 S5.70	**160-190 kHz** FIXED **190-200 kHz** AERONAUTICAL RADIONAVIGATION **200-275 kHz** AERONAUTICAL RADIONAVIGATION Aeronautical Mobile	**160-190 kHz** FIXED Aeronautical Radionavigation **200-285 kHz** AERONAUTICAL RADIONAVIGATION Aeronautical Mobile	**148.5-255 kHz** BROADCASTING	**148.5-255 kHz** BROADCASTING H6	**148.5-255 kHz** BROADCASTING H6	**148.5-255 kHz** H3 H10
255-283.5 kHz BROADCASTING AERONAUTICAL RADIONAVIGATION S5.70 S5.71	**275-285 kHz** AERONAUTICAL RADIONAVIGATION Aeronautical Mobile Maritime Radionavigation (radiobeacons)		**255-283.5 kHz** BROADCASTING AERONAUTICAL RADIONAVIGATION	**255-283.5 kHz** BROADCASTING H6	**255-283.5 kHz** BROADCASTING H6	**255-283.5 kHz** AERONAUTICAL RADIONAVIGATION H3
283.5-315 kHz			**283.5-315 kHz**	**283.5-315 kHz**	**283.5-315 kHz**	**283.5-315 kHz**

INTERNATIONAL ALLOCATION				ALLOCATION IN THE REPUBLIC OF HUNGARY		
RADIO REGULATIONS			RR ALLOCATION RELEVANT TO THE REPUBLIC OF HUNGARY	GOVERNMENTAL	CIVIL	COMMON
REGION 1	REGION 2	REGION 3				
AERONAUTICAL RADIONAVIGATION MARITIME RADIONAVIGATION (radiobeacons) S5.73 S5.72 S5.74	**285-315 kHz** AERONAUTICAL RADIONAVIGATION MARITIME RADIONAVIGATION (radiobeacons) S5.73		AERONAUTICAL RADIONAVIGATION MARITIME RADIONAVIGATION (radiobeacons) S5.73 S5.74	 H6	 H6	AERONAUTICAL RADIONAVIGATION H3 H12 H11
315-325 kHz AERONAUTICAL RADIONAVIGATION Maritime Radionavigation (radiobeacons) S5.73 S5.72 S5.75	**315-325 kHz** MARITIME RADIONAVIGATION (radiobeacons) S5.73 Aeronautical Radionavigation	**315-325 kHz** AERONAUTICAL RADIONAVIGATION MARITIME RADIONAVIGATION (radiobeacons) S5.73	**315-325 kHz** AERONAUTICAL RADIONAVIGATION Maritime Radionavigation (radiobeacons) S5.73 H6	**315-325 kHz** H6	**315-325 kHz** H6	**315-325 kHz** AERONAUTICAL RADIONAVIGATION H3 H12
325-405 kHz AERONAUTICAL RADIONAVIGATION S5.72	**325-335 kHz** AERONAUTICAL RADIONAVIGATION Aeronautical Mobile Maritime Radionavigation (radiobeacons) **335-405 kHz** AERONAUTICAL RADIONAVIGATION Aeronautical Mobile	**325-405 kHz** AERONAUTICAL RADIONAVIGATION Aeronautical Mobile	**325-405 kHz** AERONAUTICAL RADIONAVIGATION H6	**325-405 kHz** H6	**325-405 kHz** H6	**325-405 kHz** AERONAUTICAL RADIONAVIGATION H3 H12
405-415 kHz RADIONAVIGATION S5.76 S5.72	**405-415 kHz** RADIONAVIGATION S5.76 Aeronautical Mobile		**405-415 kHz** RADIONAVIGATION S5.76 H6	**405-415 kHz** H6	**405-415 kHz** H6	**405-415 kHz** RADIONAVIGATION S5.76 H3 H12
415-435 kHz MARITIME MOBILE S5.79 AERONAUTICAL RADIONAVIGATION S5.72	**415-495 kHz** MARITIME MOBILE S5.79 S5.79A Aeronautical Radionavigation S5.80		**415-435 kHz** MARITIME MOBILE S5.79 AERONAUTICAL RADIONAVIGATION H6	**415-435 kHz** H6	**415-435 kHz** H6	**415-435 kHz** AERONAUTICAL RADIONAVIGATION H3 H12 H14
435-495 kHz MARITIME MOBILE S5.79 S5.79A Aeronautical Radionavigation S5.72 S5.81 S5.82	S5.77 S5.78 S5.81 S5.82		**435-495 kHz** MARITIME MOBILE S5.79 S5.79A Aeronautical Radionavigation S5.81 S5.82	**435-495 kHz** H1 H6	**435-495 kHz** H1 H6	**435-495 kHz** AERONAUTICAL RADIONAVIGATION H3 H12 S5.81 S5.82 H14
495-505 kHz S5.83	MOBILE (distress and calling) S5.83		**495-505 kHz** MOBILE (distress and calling) S5.83			**495-505 kHz** MOBILE (distress and calling) H3 H16 S5.83

INTERNATIONAL ALLOCATION			RR ALLOCATION RELEVANT TO THE REPUBLIC OF HUNGARY	ALLOCATION IN THE REPUBLIC OF HUNGARY		
RADIO REGULATIONS				GOVERNMENTAL	CIVIL	COMMON
REGION 1	REGION 2	REGION 3				
505-526.5 kHz MARITIME MOBILE S5.79 S5.79A S5.84 AERONAUTICAL RADIONAVIGATION S5.72 S5.81	**505-510 kHz** MARITIME MOBILE S5.79 S5.81 **510-525 kHz** MOBILE S5.79A S5.84 AERONAUTICAL RADIONAVIGATION **525-535 kHz** BROADCASTING S5.86 AERONAUTICAL RADIONAVIGATION	**505-526.5 kHz** MARITIME MOBILE S5.79 S5.79A S5.84 AERONAUTICAL RADIONAVIGATION Aeronautical Mobile Land Mobile S5.81	**505-526.5 kHz** MARITIME MOBILE S5.79 S5.79A S5.84 AERONAUTICAL RADIONAVIGATION S5.81			**505-526.5 kHz** AERONAUTICAL RADIONAVIGATION H3 H12 S5.81 H14
526.5-1 606.5 kHz BROADCASTING S5.87 S5.87A	**535-1 605 kHz** BROADCASTING **1 605-1 625 kHz** BROADCASTING S5.89	**526.5-535 kHz** BROADCASTING Mobile S5.88 **535-1 606.5 kHz** BROADCASTING	**526.5-1 606.5 kHz** BROADCASTING		**526.5-1 606.5 kHz** BROADCASTING H15	**526.5-1 606.5 kHz** H3 H10
1 606.5-1 625 kHz FIXED MARITIME MOBILE S5.90 LAND MOBILE S5.92	S5.90	**1 606.5-1 800 kHz** FIXED MOBILE RADIOLOCATION RADIONAVIGATION	**1 606.5-1 625 kHz** FIXED MARITIME MOBILE S5.90 LAND MOBILE S5.92	**1 606.5-1 625 kHz** FIXED LAND MOBILE S5.92 H14		
1 625-1 635 kHz RADIOLOCATION S5.93	**1 625-1 705 kHz** FIXED MOBILE BROADCASTING S5.89		**1 625-1 635 kHz** FIXED S5.93 LAND MOBILE S5.93 RADIOLOCATION	**1 625-1 635 kHz** FIXED S5.93 LAND MOBILE S5.93 RADIOLOCATION		
1 635-1 800 kHz FIXED MARITIME MOBILE S5.90 LAND MOBILE S5.92 S5.96	Radiolocation S5.90 **1 705-1 800 kHz** FIXED MOBILE RADIOLOCATION AERONAUTICAL RADIONAVIGATION	S5.91	**1 635-1 800 kHz** FIXED MARITIME MOBILE S5.90 LAND MOBILE S5.92 S5.96	**1 635-1 800 kHz** FIXED LAND MOBILE S5.92 H14		
1 800-1 810 kHz RADIOLOCATION S5.93	**1 800-1 850 kHz** AMATEUR	**1 800-2 000 kHz** AMATEUR FIXED MOBILE except aeronautical mobile	**1 800-1 810 kHz** FIXED S5.93 LAND MOBILE S5.93 RADIOLOCATION	**1 800-1 810 kHz** FIXED S5.93 LAND MOBILE S5.93		

INTERNATIONAL ALLOCATION			RR ALLOCATION RELEVANT TO THE REPUBLIC OF HUNGARY	ALLOCATION IN THE REPUBLIC OF HUNGARY		
RADIO REGULATIONS				GOVERNMENTAL	CIVIL	COMMON
REGION 1	REGION 2	REGION 3				
1 810-1 850 kHz AMATEUR S5.98 S5.99 S5.100 S5.101		RADIONAVIGATION Radiolocation	**1 810-1 850 kHz** AMATEUR S5.100		**1 810-1 850 kHz** AMATEUR S5.100	
1 850-2 000 kHz FIXED MOBILE except aeronautical mobile S5.92 S5.96 S5.103	**1 850-2 000 kHz** AMATEUR FIXED MOBILE except aeronautical mobile RADIOLOCATION RADIONAVIGATION S5.102	S5.97	**1 850-2 000 kHz** FIXED MOBILE except aeronautical mobile S5.92 S5.96 S5.103	**1 850-2 000 kHz** FIXED MOBILE except aeronautical mobile S5.103	**1 850-2 000 kHz** Amateur S5.96	**1 850-2 000 kHz** S5.92 H3
2 000-2 025 kHz FIXED MOBILE except aeronautical mobile (R) S5.92 S5.103	**2 000-2 065 kHz** FIXED MOBILE		**2 000-2 025 kHz** FIXED MOBILE except aeronautical mobile (R) S5.92 S5.103	**2 000-2 025 kHz** FIXED MOBILE except aeronautical mobile (R) S5.92 S5.103		
2 025-2 045 kHz FIXED MOBILE except aeronautical mobile (R) Meteorological Aids S5.104 S5.92 S5.103			**2 025-2 045 kHz** FIXED MOBILE except aeronautical mobile (R) Meteorological Aids S5.104 S5.92 S5.103	**2 025-2 045 kHz** FIXED MOBILE except aeronautical mobile (R) S5.92 S5.103		
2 045-2 160 kHz FIXED MARITIME MOBILE LAND MOBILE S5.92	**2 065-2 107 kHz** MARITIME MOBILE S5.105 S5.106		**2 045-2 160 kHz** FIXED MARITIME MOBILE LAND MOBILE S5.92	**2 045-2 107 kHz** FIXED MARITIME MOBILE LAND MOBILE S5.92 H14		
	2 107-2 170 kHz FIXED MOBILE			**2 107-2 160 kHz** FIXED LAND MOBILE S5.92 H14		
2 160-2 170 kHz RADIOLOCATION S5.93 S5.107			**2 160-2 170 kHz** FIXED S5.93 LAND MOBILE S5.93 RADIOLOCATION	**2 160-2 170 kHz** FIXED S5.93 LAND MOBILE S5.93 RADIOLOCATION		
2 170-2 173.5 kHz MARITIME MOBILE			**2 170-2 173.5 kHz** MARITIME MOBILE			**2 170-2 173.5 kHz** MARITIME MOBILE H16

INTERNATIONAL ALLOCATION				ALLOCATION IN THE REPUBLIC OF HUNGARY		
RADIO REGULATIONS			RR ALLOCATION RELEVANT TO THE REPUBLIC OF HUNGARY	GOVERNMENTAL	CIVIL	COMMON
REGION 1	REGION 2	REGION 3				
2 173.5-2 190.5 kHz S5.108 S5.109 S5.110 S5.111	MOBILE (distress and calling)		**2 173.5-2 190.5 kHz** MOBILE (distress and calling) S5.108 S5.109 S5.110 S5.111			**2 173.5-2 190.5 kHz** MOBILE (distress and calling) H3 H16 S5.108 S5.109 S5.110 S5.111
2 190.5-2 194 kHz	MARITIME MOBILE		**2 190.5-2 194 kHz** MARITIME MOBILE			**2 190.5-2 194 kHz** MARITIME MOBILE H16
2 194-2 300 kHz FIXED MOBILE except aeronautical mobile (R) S5.92 S5.103 S5.112	**2 194-2 300 kHz** FIXED MOBILE S5.112		**2 194-2 300 kHz** FIXED MOBILE except aeronautical mobile (R) S5.92 S5.103	**2 194-2 300 kHz** FIXED MOBILE except aeronautical mobile (R) S5.92 S5.103		
2 300-2 498 kHz FIXED MOBILE except aeronautical mobile (R) BROADCASTING S5.113 S5.103	**2 300-2 495 kHz** FIXED MOBILE BROADCASTING S5.113 **2 495-2 501 kHz** STANDARD FREQUENCY AND TIME SIGNAL (2 500 kHz)		**2 300-2 498 kHz** FIXED MOBILE except aeronautical mobile (R) S5.103	**2 300-2 498 kHz** FIXED MOBILE except aeronautical mobile (R) S5.103		
2 498-2 501 kHz STANDARD FREQUENCY AND TIME SIGNAL (2 500 kHz)			**2 498-2 501 kHz** STANDARD FREQUENCY AND TIME SIGNAL (2 500 kHz)		**2 498-2 501 kHz** STANDARD FREQUENCY AND TIME SIGNAL (2 500 kHz)	
2 501-2 502 kHz	STANDARD FREQUENCY AND TIME SIGNAL Space Research		**2 501-2 502 kHz** STANDARD FREQUENCY AND TIME SIGNAL Space Research		**2 501-2 502 kHz** STANDARD FREQUENCY AND TIME SIGNAL Space Research	
2 502-2 625 kHz FIXED MOBILE except aeronautical mobile (R) S5.92 S5.103 S5.114	**2 502-2 505 kHz** STANDARD FREQUENCY AND TIME SIGNAL **2 505-2 850 kHz** FIXED MOBILE		**2 502-2 625 kHz** FIXED MOBILE except aeronautical mobile (R) S5.92 S5.103			**2 502-2 625 kHz** FIXED H18 MOBILE except aeronautical mobile (R) H17 S5.92 S5.103
2 625-2 650 kHz MARITIME MOBILE MARITIME RADIONAVIGATION S5.92			**2 625-2 650 kHz** MARITIME MOBILE MARITIME RADIONAVIGATION S5.92			**2 625-2 650 kHz** MARITIME MOBILE H17 S5.92

INTERNATIONAL ALLOCATION				ALLOCATION IN THE REPUBLIC OF HUNGARY		
RADIO REGULATIONS			RR ALLOCATION RELEVANT TO THE REPUBLIC OF HUNGARY	GOVERNMENTAL	CIVIL	COMMON
REGION 1	REGION 2	REGION 3				
2 650-2 850 kHz FIXED MOBILE except aeronautical mobile (R) S5.92 S5.103			**2 650-2 850 kHz** FIXED MOBILE except aeronautical mobile (R) S5.92 S5.103	**2 650-2 850 kHz** MOBILE except aeronautical mobile (R) S5.103		**2 650-2 850 kHz** FIXED H18 S5.92 S5.103
2 850-3 025 kHz	AERONAUTICAL MOBILE (R) S5.111 S5.115		**2 850-3 025 kHz** AERONAUTICAL MOBILE (R) S5.111 S5.115		**2 850-3 025 kHz** H20	**2 850-3 025 kHz** AERONAUTICAL MOBILE (R) H3 H19 S5.111 S5.115
3 025-3 155 kHz	AERONAUTICAL MOBILE (OR)		**3 025-3 155 kHz** AERONAUTICAL MOBILE (OR)	**3 025-3 155 kHz** AERONAUTICAL MOBILE (OR) H21		
3 155-3 200 kHz	FIXED MOBILE except aeronautical mobile (R) S5.116 S5.117		**3 155-3 200 kHz** FIXED MOBILE except aeronautical mobile (R) S5.116	**3 155-3 200 kHz** FIXED		**3 155-3 200 kHz** MOBILE except aeronautical mobile (R) H22 S5.116
3 200-3 230 kHz	FIXED MOBILE except aeronautical mobile (R) BROADCASTING S5.113 S5.116		**3 200-3 230 kHz** FIXED MOBILE except aeronautical mobile (R) S5.116			**3 200-3 230 kHz** FIXED H18 MOBILE except aeronautical mobile (R) H22 S5.116
3 230-3 400 kHz	FIXED MOBILE except aeronautical mobile BROADCASTING S5.113 S5.116 S5.118		**3 230-3 400 kHz** FIXED MOBILE except aeronautical mobile S5.116			**3 230-3 400 kHz** FIXED H18 MOBILE except aeronautical mobile H23 S5.116
3 400-3 500 kHz	AERONAUTICAL MOBILE (R)		**3 400-3 500 kHz** AERONAUTICAL MOBILE (R)			**3 400-3 500 kHz** AERONAUTICAL MOBILE (R) H3 H19
3 500-3 800 kHz AMATEUR S5.120 FIXED MOBILE except aeronautical mobile	**3 500-3 750 kHz** AMATEUR S5.120 S5.119	**3 500-3 900 kHz** AMATEUR S5.120 FIXED MOBILE	**3 500-3 800 kHz** AMATEUR S5.120 FIXED MOBILE except aeronautical mobile	**3 500-3 800 kHz** FIXED	**3 500-3 800 kHz** AMATEUR S5.120	**3 500-3 800 kHz** MOBILE except aeronautical mobile H17

INTERNATIONAL ALLOCATION			RR ALLOCATION RELEVANT TO THE REPUBLIC OF HUNGARY	ALLOCATION IN THE REPUBLIC OF HUNGARY		
RADIO REGULATIONS				GOVERNMENTAL	CIVIL	COMMON
REGION 1	REGION 2	REGION 3				
S5.92	**3 750-4 000 kHz** AMATEUR S5.120 FIXED		S5.92	S5.92		
3 800-3 900 kHz FIXED AERONAUTICAL MOBILE (OR) LAND MOBILE	MOBILE except aeronautical mobile (R)		**3 800-3 900 kHz** FIXED AERONAUTICAL MOBILE (OR) LAND MOBILE	**3 800-3 900 kHz** AERONAUTICAL MOBILE (OR) LAND MOBILE		**3 800-3 900 kHz** FIXED H18
3 900-3 950 kHz AERONAUTICAL MOBILE (OR) S5.123		**3 900-3 950 kHz** AERONAUTICAL MOBILE BROADCASTING	**3 900-3 950 kHz** AERONAUTICAL MOBILE (OR)	**3 900-3 950 kHz** AERONAUTICAL MOBILE (OR) H21		
3 950-4 000 kHz FIXED BROADCASTING S5.122 S5.124 S5.125		**3 950-4 000 kHz** FIXED BROADCASTING S5.126	**3 950-4 000 kHz** FIXED BROADCASTING		**3 950-4 000 kHz** BROADCASTING	
4 000-4 063 kHz S5.126	FIXED MARITIME MOBILE S5.127		**4 000-4 063 kHz** FIXED MARITIME MOBILE S5.127			**4 000-4 063 kHz** FIXED H18 MARITIME MOBILE S5.127 H16
4 063-4 438 kHz S5.128 S5.129	MARITIME MOBILE S5.79A S5.109 S5.110 S5.130 S5.131 S5.132		**4 063-4 438 kHz** MARITIME MOBILE S5.79A S5.109 S5.110 S5.130 S5.131 S5.132 S5.129	**4 063-4 438 kHz** Fixed S5.129	**4 063-4 438 kHz** MARITIME MOBILE S5.79A S5.109 S5.110 S5.130 S5.131 S5.132 H16 H25	
4 438-4 650 kHz FIXED MOBILE except aeronautical mobile (R)		**4 438-4 650 kHz** FIXED MOBILE except aeronautical mobile	**4 438-4 650 kHz** FIXED MOBILE except aeronautical mobile (R)			**4 438-4 650 kHz** FIXED H18 MOBILE except aeronautical mobile (R) H17
4 650-4 700 kHz	AERONAUTICAL MOBILE (R)		**4 650-4 700 kHz** AERONAUTICAL MOBILE (R)			**4 650-4 700 kHz** AERONAUTICAL MOBILE (R) H3 H19
4 700-4 750 kHz	AERONAUTICAL MOBILE (OR)		**4 700-4 750 kHz** AERONAUTICAL MOBILE (OR)	**4 700-4 750 kHz** AERONAUTICAL MOBILE (OR) H21		
4 750-4 850 kHz FIXED AERONAUTICAL MOBILE (OR) LAND MOBILE BROADCASTING S5.113	**4 750-4 850 kHz** FIXED MOBILE except aeronautical mobile (R) BROADCASTING S5.113	**4 750-4 850 kHz** FIXED BROADCASTING S5.113 Land Mobile	**4 750-4 850 kHz** FIXED AERONAUTICAL MOBILE (OR) LAND MOBILE	**4 750-4 850 kHz** AERONAUTICAL MOBILE (OR) LAND MOBILE		**4 750-4 850 kHz** FIXED H18

INTERNATIONAL ALLOCATION			RR ALLOCATION RELEVANT TO THE REPUBLIC OF HUNGARY	ALLOCATION IN THE REPUBLIC OF HUNGARY		
RADIO REGULATIONS				GOVERNMENTAL	CIVIL	COMMON
REGION 1	REGION 2	REGION 3				
4 850-4 995 kHz FIXED LAND MOBILE BROADCASTING S5.113			**4 850-4 995 kHz** FIXED LAND MOBILE	**4 850-4 995 kHz** LAND MOBILE		**4 850-4 995 kHz** FIXED H18
4 995-5 003 kHz STANDARD FREQUENCY AND TIME SIGNAL (5 000 kHz)			**4 995-5 003 kHz** STANDARD FREQUENCY AND TIME SIGNAL (5 000 kHz)		**4 995-5 003 kHz** STANDARD FREQUENCY AND TIME SIGNAL (5 000 kHz)	
5 003-5 005 kHz STANDARD FREQUENCY AND TIME SIGNAL Space Research			**5 003-5 005 kHz** STANDARD FREQUENCY AND TIME SIGNAL Space Research		**5 003-5 005 kHz** STANDARD FREQUENCY AND TIME SIGNAL Space Research	
5 005-5 060 kHz FIXED BROADCASTING S5.113			**5 005-5 060 kHz** FIXED			**5 005-5 060 kHz** FIXED H18
5 060-5 250 kHz FIXED Mobile except aeronautical mobile S5.133			**5 060-5 250 kHz** FIXED Mobile except aeronautical mobile	**5 060-5 250 kHz** Mobile except aeronautical mobile		**5 060-5 250 kHz** FIXED H18
5 250-5 450 kHz FIXED MOBILE except aeronautical mobile			**5 250-5 450 kHz** FIXED MOBILE except aeronautical mobile			**5 250-5 450 kHz** FIXED H18 MOBILE except aeronautical mobile H17
5 450-5 480 kHz FIXED AERONAUTICAL MOBILE (OR) LAND MOBILE	**5 450-5 480 kHz** AERONAUTICAL MOBILE (R)	**5 450-5 480 kHz** FIXED AERONAUTICAL MOBILE (OR) LAND MOBILE	**5 450-5 480 kHz** FIXED AERONAUTICAL MOBILE (OR) LAND MOBILE	**5 450-5 480 kHz** AERONAUTICAL MOBILE (OR) LAND MOBILE		**5 450-5 480 kHz** FIXED H18
5 480-5 680 kHz AERONAUTICAL MOBILE (R) S5.111 S5.115			**5 480-5 680 kHz** AERONAUTICAL MOBILE (R) S5.111 S5.115			**5 480-5 680 kHz** AERONAUTICAL MOBILE (R) H3 H19 S5.111 S5.115
5 680-5 730 kHz AERONAUTICAL MOBILE (OR) S5.111 S5.115			**5 680-5 730 kHz** AERONAUTICAL MOBILE (OR) S5.111 S5.115	**5 680-5 730 kHz** AERONAUTICAL MOBILE (OR) H21		**5 680-5 730 kHz** S5.111 S5.115
5 730-5 900 kHz FIXED LAND MOBILE	**5 730-5 900 kHz** FIXED MOBILE except aeronautical mobile (R)	**5 730-5 900 kHz** FIXED Mobile except aeronautical mobile (R)	**5 730-5 900 kHz** FIXED LAND MOBILE	**5 730-5 900 kHz** LAND MOBILE		**5 730-5 900 kHz** FIXED H18
5 900-5 950 kHz BROADCASTING S5.134 S5.136			**5 900-5 950 kHz** FIXED LAND MOBILE BROADCASTING S5.134 S5.136	**5 900-5 950 kHz** LAND MOBILE S5.136	**5 900-5 950 kHz** BROADCASTING S5.134	**5 900-5 950 kHz** FIXED H18 H27 S5.136

INTERNATIONAL ALLOCATION				ALLOCATION IN THE REPUBLIC OF HUNGARY		
RADIO REGULATIONS			RR ALLOCATION RELEVANT TO THE REPUBLIC OF HUNGARY	GOVERNMENTAL	CIVIL	COMMON
REGION 1	REGION 2	REGION 3				
5 950-6 200 kHz	BROADCASTING		**5 950-6 200 kHz** BROADCASTING	**5 950-6 200 kHz** H29	**5 950-6 200 kHz** BROADCASTING H28	
6 200-6 525 kHz	MARITIME MOBILE S5.109 S5.110 S5.130 S5.132 S5.137		**6 200-6 525 kHz** MARITIME MOBILE S5.109 S5.110 S5.130 S5.132 S5.137	**6 200-6 525 kHz** S5.137	**6 200-6 525 kHz** MARITIME MOBILE S5.109 S5.110 S5.130 S5.132 H16 H25	
6 525-6 685 kHz	AERONAUTICAL MOBILE (R)		**6 525-6 685 kHz** AERONAUTICAL MOBILE (R)			**6 525-6 685 kHz** AERONAUTICAL MOBILE (R) H3 H19
6 685-6 765 kHz	AERONAUTICAL MOBILE (OR)		**6 685-6 765 kHz** AERONAUTICAL MOBILE (OR)	**6 685-6 765 kHz** AERONAUTICAL MOBILE (OR) H21		
6 765-7 000 kHz	FIXED Land Mobile S5.139 S5.138		**6 765-7 000 kHz** FIXED Land Mobile S5.138	**6 765-7 000 kHz** Land Mobile H4 H31	**6 765-7 000 kHz** H4 H20 H31	**6 765-7 000 kHz** FIXED H18 S5.138 H30
7 000-7 100 kHz	AMATEUR S5.120 AMATEUR-SATELLITE S5.140 S5.141		**7 000-7 100 kHz** AMATEUR S5.120 AMATEUR-SATELLITE		**7 000-7 100 kHz** AMATEUR S5.120 AMATEUR-SATELLITE	
7 100-7 300 kHz BROADCASTING	**7 100-7 300 kHz** AMATEUR S5.120 S5.142	**7 100-7 300 kHz** BROADCASTING	**7 100-7 300 kHz** BROADCASTING	**7 100-7 300 kHz** H29	**7 100-7 300 kHz** BROADCASTING H28	
7 300-7 350 kHz	BROADCASTING S5.134 S5.143		**7 300-7 350 kHz** FIXED BROADCASTING S5.134 Land Mobile S5.143	**7 300-7 350 kHz** FIXED Land Mobile S5.143 H4	**7 300-7 350 kHz** BROADCASTING S5.134 H4	
7 350-8 100 kHz	FIXED Land Mobile S5.144		**7 350-8 100 kHz** FIXED Land Mobile	**7 350-8 100 kHz** Land Mobile H4	**7 350-8 100 kHz** H4	**7 350-8 100 kHz** FIXED H18
8 100-8 195 kHz	FIXED MARITIME MOBILE		**8 100-8 195 kHz** FIXED MARITIME MOBILE	**8 100-8 195 kHz** H4	**8 100-8 195 kHz** H4	**8 100-8 195 kHz** FIXED H18 MARITIME MOBILE H16

INTERNATIONAL ALLOCATION				ALLOCATION IN THE REPUBLIC OF HUNGARY		
RADIO REGULATIONS			RR ALLOCATION RELEVANT TO THE REPUBLIC OF HUNGARY	GOVERNMENTAL	CIVIL	COMMON
REGION 1	REGION 2	REGION 3				
8 195-8 815 kHz S5.111	MARITIME MOBILE S5.109 S5.110 S5.132 S5.145		**8 195-8 815 kHz** MARITIME MOBILE S5.109 S5.110 S5.132 S5.145 S5.111	**8 195-8 815 kHz** H4	**8 195-8 815 kHz** MARITIME MOBILE S5.109 S5.110 S5.132 S5.145 H16 H25 H4	**8 195-8 815 kHz** S5.111
8 815-8 965 kHz	AERONAUTICAL MOBILE (R)		**8 815-8 965 kHz** AERONAUTICAL MOBILE (R)	**8 815-8 965 kHz** H4	**8 815-8 965 kHz** H4	**8 815-8 965 kHz** AERONAUTICAL MOBILE (R) H3 H19
8 965-9 040 kHz	AERONAUTICAL MOBILE (OR)		**8 965-9 040 kHz** AERONAUTICAL MOBILE (OR)	**8 965-9 040 kHz** AERONAUTICAL MOBILE (OR) H21 H4	**8 965-9 040 kHz** H4	
9 040-9 400 kHz	FIXED		**9 040-9 400 kHz** FIXED	**9 040-9 400 kHz** H4	**9 040-9 400 kHz** H4	**9 040-9 400 kHz** FIXED H18
9 400-9 500 kHz	BROADCASTING S5.134 S5.146		**9 400-9 500 kHz** FIXED BROADCASTING S5.134 S5.146	**9 400-9 500 kHz** FIXED H27 S5.146 H4	**9 400-9 500 kHz** BROADCASTING S5.134 H4	
9 500-9 900 kHz	BROADCASTING S5.147		**9 500-9 900 kHz** BROADCASTING S5.147	**9 500-9 900 kHz** S5.147 H29	**9 500-9 900 kHz** BROADCASTING H28	
9 900-9 995 kHz	FIXED		**9 900-9 995 kHz** FIXED			**9 900-9 995 kHz** FIXED H18
9 995-10 003 kHz	STANDARD FREQUENCY AND TIME SIGNAL (10 000 kHz) S5.111		**9 995-10 003 kHz** STANDARD FREQUENCY AND TIME SIGNAL (10 000 kHz) S5.111		**9 995-10 003 kHz** STANDARD FREQUENCY AND TIME SIGNAL (10 000 kHz)	**9 995-10 003 kHz** S5.111
10 003-10 005 kHz	STANDARD FREQUENCY AND TIME SIGNAL Space Research S5.111		**10 003-10 005 kHz** STANDARD FREQUENCY AND TIME SIGNAL Space Research S5.111		**10 003-10 005 kHz** STANDARD FREQUENCY AND TIME SIGNAL Space Research	**10 003-10 005 kHz** S5.111

INTERNATIONAL ALLOCATION				ALLOCATION IN THE REPUBLIC OF HUNGARY		
RADIO REGULATIONS			RR ALLOCATION RELEVANT TO THE REPUBLIC OF HUNGARY	GOVERNMENTAL	CIVIL	COMMON
REGION 1	REGION 2	REGION 3				
10 005-10 100 kHz S5.111	AERONAUTICAL MOBILE (R)		**10 005-10 100 kHz** AERONAUTICAL MOBILE (R) S5.111			**10 005-10 100 kHz** AERONAUTICAL MOBILE (R) H3 H19 S5.111
10 100-10 150 kHz	FIXED Amateur S5.120		**10 100-10 150 kHz** FIXED Amateur S5.120		**10 100-10 150 kHz** Amateur S5.120	**10 100-10 150 kHz** FIXED H18
10 150-11 175 kHz	FIXED Mobile except aeronautical mobile (R)		**10 150-11 175 kHz** FIXED Mobile except aeronautical mobile (R)	**10 150-11 175 kHz** Mobile except aeronautical mobile (R)		**10 150-11 175 kHz** FIXED H18
11 175-11 275 kHz	AERONAUTICAL MOBILE (OR)		**11 175-11 275 kHz** AERONAUTICAL MOBILE (OR)	**11 175-11 275 kHz** AERONAUTICAL MOBILE (OR) H21		
11 275-11 400 kHz	AERONAUTICAL MOBILE (R)		**11 275-11 400 kHz** AERONAUTICAL MOBILE (R)			**11 275-11 400 kHz** AERONAUTICAL MOBILE (R) H3 H19
11 400-11 600 kHz	FIXED		**11 400-11 600 kHz** FIXED			**11 400-11 600 kHz** FIXED H18
11 600-11 650 kHz	BROADCASTING S5.134 S5.146		**11 600-11 650 kHz** FIXED BROADCASTING S5.134 S5.146		**11 600-11 650 kHz** FIXED H18 H27 BROADCASTING S5.134 S5.146	
11 650-12 050 kHz	BROADCASTING S5.147		**11 650-12 050 kHz** BROADCASTING S5.147	**11 650-12 050 kHz** S5.147 H29	**11 650-12 050 kHz** BROADCASTING H28	
12 050-12 100 kHz	BROADCASTING S5.134 S5.146		**12 050-12 100 kHz** FIXED BROADCASTING S5.134 S5.146		**12 050-12 100 kHz** BROADCASTING S5.134	
12 100-12 230 kHz	FIXED		**12 100-12 230 kHz** FIXED			**12 100-12 230 kHz** FIXED H18
12 230-13 200 kHz	MARITIME MOBILE S5.109 S5.110 S5.132 S5.145		**12 230-13 200 kHz** MARITIME MOBILE S5.109 S5.110 S5.132 S5.145		**12 230-13 200 kHz** MARITIME MOBILE S5.109 S5.110 S5.132 S5.145 H16 H25	

INTERNATIONAL ALLOCATION				ALLOCATION IN THE REPUBLIC OF HUNGARY		
RADIO REGULATIONS			RR ALLOCATION RELEVANT TO THE REPUBLIC OF HUNGARY	GOVERNMENTAL	CIVIL	COMMON
REGION 1	REGION 2	REGION 3				
13 200-13 260 kHz	AERONAUTICAL MOBILE (OR)		**13 200-13 260 kHz** AERONAUTICAL MOBILE (OR)	**13 200-13 260 kHz** AERONAUTICAL MOBILE (OR) H21		
13 260-13 360 kHz	AERONAUTICAL MOBILE (R)		**13 260-13 360 kHz** AERONAUTICAL MOBILE (R)			**13 260-13 360 kHz** AERONAUTICAL MOBILE (R) H3 H19
13 360-13 410 kHz	FIXED RADIO ASTRONOMY S5.149		**13 360-13 410 kHz** FIXED RADIO ASTRONOMY S5.149		**13 360-13 410 kHz** RADIO ASTRONOMY	**13 360-13 410 kHz** FIXED H18 S5.149
13 410-13 570 kHz	FIXED Mobile except aeronautical mobile (R) S5.150		**13 410-13 570 kHz** FIXED Mobile except aeronautical mobile (R) S5.150	**13 410-13 570 kHz** Mobile except aeronautical mobile (R) H4 H31	**13 410-13 570 kHz** H4 H31	**13 410-13 570 kHz** FIXED H18 S5.150 H30
13 570-13 600 kHz	BROADCASTING S5.134 S5.151		**13 570-13 600 kHz** FIXED BROADCASTING S5.134 Mobile except aeronautical mobile (R) S5.151	**13 570-13 600 kHz** FIXED Mobile except aeronautical mobile (R) S5.151 H27	**13 570-13 600 kHz** BROADCASTING S5.134	
13 600-13 800 kHz	BROADCASTING		**13 600-13 800 kHz** BROADCASTING	**13 600-13 800 kHz** H29	**13 600-13 800 kHz** BROADCASTING H28	
13 800-13 870 kHz	BROADCASTING S5.134 S5.151		**13 800-13 870 kHz** FIXED BROADCASTING S5.134 Mobile except aeronautical mobile (R) S5.151	**13 800-13 870 kHz** FIXED Mobile except aeronautical mobile (R) S5.151	**13 800-13 870 kHz** BROADCASTING S5.134	
13 870-14 000 kHz	FIXED Mobile except aeronautical mobile (R)		**13 870-14 000 kHz** FIXED Mobile except aeronautical mobile (R)	**13 870-14 000 kHz** Mobile except aeronautical mobile (R)		**13 870-14 000 kHz** FIXED H18
14 000-14 250 kHz	AMATEUR S5.120 AMATEUR-SATELLITE		**14 000-14 250 kHz** AMATEUR S5.120 AMATEUR-SATELLITE		**14 000-14 250 kHz** AMATEUR S5.120 AMATEUR-SATELLITE	

INTERNATIONAL ALLOCATION				ALLOCATION IN THE REPUBLIC OF HUNGARY		
RADIO REGULATIONS			RR ALLOCATION RELEVANT TO THE REPUBLIC OF HUNGARY	GOVERNMENTAL	CIVIL	COMMON
REGION 1	REGION 2	REGION 3				
14 250-14 350 kHz	AMATEUR S5.120 S5.152		**14 250-14 350 kHz** AMATEUR S5.120		**14 250-14 350 kHz** AMATEUR S5.120	
14 350-14 990 kHz	FIXED Mobile except aeronautical mobile (R)		**14 350-14 990 kHz** FIXED Mobile except aeronautical mobile (R)	**14 350-14 990 kHz** Mobile except aeronautical mobile (R)		**14 350-14 990 kHz** FIXED H18
14 990-15 005 kHz	STANDARD FREQUENCY AND TIME SIGNAL (15 000 kHz) S5.111		**14 990-15 005 kHz** STANDARD FREQUENCY AND TIME SIGNAL (15 000 kHz) S5.111		**14 990-15 005 kHz** STANDARD FREQUENCY AND TIME SIGNAL (15 000 kHz)	**14 990-15 005 kHz** S5.111
15 005-15 010 kHz	STANDARD FREQUENCY AND TIME SIGNAL Space Research		**15 005-15 010 kHz** STANDARD FREQUENCY AND TIME SIGNAL Space Research		**15 005-15 010 kHz** STANDARD FREQUENCY AND TIME SIGNAL Space Research	
15 010-15 100 kHz	AERONAUTICAL MOBILE (OR)		**15 010-15 100 kHz** AERONAUTICAL MOBILE (OR)	**15 010-15 100 kHz** AERONAUTICAL MOBILE (OR) H21		
15 100-15 600 kHz	BROADCASTING		**15 100-15 600 kHz** BROADCASTING	**15 100-15 600 kHz** H29	**15 100-15 600 kHz** BROADCASTING H28	
15 600-15 800 kHz	BROADCASTING S5.134 S5.146		**15 600-15 800 kHz** FIXED BROADCASTING S5.134 S5.146	**15 600-15 800 kHz** FIXED H27 S5.146	**15 600-15 800 kHz** BROADCASTING S5.134	
15 800-16 360 kHz	FIXED S5.153		**15 800-16 360 kHz** FIXED			**15 800-16 360 kHz** FIXED H18
16 360-17 410 kHz	MARITIME MOBILE S5.109 S5.110 S5.132 S5.145		**16 360-17 410 kHz** MARITIME MOBILE S5.109 S5.110 S5.132 S5.145		**16 360-17 410 kHz** MARITIME MOBILE S5.109 S5.110 S5.132 S5.145 H16 H25	
17 410-17 480 kHz	FIXED		**17 410-17 480 kHz** FIXED			**17 410-17 480 kHz** FIXED H18
17 480-17 550 kHz	BROADCASTING S5.134 S5.146		**17 480-17 550 kHz** FIXED BROADCASTING S5.134 S5.146	**17 480-17 550 kHz** FIXED H27 S5.146	**17 480-17 550 kHz** BROADCASTING S5.134	

INTERNATIONAL ALLOCATION				ALLOCATION IN THE REPUBLIC OF HUNGARY		
RADIO REGULATIONS			RR ALLOCATION RELEVANT TO THE REPUBLIC OF HUNGARY	GOVERNMENTAL	CIVIL	COMMON
REGION 1	REGION 2	REGION 3				
17 550-17 900 kHz	BROADCASTING		**17 550-17 900 kHz** BROADCASTING	**17 550-17 900 kHz** H29	**17 550-17 900 kHz** BROADCASTING H28	
17 900-17 970 kHz	AERONAUTICAL MOBILE (R)		**17 900-17 970 kHz** AERONAUTICAL MOBILE (R)			**17 900-17 970 kHz** AERONAUTICAL MOBILE (R) H3 H19
17 970-18 030 kHz	AERONAUTICAL MOBILE (OR)		**17 970-18 030 kHz** AERONAUTICAL MOBILE (OR)	**17 970-18 030 kHz** AERONAUTICAL MOBILE (OR) H21		
18 030-18 052 kHz	FIXED		**18 030-18 052 kHz** FIXED			**18 030-18 052 kHz** FIXED H18
18 052-18 068 kHz	FIXED Space Research		**18 052-18 068 kHz** FIXED Space Research		**18 052-18 068 kHz** Space Research	**18 052-18 068 kHz** FIXED H18
18 068-18 168 kHz	AMATEUR S5.120 AMATEUR-SATELLITE S5.154		**18 068-18 168 kHz** AMATEUR S5.120 AMATEUR-SATELLITE		**18 068-18 168 kHz** AMATEUR S5.120 AMATEUR-SATELLITE	
18 168-18 780 kHz	FIXED Mobile except aeronautical mobile		**18 168-18 780 kHz** FIXED Mobile except aeronautical mobile	**18 168-18 780 kHz** Mobile except aeronautical mobile		**18 168-18 780 kHz** FIXED H18
18 780-18 900 kHz	MARITIME MOBILE		**18 780-18 900 kHz** MARITIME MOBILE		**18 780-18 900 kHz** MARITIME MOBILE H16 H25	
18 900-19 020 kHz	BROADCASTING S5.134 S5.146		**18 900-19 020 kHz** FIXED BROADCASTING S5.134 S5.146		**18 900-19 020 kHz** BROADCASTING S5.134	
19 020-19 680 kHz	FIXED		**19 020-19 680 kHz** FIXED			**19 020-19 680 kHz** FIXED H18
19 680-19 800 kHz	MARITIME MOBILE S5.132		**19 680-19 800 kHz** MARITIME MOBILE S5.132		**19 680-19 800 kHz** MARITIME MOBILE S5.132 H16 H25	
19 800-19 990 kHz	FIXED		**19 800-19 990 kHz** FIXED			**19 800-19 990 kHz** FIXED H18

INTERNATIONAL ALLOCATION				ALLOCATION IN THE REPUBLIC OF HUNGARY		
RADIO REGULATIONS			RR ALLOCATION RELEVANT TO THE REPUBLIC OF HUNGARY	GOVERNMENTAL	CIVIL	COMMON
REGION 1	REGION 2	REGION 3				
19 990-19 995 kHz STANDARD FREQUENCY AND TIME SIGNAL Space Research S5.111			**19 990-19 995 kHz** STANDARD FREQUENCY AND TIME SIGNAL Space Research S5.111		**19 990-19 995 kHz** STANDARD FREQUENCY AND TIME SIGNAL Space Research S5.111	**19 990-19 995 kHz**
19 995-20 010 kHz STANDARD FREQUENCY AND TIME SIGNAL (20 000 kHz) S5.111			**19 995-20 010 kHz** STANDARD FREQUENCY AND TIME SIGNAL (20 000 kHz) S5.111		**19 995-20 010 kHz** STANDARD FREQUENCY AND TIME SIGNAL (20 000 kHz) S5.111	**19 995-20 010 kHz**
20 010-21 000 kHz FIXED Mobile			**20 010-21 000 kHz** FIXED Mobile	**20 010-21 000 kHz** Mobile		**20 010-21 000 kHz** FIXED H18
21 000-21 450 kHz AMATEUR S5.120 AMATEUR-SATELLITE			**21 000-21 450 kHz** AMATEUR S5.120 AMATEUR-SATELLITE		**21 000-21 450 kHz** AMATEUR S5.120 AMATEUR-SATELLITE	
21 450-21 850 kHz BROADCASTING			**21 450-21 850 kHz** BROADCASTING	**21 450-21 850 kHz** H29	**21 450-21 850 kHz** BROADCASTING H28	
21 850-21 870 kHz FIXED S5.155A S5.155			**21 850-21 870 kHz** FIXED S5.155A AERONAUTICAL MOBILE (R) S5.155			**21 850-21 870 kHz** FIXED S5.155A AERONAUTICAL MOBILE (R) S5.155
21 870-21 924 kHz FIXED S5.155B			**21 870-21 924 kHz** FIXED S5.155B			**21 870-21 924 kHz** FIXED S5.155B
21 924-22 000 kHz AERONAUTICAL MOBILE (R)			**21 924-22 000 kHz** AERONAUTICAL MOBILE (R)			**21 924-22 000 kHz** AERONAUTICAL MOBILE (R) H3 H19
22 000-22 855 kHz MARITIME MOBILE S5.132 S5.156			**22 000-22 855 kHz** MARITIME MOBILE S5.132		**22 000-22 855 kHz** MARITIME MOBILE S5.132 H16 H25	
22 855-23 000 kHz FIXED S5.156			**22 855-23 000 kHz** FIXED			**22 855-23 000 kHz** FIXED H18
23 000-23 200 kHz FIXED Mobile except aeronautical mobile (R) S5.156			**23 000-23 200 kHz** FIXED Mobile except aeronautical mobile (R)	**23 000-23 200 kHz** Mobile except aeronautical mobile (R)		**23 000-23 200 kHz** FIXED H18

INTERNATIONAL ALLOCATION			RR ALLOCATION RELEVANT TO THE REPUBLIC OF HUNGARY	ALLOCATION IN THE REPUBLIC OF HUNGARY		
RADIO REGULATIONS				GOVERNMENTAL	CIVIL	COMMON
REGION 1	REGION 2	REGION 3				
23 200-23 350 kHz	FIXED S5.156A AERONAUTICAL MOBILE (OR)		**23 200-23 350 kHz** FIXED S5.156A AERONAUTICAL MOBILE (OR)	**23 200-23 350 kHz** AERONAUTICAL MOBILE (OR)		**23 200-23 350 kHz** FIXED S5.156A
23 350-24 000 kHz	FIXED MOBILE except aeronautical mobile S5.157		**23 350-24 000 kHz** FIXED MOBILE except aeronautical mobile S5.157	**23 350-24 000 kHz** MOBILE except aeronautical mobile S5.157		**23 350-24 000 kHz** FIXED H18
24 000-24 890 kHz	FIXED LAND MOBILE		**24 000-24 890 kHz** FIXED LAND MOBILE	**24 000-24 890 kHz** LAND MOBILE		**24 000-24 890 kHz** FIXED H18
24 890-24 990 kHz	AMATEUR S5.120 AMATEUR-SATELLITE		**24 890-24 990 kHz** AMATEUR S5.120 AMATEUR-SATELLITE		**24 890-24 990 kHz** AMATEUR S5.120 AMATEUR-SATELLITE	
24 990-25 005 kHz	STANDARD FREQUENCY AND TIME SIGNAL (25 000 kHz)		**24 990-25 005 kHz** STANDARD FREQUENCY AND TIME SIGNAL (25 000 kHz)		**24 990-25 005 kHz** STANDARD FREQUENCY AND TIME SIGNAL (25 000 kHz)	
25 005-25 010 kHz	STANDARD FREQUENCY AND TIME SIGNAL Space Research		**25 005-25 010 kHz** STANDARD FREQUENCY AND TIME SIGNAL Space Research		**25 005-25 010 kHz** STANDARD FREQUENCY AND TIME SIGNAL Space Research	
25 010-25 070 kHz	FIXED MOBILE except aeronautical mobile		**25 010-25 070 kHz** FIXED MOBILE except aeronautical mobile	**25 010-25 070 kHz** MOBILE except aeronautical mobile		**25 010-25 070 kHz** FIXED H18
25 070-25 210 kHz	MARITIME MOBILE		**25 070-25 210 kHz** MARITIME MOBILE		**25 070-25 210 kHz** MARITIME MOBILE H16 H25	
25 210-25 550 kHz	FIXED MOBILE except aeronautical mobile		**25 210-25 550 kHz** FIXED MOBILE except aeronautical mobile	**25 210-25 550 kHz** MOBILE except aeronautical mobile		**25 210-25 550 kHz** FIXED H18
25 550-25 670 kHz	RADIO ASTRONOMY S5.149		**25 550-25 670 kHz** RADIO ASTRONOMY S5.149		**25 550-25 670 kHz** RADIO ASTRONOMY	**25 550-25 670 kHz** S5.149
25 670-26 100 kHz	BROADCASTING		**25 670-26 100 kHz** BROADCASTING	**25 670-26 100 kHz** H29	**25 670-26 100 kHz** BROADCASTING H28	
26 100-26 175 kHz	MARITIME MOBILE S5.132		**26 100-26 175 kHz** MARITIME MOBILE S5.132		**26 100-26 175 kHz** MARITIME MOBILE S5.132 H16 H25	

INTERNATIONAL ALLOCATION			RR ALLOCATION RELEVANT TO THE REPUBLIC OF HUNGARY	ALLOCATION IN THE REPUBLIC OF HUNGARY		
RADIO REGULATIONS				GOVERNMENTAL	CIVIL	COMMON
REGION 1	REGION 2	REGION 3				
26 175-27 500 kHz S5.150	FIXED MOBILE except aeronautical mobile		**26 175-27 500 kHz** FIXED MOBILE except aeronautical mobile S5.150	**26 175-26 510 kHz** FIXED MOBILE except aeronautical mobile		
				26 510-27 500 kHz H4 H31 H35 H37A H37B	**26 510-27 500 kHz** FIXED MOBILE except aeronautical mobile H4 H31 H34 H35 H36 H37 H37A H37B H38	**26 510-27 500 kHz** S5.150 H30
27.5-28 MHz	METEOROLOGICAL AIDS FIXED MOBILE		**27.5-28 MHz** METEOROLOGICAL AIDS FIXED MOBILE	**27.5-27.86 MHz** H35	**27.5-27.86 MHz** FIXED MOBILE H34 H35	**27.5-27.86 MHz** METEOROLOGICAL AIDS
				27.86-28 MHz FIXED MOBILE		**27.86-28 MHz** METEOROLOGICAL AIDS
28-29.7 MHz	AMATEUR AMATEUR-SATELLITE		**28-29.7 MHz** AMATEUR AMATEUR-SATELLITE		**28-29.7 MHz** AMATEUR AMATEUR-SATELLITE	
29.7-30.005 MHz	FIXED MOBILE		**29.7-30.005 MHz** FIXED MOBILE	**29.7-30.005 MHz** FIXED MOBILE		
30.005-30.01 MHz	SPACE OPERATION (satellite identification) FIXED MOBILE SPACE RESEARCH		**30.005-30.01 MHz** SPACE OPERATION (satellite identification) FIXED MOBILE SPACE RESEARCH	**30.005-30.01 MHz** FIXED MOBILE	**30.005-30.01 MHz** SPACE OPERATION (satellite identification) SPACE RESEARCH	
30.01-37.5 MHz	FIXED MOBILE		**30.01-37.5 MHz** FIXED MOBILE	**30.01-34.995 MHz** FIXED MOBILE H39	**30.01-34.995 MHz** H40	
				34.995-35.225 MHz MOBILE H37A	**34.995-35.225 MHz** MOBILE H37A H40	
				35.225-37.5 MHz FIXED MOBILE	**35.225-37.5 MHz** H40	

INTERNATIONAL ALLOCATION			RR ALLOCATION RELEVANT TO THE REPUBLIC OF HUNGARY	ALLOCATION IN THE REPUBLIC OF HUNGARY		
RADIO REGULATIONS				GOVERNMENTAL	CIVIL	COMMON
REGION 1	REGION 2	REGION 3				
37.5-38.25 MHz FIXED MOBILE Radio Astronomy S5.149			**37.5-38.25 MHz** FIXED MOBILE Radio Astronomy S5.149	**37.5-38.25 MHz** FIXED MOBILE S5.149	**37.5-38.25 MHz** Radio Astronomy S5.149 H40	
38.25-39.986 MHz FIXED MOBILE			**38.25-39.986 MHz** FIXED MOBILE	**38.25-39.986 MHz** FIXED MOBILE	**38.25-39.986 MHz** H40	
39.986-40.02 MHz FIXED MOBILE Space Research			**39.986-40.02 MHz** FIXED MOBILE Space Research	**39.986-40.02 MHz** FIXED MOBILE	**39.986-40.02 MHz** Space Research	
40.02-40.98 MHz FIXED MOBILE S5.150			**40.02-40.98 MHz** FIXED MOBILE S5.150	**40.02-40.98 MHz** FIXED MOBILE H31 H37A H37B	**40.02-40.98 MHz** H31 H37A H37B H42	**40.02-40.98 MHz** S5.150 H30
40.98-41.015 MHz FIXED MOBILE Space Research S5.160 S5.161			**40.98-41.015 MHz** FIXED MOBILE Space Research	**40.98-41.015 MHz** FIXED MOBILE H39	**40.98-41.015 MHz** Space Research	
41.015-44 MHz FIXED MOBILE S5.160 S5.161			**41.015-44 MHz** FIXED MOBILE	**41.015-44 MHz** FIXED MOBILE H39		
44-47 MHz FIXED MOBILE S5.162 S5.162A			**44-47 MHz** FIXED MOBILE	**44-47 MHz** FIXED MOBILE H39 H43		
47-68 MHz BROADCASTING	**47-50 MHz** FIXED MOBILE	**47-50 MHz** FIXED MOBILE BROADCASTING	**47-48.5 MHz** BROADCASTING Fixed S5.163 Land Mobile S5.163	**47-48.5 MHz** Fixed S5.163 Land Mobile S5.163		
	50-54 MHz AMATEUR S5.166 S5.167 S5.168 S5.170		**48.5-56.5 MHz** BROADCASTING		**48.5-56.5 MHz** BROADCASTING H44 H45	**48.5-56.5 MHz**

INTERNATIONAL ALLOCATION			RR ALLOCATION RELEVANT TO THE REPUBLIC OF HUNGARY	ALLOCATION IN THE REPUBLIC OF HUNGARY		
RADIO REGULATIONS				GOVERNMENTAL	CIVIL	COMMON
REGION 1	REGION 2	REGION 3				
	54-68 MHz BROADCASTING Fixed Mobile	**54-68 MHz** FIXED MOBILE BROADCASTING				H46
			56.5-58 MHz BROADCASTING Fixed S5.163 Land Mobile S5.163		**56.5-58 MHz** BROADCASTING H45	**56.5-58 MHz** Fixed S5.163 Land Mobile S5.163 H46
S5.162A S5.163 S5.164 S5.165 S5.169 S5.171	S5.172		**58-68 MHz** BROADCASTING	**58-68 MHz** H47	**58-68 MHz** BROADCASTING H44 H45 H48	**58-68 MHz** H46
68-74.8 MHz FIXED MOBILE except aeronautical mobile	**68-72 MHz** BROADCASTING Fixed Mobile S5.173	**68-74.8 MHz** FIXED MOBILE	**68-73 MHz** BROADCASTING	**68-73 MHz** S5.175 H47	**68-73 MHz** BROADCASTING H45 H48 S5.174 S5.175	**68-73 MHz** H46
	72-73 MHz FIXED MOBILE					
	73-74.6 MHz RADIO ASTRONOMY S5.178		**73-74.8 MHz** FIXED MOBILE except aeronautical mobile	**73-74.8 MHz** S5.149 H39 H49	**73-74.8 MHz** MOBILE except aeronautical mobile S5.149 H49 H50 H51	
S5.149 S5.174 S5.175 S5.177 S5.179	**74.6-74.8 MHz** FIXED MOBILE	S5.149 S5.176 S5.179	S5.149			
74.8-75.2 MHz S5.180 S5.181	AERONAUTICAL RADIONAVIGATION		**74.8-75.2 MHz** AERONAUTICAL RADIONAVIGATION S5.180		**74.8-75.2 MHz** H53	**74.8-75.2 MHz** AERONAUTICAL RADIONAVIGATION H3 S5.180
75.2-87.5 MHz FIXED MOBILE except aeronautical mobile	**75.2-75.4 MHz** FIXED MOBILE S5.179		**75.2-87.5 MHz** FIXED MOBILE except aeronautical mobile	**75.2-76 MHz** FIXED MOBILE except aeronautical mobile H49		
	75.4-76 MHz FIXED MOBILE	**75.4-87 MHz** FIXED MOBILE				

INTERNATIONAL ALLOCATION			RR ALLOCATION RELEVANT TO THE REPUBLIC OF HUNGARY	ALLOCATION IN THE REPUBLIC OF HUNGARY		
RADIO REGULATIONS				GOVERNMENTAL	CIVIL	COMMON
REGION 1	REGION 2	REGION 3				
	76-88 MHz BROADCASTING Fixed Mobile			**76-77 MHz** FIXED MOBILE except aeronautical mobile S5.175 H49		
				77-79.7 MHz H39 H49	**77-79.7 MHz** MOBILE except aeronautical mobile S5.175 H49 H50 H51 H53 H54 H55	
				79.7-81.5 MHz FIXED MOBILE except aeronautical mobile S5.175 H49		
				81.5-82 MHz H49	**81.5-82 MHz** MOBILE except aeronautical mobile S5.175 H49 H50 H51	
				82-84 MHz FIXED MOBILE except aeronautical mobile S5.175 H49		
		S5.149 S5.182 S5.183 S5.188		**84-87.5 MHz** H49	**84-87.5 MHz** MOBILE except aeronautical mobile S5.175 H49 H56	
S5.175 S5.179 S5.184 S5.187		**87-100 MHz** FIXED MOBILE BROADCASTING	S5.175			
87.5-100 MHz BROADCASTING S5.190	S5.185 **88-100 MHz** BROADCASTING		**87.5-100 MHz** BROADCASTING		**87.5-108 MHz** BROADCASTING H57	
100-108 MHz	BROADCASTING S5.192 S5.194		**100-108 MHz** BROADCASTING			

INTERNATIONAL ALLOCATION				ALLOCATION IN THE REPUBLIC OF HUNGARY		
RADIO REGULATIONS			RR ALLOCATION RELEVANT TO THE REPUBLIC OF HUNGARY	GOVERNMENTAL	CIVIL	COMMON
REGION 1	REGION 2	REGION 3				
108-117.975 MHz S5.197	AERONAUTICAL RADIONAVIGATION		**108-117.975 MHz** AERONAUTICAL RADIONAVIGATION			**108-117.975 MHz** AERONAUTICAL RADIONAVIGATION H3 H59
117.975-137 MHz	AERONAUTICAL MOBILE (R)		**117.975-132 MHz** AERONAUTICAL MOBILE (R) Aeronautical Mobile-Satellite (R) S5.198 S5.111 S5.199 S5.200			**117.975-132 MHz** AERONAUTICAL MOBILE (R) H3 H59 H60 H61 Aeronautical Mobile-Satellite (R) S5.198 S5.111 S5.199 S5.200 H62
			132-136 MHz AERONAUTICAL MOBILE (OR) S5.201 AERONAUTICAL MOBILE (R) Aeronautical Mobile-Satellite (R) S5.198 S5.200			**132-136 MHz** AERONAUTICAL MOBILE (OR) S5.201 H63 AERONAUTICAL MOBILE (R) H3 H59 H60 H61 Aeronautical Mobile-Satellite (R) S5.198 S5.200
	S5.111 S5.198 S5.199 S5.200 S5.201 S5.202 S5.203 S5.203A S5.203B		**136-137 MHz** AERONAUTICAL MOBILE (R) S5.203			**136-137 MHz** AERONAUTICAL MOBILE (R) H3 H59 H60 H61
137-137.025 MHz	SPACE OPERATION (space-to-Earth) METEOROLOGICAL-SATELLITE (space-to-Earth) MOBILE-SATELLITE (space-to-Earth) S5.208A S5.209 SPACE RESEARCH (space-to-Earth) Fixed Mobile except aeronautical mobile (R) S5.204 S5.205 S5.206 S5.207 S5.208		**137-137.025 MHz** SPACE OPERATION (space-to-Earth) METEOROLOGICAL-SATELLITE (space-to-Earth) AERONAUTICAL MOBILE (OR) S5.206 MOBILE-SATELLITE (space-to-Earth) S5.208A S5.209 SPACE RESEARCH (space-to-Earth) Fixed Mobile except aeronautical mobile S5.208		**137-137.025 MHz** MOBILE-SATELLITE (space-to-Earth) S5.208A S5.209 H64A SPACE RESEARCH (space-to-Earth) S5.208	**137-137.025 MHz** METEOROLOGICAL-SATELLITE (space-to-Earth) AERONAUTICAL MOBILE (OR) S5.206

INTERNATIONAL ALLOCATION				ALLOCATION IN THE REPUBLIC OF HUNGARY		
RADIO REGULATIONS			RR ALLOCATION RELEVANT TO THE REPUBLIC OF HUNGARY	GOVERNMENTAL	CIVIL	COMMON
REGION 1	REGION 2	REGION 3				
137.025-137.175 MHz SPACE OPERATION (space-to-Earth) METEOROLOGICAL-SATELLITE (space-to-Earth) SPACE RESEARCH (space-to-Earth) Fixed Mobile-Satellite (space-to-Earth) S5.208A S5.209 Mobile except aeronautical mobile (R) S5.204 S5.205 S5.206 S5.207 S5.208			**137.025-137.175 MHz** SPACE OPERATION (space-to-Earth) METEOROLOGICAL-SATELLITE (space-to-Earth) AERONAUTICAL MOBILE (OR) S5.206 SPACE RESEARCH (space-to-Earth) Fixed Mobile-Satellite (space-to-Earth) S5.208A S5.209 Mobile except aeronautical mobile S5.208		**137.025-137.175 MHz** SPACE RESEARCH (space-to-Earth) Mobile-Satellite (space-to-Earth) S5.208A S5.209 H64A S5.208	**137.025-137.175 MHz** METEOROLOGICAL-SATELLITE (space-to-Earth) AERONAUTICAL MOBILE (OR) S5.206
137.175-137.825 MHz SPACE OPERATION (space-to-Earth) METEOROLOGICAL-SATELLITE (space-to-Earth) MOBILE-SATELLITE (space-to-Earth) S5.208A S5.209 SPACE RESEARCH (space-to-Earth) Fixed Mobile except aeronautical mobile (R) S5.204 S5.205 S5.206 S5.207 S5.208			**137.175-137.825 MHz** SPACE OPERATION (space-to-Earth) METEOROLOGICAL-SATELLITE (space-to-Earth) AERONAUTICAL MOBILE (OR) S5.206 MOBILE-SATELLITE (space-to-Earth) S5.208A S5.209 SPACE RESEARCH (space-to-Earth) Fixed Mobile except aeronautical mobile S5.208		**137.175-137.825 MHz** MOBILE-SATELLITE (space-to-Earth) S5.208A S5.209 H64A SPACE RESEARCH (space-to-Earth) S5.208	**137.175-137.825 MHz** METEOROLOGICAL-SATELLITE (space-to-Earth) AERONAUTICAL MOBILE (OR) S5.206

INTERNATIONAL ALLOCATION				ALLOCATION IN THE REPUBLIC OF HUNGARY		
RADIO REGULATIONS			RR ALLOCATION RELEVANT TO THE REPUBLIC OF HUNGARY	GOVERNMENTAL	CIVIL	COMMON
REGION 1	REGION 2	REGION 3				
137.825-138 MHz SPACE OPERATION (space-to-Earth) METEOROLOGICAL-SATELLITE (space-to-Earth) SPACE RESEARCH (space-to-Earth) Fixed Mobile-Satellite (space-to-Earth) S5.208A S5.209 Mobile except aeronautical mobile (R) S5.204 S5.205 S5.206 S5.207 S5.208			**137.825-138 MHz** SPACE OPERATION (space-to-Earth) METEOROLOGICAL-SATELLITE (space-to-Earth) AERONAUTICAL MOBILE (OR) S5.206 SPACE RESEARCH (space-to-Earth) Fixed Mobile-Satellite (space-to-Earth) S5.208A S5.209 Mobile except aeronautical mobile S5.208		**137.825-138 MHz** SPACE RESEARCH (space-to-Earth) Mobile-Satellite (space-to-Earth) S5.208A S5.209 H64A S5.208	**137.825-138 MHz** METEOROLOGICAL-SATELLITE (space-to-Earth) AERONAUTICAL MOBILE (OR) S5.206
138-143.6 MHz AERONAUTICAL MOBILE (OR) S5.210 S5.211 S5.212 S5.214	**138-143.6 MHz** FIXED MOBILE RADIOLOCATION Space Research (space-to-Earth)	**138-143.6 MHz** FIXED MOBILE Space Research (space-to-Earth) S5.207 S5.213	**138-143.6 MHz** AERONAUTICAL MOBILE (OR)	**138-143.6 MHz** AERONAUTICAL MOBILE (OR)		
143.6-143.65 MHz AERONAUTICAL MOBILE (OR) SPACE RESEARCH (space-to-Earth) S5.211 S5.212 S5.214	**143.6-143.65 MHz** FIXED MOBILE RADIOLOCATION SPACE RESEARCH (space-to-Earth)	**143.6-143.65 MHz** FIXED MOBILE SPACE RESEARCH (space-to-Earth) S5.207 S5.213	**143.6-143.65 MHz** AERONAUTICAL MOBILE (OR) SPACE RESEARCH (space-to-Earth)	**143.6-143.65 MHz** AERONAUTICAL MOBILE (OR)		
143.65-144 MHz AERONAUTICAL MOBILE (OR) S5.210 S5.211 S5.212 S5.214	**143.65-144 MHz** FIXED MOBILE RADIOLOCATION Space Research (space-to-Earth)	**143.65-144 MHz** FIXED MOBILE Space Research (space-to-Earth) S5.207 S5.213	**143.65-144 MHz** AERONAUTICAL MOBILE (OR)	**143.65-144 MHz** AERONAUTICAL MOBILE (OR)		
144-146 MHz AMATEUR S5.120 AMATEUR-SATELLITE S5.216			**144-146 MHz** AMATEUR S5.120 AMATEUR-SATELLITE		**144-146 MHz** AMATEUR S5.120 AMATEUR-SATELLITE	

INTERNATIONAL ALLOCATION				ALLOCATION IN THE REPUBLIC OF HUNGARY		
RADIO REGULATIONS			RR ALLOCATION RELEVANT TO THE REPUBLIC OF HUNGARY	GOVERNMENTAL	CIVIL	COMMON
REGION 1	REGION 2	REGION 3				
146-148 MHz FIXED MOBILE except aeronautical mobile (R)	**146-148 MHz** AMATEUR S5.217	**146-148 MHz** AMATEUR FIXED MOBILE S5.217	**146-148 MHz** FIXED MOBILE except aeronautical mobile (R)	**146-148 MHz** FIXED MOBILE except aeronautical mobile (R) H49 H51 H65	**146-148 MHz** H49 H65	
148-149.9 MHz FIXED MOBILE except aeronautical mobile (R) MOBILE-SATELLITE (Earth-to-space) S5.209 S5.218 S5.219 S5.221	**148-149.9 MHz** FIXED MOBILE MOBILE-SATELLITE (Earth-to-space) S5.209 S5.218 S5.219 S5.221		**148-149.9 MHz** FIXED MOBILE except aeronautical mobile (R) MOBILE-SATELLITE (Earth-to-space) S5.209 S5.218 S5.219 S5.221	**148-149.9 MHz** H65	**148-149.9 MHz** MOBILE-SATELLITE (Earth-to-space) S5.209 H64A LAND MOBILE S5.219 S5.221 H49 H51 H65 H66 H66A H67 H68	
149.9-150.05 MHz	MOBILE-SATELLITE (Earth-to-space) S5.209 S5.224A RADIONAVIGATION-SATELLITE S5.224B S5.220 S5.222 S5.223		**149.9-150.05 MHz** MOBILE-SATELLITE (Earth-to-space) S5.209 S5.224A RADIONAVIGATION-SATELLITE S5.224B S5.220 S5.222 S5.223	**149.9-150.05 MHz** H69	**149.9-150.05 MHz** MOBILE-SATELLITE (Earth-to-space) S5.209 S5.224A H64A S5.220	**149.9-150.05 MHz** RADIONAVIGATION-SATELLITE S5.224B S5.222 S5.223
150.05-153 MHz FIXED MOBILE except aeronautical mobile RADIO ASTRONOMY S5.149	**150.05-156.7625 MHz** FIXED MOBILE		**150.05-153 MHz** FIXED MOBILE except aeronautical mobile RADIO ASTRONOMY S5.149	**150.05-153 MHz** FIXED MOBILE except aeronautical mobile S5.149 H49 H51 H70	**150.05-153 MHz** RADIO ASTRONOMY S5.149 H49 H70	
153-154 MHz FIXED MOBILE except aeronautical mobile (R) Meteorological Aids			**153-154 MHz** FIXED MOBILE except aeronautical mobile (R) Meteorological Aids	**153-154 MHz** FIXED MOBILE except aeronautical mobile (R) H49 H51	**153-154 MHz** H49	
154-156.7625 MHz FIXED MOBILE except aeronautical mobile (R)			**154-156.7625 MHz** FIXED MOBILE except aeronautical mobile (R)	**154-156 MHz** FIXED MOBILE except aeronautical mobile (R) H49 H51 H71	**154-156 MHz** H49	

INTERNATIONAL ALLOCATION			RR ALLOCATION RELEVANT TO THE REPUBLIC OF HUNGARY	ALLOCATION IN THE REPUBLIC OF HUNGARY		
RADIO REGULATIONS				GOVERNMENTAL	CIVIL	COMMON
REGION 1	REGION 2	REGION 3				
S5.226 S5.227	S5.225 S5.226 S5.227		S5.226 S5.227		**156-156.7625 MHz** MOBILE except aeronautical mobile (R) S5.226 S5.227 H49 H51 H66 H66A H71A H72A	**156-156.7625 MHz** H71B H72 H73
156.7625-156.8375 MHz S5.111 S5.226	MARITIME MOBILE (distress and calling)		**156.7625-156.8375 MHz** MARITIME MOBILE (distress and calling) S5.111 S5.226			**156.7625-156.8375 MHz** MARITIME MOBILE (distress and calling) S5.111 S5.226 H71A H71B H74
156.8375-174 MHz FIXED MOBILE except aeronautical mobile	**156.8375-174 MHz** FIXED MOBILE		**156.8375-174 MHz** FIXED MOBILE except aeronautical mobile		**156.8375-167.3 MHz** MOBILE except aeronautical mobile S5.226 H49 H51 H66 H66A H68 H71A H72A H75 H76	**156.8375-167.3 MHz** H71B H73
				167.3-169.4125 MHz FIXED MOBILE except aeronautical mobile H49 H51	**167.3-169.4125 MHz** H49	
						169.4125-169.8125 MHz MOBILE except aeronautical mobile H78
S5.226 S5.229	S5.226 S5.230 S5.231 S5.232		S5.226	**169.8125-174 MHz** FIXED MOBILE except aeronautical mobile H49 H51 H71	**169.8125-174 MHz** H49 H51 H79	

INTERNATIONAL ALLOCATION				ALLOCATION IN THE REPUBLIC OF HUNGARY		
RADIO REGULATIONS			RR ALLOCATION RELEVANT TO THE REPUBLIC OF HUNGARY	GOVERNMENTAL	CIVIL	COMMON
REGION 1	REGION 2	REGION 3				
174-223 MHz BROADCASTING S5.235 S5.237 S5.243	**174-216 MHz** BROADCASTING Fixed Mobile S5.234 **216-220 MHz** FIXED MARITIME MOBILE Radiolocation S5.241 S5.242 **220-225 MHz** AMATEUR FIXED MOBILE Radiolocation S5.241 **225-235 MHz** FIXED MOBILE	**174-223 MHz** FIXED MOBILE BROADCASTING S5.233 S5.238 S5.240 S5.245	**174-223 MHz** BROADCASTING	**174-223 MHz** H65 H79A	**174-223 MHz** BROADCASTING H44 H82 H65 H79A H80 H81	
223-230 MHz BROADCASTING Fixed Mobile S5.243 S5.246 S5.247		**223-230 MHz** FIXED MOBILE BROADCASTING AERONAUTICAL RADIONAVIGATION Radiolocation S5.250	**223-230 MHz** BROADCASTING Fixed Mobile	**223-230 MHz** Fixed Mobile H43	**223-230 MHz** BROADCASTING H44 H82 H83	
230-235 MHz FIXED MOBILE S5.247 S5.251 S5.252		**230-235 MHz** FIXED MOBILE AERONAUTICAL RADIONAVIGATION S5.250	**230-235 MHz** FIXED MOBILE	**230-235 MHz** FIXED MOBILE H43	**230-235 MHz** H84	
235-267 MHz S5.111 S5.199 S5.252 S5.254 S5.256	FIXED MOBILE		**235-267 MHz** FIXED MOBILE S5.111 S5.199 S5.254 S5.256	**235-267 MHz** FIXED MOBILE S5.254 H43		**235-267 MHz** S5.111 S5.199 S5.256 H62
267-272 MHz S5.254 S5.257	FIXED MOBILE Space Operation (space-to-Earth)		**267-272 MHz** FIXED MOBILE Space Operation (space-to-Earth) S5.254 S5.257	**267-272 MHz** FIXED MOBILE S5.254 S5.257 H43		

INTERNATIONAL ALLOCATION			RR ALLOCATION RELEVANT TO THE REPUBLIC OF HUNGARY	ALLOCATION IN THE REPUBLIC OF HUNGARY		
RADIO REGULATIONS				GOVERNMENTAL	CIVIL	COMMON
REGION 1	REGION 2	REGION 3				
272-273 MHz SPACE OPERATION (space-to-Earth) FIXED MOBILE S5.254			**272-273 MHz** SPACE OPERATION (space-to-Earth) FIXED MOBILE S5.254	**272-273 MHz** FIXED MOBILE S5.254 H43		
273-312 MHz FIXED MOBILE S5.254			**273-312 MHz** FIXED MOBILE S5.254	**273-312 MHz** FIXED MOBILE S5.254 H43		
312-315 MHz FIXED MOBILE Mobile-Satellite (Earth-to-space) S5.254 S5.255			**312-315 MHz** FIXED MOBILE Mobile-Satellite (Earth-to-space) S5.254 S5.255	**312-315 MHz** FIXED MOBILE Mobile-Satellite (Earth-to-space) S5.254 H43	**312-315 MHz** Mobile-Satellite (Earth-to-space) S5.254 S5.255 H64A	
315-322 MHz FIXED MOBILE S5.254			**315-322 MHz** FIXED MOBILE S5.254	**315-322 MHz** FIXED MOBILE S5.254 H43 H85	**315-322 MHz** H85	
322-328.6 MHz FIXED MOBILE RADIO ASTRONOMY S5.149			**322-328.6 MHz** FIXED MOBILE RADIO ASTRONOMY S5.149	**322-328.6 MHz** FIXED MOBILE S5.149 H43	**322-328.6 MHz** RADIO ASTRONOMY	
328.6-335.4 MHz AERONAUTICAL RADIONAVIGATION S5.258 S5.259			**328.6-335.4 MHz** AERONAUTICAL RADIONAVIGATION S5.258			**328.6-335.4 MHz** AERONAUTICAL RADIONAVIGATION H3 S5.258 H43
335.4-387 MHz FIXED MOBILE			**335.4-387 MHz** FIXED MOBILE	**335.4-380 MHz** FIXED MOBILE S5.254 H43		

INTERNATIONAL ALLOCATION			RR ALLOCATION RELEVANT TO THE REPUBLIC OF HUNGARY	ALLOCATION IN THE REPUBLIC OF HUNGARY		
RADIO REGULATIONS				GOVERNMENTAL	CIVIL	COMMON
REGION 1	REGION 2	REGION 3				
				380-385 MHz FIXED MOBILE S5.254 H43 H86		
				385-387 MHz FIXED MOBILE S5.254 H43		
	S5.254		S5.254			
387-390 MHz	FIXED MOBILE Mobile-Satellite (space-to-Earth) S5.208A S5.254 S5.255		**387-390 MHz** FIXED MOBILE Mobile-Satellite (space-to-Earth) S5.208A S5.254 S5.255	**387-390 MHz** FIXED MOBILE Mobile-Satellite (space-to-Earth) S5.208A S5.254 H43	**387-390 MHz** Mobile-Satellite (space-to-Earth) S5.208A S5.254 S5.255 H64A	
390-399.9 MHz	FIXED MOBILE		**390-399.9 MHz** FIXED MOBILE	**390-395 MHz** FIXED MOBILE S5.254 H43 H86		
				395-399.9 MHz FIXED MOBILE S5.254 H43		
	S5.254		S5.254			
399.9-400.05 MHz	MOBILE-SATELLITE (Earth-to-space) S5.209 S5.224A RADIONAVIGATION-SATELLITE S5.222 S5.224B S5.260		**399.9-400.05 MHz** MOBILE-SATELLITE (Earth-to-space) S5.209 S5.224A RADIONAVIGATION-SATELLITE S5.222 S5.224B S5.260		**399.9-400.05 MHz** MOBILE-SATELLITE (Earth-to-space) S5.209 S5.224A H64A	**399.9-400.05 MHz** RADIONAVIGATION-SATELLITE S5.224B
	S5.220		S5.220		S5.220	S5.222 S5.260
400.05-400.15 MHz	STANDARD FREQUENCY AND TIME SIGNAL-SATELLITE (400.1 MHz)		**400.05-400.15 MHz** FIXED S5.262 STANDARD FREQUENCY AND TIME SIGNAL-SATELLITE (400.1 MHz) S5.261 MOBILE S5.262	**400.05-400.15 MHz** FIXED S5.262 MOBILE S5.262	**400.05-400.15 MHz** STANDARD FREQUENCY AND TIME SIGNAL-SATELLITE (400.1 MHz)	
	S5.261 S5.262				S5.261	

INTERNATIONAL ALLOCATION				ALLOCATION IN THE REPUBLIC OF HUNGARY		
RADIO REGULATIONS			RR ALLOCATION RELEVANT TO THE REPUBLIC OF HUNGARY	GOVERNMENTAL	CIVIL	COMMON
REGION 1	REGION 2	REGION 3				
400.15-401 MHz METEOROLOGICAL AIDS METEOROLOGICAL-SATELLITE (space-to-Earth) MOBILE-SATELLITE (space-to-Earth) S5.208A S5.209 SPACE RESEARCH (space-to-Earth) S5.263 Space Operation (space-to-Earth) S5.262 S5.264			**400.15-401 MHz** METEOROLOGICAL AIDS FIXED S5.262 METEOROLOGICAL-SATELLITE (space-to-Earth) MOBILE S5.262 MOBILE-SATELLITE (space-to-Earth) S5.208A S5.209 SPACE RESEARCH (space-to-Earth) S5.263 Space Operation (space-to-Earth) S5.264	**400.15-401 MHz** FIXED S5.262 MOBILE S5.262	**400.15-401 MHz** MOBILE-SATELLITE (space-to-Earth) S5.208A S5.209 H64A SPACE RESEARCH (space-to-Earth) S5.263 S5.264	**400.15-401 MHz** METEOROLOGICAL AIDS METEOROLOGICAL-SATELLITE (space-to-Earth)
401-402 MHz METEOROLOGICAL AIDS SPACE OPERATION (space-to-Earth) EARTH EXPLORATION-SATELLITE (Earth-to-space) METEOROLOGICAL-SATELLITE (Earth-to-space) Fixed Mobile except aeronautical mobile			**401-402 MHz** METEOROLOGICAL AIDS SPACE OPERATION (space-to-Earth) EARTH EXPLORATION-SATELLITE (Earth-to-space) METEOROLOGICAL-SATELLITE (Earth-to-space) Fixed Mobile except aeronautical mobile	**401-402 MHz** Fixed Mobile except aeronautical mobile	**401-402 MHz** EARTH EXPLORATION-SATELLITE (Earth-to-space)	**401-402 MHz** METEOROLOGICAL AIDS METEOROLOGICAL-SATELLITE (Earth-to-space)
402-403 MHz METEOROLOGICAL AIDS EARTH EXPLORATION-SATELLITE (Earth-to-space) METEOROLOGICAL-SATELLITE (Earth-to-space) Fixed Mobile except aeronautical mobile			**402-403 MHz** METEOROLOGICAL AIDS EARTH EXPLORATION-SATELLITE (Earth-to-space) METEOROLOGICAL-SATELLITE (Earth-to-space) Fixed Mobile except aeronautical mobile	**402-403 MHz** Fixed Mobile except aeronautical mobile	**402-403 MHz** EARTH EXPLORATION-SATELLITE (Earth-to-space) H86A	**402-403 MHz** METEOROLOGICAL AIDS METEOROLOGICAL-SATELLITE (Earth-to-space)
403-406 MHz METEOROLOGICAL AIDS Fixed Mobile except aeronautical mobile			**403-406 MHz** METEOROLOGICAL AIDS Fixed Mobile except aeronautical mobile	**403-406 MHz** Fixed Mobile except aeronautical mobile	**403-406 MHz** H86A	**403-406 MHz** METEOROLOGICAL AIDS

INTERNATIONAL ALLOCATION				ALLOCATION IN THE REPUBLIC OF HUNGARY		
RADIO REGULATIONS			RR ALLOCATION RELEVANT TO THE REPUBLIC OF HUNGARY	GOVERNMENTAL	CIVIL	COMMON
REGION 1	REGION 2	REGION 3				
406-406.1 MHz	MOBILE-SATELLITE (Earth-to-space) S5.266 S5.267		**406-406.1 MHz** MOBILE-SATELLITE (Earth-to-space) S5.266 S5.267			**406-406.1 MHz** MOBILE-SATELLITE (Earth-to-space) S5.266 S5.267 H86B
406.1-410 MHz	FIXED MOBILE except aeronautical mobile RADIO ASTRONOMY S5.149		**406.1-410 MHz** FIXED MOBILE except aeronautical mobile RADIO ASTRONOMY S5.149	**406.1-410 MHz** FIXED MOBILE except aeronautical mobile S5.149	**406.1-410 MHz** RADIO ASTRONOMY	
410-420 MHz	FIXED MOBILE except aeronautical mobile SPACE RESEARCH (space-to-space) S5.268		**410-420 MHz** FIXED MOBILE except aeronautical mobile SPACE RESEARCH (space-to-space) S5.268	**410-413.75 MHz** H88	**410-413.75 MHz** MOBILE except aeronautical mobile H66A H87 H89	
				413.75-417.25 MHz FIXED MOBILE except aeronautical mobile H87 H90		
					417.25-420 MHz MOBILE except aeronautical mobile H66A H87 H89	
420-430 MHz	FIXED MOBILE except aeronautical mobile Radiolocation		**420-430 MHz** FIXED MOBILE except aeronautical mobile Radiolocation	**420-423.75 MHz** H88	**420-423.75 MHz** MOBILE except aeronautical mobile H66A H87 H89 H92	
				423.75-427.25 MHz FIXED MOBILE except aeronautical mobile H87 H90	**423.75-427.25 MHz** H92	

INTERNATIONAL ALLOCATION			RR ALLOCATION RELEVANT TO THE REPUBLIC OF HUNGARY	ALLOCATION IN THE REPUBLIC OF HUNGARY		
RADIO REGULATIONS				GOVERNMENTAL	CIVIL	COMMON
REGION 1	REGION 2	REGION 3				
	S5.269 S5.270 S5.271				**427.25-430 MHz** MOBILE except aeronautical mobile H66A H87 H89 H92	
430-440 MHz AMATEUR RADIOLOCATION S5.138 S5.271 S5.272 S5.273 S5.274 S5.275 S5.276 S5.277 S5.280 S5.281 S5.282 S5.283	**430-440 MHz** RADIOLOCATION Amateur S5.271 S5.276 S5.277 S5.278 S5.279 S5.281 S5.282		**430-440 MHz** AMATEUR FIXED S5.277 RADIOLOCATION S5.138 S5.282	**430-432 MHz** FIXED S5.277 RADIOLOCATION		
				432-438 MHz FIXED S5.277 H31 H37B	**432-438 MHz** AMATEUR S5.282 H31 H37B	**432-438 MHz** S5.138 H30
				438-440 MHz FIXED S5.277 RADIOLOCATION		
440-450 MHz FIXED MOBILE except aeronautical mobile Radiolocation S5.269 S5.270 S5.271 S5.284 S5.285 S5.286			**440-450 MHz** FIXED MOBILE except aeronautical mobile Radiolocation S5.286	**440-442 MHz** FIXED MOBILE except aeronautical mobile H93	**440-442 MHz** H92	
					442-445 MHz FIXED H51 H66A H93 H96	**442-445 MHz** H95
				445-447 MHz FIXED MOBILE except aeronautical mobile H93 H97	**445-447 MHz** H92 H97	
					447-450 MHz FIXED S5.286 H51 H66A H93	
450-455 MHz FIXED MOBILE			**450-455 MHz** FIXED MOBILE		**450-451.3 MHz** MOBILE S5.286 H66A H92 H93 H98	
					451.3-452.74 MHz MOBILE H51 H66A H99	

INTERNATIONAL ALLOCATION				ALLOCATION IN THE REPUBLIC OF HUNGARY		
RADIO REGULATIONS			RR ALLOCATION RELEVANT TO THE REPUBLIC OF HUNGARY	GOVERNMENTAL	CIVIL	COMMON
REGION 1	REGION 2	REGION 3				
S5.209 S5.271 S5.286 S5.286A S5.286B S5.286C S5.286D S5.286E			S5.286	**452.74-455 MHz** FIXED MOBILE		
455-456 MHz FIXED MOBILE S5.209 S5.271 S5.286A S5.286B S5.286C S5.286E	**455-456 MHz** FIXED MOBILE MOBILE-SATELLITE (Earth-to-space) S5.286A S5.286B S5.286C S5.209 S5.271	**455-456 MHz** FIXED MOBILE S5.209 S5.271 S5.286A S5.286B S5.286C S5.286E	**455-456 MHz** FIXED MOBILE	**455-455.16 MHz** FIXED MOBILE		
					455.16-456 MHz MOBILE H100	
456-459 MHz	FIXED MOBILE S5.271 S5.287 S5.288		**456-459 MHz** FIXED MOBILE S5.287		**456-459 MHz** MOBILE S5.287 H100 H101 H102 H103	
459-460 MHz FIXED MOBILE S5.209 S5.271 S5.286A S5.286B S5.286C S5.286E	**459-460 MHz** FIXED MOBILE MOBILE-SATELLITE (Earth-to-space) S5.286A S5.286B S5.286C S5.209 S5.271	**459-460 MHz** FIXED MOBILE S5.209 S5.271 S5.286A S5.286B S5.286C S5.286E	**459-460 MHz** FIXED MOBILE		**459-460 MHz** MOBILE H100	
460-470 MHz	FIXED MOBILE Meteorological-Satellite (space-to-Earth)		**460-470 MHz** FIXED MOBILE Meteorological-Satellite (space-to-Earth)		**460-461.3 MHz** MOBILE Meteorological-Satellite (space-to-Earth) S5.289 H66A H92 H98	
					461.3-462.74 MHz MOBILE Meteorological-Satellite (space-to-Earth) S5.289 H51 H66A H99	
				462.74-465.16 MHz FIXED MOBILE	**462.74-465.16 MHz** Meteorological-Satellite (space-to-Earth) S5.289	

<table>
<tr><th colspan="4">INTERNATIONAL ALLOCATION</th><th colspan="3">ALLOCATION IN THE REPUBLIC OF HUNGARY</th></tr>
<tr><th colspan="3">RADIO REGULATIONS</th><th rowspan="2">RR ALLOCATION RELEVANT TO THE REPUBLIC OF HUNGARY</th><th rowspan="2">GOVERNMENTAL</th><th rowspan="2">CIVIL</th><th rowspan="2">COMMON</th></tr>
<tr><th>REGION 1</th><th>REGION 2</th><th>REGION 3</th></tr>
<tr><td colspan="3">S5.287 S5.288 S5.289 S5.290</td><td>S5.287 S5.289</td><td></td><td>465.16-470 MHz
MOBILE
Meteorological-Satellite
(space-to-Earth)

S5.287 S5.289 H100 H101
H102 H103</td><td></td></tr>
<tr><td rowspan="5">470-790 MHz
BROADCASTING</td><td>470-512 MHz
BROADCASTING
Fixed
Mobile

S5.292 S5.293</td><td rowspan="2">470-585 MHz
FIXED
MOBILE
BROADCASTING

S5.291 S5.298</td><td>470-608 MHz
BROADCASTING</td><td>470-608 MHz

H79A H104</td><td>470-608 MHz
BROADCASTING H105

H79A H104 H106</td><td></td></tr>
<tr><td>512-608 MHz
BROADCASTING

S5.297</td></tr>
<tr><td>608-614 MHz
RADIO ASTRONOMY
Mobile-Satellite except
aeronautical mobile-satellite
(Earth-to-space)</td><td rowspan="3">585-610 MHz
FIXED
MOBILE
BROADCASTING
RADIONAVIGATION

S5.149 S5.305 S5.306 S5.307</td><td>608-614 MHz
BROADCASTING
Radio Astronomy S5.306

S5.149</td><td>608-614 MHz

S5.149 H79A</td><td>608-614 MHz
BROADCASTING H105
Radio Astronomy S5.306

S5.149 H79A H106</td><td></td></tr>
<tr><td rowspan="3">614-806 MHz
BROADCASTING
Fixed
Mobile</td><td rowspan="3">610-890 MHz
FIXED
MOBILE
BROADCASTING</td><td>614-645 MHz
BROADCASTING

S5.311</td><td>614-645 MHz

H79A</td><td>614-645 MHz
BROADCASTING H105

H79A H106</td><td></td></tr>
<tr><td>645-790 MHz
BROADCASTING
AERONAUTICAL
RADIONAVIGATION S5.312</td><td>645-654 MHz

H79A</td><td>645-654 MHz
BROADCASTING H105

H79A H106</td><td></td></tr>
<tr><td>654-678 MHz
AERONAUTICAL
RADIONAVIGATION S5.312

H79A</td><td>654-678 MHz
BROADCASTING H105 H107

H79A</td><td></td></tr>
<tr><td></td><td></td><td></td><td></td><td>678-734 MHz

H79A H108</td><td>678-734 MHz
BROADCASTING H105

H79A H106 H108</td><td></td></tr>
</table>

INTERNATIONAL ALLOCATION				ALLOCATION IN THE REPUBLIC OF HUNGARY		
RADIO REGULATIONS			RR ALLOCATION RELEVANT TO THE REPUBLIC OF HUNGARY	GOVERNMENTAL	CIVIL	COMMON
REGION 1	REGION 2	REGION 3				
S5.149 S5.291A S5.294 S5.296 S5.300 S5.302 S5.304 S5.306 S5.311 S5.312			S5.311	**734-742 MHz** AERONAUTICAL RADIONAVIGATION S5.312 H79A	**734-742 MHz** BROADCASTING H105 H107 H79A	
				742-782 MHz H79A H108	**742-782 MHz** BROADCASTING H105 H79A H106 H108	
				782-790 MHz AERONAUTICAL RADIONAVIGATION S5.312 H79A	**782-790 MHz** BROADCASTING H105 H107 H79A	
790-862 MHz FIXED BROADCASTING S5.312 S5.314 S5.315 S5.316 S5.319 S5.321	S5.293 S5.309 S5.311		**790-862 MHz** FIXED BROADCASTING AERONAUTICAL RADIONAVIGATION S5.312	**790-862 MHz** FIXED AERONAUTICAL RADIONAVIGATION S5.312 H71 H79A	**790-862 MHz** BROADCASTING H105 H107 H109 H110 H79A	
	806-890 MHz FIXED MOBILE BROADCASTING					
862-890 MHz FIXED MOBILE except aeronautical mobile BROADCASTING S5.322			**862-890 MHz** FIXED MOBILE except aeronautical mobile AERONAUTICAL RADIONAVIGATION S5.323	**862-864.1 MHz** AERONAUTICAL RADIONAVIGATION S5.323 H90 H112 H112A	**862-864.1 MHz** MOBILE except aeronautical mobile H111 H112A	
				864.1-868 MHz H112A	**864.1-868 MHz** MOBILE except aeronautical mobile H111 H112A	
				868-869 MHz H114	**868-869 MHz** MOBILE except aeronautical mobile H111 H114	
				869-873 MHz AERONAUTICAL RADIONAVIGATION S5.323 H90 H112 H114 H115	**869-870 MHz** MOBILE except aeronautical mobile H111 H114 H115 H116	
					870-873 MHz MOBILE except aeronautical mobile H117	

INTERNATIONAL ALLOCATION				ALLOCATION IN THE REPUBLIC OF HUNGARY		
RADIO REGULATIONS			RR ALLOCATION RELEVANT TO THE REPUBLIC OF HUNGARY	GOVERNMENTAL	CIVIL	COMMON
REGION 1	REGION 2	REGION 3				
						873-876 MHz MOBILE except aeronautical mobile H117
					876-880 MHz MOBILE except aeronautical mobile H118	
				878-882 MHz AERONAUTICAL RADIONAVIGATION S5.323 H90 H112		
					880-890 MHz MOBILE except aeronautical mobile H119 H120	
S5.319 S5.323	S5.317 S5.318	S5.149 S5.305 S5.306 S5.307 S5.311 S5.320				
890-942 MHz FIXED MOBILE except aeronautical mobile BROADCASTING S5.322 Radiolocation	**890-902 MHz** FIXED MOBILE except aeronautical mobile Radiolocation S5.318 S5.325	**890-942 MHz** FIXED MOBILE BROADCASTING Radiolocation	**890-942 MHz** FIXED MOBILE except aeronautical mobile AERONAUTICAL RADIONAVIGATION S5.323 Radiolocation		**890-914 MHz** MOBILE except aeronautical mobile H121 H122	
	902-928 MHz FIXED Amateur Mobile except aeronautical mobile Radiolocation			**914-919 MHz** AERONAUTICAL RADIONAVIGATION S5.323 H90 H112		**914-915 MHz** MOBILE except aeronautical mobile H121 H123
					915-918 MHz MOBILE except aeronautical mobile H117	
						918-921 MHz MOBILE except aeronautical mobile H117
				921-935 MHz AERONAUTICAL RADIONAVIGATION S5.323 H90 H112	**921-925 MHz** MOBILE except aeronautical mobile H118	
	S5.150 S5.325 S5.326				**925-935 MHz**	

INTERNATIONAL ALLOCATION				ALLOCATION IN THE REPUBLIC OF HUNGARY		
RADIO REGULATIONS			RR ALLOCATION RELEVANT TO THE REPUBLIC OF HUNGARY	GOVERNMENTAL	CIVIL	COMMON
REGION 1	REGION 2	REGION 3				
	928-942 MHz FIXED MOBILE except aeronautical mobile Radiolocation				MOBILE except aeronautical mobile H119 H120	
S5.323	S5.325	S5.327				
942-960 MHz FIXED MOBILE except aeronautical mobile BROADCASTING S5.322	**942-960 MHz** FIXED MOBILE	**942-960 MHz** FIXED MOBILE BROADCASTING	**942-960 MHz** FIXED MOBILE except aeronautical mobile AERONAUTICAL RADIONAVIGATION S5.323		**935-959 MHz** MOBILE except aeronautical mobile H121	
					H122	
S5.323		S5.320		**959-960 MHz** AERONAUTICAL RADIONAVIGATION S5.323 H90 H112		**959-960 MHz** MOBILE except aeronautical mobile H121 H123
960-1 215 MHz	AERONAUTICAL RADIONAVIGATION		**960-1 215 MHz** AERONAUTICAL RADIONAVIGATION			**960-1 215 MHz** AERONAUTICAL RADIONAVIGATION H3
	S5.328		S5.328			S5.328 H12
1 215-1 240 MHz	EARTH EXPLORATION-SATELLITE (active) RADIOLOCATION RADIONAVIGATION-SATELLITE (space-to-Earth) S5.329 SPACE RESEARCH (active)		**1 215-1 240 MHz** EARTH EXPLORATION-SATELLITE (active) RADIOLOCATION RADIONAVIGATION-SATELLITE (space-to-Earth) S5.329 SPACE RESEARCH (active)		**1 215-1 240 MHz** EARTH EXPLORATION-SATELLITE (active) SPACE RESEARCH (active)	**1 215-1 240 MHz** RADIOLOCATION RADIONAVIGATION-SATELLITE (space-to-Earth) S5.329
	S5.330 S5.331 S5.332		S5.332		S5.332	H12
1 240-1 260 MHz	EARTH EXPLORATION-SATELLITE (active) RADIOLOCATION RADIONAVIGATION-SATELLITE (space-to-Earth) S5.329 SPACE RESEARCH (active) Amateur		**1 240-1 260 MHz** EARTH EXPLORATION-SATELLITE (active) RADIOLOCATION RADIONAVIGATION-SATELLITE (space-to-Earth) S5.329 SPACE RESEARCH (active) Amateur		**1 240-1 260 MHz** EARTH EXPLORATION-SATELLITE (active) SPACE RESEARCH (active) Amateur	**1 240-1 260 MHz** RADIOLOCATION RADIONAVIGATION-SATELLITE (space-to-Earth) S5.329
	S5.330 S5.331 S5.332 S5.334 S5.335		S5.332		S5.332	H12

INTERNATIONAL ALLOCATION				ALLOCATION IN THE REPUBLIC OF HUNGARY		
RADIO REGULATIONS			RR ALLOCATION RELEVANT TO THE REPUBLIC OF HUNGARY	GOVERNMENTAL	CIVIL	COMMON
REGION 1	REGION 2	REGION 3				
1 260-1 300 MHz EARTH EXPLORATION-SATELLITE (active) RADIOLOCATION SPACE RESEARCH (active) Amateur S5.282 S5.330 S5.331 S5.332 S5.334 S5.335			**1 260-1 300 MHz** EARTH EXPLORATION-SATELLITE (active) RADIOLOCATION SPACE RESEARCH (active) Amateur S5.282 S5.332		**1 260-1 300 MHz** EARTH EXPLORATION-SATELLITE (active) SPACE RESEARCH (active) Amateur S5.282 S5.332	**1 260-1 300 MHz** RADIOLOCATION H12
1 300-1 350 MHz AERONAUTICAL RADIONAVIGATION S5.337 Radiolocation S5.149			**1 300-1 350 MHz** AERONAUTICAL RADIONAVIGATION S5.337 Radiolocation S5.149			**1 300-1 350 MHz** AERONAUTICAL RADIONAVIGATION S5.337 Radiolocation S5.149 H12
1 350-1 400 MHz FIXED MOBILE RADIOLOCATION S5.149 S5.338 S5.339	**1 350-1 400 MHz** RADIOLOCATION S5.149 S5.334 S5.339		**1 350-1 400 MHz** FIXED MOBILE RADIOLOCATION S5.149 S5.339	**1 350-1 375 MHz** FIXED MOBILE S5.149 H124	**1 350-1 375 MHz** S5.339	**1 350-1 375 MHz** RADIOLOCATION S5.149 H12
				1 375-1 400 MHz FIXED H126 S5.149 S5.339		
1 400-1 427 MHz EARTH EXPLORATION-SATELLITE (passive) RADIO ASTRONOMY SPACE RESEARCH (passive) S5.340 S5.341			**1 400-1 427 MHz** EARTH EXPLORATION-SATELLITE (passive) RADIO ASTRONOMY SPACE RESEARCH (passive) S5.340 S5.341	**1 400-1 427 MHz** S5.340	**1 400-1 427 MHz** EARTH EXPLORATION-SATELLITE (passive) RADIO ASTRONOMY SPACE RESEARCH (passive) S5.340 S5.341	
1 427-1 429 MHz SPACE OPERATION (Earth-to-space) FIXED MOBILE except aeronautical mobile S5.341			**1 427-1 429 MHz** SPACE OPERATION (Earth-to-space) FIXED MOBILE except aeronautical mobile S5.341	**1 427-1 429 MHz** FIXED H127	**1 427-1 429 MHz** FIXED H126 S5.341	
1 429-1 452 MHz FIXED MOBILE except aeronautical mobile	**1 429-1 452 MHz** FIXED MOBILE S5.343		**1 429-1 452 MHz** FIXED MOBILE except aeronautical mobile	**1 429-1 439.5 MHz** FIXED H127	**1 429-1 439.5 MHz** FIXED H126 S5.341	

INTERNATIONAL ALLOCATION				ALLOCATION IN THE REPUBLIC OF HUNGARY		
RADIO REGULATIONS			RR ALLOCATION RELEVANT TO THE REPUBLIC OF HUNGARY	GOVERNMENTAL	CIVIL	COMMON
REGION 1	REGION 2	REGION 3				
S5.341 S5.342	S5.341		S5.341		**1 439.5-1 452 MHz** FIXED H126 H127 S5.341	
1 452-1 492 MHz FIXED MOBILE except aeronautical mobile BROADCASTING S5.345 S5.347 BROADCASTING-SATELLITE S5.345 S5.347	**1 452-1 492 MHz** FIXED MOBILE S5.343 BROADCASTING S5.345 S5.347 BROADCASTING-SATELLITE S5.345 S5.347		**1 452-1 492 MHz** FIXED MOBILE except aeronautical mobile BROADCASTING S5.345 BROADCASTING-SATELLITE S5.345		**1 452-1 476 MHz** FIXED H127 BROADCASTING S5.345 H128 BROADCASTING-SATELLITE S5.345 S5.341	
				1 476-1 488.5 MHz FIXED H127	**1 476-1 488.5 MHz** BROADCASTING S5.345 BROADCASTING-SATELLITE S5.345 S5.341	
					1 488.5-1 492 MHz FIXED H127 BROADCASTING S5.345 BROADCASTING-SATELLITE S5.345 S5.341	
S5.341 S5.342	S5.341 S5.344		S5.341			
1 492-1 525 MHz FIXED MOBILE except aeronautical mobile S5.341 S5.342	**1 492-1 525 MHz** FIXED MOBILE S5.343 MOBILE-SATELLITE (space-to-Earth) S5.348A S5.341 S5.344 S5.348	**1 492-1 525 MHz** FIXED MOBILE S5.341 S5.348A	**1 492-1 525 MHz** FIXED MOBILE except aeronautical mobile S5.341	**1 492-1 525 MHz** FIXED MOBILE except aeronautical mobile H124	**1 492-1 525 MHz** FIXED H127 S5.341	
1 525-1 530 MHz SPACE OPERATION (space-to-Earth) FIXED MOBILE-SATELLITE (space-to-Earth) Earth Exploration-Satellite Mobile except aeronautical mobile S5.349 S5.341 S5.342 S5.350 S5.351 S5.352A S5.354	**1 525-1 530 MHz** SPACE OPERATION (space-to-Earth) MOBILE-SATELLITE (space-to-Earth) Earth Exploration-Satellite Fixed Mobile S5.343 S5.341 S5.351 S5.354	**1 525-1 530 MHz** SPACE OPERATION (space-to-Earth) FIXED MOBILE-SATELLITE (space-to-Earth) Earth Exploration-Satellite Mobile S5.349 S5.341 S5.351 S5.352A S5.354	**1 525-1 530 MHz** SPACE OPERATION (space-to-Earth) FIXED MOBILE-SATELLITE (space-to-Earth) Earth Exploration-Satellite Mobile except aeronautical mobile S5.341 S5.351 S5.352A S5.354	**1 525-1 530 MHz** H129	**1 525-1 530 MHz** MOBILE-SATELLITE (space-to-Earth) H130 S5.341 S5.351 S5.352A S5.354	**1 525-1 530 MHz** Earth Exploration-Satellite

INTERNATIONAL ALLOCATION			RR ALLOCATION RELEVANT TO THE REPUBLIC OF HUNGARY	ALLOCATION IN THE REPUBLIC OF HUNGARY		
RADIO REGULATIONS				GOVERNMENTAL	CIVIL	COMMON
REGION 1	REGION 2	REGION 3				
1 530-1 535 MHz SPACE OPERATION (space-to-Earth) MOBILE-SATELLITE (space-to-Earth) S5.353A Earth Exploration-Satellite Fixed Mobile except aeronautical mobile S5.341 S5.342 S5.351 S5.354	**1 530-1 535 MHz** SPACE OPERATION (space-to-Earth) MOBILE-SATELLITE (space-to-Earth) S5.353A Earth Exploration-Satellite Fixed Mobile S5.343 S5.341 S5.351 S5.354		**1 530-1 535 MHz** SPACE OPERATION (space-to-Earth) MOBILE-SATELLITE (space-to-Earth) S5.353A Earth Exploration-Satellite Fixed Mobile except aeronautical mobile S5.341 S5.351 S5.354	**1 530-1 535 MHz** H129	**1 530-1 535 MHz** MOBILE-SATELLITE (space-to-Earth) S5.353A H130 S5.341 S5.351 S5.354	**1 530-1 535 MHz** Earth Exploration-Satellite
1 535-1 559 MHz	MOBILE-SATELLITE (space-to-Earth) S5.341 S5.351 S5.353A S5.354 S5.355 S5.356 S5.357 S5.357A S5.359 S5.362A		**1 535-1 550 MHz** MOBILE-SATELLITE (space-to-Earth) S5.341 S5.351 S5.353A S5.354 S5.356 S5.357 S5.357A	**1 535-1 550 MHz** H129	**1 535-1 550 MHz** MOBILE-SATELLITE (space-to-Earth) H130 H132 S5.341 S5.351 S5.353A S5.354 S5.356 S5.357 S5.357A	
			1 550-1 559 MHz FIXED S5.359 MOBILE-SATELLITE (space-to-Earth) S5.341 S5.351 S5.354 S5.357 S5.357A	**1 550-1 559 MHz** S5.359 H129	**1 550-1 559 MHz** FIXED S5.359 H133 MOBILE-SATELLITE (space-to-Earth) H130 H132 S5.341 S5.351 S5.354 S5.357 S5.357A	
1 559-1 610 MHz	AERONAUTICAL RADIONAVIGATION RADIONAVIGATION-SATELLITE (space-to-Earth)		**1 559-1 610 MHz** FIXED S5.359 AERONAUTICAL RADIONAVIGATION RADIONAVIGATION-SATELLITE (space-to-Earth)	**1 559-1 574.5 MHz** S5.359 H129	**1 559-1 574.5 MHz** FIXED S5.359 H133 S5.341	**1 559-1 574.5 MHz** AERONAUTICAL RADIONAVIGATION RADIONAVIGATION-SATELLITE (space-to-Earth) H12
					1 574.5-1 576.5 MHz S5.341	**1 574.5-1 576.5 MHz** AERONAUTICAL RADIONAVIGATION RADIONAVIGATION-SATELLITE (space-to-Earth) H12 H133A

INTERNATIONAL ALLOCATION				ALLOCATION IN THE REPUBLIC OF HUNGARY		
RADIO REGULATIONS			RR ALLOCATION RELEVANT TO THE REPUBLIC OF HUNGARY	GOVERNMENTAL	CIVIL	COMMON
REGION 1	REGION 2	REGION 3				
S5.341 S5.355 S5.359 S5.363			S5.341	**1 576.5-1 610 MHz** S5.359 H129	**1 576.5-1 610 MHz** FIXED S5.359 H133 S5.341	**1 576.5-1 610 MHz** AERONAUTICAL RADIONAVIGATION RADIONAVIGATION-SATELLITE (space-to-Earth) H12
1 610-1 610.6 MHz MOBILE-SATELLITE (Earth-to-space) AERONAUTICAL RADIONAVIGATION S5.341 S5.355 S5.359 S5.363 S5.364 S5.366 S5.367 S5.368 S5.369 S5.371 S5.372	**1 610-1 610.6 MHz** MOBILE-SATELLITE (Earth-to-space) AERONAUTICAL RADIONAVIGATION RADIODETERMINATION-SATELLITE (Earth-to-space) S5.341 S5.364 S5.366 S5.367 S5.368 S5.370 S5.372	**1 610-1 610.6 MHz** MOBILE-SATELLITE (Earth-to-space) AERONAUTICAL RADIONAVIGATION Radiodetermination-Satellite (Earth-to-space) S5.341 S5.355 S5.359 S5.364 S5.366 S5.367 S5.368 S5.369 S5.372	**1 610-1 610.6 MHz** FIXED S5.359 AERONAUTICAL MOBILE-SATELLITE (R) S5.367 MOBILE-SATELLITE (Earth-to-space) AERONAUTICAL RADIONAVIGATION Radiodetermination-Satellite (Earth-to-space) S5.371 S5.341 S5.364 S5.366 S5.368 S5.372	**1 610-1 610.6 MHz** S5.359 H129	**1 610-1 610.6 MHz** FIXED S5.359 H133 AERONAUTICAL MOBILE-SATELLITE (R) S5.367 MOBILE-SATELLITE (Earth-to-space) H133B S5.341 S5.364 S5.368 S5.372	**1 610-1 610.6 MHz** AERONAUTICAL RADIONAVIGATION Radiodetermination-Satellite (Earth-to-space) S5.371 S5.364 S5.366 S5.368 S5.372
1 610.6-1 613.8 MHz MOBILE-SATELLITE (Earth-to-space) RADIO ASTRONOMY AERONAUTICAL RADIONAVIGATION S5.149 S5.341 S5.355 S5.359 S5.363 S5.364 S5.366 S5.367 S5.368 S5.369 S5.371 S5.372	**1 610.6-1 613.8 MHz** MOBILE-SATELLITE (Earth-to-space) RADIO ASTRONOMY AERONAUTICAL RADIONAVIGATION RADIODETERMINATION-SATELLITE (Earth-to-space) S5.149 S5.341 S5.364 S5.366 S5.367 S5.368 S5.370 S5.372	**1 610.6-1 613.8 MHz** MOBILE-SATELLITE (Earth-to-space) RADIO ASTRONOMY AERONAUTICAL RADIONAVIGATION Radiodetermination-Satellite (Earth-to-space) S5.149 S5.341 S5.355 S5.359 S5.364 S5.366 S5.367 S5.368 S5.369 S5.372	**1 610.6-1 613.8 MHz** FIXED S5.359 AERONAUTICAL MOBILE-SATELLITE (R) S5.367 MOBILE-SATELLITE (Earth-to-space) RADIO ASTRONOMY AERONAUTICAL RADIONAVIGATION Radiodetermination-Satellite (Earth-to-space) S5.371 S5.149 S5.341 S5.364 S5.366 S5.368 S5.372	**1 610.6-1 613.8 MHz** S5.149 S5.359 H129	**1 610.6-1 613.8 MHz** FIXED S5.359 H133 AERONAUTICAL MOBILE-SATELLITE (R) S5.367 MOBILE-SATELLITE (Earth-to-space) H133B RADIO ASTRONOMY S5.149 S5.341 S5.364 S5.368 S5.372	**1 610.6-1 613.8 MHz** AERONAUTICAL RADIONAVIGATION Radiodetermination-Satellite (Earth-to-space) S5.371 S5.149 S5.364 S5.366 S5.368 S5.372

INTERNATIONAL ALLOCATION				ALLOCATION IN THE REPUBLIC OF HUNGARY		
RADIO REGULATIONS			RR ALLOCATION RELEVANT TO THE REPUBLIC OF HUNGARY	GOVERNMENTAL	CIVIL	COMMON
REGION 1	REGION 2	REGION 3				
1 613.8-1 626.5 MHz MOBILE-SATELLITE (Earth-to-space) AERONAUTICAL RADIONAVIGATION Mobile-Satellite (space-to-Earth) S5.341 S5.355 S5.359 S5.363 S5.364 S5.365 S5.366 S5.367 S5.368 S5.369 S5.371 S5.372	**1 613.8-1 626.5 MHz** MOBILE-SATELLITE (Earth-to-space) AERONAUTICAL RADIONAVIGATION RADIODETERMINATION- SATELLITE (Earth-to-space) Mobile-Satellite (space-to-Earth) S5.341 S5.364 S5.365 S5.366 S5.367 S5.368 S5.370 S5.372	**1 613.8-1 626.5 MHz** MOBILE-SATELLITE (Earth-to-space) AERONAUTICAL RADIONAVIGATION Mobile-Satellite (space-to-Earth) Radiodetermination-Satellite (Earth-to-space) S5.341 S5.355 S5.359 S5.364 S5.365 S5.366 S5.367 S5.368 S5.369 S5.372	**1 613.8-1 626.5 MHz** FIXED S5.359 AERONAUTICAL MOBILE- SATELLITE (R) S5.367 MOBILE-SATELLITE (Earth-to-space) AERONAUTICAL RADIONAVIGATION Mobile-Satellite (space-to-Earth) Radiodetermination-Satellite (Earth-to-space) S5.371 S5.341 S5.364 S5.365 S5.366 S5.368 S5.372	**1 613.8-1 626.5 MHz** S5.359 H129	**1 613.8-1 626.5 MHz** FIXED S5.359 H133 AERONAUTICAL MOBILE- SATELLITE (R) S5.367 MOBILE-SATELLITE (Earth-to-space) H133B Mobile-Satellite (space-to-Earth) H133B S5.341 S5.364 S5.365 S5.368 S5.372	**1 613.8-1 626.5 MHz** AERONAUTICAL RADIONAVIGATION Radiodetermination-Satellite (Earth-to-space) S5.371 S5.364 S5.366 S5.368 S5.372
1 626.5-1 660 MHz	MOBILE-SATELLITE (Earth-to-space)		**1 626.5-1 645.5 MHz** FIXED S5.359 MOBILE-SATELLITE (Earth-to-space) S5.341 S5.351 S5.353A S5.354 S5.374	**1 626.5-1 645.5 MHz** S5.359 H129	**1 626.5-1 645.5 MHz** FIXED S5.359 H133 MOBILE-SATELLITE (Earth-to-space) H130 S5.341 S5.351 S5.353A S5.354 S5.374	
			1 645.5-1 646.5 MHz MOBILE-SATELLITE (Earth-to-space) S5.341 S5.354 S5.375		**1 645.5-1 646.5 MHz** MOBILE-SATELLITE (Earth-to-space) S5.341 S5.354 S5.375	
	S5.341 S5.351 S5.353A S5.354 S5.355 S5.357A S5.359 S5.362A S5.374 S5.375 S5.376		**1 646.5-1 660 MHz** FIXED S5.359 MOBILE-SATELLITE (Earth-to-space) S5.341 S5.351 S5.354 S5.357A S5.374 S5.376	**1 646.5-1 660 MHz** S5.359 H129	**1 646.5-1 660 MHz** FIXED S5.359 H133 MOBILE-SATELLITE (Earth-to-space) H130 H132 S5.341 S5.351 S5.354 S5.374 S5.376	
1 660-1 660.5 MHz	MOBILE-SATELLITE (Earth-to-space) RADIO ASTRONOMY S5.149 S5.341 S5.351 S5.354 S5.362A S5.376A		**1 660-1 660.5 MHz** MOBILE-SATELLITE (Earth-to-space) RADIO ASTRONOMY S5.149 S5.341 S5.351 S5.354 S5.376A	**1 660-1 660.5 MHz** S5.149 H129	**1 660-1 660.5 MHz** MOBILE-SATELLITE (Earth-to-space) H130 RADIO ASTRONOMY S5.149 S5.341 S5.351 S5.354 S5.376A	

INTERNATIONAL ALLOCATION				ALLOCATION IN THE REPUBLIC OF HUNGARY		
RADIO REGULATIONS			RR ALLOCATION RELEVANT TO THE REPUBLIC OF HUNGARY	GOVERNMENTAL	CIVIL	COMMON
REGION 1	REGION 2	REGION 3				
1 660.5-1 668.4 MHz RADIO ASTRONOMY SPACE RESEARCH (passive) Fixed Mobile except aeronautical mobile S5.149 S5.341 S5.379 S5.379A			**1 660.5-1 668.4 MHz** RADIO ASTRONOMY SPACE RESEARCH (passive) Fixed Mobile except aeronautical mobile S5.149 S5.341 S5.379A	**1 660.5-1 668.4 MHz** S5.149 S5.379A H129	**1 660.5-1 668.4 MHz** RADIO ASTRONOMY SPACE RESEARCH (passive) S5.341 S5.379A	
1 668.4-1 670 MHz METEOROLOGICAL AIDS FIXED MOBILE except aeronautical mobile RADIO ASTRONOMY S5.149 S5.341			**1 668.4-1 670 MHz** METEOROLOGICAL AIDS FIXED MOBILE except aeronautical mobile RADIO ASTRONOMY S5.149 S5.341	**1 668.4-1 670 MHz** S5.149 H129	**1 668.4-1 670 MHz** RADIO ASTRONOMY S5.341	**1 668.4-1 670 MHz** METEOROLOGICAL AIDS S5.149
1 670-1 675 MHz METEOROLOGICAL AIDS FIXED METEOROLOGICAL-SATELLITE (space-to-Earth) MOBILE S5.380 S5.341			**1 670-1 675 MHz** METEOROLOGICAL AIDS FIXED METEOROLOGICAL-SATELLITE (space-to-Earth) MOBILE S5.380 S5.341		**1 670-1 675 MHz** MOBILE S5.380 H134 S5.341	**1 670-1 675 MHz** METEOROLOGICAL AIDS METEOROLOGICAL-SATELLITE (space-to-Earth)
1 675-1 690 MHz METEOROLOGICAL AIDS FIXED METEOROLOGICAL-SATELLITE (space-to-Earth) MOBILE except aeronautical mobile S5.341	**1 675-1 690 MHz** METEOROLOGICAL AIDS FIXED METEOROLOGICAL-SATELLITE (space-to-Earth) MOBILE except aeronautical mobile MOBILE-SATELLITE (Earth-to-space) S5.341 S5.377	**1 675-1 690 MHz** METEOROLOGICAL AIDS FIXED METEOROLOGICAL-SATELLITE (space-to-Earth) MOBILE except aeronautical mobile S5.341	**1 675-1 690 MHz** METEOROLOGICAL AIDS FIXED METEOROLOGICAL-SATELLITE (space-to-Earth) MOBILE except aeronautical mobile S5.341	**1 675-1 690 MHz** H129	**1 675-1 690 MHz** S5.341	**1 675-1 690 MHz** METEOROLOGICAL AIDS METEOROLOGICAL-SATELLITE (space-to-Earth)
1 690-1 700 MHz METEOROLOGICAL AIDS METEOROLOGICAL-SATELLITE (space-to-Earth) Fixed Mobile except aeronautical mobile S5.289 S5.341 S5.382	**1 690-1 700 MHz** METEOROLOGICAL AIDS METEOROLOGICAL-SATELLITE (space-to-Earth) MOBILE-SATELLITE (Earth-to-space) S5.289 S5.341 S5.377 S5.381	**1 690-1 700 MHz** METEOROLOGICAL AIDS METEOROLOGICAL-SATELLITE (space-to-Earth) S5.289 S5.341 S5.381	**1 690-1 700 MHz** METEOROLOGICAL AIDS FIXED S5.382 METEOROLOGICAL-SATELLITE (space-to-Earth) MOBILE except aeronautical mobile S5.382 S5.289 S5.341	**1 690-1 700 MHz** H129	**1 690-1 700 MHz** S5.341	**1 690-1 700 MHz** METEOROLOGICAL AIDS METEOROLOGICAL-SATELLITE (space-to-Earth) S5.289

INTERNATIONAL ALLOCATION				ALLOCATION IN THE REPUBLIC OF HUNGARY		
RADIO REGULATIONS			RR ALLOCATION RELEVANT TO THE REPUBLIC OF HUNGARY	GOVERNMENTAL	CIVIL	COMMON
REGION 1	REGION 2	REGION 3				
1 700-1 710 MHz FIXED METEOROLOGICAL-SATELLITE (space-to-Earth) MOBILE except aeronautical mobile S5.289 S5.341	**1 700-1 710 MHz** FIXED METEOROLOGICAL-SATELLITE (space-to-Earth) MOBILE except aeronautical mobile MOBILE-SATELLITE (Earth-to-space) S5.289 S5.341 S5.377	**1 700-1 710 MHz** FIXED METEOROLOGICAL-SATELLITE (space-to-Earth) MOBILE except aeronautical mobile S5.289 S5.341 S5.384	**1 700-1 710 MHz** FIXED METEOROLOGICAL-SATELLITE (space-to-Earth) MOBILE except aeronautical mobile S5.289 S5.341	**1 700-1 710 MHz** H129	**1 700-1 710 MHz** S5.341	**1 700-1 710 MHz** METEOROLOGICAL-SATELLITE (space-to-Earth) S5.289
1 710-1 930 MHz S5.149 S5.341 S5.385 S5.386 S5.387 S5.388	FIXED MOBILE S5.380		**1 710-1 930 MHz** FIXED MOBILE S5.380 S5.149 S5.341 S5.385 S5.388		**1 710-1 785 MHz** FIXED MOBILE S5.149 S5.341 S5.385 H135 H137A	
				1 785-1 800 MHz H79A	**1 785-1 800 MHz** FIXED H139 MOBILE H139 H79A	
					1 800-1 805 MHz MOBILE S5.380 H134	
					1 805-1 880 MHz FIXED MOBILE H135 H137A	
					1 880-1 900 MHz FIXED MOBILE S5.388 H140	
				1 900-1 930 MHz H129	**1 900-1 930 MHz** FIXED MOBILE S5.388 H141 H142	
1 930-1 970 MHz FIXED MOBILE S5.388	**1 930-1 970 MHz** FIXED MOBILE Mobile-Satellite (Earth-to-space) S5.388	**1 930-1 970 MHz** FIXED MOBILE S5.388	**1 930-1 970 MHz** FIXED MOBILE S5.388	**1 930-1 970 MHz** H129	**1 930-1 970 MHz** FIXED MOBILE S5.388 H141 H142	

INTERNATIONAL ALLOCATION			RR ALLOCATION RELEVANT TO THE REPUBLIC OF HUNGARY	ALLOCATION IN THE REPUBLIC OF HUNGARY		
RADIO REGULATIONS				GOVERNMENTAL	CIVIL	COMMON
REGION 1	REGION 2	REGION 3				
1 970-1 980 MHz FIXED MOBILE S5.388			**1 970-1 980 MHz** FIXED MOBILE S5.388	**1 970-1 980 MHz** H129	**1 970-1 980 MHz** FIXED MOBILE S5.388 H141 H142	
1 980-2 010 MHz FIXED MOBILE MOBILE-SATELLITE (Earth-to-space) S5.388 S5.389A S5.389B S5.389F			**1 980-2 010 MHz** FIXED MOBILE MOBILE-SATELLITE (Earth-to-space) S5.388 S5.389A	**1 980-2 010 MHz** H129	**1 980-2 010 MHz** MOBILE-SATELLITE (Earth-to-space) H133B H143 S5.388 S5.389A H142	**1 980-2 010 MHz** H145
2 010-2 025 MHz FIXED MOBILE S5.388	**2 010-2 025 MHz** FIXED MOBILE MOBILE-SATELLITE (Earth-to-space) S5.388 S5.389C S5.389D S5.389E S5.390	**2 010-2 025 MHz** FIXED MOBILE S5.388	**2 010-2 025 MHz** FIXED MOBILE S5.388	**2 010-2 025 MHz** H129	**2 010-2 025 MHz** FIXED MOBILE S5.388 H141 H142	
2 025-2 110 MHz SPACE OPERATION (Earth-to-space) (space-to-space) EARTH EXPLORATION-SATELLITE (Earth-to-space) (space-to-space) FIXED MOBILE S5.391 SPACE RESEARCH (Earth-to-space) (space-to-space) S5.392			**2 025-2 110 MHz** SPACE OPERATION (Earth-to-space) (space-to-space) EARTH EXPLORATION- SATELLITE (Earth-to-space) (space-to-space) FIXED MOBILE S5.391 SPACE RESEARCH (Earth-to-space) (space-to-space) S5.392	**2 025-2 070 MHz** MOBILE S5.391 H12 H129 **2 070-2 100 MHz** H129 **2 100-2 110 MHz** RADIOLOCATION H147	**2 025-2 100 MHz** EARTH EXPLORATION- SATELLITE (Earth-to-space) (space-to-space) SPACE RESEARCH (Earth-to-space) (space-to-space) S5.392 H142 **2 100-2 110 MHz** EARTH EXPLORATION- SATELLITE (Earth-to-space) (space-to-space) SPACE RESEARCH (Earth-to-space) (space-to-space) S5.392 H142 H147	**2 025-2 100 MHz** FIXED H146 **2 100-2 110 MHz** FIXED H146 H147

INTERNATIONAL ALLOCATION				ALLOCATION IN THE REPUBLIC OF HUNGARY		
RADIO REGULATIONS			RR ALLOCATION RELEVANT TO THE REPUBLIC OF HUNGARY	GOVERNMENTAL	CIVIL	COMMON
REGION 1	REGION 2	REGION 3				
2 110-2 120 MHz FIXED MOBILE SPACE RESEARCH (deep space) (Earth-to-space) S5.388			**2 110-2 120 MHz** FIXED MOBILE SPACE RESEARCH (deep space) (Earth-to-space) S5.388	**2 110-2 120 MHz** RADIOLOCATION H147	**2 110-2 120 MHz** FIXED H142 MOBILE H142 SPACE RESEARCH (deep space) (Earth-to-space) S5.388 H141 H147	
2 120-2 160 MHz FIXED MOBILE S5.388	**2 120-2 160 MHz** FIXED MOBILE Mobile-Satellite (space-to-Earth) S5.388	**2 120-2 160 MHz** FIXED MOBILE S5.388	**2 120-2 160 MHz** FIXED MOBILE S5.388	**2 120-2 160 MHz** RADIOLOCATION H147	**2 120-2 160 MHz** FIXED MOBILE S5.388 H141 H142 H147	
2 160-2 170 MHz FIXED MOBILE S5.388 S5.392A	**2 160-2 170 MHz** FIXED MOBILE MOBILE-SATELLITE (space-to-Earth) S5.388 S5.389C S5.389D S5.389E S5.390	**2 160-2 170 MHz** FIXED MOBILE S5.388	**2 160-2 170 MHz** FIXED MOBILE S5.388	**2 160-2 170 MHz** RADIOLOCATION H147	**2 160-2 170 MHz** FIXED MOBILE S5.388 H141 H142 H147	
2 170-2 200 MHz FIXED MOBILE MOBILE-SATELLITE (space-to-Earth) S5.388 S5.389A S5.389F S5.392A			**2 170-2 200 MHz** FIXED MOBILE MOBILE-SATELLITE (space-to-Earth) S5.388 S5.389A	**2 170-2 200 MHz** RADIOLOCATION H147	**2 170-2 200 MHz** MOBILE-SATELLITE (space-to-Earth) H133B H143 S5.388 S5.389A H142 H147	
2 200-2 290 MHz SPACE OPERATION (space-to-Earth) (space-to-space) EARTH EXPLORATION-SATELLITE (space-to-Earth) (space-to-space) FIXED MOBILE S5.391 SPACE RESEARCH (space-to-Earth) (space-to-space) S5.392			**2 200-2 290 MHz** SPACE OPERATION (space-to-Earth) (space-to-space) EARTH EXPLORATION-SATELLITE (space-to-Earth) (space-to-space) FIXED MOBILE S5.391 SPACE RESEARCH (space-to-Earth) (space-to-space) S5.392	**2 200-2 245 MHz** RADIOLOCATION H147 MOBILE S5.391 H12 **2 245-2 290 MHz** RADIOLOCATION H147	**2 200-2 290 MHz** EARTH EXPLORATION-SATELLITE (space-to-Earth) (space-to-space) SPACE RESEARCH (space-to-Earth) (space-to-space) S5.392 H147	**2 200-2 290 MHz** FIXED H146 H147

INTERNATIONAL ALLOCATION				ALLOCATION IN THE REPUBLIC OF HUNGARY		
RADIO REGULATIONS			RR ALLOCATION RELEVANT TO THE REPUBLIC OF HUNGARY	GOVERNMENTAL	CIVIL	COMMON
REGION 1	REGION 2	REGION 3				
2 290-2 300 MHz FIXED MOBILE except aeronautical mobile SPACE RESEARCH (deep space) (space-to-Earth)			**2 290-2 300 MHz** FIXED MOBILE except aeronautical mobile SPACE RESEARCH (deep space) (space-to-Earth) H147	**2 290-2 300 MHz** RADIOLOCATION H147	**2 290-2 300 MHz** SPACE RESEARCH (deep space) (space-to-Earth) H147	
2 300-2 450 MHz FIXED MOBILE Amateur Radiolocation S5.150 S5.282 S5.395	**2 300-2 450 MHz** FIXED MOBILE RADIOLOCATION Amateur S5.150 S5.282 S5.393 S5.394 S5.396		**2 300-2 450 MHz** FIXED MOBILE Amateur Radiolocation S5.150 S5.282	**2 300-2 450 MHz** Radiolocation H148 H31 H149 H151 H152	**2 300-2 400 MHz** Amateur **2 400-2 450 MHz** Amateur S5.282 H31 H149 H151 H152 H153	 **2 400-2 450 MHz** S5.150 H30
2 450-2 483.5 MHz FIXED MOBILE Radiolocation S5.150 S5.397	**2 450-2 483.5 MHz** FIXED MOBILE RADIOLOCATION S5.150 S5.394		**2 450-2 483.5 MHz** FIXED MOBILE Radiolocation S5.150	**2 450-2 483.5 MHz** Radiolocation H148 H31 H149 H151 H152	**2 450-2 483.5 MHz** H31 H149 H151 H152 H153	**2 450-2 483.5 MHz** S5.150 H30
2 483.5-2 500 MHz FIXED MOBILE MOBILE-SATELLITE (space-to-Earth) Radiolocation S5.150 S5.371 S5.397 S5.398 S5.399 S5.400 S5.402	**2 483.5-2 500 MHz** FIXED MOBILE MOBILE-SATELLITE (space-to-Earth) RADIOLOCATION RADIODETERMINATION-SATELLITE (space-to-Earth) S5.398 S5.150 S5.402	**2 483.5-2 500 MHz** FIXED MOBILE MOBILE-SATELLITE (space-to-Earth) RADIOLOCATION Radiodetermination-Satellite (space-to-Earth) S5.398 S5.150 S5.400 S5.402	**2 483.5-2 500 MHz** FIXED MOBILE MOBILE-SATELLITE (space-to-Earth) Radiolocation Radiodetermination-Satellite (space-to-Earth) S5.371 S5.398 S5.399 S5.150 S5.402	**2 483.5-2 500 MHz** Radiolocation H148 S5.402	**2 483.5-2 500 MHz** MOBILE-SATELLITE (space-to-Earth) H133B S5.402	**2 483.5-2 500 MHz** Radiodetermination-Satellite (space-to-Earth) S5.371 S5.398 S5.399 S5.150 S5.402 H30
2 500-2 520 MHz FIXED S5.409 S5.410 S5.411 MOBILE except aeronautical mobile MOBILE-SATELLITE (space-to-Earth) S5.403 S5.405 S5.407 S5.408 S5.412 S5.414	**2 500-2 520 MHz** FIXED S5.409 S5.411 FIXED-SATELLITE (space-to-Earth) S5.415 MOBILE except aeronautical mobile MOBILE-SATELLITE (space-to-Earth) S5.403 S5.404 S5.407 S5.414 S5.415A		**2 500-2 520 MHz** FIXED S5.409 S5.410 S5.411 MOBILE except aeronautical mobile MOBILE-SATELLITE (space-to-Earth) S5.403 S5.414	**2 500-2 520 MHz** H71 H147 H154	**2 500-2 520 MHz** MOBILE-SATELLITE (space-to-Earth) S5.403 S5.414 H147	

INTERNATIONAL ALLOCATION				ALLOCATION IN THE REPUBLIC OF HUNGARY		
RADIO REGULATIONS			RR ALLOCATION RELEVANT TO THE REPUBLIC OF HUNGARY	GOVERNMENTAL	CIVIL	COMMON
REGION 1	REGION 2	REGION 3				
2 520-2 655 MHz FIXED S5.409 S5.410 S5.411 MOBILE except aeronautical mobile BROADCASTING-SATELLITE S5.413 S5.416 S5.339 S5.403 S5.405 S5.408 S5.412 S5.417 S5.418	**2 520-2 655 MHz** FIXED S5.409 S5.411 FIXED-SATELLITE (space-to-Earth) S5.415 MOBILE except aeronautical mobile BROADCASTING-SATELLITE S5.413 S5.416 S5.339 S5.403	**2 520-2 535 MHz** FIXED S5.409 S5.411 FIXED-SATELLITE (space-to-Earth) S5.415 MOBILE except aeronautical mobile BROADCASTING-SATELLITE S5.413 S5.416 S5.403 S5.415A **2 535-2 655 MHz** FIXED S5.409 S5.411 MOBILE except aeronautical mobile BROADCASTING-SATELLITE S5.413 S5.416 S5.339 S5.418	**2 520-2 655 MHz** FIXED S5.409 S5.410 S5.411 MOBILE except aeronautical mobile BROADCASTING-SATELLITE S5.413 S5.416 S5.339 S5.403	**2 520-2 655 MHz** FIXED S5.409 MOBILE except aeronautical mobile H71 H124 H147 H154	**2 520-2 655 MHz** FIXED S5.409 H155 S5.339 H147	
2 655-2 670 MHz FIXED S5.409 S5.410 S5.411 MOBILE except aeronautical mobile BROADCASTING-SATELLITE S5.413 S5.416 Earth Exploration-Satellite (passive) Radio Astronomy Space Research (passive) S5.149 S5.412 S5.417 S5.420	**2 655-2 670 MHz** FIXED S5.409 S5.411 FIXED-SATELLITE (Earth-to-space) (space-to-Earth) S5.415 MOBILE except aeronautical mobile BROADCASTING-SATELLITE S5.413 S5.416 Earth Exploration-Satellite (passive) Radio Astronomy Space Research (passive) S5.149 S5.420	**2 655-2 670 MHz** FIXED S5.409 S5.411 FIXED-SATELLITE (Earth-to-space) S5.415 MOBILE except aeronautical mobile BROADCASTING-SATELLITE S5.413 S5.416 Earth Exploration-Satellite (passive) Radio Astronomy Space Research (passive) S5.149 S5.420	**2 655-2 670 MHz** FIXED S5.409 S5.410 S5.411 MOBILE except aeronautical mobile BROADCASTING-SATELLITE S5.413 S5.416 Earth Exploration-Satellite (passive) Radio Astronomy Space Research (passive) S5.149 S5.420	**2 655-2 670 MHz** FIXED S5.409 MOBILE except aeronautical mobile S5.149 H71 H124 H147 H154	**2 655-2 670 MHz** FIXED S5.409 H155 Earth Exploration-Satellite (passive) Radio Astronomy Space Research (passive) S5.149 H147	

INTERNATIONAL ALLOCATION				ALLOCATION IN THE REPUBLIC OF HUNGARY		
RADIO REGULATIONS			RR ALLOCATION RELEVANT TO THE REPUBLIC OF HUNGARY	GOVERNMENTAL	CIVIL	COMMON
REGION 1	REGION 2	REGION 3				
2 670-2 690 MHz FIXED S5.409 S5.410 S5.411 MOBILE except aeronautical mobile MOBILE-SATELLITE (Earth-to-space) Earth Exploration-Satellite (passive) Radio Astronomy Space Research (passive) S5.149 S5.419 S5.420	**2 670-2 690 MHz** FIXED S5.409 S5.411 FIXED-SATELLITE (Earth-to-space) (space-to-Earth) S5.415 MOBILE except aeronautical mobile MOBILE-SATELLITE (Earth-to-space) Earth Exploration-Satellite (passive) Radio Astronomy Space Research (passive) S5.149 S5.419 S5.420	**2 670-2 690 MHz** FIXED S5.409 S5.411 FIXED-SATELLITE (Earth-to-space) S5.415 MOBILE except aeronautical mobile MOBILE-SATELLITE (Earth-to-space) Earth Exploration-Satellite (passive) Radio Astronomy Space Research (passive) S5.149 S5.419 S5.420 S5.420A	**2 670-2 690 MHz** FIXED S5.409 S5.410 S5.411 MOBILE except aeronautical mobile MOBILE-SATELLITE (Earth-to-space) Earth Exploration-Satellite (passive) Radio Astronomy Space Research (passive) S5.149 S5.419 S5.420	**2 670-2 690 MHz** S5.149 H71 H147 H154	**2 670-2 690 MHz** MOBILE-SATELLITE (Earth-to-space) Earth Exploration-Satellite (passive) Radio Astronomy Space Research (passive) S5.149 S5.419 S5.420 H147	
2 690-2 700 MHz S5.340 S5.421 S5.422	EARTH EXPLORATION-SATELLITE (passive) RADIO ASTRONOMY SPACE RESEARCH (passive)		**2 690-2 700 MHz** EARTH EXPLORATION-SATELLITE (passive) RADIO ASTRONOMY SPACE RESEARCH (passive) S5.340	**2 690-2 700 MHz** S5.340	**2 690-2 700 MHz** EARTH EXPLORATION-SATELLITE (passive) RADIO ASTRONOMY SPACE RESEARCH (passive) S5.340	
2 700-2 900 MHz S5.423 S5.424	AERONAUTICAL RADIONAVIGATION S5.337 Radiolocation		**2 700-2 900 MHz** AERONAUTICAL RADIONAVIGATION S5.337 Radiolocation S5.423			**2 700-2 900 MHz** AERONAUTICAL RADIONAVIGATION S5.337 Radiolocation H12 S5.423
2 900-3 100 MHz S5.425 S5.427	RADIONAVIGATION S5.426 Radiolocation		**2 900-3 100 MHz** RADIONAVIGATION S5.426 Radiolocation S5.425 S5.427			**2 900-3 100 MHz** RADIONAVIGATION S5.426 Radiolocation H12 S5.425 S5.427
3 100-3 300 MHz S5.149 S5.428	RADIOLOCATION Earth Exploration-Satellite (active) Space Research (active)		**3 100-3 300 MHz** RADIOLOCATION Earth Exploration-Satellite (active) Space Research (active) S5.149	**3 100-3 300 MHz** RADIOLOCATION H12 S5.149	**3 100-3 300 MHz** Earth Exploration-Satellite (active) Space Research (active) S5.149	

<table>
<tr><th colspan="3">INTERNATIONAL ALLOCATION</th><th rowspan="2">RR ALLOCATION RELEVANT TO THE REPUBLIC OF HUNGARY</th><th colspan="3">ALLOCATION IN THE REPUBLIC OF HUNGARY</th></tr>
<tr><th colspan="3">RADIO REGULATIONS</th><th>GOVERNMENTAL</th><th>CIVIL</th><th>COMMON</th></tr>
<tr><th>REGION 1</th><th>REGION 2</th><th>REGION 3</th><th></th><th></th><th></th><th></th></tr>
<tr><td>3 300-3 400 MHz
RADIOLOCATION

S5.149 S5.429 S5.430</td><td>3 300-3 400 MHz
RADIOLOCATION
Amateur
Fixed
Mobile

S5.149 S5.430</td><td>3 300-3 400 MHz
RADIOLOCATION
Amateur

S5.149 S5.429</td><td>3 300-3 400 MHz
RADIOLOCATION

S5.149</td><td>3 300-3 400 MHz
RADIOLOCATION H12

S5.149</td><td></td><td></td></tr>
<tr><td rowspan="2">3 400-3 600 MHz
FIXED
FIXED-SATELLITE
(space-to-Earth)
Mobile
Radiolocation

S5.431</td><td colspan="2" rowspan="2">3 400-3 500 MHz
FIXED
FIXED-SATELLITE (space-to-Earth)
Amateur
Mobile
Radiolocation S5.433

S5.282 S5.432</td><td rowspan="2">3 400-3 600 MHz
FIXED
FIXED-SATELLITE
(space-to-Earth)
Mobile
Radiolocation</td><td>3 400-3 410 MHz
Radiolocation H12</td><td>3 400-3 410 MHz
FIXED-SATELLITE
(space-to-Earth)</td><td></td></tr>
<tr><td></td><td>3 410-3 600 MHz
FIXED H156 H156A
FIXED-SATELLITE
(space-to-Earth)</td><td></td></tr>
<tr><td rowspan="3">3 600-4 200 MHz
FIXED
FIXED-SATELLITE
(space-to-Earth)
Mobile</td><td colspan="2">3 500-3 700 MHz
FIXED
FIXED-SATELLITE (space-to-Earth)
MOBILE except aeronautical mobile
Radiolocation S5.433

S5.435</td><td rowspan="3">3 600-4 200 MHz
FIXED
FIXED-SATELLITE
(space-to-Earth)
Mobile</td><td rowspan="3"></td><td rowspan="3">3 600-4 200 MHz
FIXED H157 H158
FIXED-SATELLITE
(space-to-Earth)</td><td rowspan="3"></td></tr>
<tr><td colspan="2">3 700-4 200 MHz
FIXED
FIXED-SATELLITE (space-to-Earth)
MOBILE except aeronautical mobile</td></tr>
<tr><td>4 200-4 400 MHz

S5.437 S5.439 S5.440</td><td colspan="2">AERONAUTICAL RADIONAVIGATION S5.438</td><td>4 200-4 400 MHz
AERONAUTICAL
RADIONAVIGATION S5.438

S5.440</td><td></td><td></td><td>4 200-4 400 MHz
AERONAUTICAL
RADIONAVIGATION S5.438

S5.440</td></tr>
<tr><td>4 400-4 500 MHz</td><td colspan="2">FIXED
MOBILE</td><td>4 400-4 500 MHz
FIXED
MOBILE</td><td>4 400-4 500 MHz
FIXED
MOBILE

H43</td><td></td><td></td></tr>
<tr><td>4 500-4 800 MHz</td><td colspan="2">FIXED
FIXED-SATELLITE (space-to-Earth) S5.441
MOBILE</td><td>4 500-4 800 MHz
FIXED
FIXED-SATELLITE
(space-to-Earth) S5.441
MOBILE</td><td>4 500-4 800 MHz
FIXED
MOBILE

H43</td><td></td><td></td></tr>
</table>

INTERNATIONAL ALLOCATION				ALLOCATION IN THE REPUBLIC OF HUNGARY		
RADIO REGULATIONS			RR ALLOCATION RELEVANT TO THE REPUBLIC OF HUNGARY	GOVERNMENTAL	CIVIL	COMMON
REGION 1	REGION 2	REGION 3				
4 800-4 990 MHz FIXED MOBILE S5.442 Radio Astronomy S5.149 S5.339 S5.443			**4 800-4 990 MHz** FIXED MOBILE S5.442 Radio Astronomy S5.149 S5.339	**4 800-4 990 MHz** FIXED MOBILE S5.442 S5.149 H43	**4 800-4 990 MHz** Radio Astronomy S5.149 S5.339	
4 990-5 000 MHz FIXED MOBILE except aeronautical mobile RADIO ASTRONOMY Space Research (passive) S5.149			**4 990-5 000 MHz** FIXED MOBILE except aeronautical mobile RADIO ASTRONOMY Space Research (passive) S5.149	**4 990-5 000 MHz** FIXED MOBILE except aeronautical mobile S5.149 H43	**4 990-5 000 MHz** RADIO ASTRONOMY Space Research (passive) S5.149	
5 000-5 150 MHz AERONAUTICAL RADIONAVIGATION S5.367 S5.444 S5.444A			**5 000-5 150 MHz** AERONAUTICAL RADIONAVIGATION AERONAUTICAL MOBILE-SATELLITE (R) S5.367 S5.444 S5.444A		**5 000-5 150 MHz** S5.444A	**5 000-5 150 MHz** AERONAUTICAL RADIONAVIGATION H3 AERONAUTICAL MOBILE-SATELLITE (R) S5.367 S5.444
5 150-5 250 MHz AERONAUTICAL RADIONAVIGATION FIXED-SATELLITE (Earth-to-space) S5.447A			**5 150-5 216 MHz** AERONAUTICAL RADIONAVIGATION FIXED-SATELLITE (Earth-to-space) S5.447A (space-to-Earth) S5.447B Radiodetermination-Satellite (space-to-Earth) S5.446 S5.447C	**5 150-5 216 MHz** AERONAUTICAL RADIONAVIGATION H159	**5 150-5 216 MHz** FIXED-SATELLITE (Earth-to-space) S5.447A (space-to-Earth) S5.447B S5.447C H159	**5 150-5 216 MHz** Radiodetermination-Satellite (space-to-Earth) S5.446
S5.446 S5.447 S5.447B S5.447C			**5 216-5 250 MHz** AERONAUTICAL RADIONAVIGATION FIXED-SATELLITE (Earth-to-space) S5.447A S5.447C	**5 216-5 250 MHz** AERONAUTICAL RADIONAVIGATION H159	**5 216-5 250 MHz** FIXED-SATELLITE (Earth-to-space) S5.447A S5.447C H159	

INTERNATIONAL ALLOCATION				ALLOCATION IN THE REPUBLIC OF HUNGARY		
RADIO REGULATIONS			RR ALLOCATION RELEVANT TO THE REPUBLIC OF HUNGARY	GOVERNMENTAL	CIVIL	COMMON
REGION 1	REGION 2	REGION 3				
5 250-5 255 MHz EARTH EXPLORATION-SATELLITE (active) RADIOLOCATION SPACE RESEARCH S5.447D S5.448 S5.448A			**5 250-5 255 MHz** EARTH EXPLORATION-SATELLITE (active) RADIOLOCATION SPACE RESEARCH S5.447D S5.448A	**5 250-5 255 MHz** RADIOLOCATION H12	**5 250-5 255 MHz** EARTH EXPLORATION-SATELLITE (active) SPACE RESEARCH S5.447D S5.448A	
5 255-5 350 MHz EARTH EXPLORATION-SATELLITE (active) RADIOLOCATION SPACE RESEARCH (active) S5.448 S5.448A			**5 255-5 350 MHz** EARTH EXPLORATION-SATELLITE (active) RADIOLOCATION SPACE RESEARCH (active) S5.448A	**5 255-5 350 MHz** RADIOLOCATION H12	**5 255-5 350 MHz** EARTH EXPLORATION-SATELLITE (active) SPACE RESEARCH (active) S5.448A	
5 350-5 460 MHz EARTH EXPLORATION-SATELLITE (active) S5.448B AERONAUTICAL RADIONAVIGATION S5.449 Radiolocation			**5 350-5 460 MHz** EARTH EXPLORATION-SATELLITE (active) S5.448B AERONAUTICAL RADIONAVIGATION S5.449 Radiolocation	**5 350-5 460 MHz** Radiolocation H12	**5 350-5 460 MHz** EARTH EXPLORATION-SATELLITE (active) S5.448B	**5 350-5 460 MHz** AERONAUTICAL RADIONAVIGATION S5.449
5 460-5 470 MHz RADIONAVIGATION S5.449 Radiolocation			**5 460-5 470 MHz** RADIONAVIGATION S5.449 Radiolocation	**5 460-5 470 MHz** Radiolocation H12		**5 460-5 470 MHz** RADIONAVIGATION S5.449
5 470-5 650 MHz MARITIME RADIONAVIGATION Radiolocation S5.450 S5.451 S5.452			**5 470-5 650 MHz** MARITIME RADIONAVIGATION Radiolocation S5.452			**5 470-5 650 MHz** MARITIME RADIONAVIGATION Radiolocation H12 S5.452
5 650-5 725 MHz RADIOLOCATION Amateur Space Research (deep space) S5.282 S5.451 S5.453 S5.454 S5.455			**5 650-5 670 MHz** RADIOLOCATION Amateur Space Research (deep space) S5.282	**5 650-5 670 MHz** RADIOLOCATION H12	**5 650-5 670 MHz** Amateur Space Research (deep space) S5.282	
			5 670-5 725 MHz FIXED S5.455 RADIOLOCATION Amateur Space Research (deep space)	**5 670-5 725 MHz** FIXED S5.455 RADIOLOCATION H12	**5 670-5 725 MHz** Amateur Space Research (deep space)	

INTERNATIONAL ALLOCATION			RR ALLOCATION RELEVANT TO THE REPUBLIC OF HUNGARY	ALLOCATION IN THE REPUBLIC OF HUNGARY		
RADIO REGULATIONS				GOVERNMENTAL	CIVIL	COMMON
REGION 1	REGION 2	REGION 3				
5 725-5 830 MHz FIXED-SATELLITE (Earth-to-space) RADIOLOCATION Amateur S5.150 S5.451 S5.453 S5.455 S5.456	**5 725-5 830 MHz** RADIOLOCATION Amateur S5.150 S5.453 S5.455		**5 725-5 830 MHz** FIXED S5.455 FIXED-SATELLITE (Earth-to-space) RADIOLOCATION Amateur S5.150	**5 725-5 830 MHz** FIXED S5.455 RADIOLOCATION H12 H31 H151 H159A	**5 725-5 830 MHz** FIXED-SATELLITE (Earth-to-space) H160 Amateur H31 H151 H159A H161	**5 725-5 830 MHz** S5.150 H30
5 830-5 850 MHz FIXED-SATELLITE (Earth-to-space) RADIOLOCATION Amateur Amateur-Satellite (space-to-Earth) S5.150 S5.451 S5.453 S5.455 S5.456	**5 830-5 850 MHz** RADIOLOCATION Amateur Amateur-Satellite (space-to-Earth) S5.150 S5.453 S5.455		**5 830-5 850 MHz** FIXED S5.455 FIXED-SATELLITE (Earth-to-space) RADIOLOCATION Amateur Amateur-Satellite (space-to-Earth) S5.150	**5 830-5 850 MHz** FIXED S5.455 RADIOLOCATION H12 H31 H151 H159A	**5 830-5 850 MHz** FIXED-SATELLITE (Earth-to-space) H160 Amateur Amateur-Satellite (space-to-Earth) H31 H151 H159A	**5 830-5 850 MHz** S5.150 H30
5 850-5 925 MHz FIXED FIXED-SATELLITE (Earth-to-space) MOBILE S5.150	**5 850-5 925 MHz** FIXED FIXED-SATELLITE (Earth-to-space) MOBILE Amateur Radiolocation S5.150	**5 850-5 925 MHz** FIXED FIXED-SATELLITE (Earth-to-space) MOBILE Radiolocation S5.150	**5 850-5 925 MHz** FIXED FIXED-SATELLITE (Earth-to-space) MOBILE S5.150	**5 850-5 925 MHz** H31 H151	**5 850-5 925 MHz** FIXED-SATELLITE (Earth-to-space) H160 H31 H151	**5 850-5 925 MHz** FIXED H139 S5.150 H30
5 925-6 700 MHz S5.149 S5.440 S5.458	FIXED FIXED-SATELLITE (Earth-to-space) MOBILE		**5 925-6 700 MHz** FIXED FIXED-SATELLITE (Earth-to-space) MOBILE S5.149 S5.440 S5.458	**5 925-6 425 MHz** H71 H154 **6 425-6 700 MHz** S5.149 S5.458 H71 H147 H154	**5 925-6 425 MHz** FIXED H162 FIXED-SATELLITE (Earth-to-space) H160 **6 425-6 700 MHz** FIXED H163 FIXED-SATELLITE (Earth-to-space) H160 S5.149 S5.440 S5.458 H147	

INTERNATIONAL ALLOCATION				ALLOCATION IN THE REPUBLIC OF HUNGARY		
RADIO REGULATIONS			RR ALLOCATION RELEVANT TO THE REPUBLIC OF HUNGARY	GOVERNMENTAL	CIVIL	COMMON
REGION 1	REGION 2	REGION 3				
6 700-7 075 MHz FIXED FIXED-SATELLITE (Earth-to-space) (space-to-Earth) S5.441 MOBILE S5.458 S5.458A S5.458B S5.458C			**6 700-7 075 MHz** FIXED FIXED-SATELLITE (Earth-to-space) (space-to-Earth) S5.441 MOBILE S5.458 S5.458A S5.458B S5.458C	**6 700-7 075 MHz** S5.458 H71 H147 H154	**6 700-7 075 MHz** FIXED H163 FIXED-SATELLITE (Earth-to-space) (space-to-Earth) S5.441 H160 S5.458 S5.458A S5.458B S5.458C H147	
7 075-7 250 MHz FIXED MOBILE S5.458 S5.459 S5.460			**7 075-7 250 MHz** FIXED MOBILE S5.458 S5.460	 **7 125-7 250 MHz** FIXED S5.458	**7 075-7 125 MHz** FIXED H163 S5.458	
7 250-7 300 MHz FIXED FIXED-SATELLITE (space-to-Earth) MOBILE S5.461			**7 250-7 300 MHz** FIXED FIXED-SATELLITE (space-to-Earth) MOBILE S5.461	**7 250-7 300 MHz** FIXED FIXED-SATELLITE (space-to-Earth) S5.461 H165 H166	**7 250-7 300 MHz** H164	
7 300-7 450 MHz FIXED FIXED-SATELLITE (space-to-Earth) MOBILE except aeronautical mobile S5.461			**7 300-7 450 MHz** FIXED FIXED-SATELLITE (space-to-Earth) MOBILE except aeronautical mobile S5.461	**7 300-7 425 MHz** FIXED FIXED-SATELLITE (space-to-Earth) H167 H166 **7 425-7 450 MHz** FIXED-SATELLITE (space-to-Earth) H167 H166	**7 300-7 425 MHz** H164 **7 425-7 450 MHz** FIXED H168 H169	

INTERNATIONAL ALLOCATION				ALLOCATION IN THE REPUBLIC OF HUNGARY		
RADIO REGULATIONS			RR ALLOCATION RELEVANT TO THE REPUBLIC OF HUNGARY	GOVERNMENTAL	CIVIL	COMMON
REGION 1	REGION 2	REGION 3				
7 450-7 550 MHz FIXED FIXED-SATELLITE (space-to-Earth) METEOROLOGICAL-SATELLITE (space-to-Earth) MOBILE except aeronautical mobile S5.461A			**7 450-7 550 MHz** FIXED FIXED-SATELLITE (space-to-Earth) METEOROLOGICAL-SATELLITE (space-to-Earth) MOBILE except aeronautical mobile S5.461A	**7 450-7 550 MHz** FIXED-SATELLITE (space-to-Earth) H167 H166	**7 450-7 550 MHz** FIXED H168 H169 METEOROLOGICAL-SATELLITE (space-to-Earth) S5.461A	
7 550-7 750 MHz FIXED FIXED-SATELLITE (space-to-Earth) MOBILE except aeronautical mobile			**7 550-7 750 MHz** FIXED FIXED-SATELLITE (space-to-Earth) MOBILE except aeronautical mobile	**7 550-7 750 MHz** FIXED-SATELLITE (space-to-Earth) H167 H166	**7 550-7 725 MHz** FIXED H168 H169 **7 725-7 750 MHz** FIXED H169 MOBILE except aeronautical mobile H170	
7 750-7 850 MHz FIXED METEOROLOGICAL-SATELLITE (space-to-Earth) S5.461B MOBILE except aeronautical mobile			**7 750-7 850 MHz** FIXED METEOROLOGICAL-SATELLITE (space-to-Earth) S5.461B MOBILE except aeronautical mobile	**7 750-7 850 MHz** H147 H154	**7 750-7 850 MHz** FIXED H169 METEOROLOGICAL-SATELLITE (space-to-Earth) S5.461B MOBILE except aeronautical mobile H147 H170	
7 850-7 900 MHz FIXED MOBILE except aeronautical mobile			**7 850-7 900 MHz** FIXED MOBILE except aeronautical mobile	**7 850-7 900 MHz** H147 H154	**7 850-7 900 MHz** FIXED H169 MOBILE except aeronautical mobile H147 H170	
7 900-8 025 MHz FIXED FIXED-SATELLITE (Earth-to-space) MOBILE S5.461			**7 900-8 025 MHz** FIXED FIXED-SATELLITE (Earth-to-space) MOBILE S5.461	**7 900-8 025 MHz** FIXED-SATELLITE (Earth-to-space) H171 H172 S5.461 H147 H154 H165 H166	**7 900-8 025 MHz** FIXED H168 H169 H147 H172	

INTERNATIONAL ALLOCATION				ALLOCATION IN THE REPUBLIC OF HUNGARY		
RADIO REGULATIONS			RR ALLOCATION RELEVANT TO THE REPUBLIC OF HUNGARY	GOVERNMENTAL	CIVIL	COMMON
REGION 1	REGION 2	REGION 3				
8 025-8 175 MHz EARTH EXPLORATION-SATELLITE (space-to-Earth) FIXED FIXED-SATELLITE (Earth-to-space) MOBILE S5.463 S5.462A			**8 025-8 175 MHz** EARTH EXPLORATION-SATELLITE (space-to-Earth) FIXED FIXED-SATELLITE (Earth-to-space) MOBILE S5.463 S5.462A	**8 025-8 175 MHz** FIXED-SATELLITE (Earth-to-space) H171 H172 H147 H154 H166	**8 025-8 175 MHz** EARTH EXPLORATION-SATELLITE (space-to-Earth) FIXED H168 H169 S5.462A H147 H172	
8 175-8 215 MHz EARTH EXPLORATION-SATELLITE (space-to-Earth) FIXED FIXED-SATELLITE (Earth-to-space) METEOROLOGICAL-SATELLITE (Earth-to-space) MOBILE S5.463 S5.462A			**8 175-8 215 MHz** EARTH EXPLORATION-SATELLITE (space-to-Earth) FIXED FIXED-SATELLITE (Earth-to-space) METEOROLOGICAL-SATELLITE (Earth-to-space) MOBILE S5.463 S5.462A	**8 175-8 215 MHz** FIXED-SATELLITE (Earth-to-space) H171 H172 H147 H154 H166	**8 175-8 215 MHz** EARTH EXPLORATION-SATELLITE (space-to-Earth) FIXED H168 H169 METEOROLOGICAL-SATELLITE (Earth-to-space) S5.462A H147 H172	
8 215-8 400 MHz EARTH EXPLORATION-SATELLITE (space-to-Earth) FIXED FIXED-SATELLITE (Earth-to-space) MOBILE S5.463 S5.462A			**8 215-8 400 MHz** EARTH EXPLORATION-SATELLITE (space-to-Earth) FIXED FIXED-SATELLITE (Earth-to-space) MOBILE S5.463 S5.462A	**8 215-8 275 MHz** FIXED-SATELLITE (Earth-to-space) H171 H172 H147 H154 H166	**8 215-8 275 MHz** EARTH EXPLORATION-SATELLITE (space-to-Earth) FIXED H168 H169 S5.462A H147 H172	
				8 275-8 400 MHz FIXED-SATELLITE (Earth-to-space) H171 H172 H166	**8 275-8 400 MHz** EARTH EXPLORATION-SATELLITE (space-to-Earth) FIXED H168 H169 S5.462A H172	
8 400-8 500 MHz FIXED MOBILE except aeronautical mobile SPACE RESEARCH (space-to-Earth) S5.465 S5.466 S5.467			**8 400-8 500 MHz** FIXED MOBILE except aeronautical mobile SPACE RESEARCH (space-to-Earth) S5.465		**8 400-8 500 MHz** FIXED H168 H169 SPACE RESEARCH (space-to-Earth) S5.465	
8 500-8 550 MHz RADIOLOCATION S5.468 S5.469			**8 500-8 550 MHz** LAND MOBILE S5.469 RADIOLOCATION RADIONAVIGATION S5.469	**8 500-8 550 MHz** RADIOLOCATION RADIONAVIGATION S5.469		

INTERNATIONAL ALLOCATION				ALLOCATION IN THE REPUBLIC OF HUNGARY		
RADIO REGULATIONS			RR ALLOCATION RELEVANT TO THE REPUBLIC OF HUNGARY	GOVERNMENTAL	CIVIL	COMMON
REGION 1	REGION 2	REGION 3				
8 550-8 650 MHz EARTH EXPLORATION-SATELLITE (active) RADIOLOCATION SPACE RESEARCH (active) S5.468 S5.469 S5.469A			**8 550-8 650 MHz** EARTH EXPLORATION-SATELLITE (active) LAND MOBILE S5.469 RADIOLOCATION RADIONAVIGATION S5.469 SPACE RESEARCH (active) S5.469A	**8 550-8 650 MHz** RADIOLOCATION RADIONAVIGATION S5.469	**8 550-8 650 MHz** EARTH EXPLORATION-SATELLITE (active) SPACE RESEARCH (active) S5.469A	
8 650-8 750 MHz RADIOLOCATION S5.468 S5.469			**8 650-8 750 MHz** LAND MOBILE S5.469 RADIOLOCATION RADIONAVIGATION S5.469	**8 650-8 750 MHz** RADIOLOCATION RADIONAVIGATION S5.469		
8 750-8 850 MHz RADIOLOCATION AERONAUTICAL RADIONAVIGATION S5.470 S5.471			**8 750-8 850 MHz** RADIOLOCATION AERONAUTICAL RADIONAVIGATION S5.470	**8 750-8 850 MHz** RADIOLOCATION		**8 750-8 850 MHz** AERONAUTICAL RADIONAVIGATION S5.470
8 850-9 000 MHz RADIOLOCATION MARITIME RADIONAVIGATION S5.472 S5.473			**8 850-9 000 MHz** RADIOLOCATION RADIONAVIGATION S5.473	**8 850-9 000 MHz** RADIOLOCATION RADIONAVIGATION S5.473		
9 000-9 200 MHz AERONAUTICAL RADIONAVIGATION S5.337 Radiolocation S5.471			**9 000-9 200 MHz** AERONAUTICAL RADIONAVIGATION S5.337 Radiolocation			**9 000-9 200 MHz** AERONAUTICAL RADIONAVIGATION S5.337 Radiolocation H173A
9 200-9 300 MHz RADIOLOCATION MARITIME RADIONAVIGATION S5.472 S5.473 S5.474			**9 200-9 300 MHz** RADIOLOCATION RADIONAVIGATION S5.473 S5.474	**9 200-9 300 MHz** H152	**9 200-9 300 MHz** H152	**9 200-9 300 MHz** RADIOLOCATION RADIONAVIGATION S5.473 S5.474 H173A
9 300-9 500 MHz RADIONAVIGATION S5.476 Radiolocation S5.427 S5.474 S5.475			**9 300-9 500 MHz** RADIONAVIGATION S5.476 Radiolocation S5.427 S5.474 S5.475	**9 300-9 500 MHz** H152	**9 300-9 500 MHz** H152	**9 300-9 500 MHz** RADIONAVIGATION S5.476 Radiolocation S5.427 S5.474 S5.475 H173A

INTERNATIONAL ALLOCATION			RR ALLOCATION RELEVANT TO THE REPUBLIC OF HUNGARY	ALLOCATION IN THE REPUBLIC OF HUNGARY		
RADIO REGULATIONS				GOVERNMENTAL	CIVIL	COMMON
REGION 1	REGION 2	REGION 3				
9 500-9 800 MHz EARTH EXPLORATION-SATELLITE (active) RADIOLOCATION RADIONAVIGATION SPACE RESEARCH (active) S5.476A			**9 500-9 800 MHz** EARTH EXPLORATION-SATELLITE (active) RADIOLOCATION RADIONAVIGATION SPACE RESEARCH (active) S5.476A	**9 500-9 800 MHz** H152	**9 500-9 800 MHz** EARTH EXPLORATION-SATELLITE (active) SPACE RESEARCH (active) S5.476A H152	**9 500-9 800 MHz** RADIOLOCATION RADIONAVIGATION
9 800-10 000 MHz RADIOLOCATION Fixed S5.477 S5.478 S5.479			**9 800-10 000 MHz** RADIOLOCATION Fixed S5.479	**9 800-10 000 MHz** H152	**9 800-10 000 MHz** H152	**9 800-10 000 MHz** RADIOLOCATION S5.479
10-10.45 GHz FIXED MOBILE RADIOLOCATION Amateur S5.479	**10-10.45 GHz** RADIOLOCATION Amateur S5.479 S5.480	**10-10.45 GHz** FIXED MOBILE RADIOLOCATION Amateur S5.479	**10-10.45 GHz** FIXED MOBILE RADIOLOCATION Amateur S5.479	**10-10.45 GHz** H174B	**10-10.45 GHz** FIXED H174 H174A MOBILE H174 Amateur H174B	**10-10.45 GHz** S5.479
10.45-10.5 GHz RADIOLOCATION Amateur Amateur-Satellite S5.481			**10.45-10.5 GHz** RADIOLOCATION Amateur Amateur-Satellite	**10.45-10.5 GHz** H174B	**10.45-10.5 GHz** Amateur Amateur-Satellite H174B	**10.45-10.5 GHz** RADIOLOCATION
10.5-10.55 GHz FIXED MOBILE Radiolocation	**10.5-10.55 GHz** FIXED MOBILE RADIOLOCATION		**10.5-10.55 GHz** FIXED MOBILE Radiolocation	**10.5-10.55 GHz** H152	**10.5-10.55 GHz** FIXED H174A MOBILE H152 H174	
10.55-10.6 GHz FIXED MOBILE except aeronautical mobile Radiolocation			**10.55-10.6 GHz** FIXED MOBILE except aeronautical mobile Radiolocation	**10.55-10.6 GHz** H152	**10.55-10.6 GHz** FIXED H174A MOBILE except aeronautical mobile H152 H174	

INTERNATIONAL ALLOCATION				ALLOCATION IN THE REPUBLIC OF HUNGARY		
RADIO REGULATIONS			RR ALLOCATION RELEVANT TO THE REPUBLIC OF HUNGARY	GOVERNMENTAL	CIVIL	COMMON
REGION 1	REGION 2	REGION 3				
10.6-10.68 GHz EARTH EXPLORATION-SATELLITE (passive) FIXED MOBILE except aeronautical mobile RADIO ASTRONOMY SPACE RESEARCH (passive) Radiolocation S5.149 S5.482			**10.6-10.68 GHz** EARTH EXPLORATION-SATELLITE (passive) FIXED MOBILE except aeronautical mobile RADIO ASTRONOMY SPACE RESEARCH (passive) Radiolocation S5.149 S5.482		**10.6-10.68 GHz** EARTH EXPLORATION-SATELLITE (passive) FIXED H174 H174A MOBILE except aeronautical mobile H174 RADIO ASTRONOMY SPACE RESEARCH (passive) S5.149 S5.482	**10.6-10.68 GHz** S5.149 H175
10.68-10.7 GHz EARTH EXPLORATION-SATELLITE (passive) RADIO ASTRONOMY SPACE RESEARCH (passive) S5.340 S5.483			**10.68-10.7 GHz** EARTH EXPLORATION-SATELLITE (passive) RADIO ASTRONOMY SPACE RESEARCH (passive) S5.340	**10.68-10.7 GHz** S5.340	**10.68-10.7 GHz** EARTH EXPLORATION-SATELLITE (passive) RADIO ASTRONOMY SPACE RESEARCH (passive) S5.340	
10.7-11.7 GHz FIXED FIXED-SATELLITE (space-to-Earth) S5.441 S5.484A (Earth-to-space) S5.484 MOBILE except aeronautical mobile	**10.7-11.7 GHz** FIXED FIXED-SATELLITE (space-to-Earth) S5.441 S5.484A MOBILE except aeronautical mobile	**10.7-11.7 GHz** FIXED FIXED-SATELLITE (space-to-Earth) S5.441 S5.484A MOBILE except aeronautical mobile	**10.7-11.7 GHz** FIXED FIXED-SATELLITE (space-to-Earth) S5.441 S5.484A (Earth-to-space) S5.484 MOBILE except aeronautical mobile		**10.7-11.7 GHz** FIXED H176 FIXED-SATELLITE (space-to-Earth) S5.441 S5.484A H177 H179 H180 (Earth-to-space) S5.484 H178	
11.7-12.5 GHz FIXED BROADCASTING BROADCASTING-SATELLITE MOBILE except aeronautical mobile	**11.7-12.1 GHz** FIXED S5.486 FIXED-SATELLITE (space-to-Earth) S5.484A Mobile except aeronautical mobile S5.485 S5.488 **12.1-12.2 GHz** FIXED-SATELLITE (space-to-Earth) S5.484A S5.485 S5.488 S5.489	**11.7-12.2 GHz** FIXED MOBILE except aeronautical mobile BROADCASTING BROADCASTING-SATELLITE S5.487 S5.487A S5.492	**11.7-12.5 GHz** FIXED BROADCASTING BROADCASTING-SATELLITE MOBILE except aeronautical mobile	**11.7-12.5 GHz**	**11.7-12.5 GHz** FIXED H182 BROADCASTING-SATELLITE H177 H181	

INTERNATIONAL ALLOCATION				ALLOCATION IN THE REPUBLIC OF HUNGARY		
RADIO REGULATIONS			RR ALLOCATION RELEVANT TO THE REPUBLIC OF HUNGARY	GOVERNMENTAL	CIVIL	COMMON
REGION 1	REGION 2	REGION 3				
S5.487 S5.487A S5.492	**12.2-12.7 GHz** FIXED MOBILE except aeronautical mobile BROADCASTING BROADCASTING-SATELLITE	**12.2-12.5 GHz** FIXED MOBILE except aeronautical mobile BROADCASTING S5.484A S5.487 S5.491	S5.487 S5.487A S5.492	H154	S5.487	
12.5-12.75 GHz FIXED-SATELLITE (space-to-Earth) S5.484A (Earth-to-space) S5.494 S5.495 S5.496	S5.487A S5.488 S5.490 S5.492 **12.7-12.75 GHz** FIXED FIXED-SATELLITE (Earth-to-space) MOBILE except aeronautical mobile	**12.5-12.75 GHz** FIXED FIXED-SATELLITE (space-to-Earth) S5.484A MOBILE except aeronautical mobile BROADCASTING-SATELLITE S5.493	**12.5-12.75 GHz** FIXED-SATELLITE (space-to-Earth) S5.484A (Earth-to-space) S5.496	**12.5-12.75 GHz** H154	**12.5-12.75 GHz** FIXED-SATELLITE (space-to-Earth) S5.484A H179 H180 (Earth-to-space) H178	
12.75-13.25 GHz	FIXED FIXED-SATELLITE (Earth-to-space) S5.441 MOBILE Space Research (deep space) (space-to-Earth)		**12.75-13.25 GHz** FIXED FIXED-SATELLITE (Earth-to-space) S5.441 MOBILE Space Research (deep space) (space-to-Earth)	**12.75-13.25 GHz** H147 H154	**12.75-13.25 GHz** FIXED H183 FIXED-SATELLITE (Earth-to-space) S5.441 H180 Space Research (deep space) (space-to-Earth) H147	
13.25-13.4 GHz	EARTH EXPLORATION-SATELLITE (active) AERONAUTICAL RADIONAVIGATION S5.497 SPACE RESEARCH (active) S5.498A S5.499		**13.25-13.4 GHz** EARTH EXPLORATION-SATELLITE (active) AERONAUTICAL RADIONAVIGATION S5.497 SPACE RESEARCH (active) S5.498A	**13.25-13.4 GHz** AERONAUTICAL RADIONAVIGATION S5.497	**13.25-13.4 GHz** EARTH EXPLORATION-SATELLITE (active) SPACE RESEARCH (active) S5.498A	

INTERNATIONAL ALLOCATION				ALLOCATION IN THE REPUBLIC OF HUNGARY		
RADIO REGULATIONS			RR ALLOCATION RELEVANT TO THE REPUBLIC OF HUNGARY	GOVERNMENTAL	CIVIL	COMMON
REGION 1	REGION 2	REGION 3				
13.4-13.75 GHz EARTH EXPLORATION-SATELLITE (active) RADIOLOCATION SPACE RESEARCH S5.501A Standard Frequency and Time Signal-Satellite (Earth-to-space) S5.499 S5.500 S5.501 S5.501B			**13.4-13.75 GHz** EARTH EXPLORATION-SATELLITE (active) RADIOLOCATION RADIONAVIGATION S5.501 SPACE RESEARCH S5.501A Standard Frequency and Time Signal-Satellite (Earth-to-space) S5.501B	**13.4-13.75 GHz** RADIOLOCATION H12 RADIONAVIGATION S5.501 H152	**13.4-13.75 GHz** EARTH EXPLORATION-SATELLITE (active) SPACE RESEARCH S5.501A Standard Frequency and Time Signal-Satellite (Earth-to-space) S5.501B H152	
13.75-14 GHz FIXED-SATELLITE (Earth-to-space) S5.484A RADIOLOCATION Standard Frequency and Time Signal-Satellite (Earth-to-space) Space Research S5.499 S5.500 S5.501 S5.502 S5.503 S5.503A			**13.75-14 GHz** FIXED-SATELLITE (Earth-to-space) S5.484A RADIOLOCATION RADIONAVIGATION S5.501 Standard Frequency and Time Signal-Satellite (Earth-to-space) Space Research S5.502 S5.503 S5.503A	**13.75-14 GHz** RADIOLOCATION H12 RADIONAVIGATION S5.501 S5.502 H152	**13.75-14 GHz** FIXED-SATELLITE (Earth-to-space) S5.484A H180 Standard Frequency and Time Signal-Satellite (Earth-to-space) Space Research S5.502 S5.503 S5.503A H152	
14-14.25 GHz FIXED-SATELLITE (Earth-to-space) S5.484A S5.506 RADIONAVIGATION S5.504 Mobile-Satellite (Earth-to-space) except aeronautical mobile-satellite Space Research S5.505			**14-14.25 GHz** FIXED-SATELLITE (Earth-to-space) S5.484A S5.506 RADIONAVIGATION S5.504 Mobile-Satellite (Earth-to-space) except aeronautical mobile-satellite Space Research	**14-14.25 GHz** RADIONAVIGATION S5.504	**14-14.25 GHz** FIXED-SATELLITE (Earth-to-space) S5.484A S5.506 H179 H180 Mobile-Satellite (Earth-to-space) except aeronautical mobile-satellite H178 Space Research	

INTERNATIONAL ALLOCATION				ALLOCATION IN THE REPUBLIC OF HUNGARY		
RADIO REGULATIONS			RR ALLOCATION RELEVANT TO THE REPUBLIC OF HUNGARY	GOVERNMENTAL	CIVIL	COMMON
REGION 1	REGION 2	REGION 3				
14.25-14.3 GHz FIXED-SATELLITE (Earth-to-space) S5.484A S5.506 RADIONAVIGATION S5.504 Mobile-Satellite (Earth-to-space) except aeronautical mobile-satellite Space Research S5.505 S5.508 S5.509			**14.25-14.3 GHz** FIXED-SATELLITE (Earth-to-space) S5.484A S5.506 RADIONAVIGATION S5.504 Mobile-Satellite (Earth-to-space) except aeronautical mobile-satellite Space Research	**14.25-14.3 GHz** RADIONAVIGATION S5.504	**14.25-14.3 GHz** FIXED-SATELLITE (Earth-to-space) S5.484A S5.506 H179 H180 Mobile-Satellite (Earth-to-space) except aeronautical mobile-satellite Space Research	
14.3-14.4 GHz FIXED FIXED-SATELLITE (Earth-to-space) S5.484A S5.506 MOBILE except aeronautical mobile Mobile-Satellite (Earth-to-space) except aeronautical mobile-satellite Radionavigation-Satellite	**14.3-14.4 GHz** FIXED-SATELLITE (Earth-to-space) S5.484A S5.506 Mobile-Satellite (Earth-to-space) except aeronautical mobile-satellite Radionavigation-Satellite	**14.3-14.4 GHz** FIXED FIXED-SATELLITE (Earth-to-space) S5.484A S5.506 MOBILE except aeronautical mobile Mobile-Satellite (Earth-to-space) except aeronautical mobile-satellite Radionavigation-Satellite	**14.3-14.4 GHz** FIXED FIXED-SATELLITE (Earth-to-space) S5.484A S5.506 MOBILE except aeronautical mobile Mobile-Satellite (Earth-to-space) except aeronautical mobile-satellite Radionavigation-Satellite		**14.3-14.4 GHz** FIXED-SATELLITE (Earth-to-space) S5.484A S5.506 H179 H180 Mobile-Satellite (Earth-to-space) except aeronautical mobile-satellite	
14.4-14.47 GHz FIXED FIXED-SATELLITE (Earth-to-space) S5.484A S5.506 MOBILE except aeronautical mobile Mobile-Satellite (Earth-to-space) except aeronautical mobile-satellite Space Research (space-to-Earth)			**14.4-14.47 GHz** FIXED FIXED-SATELLITE (Earth-to-space) S5.484A S5.506 MOBILE except aeronautical mobile Mobile-Satellite (Earth-to-space) except aeronautical mobile-satellite Space Research (space-to-Earth)		**14.4-14.47 GHz** FIXED-SATELLITE (Earth-to-space) S5.484A S5.506 H179 H180 Mobile-Satellite (Earth-to-space) except aeronautical mobile-satellite Space Research (space-to-Earth)	

INTERNATIONAL ALLOCATION				ALLOCATION IN THE REPUBLIC OF HUNGARY		
RADIO REGULATIONS			RR ALLOCATION RELEVANT TO THE REPUBLIC OF HUNGARY	GOVERNMENTAL	CIVIL	COMMON
REGION 1	REGION 2	REGION 3				
14.47-14.5 GHz FIXED FIXED-SATELLITE (Earth-to-space) S5.484A S5.506 MOBILE except aeronautical mobile Mobile-Satellite (Earth-to-space) except aeronautical mobile-satellite Radio Astronomy S5.149			**14.47-14.5 GHz** FIXED FIXED-SATELLITE (Earth-to-space) S5.484A S5.506 MOBILE except aeronautical mobile Mobile-Satellite (Earth-to-space) except aeronautical mobile-satellite Radio Astronomy S5.149		**14.47-14.5 GHz** FIXED-SATELLITE (Earth-to-space) S5.484A S5.506 H179 H180 Mobile-Satellite (Earth-to-space) except aeronautical mobile-satellite Radio Astronomy S5.149	
14.5-14.8 GHz FIXED FIXED-SATELLITE (Earth-to-space) S5.510 MOBILE Space Research			**14.5-14.8 GHz** FIXED MOBILE Space Research	**14.5-14.774 GHz** H43 H185	**14.5-14.774 GHz** FIXED H184 H185 Space Research	
				14.774-14.809 GHz FIXED MOBILE H43 H185B	**14.774-14.809 GHz** FIXED H185A Space Research	
14.8-15.35 GHz FIXED MOBILE Space Research S5.339			**14.8-15.35 GHz** FIXED MOBILE Space Research S5.339	**14.809-14.923 GHz** FIXED H184 H43	**14.809-14.923 GHz** Space Research	
				14.923-15.194 GHz H43	**14.923-15.194 GHz** FIXED H184 Space Research	
				15.194-15.229 GHz FIXED MOBILE H43 H185B	**15.194-15.229 GHz** FIXED H185A Space Research S5.339	
				15.229-15.35 GHz FIXED H184 H185 H43	**15.229-15.35 GHz** Space Research S5.339 H185	
15.35-15.4 GHz EARTH EXPLORATION-SATELLITE (passive) RADIO ASTRONOMY SPACE RESEARCH (passive) S5.340 S5.511			**15.35-15.4 GHz** EARTH EXPLORATION-SATELLITE (passive) RADIO ASTRONOMY SPACE RESEARCH (passive) S5.340	**15.35-15.4 GHz** S5.340	**15.35-15.4 GHz** EARTH EXPLORATION-SATELLITE (passive) RADIO ASTRONOMY SPACE RESEARCH (passive) S5.340	

INTERNATIONAL ALLOCATION				ALLOCATION IN THE REPUBLIC OF HUNGARY		
RADIO REGULATIONS			RR ALLOCATION RELEVANT TO THE REPUBLIC OF HUNGARY	GOVERNMENTAL	CIVIL	COMMON
REGION 1	REGION 2	REGION 3				
15.4-15.43 GHz AERONAUTICAL RADIONAVIGATION S5.511D			**15.4-15.43 GHz** AERONAUTICAL RADIONAVIGATION S5.511D		**15.4-15.43 GHz** S5.511D	**15.4-15.43 GHz** AERONAUTICAL RADIONAVIGATION
15.43-15.63 GHz FIXED-SATELLITE (space-to-Earth) (Earth-to-space) S5.511A AERONAUTICAL RADIONAVIGATION S5.511C			**15.43-15.63 GHz** FIXED-SATELLITE (space-to-Earth) (Earth-to-space) S5.511A AERONAUTICAL RADIONAVIGATION S5.511C		**15.43-15.63 GHz** FIXED-SATELLITE (space-to-Earth) (Earth-to-space) S5.511A S5.511C	**15.43-15.63 GHz** AERONAUTICAL RADIONAVIGATION S5.511C
15.63-15.7 GHz AERONAUTICAL RADIONAVIGATION S5.511D			**15.63-15.7 GHz** AERONAUTICAL RADIONAVIGATION S5.511D		**15.63-15.7 GHz** S5.511D	**15.63-15.7 GHz** AERONAUTICAL RADIONAVIGATION
15.7-16.6 GHz RADIOLOCATION S5.512 S5.513			**15.7-16.6 GHz** RADIOLOCATION			**15.7-16.6 GHz** RADIOLOCATION H43
16.6-17.1 GHz RADIOLOCATION Space Research (deep space) (Earth-to-space) S5.512 S5.513			**16.6-17.1 GHz** RADIOLOCATION Space Research (deep space) (Earth-to-space)		**16.6-17.1 GHz** Space Research (deep space) (Earth-to-space)	**16.6-17.1 GHz** RADIOLOCATION H186 H43
17.1-17.2 GHz RADIOLOCATION S5.512 S5.513			**17.1-17.2 GHz** RADIOLOCATION		**17.1-17.2 GHz** H187	**17.1-17.2 GHz** RADIOLOCATION H186
17.2-17.3 GHz EARTH EXPLORATION-SATELLITE (active) RADIOLOCATION SPACE RESEARCH (active) S5.512 S5.513 S5.513A			**17.2-17.3 GHz** EARTH EXPLORATION-SATELLITE (active) RADIOLOCATION SPACE RESEARCH (active) S5.513A		**17.2-17.3 GHz** EARTH EXPLORATION-SATELLITE (active) SPACE RESEARCH (active) S5.513A H187	**17.2-17.3 GHz** RADIOLOCATION H186
17.3-17.7 GHz FIXED-SATELLITE (Earth-to-space) S5.516 Radiolocation S5.514	**17.3-17.7 GHz** FIXED-SATELLITE (Earth-to-space) S5.516 BROADCASTING-SATELLITE Radiolocation S5.514 S5.515 S5.517	**17.3-17.7 GHz** FIXED-SATELLITE (Earth-to-space) S5.516 Radiolocation S5.514	**17.3-17.7 GHz** FIXED-SATELLITE (Earth-to-space) S5.516 Radiolocation	**17.3-17.7 GHz** Radiolocation H12	**17.3-17.7 GHz** FIXED-SATELLITE (Earth-to-space) S5.516 H188	

INTERNATIONAL ALLOCATION				ALLOCATION IN THE REPUBLIC OF HUNGARY		
RADIO REGULATIONS			RR ALLOCATION RELEVANT TO THE REPUBLIC OF HUNGARY	GOVERNMENTAL	CIVIL	COMMON
REGION 1	REGION 2	REGION 3				
17.7-18.1 GHz FIXED FIXED-SATELLITE (space-to-Earth) S5.484A (Earth-to-space) S5.516 MOBILE	**17.7-17.8 GHz** FIXED FIXED-SATELLITE (space-to-Earth) (Earth-to-space) S5.516 BROADCASTING-SATELLITE Mobile S5.518 S5.515 S5.517	**17.7-18.1 GHz** FIXED FIXED-SATELLITE (space-to-Earth) S5.484A (Earth-to-space) S5.516 MOBILE	**17.7-18.1 GHz** FIXED FIXED-SATELLITE (space-to-Earth) S5.484A (Earth-to-space) S5.516 MOBILE	**17.7-18.1 GHz** FIXED H189	**17.7-18.1 GHz** FIXED H189 FIXED-SATELLITE (space-to-Earth) S5.484A H189A (Earth-to-space) S5.516	
	17.8-18.1 GHz FIXED FIXED-SATELLITE (space-to-Earth) S5.484A (Earth-to-space) S5.516 MOBILE					
18.1-18.4 GHz	FIXED FIXED-SATELLITE (space-to-Earth) S5.484A (Earth-to-space) S5.520 MOBILE S5.519 S5.521		**18.1-18.3 GHz** FIXED FIXED-SATELLITE (space-to-Earth) S5.484A (Earth-to-space) S5.520 METEOROLOGICAL-SATELLITE (space-to-Earth) S5.519 MOBILE	**18.1-18.3 GHz** FIXED H189	**18.1-18.3 GHz** FIXED H189 FIXED-SATELLITE (space-to-Earth) S5.484A H189A (Earth-to-space) S5.520 METEOROLOGICAL-SATELLITE (space-to-Earth) S5.519	
			18.3-18.4 GHz FIXED FIXED-SATELLITE (space-to-Earth) S5.484A (Earth-to-space) S5.520 MOBILE	**18.3-18.4 GHz** FIXED H189	**18.3-18.4 GHz** FIXED H189 FIXED-SATELLITE (space-to-Earth) S5.484A H189A (Earth-to-space) S5.520	
18.4-18.6 GHz	FIXED FIXED-SATELLITE (space-to-Earth) S5.484A MOBILE		**18.4-18.6 GHz** FIXED FIXED-SATELLITE (space-to-Earth) S5.484A MOBILE	**18.4-18.6 GHz** FIXED H189	**18.4-18.6 GHz** FIXED H189 FIXED-SATELLITE (space-to-Earth) S5.484A H189A	

INTERNATIONAL ALLOCATION				ALLOCATION IN THE REPUBLIC OF HUNGARY		
RADIO REGULATIONS			RR ALLOCATION RELEVANT TO THE REPUBLIC OF HUNGARY	GOVERNMENTAL	CIVIL	COMMON
REGION 1	REGION 2	REGION 3				
18.6-18.8 GHz FIXED FIXED-SATELLITE (space-to-Earth) S5.523 MOBILE except aeronautical mobile Earth Exploration-Satellite (passive) Space Research (passive) S5.522	**18.6-18.8 GHz** EARTH EXPLORATION-SATELLITE (passive) FIXED FIXED-SATELLITE (space-to-Earth) S5.523 MOBILE except aeronautical mobile SPACE RESEARCH (passive) S5.522	**18.6-18.8 GHz** FIXED FIXED-SATELLITE (space-to-Earth) S5.523 MOBILE except aeronautical mobile Earth Exploration-Satellite (passive) Space Research (passive) S5.522	**18.6-18.8 GHz** FIXED FIXED-SATELLITE (space-to-Earth) S5.523 MOBILE except aeronautical mobile Earth Exploration-Satellite (passive) Space Research (passive) S5.522	**18.6-18.8 GHz** FIXED H189	**18.6-18.8 GHz** FIXED H189 FIXED-SATELLITE (space-to-Earth) S5.523 Earth Exploration-Satellite (passive) Space Research (passive) S5.522	
18.8-19.3 GHz	FIXED FIXED-SATELLITE (space-to-Earth) S5.523A MOBILE		**18.8-19.3 GHz** FIXED FIXED-SATELLITE (space-to-Earth) S5.523A MOBILE	**18.8-19.3 GHz** FIXED H189	**18.8-19.3 GHz** FIXED H189 FIXED-SATELLITE (space-to-Earth) S5.523A H189B	
19.3-19.7 GHz	FIXED FIXED-SATELLITE (space-to-Earth) (Earth-to-space) S5.523B S5.523C S5.523D S5.523E MOBILE		**19.3-19.7 GHz** FIXED FIXED-SATELLITE (space-to-Earth) (Earth-to-space) S5.523B S5.523C S5.523D S5.523E MOBILE	**19.3-19.7 GHz** FIXED H189	**19.3-19.7 GHz** FIXED H189 FIXED-SATELLITE (space-to-Earth) (Earth-to-space) S5.523B S5.523C S5.523D S5.523E	
19.7-20.1 GHz FIXED-SATELLITE (space-to-Earth) S5.484A Mobile-Satellite (space-to-Earth) S5.524	**19.7-20.1 GHz** FIXED-SATELLITE (space-to-Earth) S5.484A MOBILE-SATELLITE (space-to-Earth) S5.524 S5.525 S5.526 S5.527 S5.528 S5.529	**19.7-20.1 GHz** FIXED-SATELLITE (space-to-Earth) S5.484A Mobile-Satellite (space-to-Earth) S5.524	**19.7-20.1 GHz** FIXED-SATELLITE (space-to-Earth) S5.484A Mobile-Satellite (space-to-Earth)		**19.7-20.1 GHz** FIXED-SATELLITE (space-to-Earth) S5.484A Mobile-Satellite (space-to-Earth)	
20.1-20.2 GHz	FIXED-SATELLITE (space-to-Earth) S5.484A MOBILE-SATELLITE (space-to-Earth) S5.524 S5.525 S5.526 S5.527 S5.528		**20.1-20.2 GHz** FIXED-SATELLITE (space-to-Earth) S5.484A MOBILE-SATELLITE (space-to-Earth) S5.525 S5.526 S5.527 S5.528		**20.1-20.2 GHz** FIXED-SATELLITE (space-to-Earth) S5.484A MOBILE-SATELLITE (space-to-Earth) S5.525 S5.526 S5.527 S5.528	

INTERNATIONAL ALLOCATION				ALLOCATION IN THE REPUBLIC OF HUNGARY		
RADIO REGULATIONS			RR ALLOCATION RELEVANT TO THE REPUBLIC OF HUNGARY	GOVERNMENTAL	CIVIL	COMMON
REGION 1	REGION 2	REGION 3				
20.2-21.2 GHz S5.524	FIXED-SATELLITE (space-to-Earth) MOBILE-SATELLITE (space-to-Earth) Standard Frequency and Time Signal-Satellite (space-to-Earth)		**20.2-21.2 GHz** FIXED-SATELLITE (space-to-Earth) MOBILE-SATELLITE (space-to-Earth) Standard Frequency and Time Signal-Satellite (space-to-Earth)	**20.2-21.2 GHz** FIXED-SATELLITE (space-to-Earth) MOBILE-SATELLITE (space-to-Earth) H43	**20.2-21.2 GHz** Standard Frequency and Time Signal-Satellite (space-to-Earth)	
21.2-21.4 GHz	EARTH EXPLORATION-SATELLITE (passive) FIXED MOBILE SPACE RESEARCH (passive)		**21.2-21.4 GHz** EARTH EXPLORATION-SATELLITE (passive) FIXED MOBILE SPACE RESEARCH (passive)		**21.2-21.4 GHz** EARTH EXPLORATION-SATELLITE (passive) FIXED H190 MOBILE H190 SPACE RESEARCH (passive)	
21.4-22 GHz FIXED MOBILE BROADCASTING-SATELLITE S5.530	**21.4-22 GHz** FIXED MOBILE	**21.4-22 GHz** FIXED MOBILE BROADCASTING-SATELLITE S5.530 S5.531	**21.4-22 GHz** FIXED MOBILE BROADCASTING-SATELLITE S5.530		**21.4-22 GHz** FIXED H191 BROADCASTING-SATELLITE S5.530	
22-22.21 GHz S5.149	FIXED MOBILE except aeronautical mobile		**22-22.21 GHz** FIXED MOBILE except aeronautical mobile S5.149		**22-22.21 GHz** FIXED H192 S5.149	
22.21-22.5 GHz S5.149 S5.532	EARTH EXPLORATION-SATELLITE (passive) FIXED MOBILE except aeronautical mobile RADIO ASTRONOMY SPACE RESEARCH (passive)		**22.21-22.5 GHz** EARTH EXPLORATION-SATELLITE (passive) FIXED MOBILE except aeronautical mobile RADIO ASTRONOMY SPACE RESEARCH (passive) S5.149 S5.532	 S5.149	**22.21-22.442 GHz** EARTH EXPLORATION-SATELLITE (passive) FIXED H192 RADIO ASTRONOMY SPACE RESEARCH (passive) S5.149 S5.532 **22.442-22.5 GHz** EARTH EXPLORATION-SATELLITE (passive) RADIO ASTRONOMY SPACE RESEARCH (passive) S5.149 S5.532	

INTERNATIONAL ALLOCATION				ALLOCATION IN THE REPUBLIC OF HUNGARY		
RADIO REGULATIONS			RR ALLOCATION RELEVANT TO THE REPUBLIC OF HUNGARY	GOVERNMENTAL	CIVIL	COMMON
REGION 1	REGION 2	REGION 3				
22.5-22.55 GHz FIXED MOBILE			**22.5-22.55 GHz** FIXED MOBILE	**22.5-22.55 GHz** FIXED H192		
22.55-23.55 GHz FIXED INTER-SATELLITE MOBILE S5.149			**22.55-23.55 GHz** FIXED INTER-SATELLITE MOBILE S5.149	**22.55-22.6 GHz** FIXED H192		
					22.6-23 GHz FIXED H190 MOBILE H190 S5.149	
					23-23.45 GHz FIXED H192 S5.149	
				23.45-23.55 GHz FIXED H192		
23.55-23.6 GHz FIXED MOBILE			**23.55-23.6 GHz** FIXED MOBILE	**23.55-23.6 GHz** FIXED H192		
23.6-24 GHz EARTH EXPLORATION-SATELLITE (passive) RADIO ASTRONOMY SPACE RESEARCH (passive) S5.340			**23.6-24 GHz** EARTH EXPLORATION-SATELLITE (passive) RADIO ASTRONOMY SPACE RESEARCH (passive) S5.340	**23.6-24 GHz** S5.340	**23.6-24 GHz** EARTH EXPLORATION-SATELLITE (passive) RADIO ASTRONOMY SPACE RESEARCH (passive) S5.340	
24-24.05 GHz AMATEUR AMATEUR-SATELLITE S5.150			**24-24.05 GHz** AMATEUR AMATEUR-SATELLITE S5.150	**24-24.05 GHz** H31 H151	**24-24.05 GHz** AMATEUR AMATEUR-SATELLITE H31 H151	**24-24.05 GHz** S5.150 H30
24.05-24.25 GHz RADIOLOCATION Amateur Earth Exploration-Satellite (active) S5.150			**24.05-24.25 GHz** RADIOLOCATION Amateur Earth Exploration-Satellite (active) S5.150	**24.05-24.25 GHz** H31 H151 H152	**24.05-24.25 GHz** Amateur Earth Exploration-Satellite (active) H31 H151 H152	**24.05-24.25 GHz** RADIOLOCATION H12 S5.150 H30
24.25-24.45 GHz FIXED	**24.25-24.45 GHz** RADIONAVIGATION	**24.25-24.45 GHz** RADIONAVIGATION FIXED MOBILE	**24.25-24.45 GHz** FIXED		**24.25-24.45 GHz** FIXED H193	

INTERNATIONAL ALLOCATION				ALLOCATION IN THE REPUBLIC OF HUNGARY		
RADIO REGULATIONS			RR ALLOCATION RELEVANT TO THE REPUBLIC OF HUNGARY	GOVERNMENTAL	CIVIL	COMMON
REGION 1	REGION 2	REGION 3				
24.45-24.65 GHz FIXED INTER-SATELLITE	**24.45-24.65 GHz** INTER-SATELLITE RADIONAVIGATION S5.533	**24.45-24.65 GHz** FIXED INTER-SATELLITE MOBILE RADIONAVIGATION S5.533	**24.45-24.65 GHz** FIXED INTER-SATELLITE		**24.45-24.65 GHz** FIXED H193 H194	
24.65-24.75 GHz FIXED INTER-SATELLITE	**24.65-24.75 GHz** INTER-SATELLITE RADIOLOCATION-SATELLITE (Earth-to-space)	**24.65-24.75 GHz** FIXED INTER-SATELLITE MOBILE S5.533 S5.534	**24.65-24.75 GHz** FIXED INTER-SATELLITE		**24.65-24.75 GHz** FIXED H194	
24.75-25.25 GHz FIXED	**24.75-25.25 GHz** FIXED-SATELLITE (Earth-to-space) S5.535	**24.75-25.25 GHz** FIXED FIXED-SATELLITE (Earth-to-space) S5.535 MOBILE S5.534	**24.75-25.25 GHz** FIXED		**24.75-25.25 GHz** FIXED H194	
25.25-25.5 GHz	FIXED INTER-SATELLITE S5.536 MOBILE Standard Frequency and Time Signal-Satellite (Earth-to-space)		**25.25-25.5 GHz** FIXED INTER-SATELLITE S5.536 MOBILE Standard Frequency and Time Signal-Satellite (Earth-to-space)		**25.25-25.5 GHz** FIXED H194 Standard Frequency and Time Signal-Satellite (Earth-to-space)	
25.5-27 GHz	EARTH EXPLORATION-SATELLITE (space-to-Earth) S5.536A S5.536B FIXED INTER-SATELLITE S5.536 MOBILE Standard Frequency and Time Signal-Satellite (Earth-to-space)		**25.5-27 GHz** EARTH EXPLORATION-SATELLITE (space-to-Earth) S5.536A S5.536B FIXED INTER-SATELLITE S5.536 MOBILE Standard Frequency and Time Signal-Satellite (Earth-to-space)		**25.5-26.5 GHz** EARTH EXPLORATION-SATELLITE (space-to-Earth) S5.536A S5.536B FIXED H194 Standard Frequency and Time Signal-Satellite (Earth-to-space)	
				26.5-27 GHz FIXED MOBILE H195	**26.5-27 GHz** EARTH EXPLORATION-SATELLITE (space-to-Earth) S5.536A S5.536B Standard Frequency and Time Signal-Satellite (Earth-to-space)	

INTERNATIONAL ALLOCATION				ALLOCATION IN THE REPUBLIC OF HUNGARY		
RADIO REGULATIONS			RR ALLOCATION RELEVANT TO THE REPUBLIC OF HUNGARY	GOVERNMENTAL	CIVIL	COMMON
REGION 1	REGION 2	REGION 3				
27-27.5 GHz FIXED INTER-SATELLITE S5.536 MOBILE	**27-27.5 GHz** FIXED FIXED-SATELLITE (Earth-to-space) INTER-SATELLITE S5.536 S5.537 MOBILE		**27-27.5 GHz** FIXED INTER-SATELLITE S5.536 MOBILE	**27-27.5 GHz** FIXED MOBILE H195		
27.5-28.5 GHz S5.538 S5.540	FIXED FIXED-SATELLITE (Earth-to-space) S5.484A S5.539 MOBILE S5.538 S5.540		**27.5-28.5 GHz** FIXED FIXED-SATELLITE (Earth-to-space) S5.484A S5.539 MOBILE S5.538 S5.540		**27.5-28.5 GHz** FIXED-SATELLITE (Earth-to-space) S5.484A S5.539 H189A S5.538 S5.540	
28.5-29.1 GHz S5.540	FIXED FIXED-SATELLITE (Earth-to-space) S5.484A S5.523A S5.539 MOBILE Earth Exploration-Satellite (Earth-to-space) S5.541 S5.540		**28.5-29.1 GHz** FIXED FIXED-SATELLITE (Earth-to-space) S5.484A S5.523A S5.539 MOBILE Earth Exploration-Satellite (Earth-to-space) S5.541 S5.540		**28.5-29.1 GHz** FIXED-SATELLITE (Earth-to-space) S5.484A S5.523A S5.539 H189B Earth Exploration-Satellite (Earth-to-space) S5.541 S5.540	
29.1-29.5 GHz S5.540	FIXED FIXED-SATELLITE (Earth-to-space) S5.523C S5.523E S5.535A S5.539 S5.541A MOBILE Earth Exploration-Satellite (Earth-to-space) S5.541 S5.540		**29.1-29.5 GHz** FIXED FIXED-SATELLITE (Earth-to-space) S5.523C S5.523E S5.535A S5.539 S5.541A MOBILE Earth Exploration-Satellite (Earth-to-space) S5.541 S5.540		**29.1-29.5 GHz** FIXED-SATELLITE (Earth-to-space) S5.523C S5.523E S5.535A S5.539 S5.541A Earth Exploration-Satellite (Earth-to-space) S5.541 S5.540	

INTERNATIONAL ALLOCATION				ALLOCATION IN THE REPUBLIC OF HUNGARY		
RADIO REGULATIONS			RR ALLOCATION RELEVANT TO THE REPUBLIC OF HUNGARY	GOVERNMENTAL	CIVIL	COMMON
REGION 1	REGION 2	REGION 3				
29.5-29.9 GHz FIXED-SATELLITE (Earth-to-space) S5.484A S5.539 Earth Exploration-Satellite (Earth-to-space) S5.541 Mobile-Satellite (Earth-to-space) S5.540 S5.542	**29.5-29.9 GHz** FIXED-SATELLITE (Earth-to-space) S5.484A S5.539 MOBILE-SATELLITE (Earth-to-space) Earth Exploration-Satellite (Earth-to-space) S5.541 S5.525 S5.526 S5.527 S5.529 S5.540 S5.542	**29.5-29.9 GHz** FIXED-SATELLITE (Earth-to-space) S5.484A S5.539 Earth Exploration-Satellite (Earth-to-space) S5.541 Mobile-Satellite (Earth-to-space) S5.540 S5.542	**29.5-29.9 GHz** FIXED-SATELLITE (Earth-to-space) S5.484A S5.539 Earth Exploration-Satellite (Earth-to-space) S5.541 Mobile-Satellite (Earth-to-space) S5.540		**29.5-29.9 GHz** FIXED-SATELLITE (Earth-to-space) S5.484A S5.539 Earth Exploration-Satellite (Earth-to-space) S5.541 Mobile-Satellite (Earth-to-space) S5.540	
29.9-30 GHz S5.525 S5.526 S5.527 S5.538 S5.540 S5.542	FIXED-SATELLITE (Earth-to-space) S5.484A S5.539 MOBILE-SATELLITE (Earth-to-space) Earth Exploration-Satellite (Earth-to-space) S5.541 S5.543		**29.9-30 GHz** FIXED-SATELLITE (Earth-to-space) S5.484A S5.539 MOBILE-SATELLITE (Earth-to-space) Earth Exploration-Satellite (Earth-to-space) S5.541 S5.543 S5.525 S5.526 S5.527 S5.538 S5.540		**29.9-30 GHz** FIXED-SATELLITE (Earth-to-space) S5.484A S5.539 MOBILE-SATELLITE (Earth-to-space) Earth Exploration-Satellite (Earth-to-space) S5.541 S5.543 S5.525 S5.526 S5.527 S5.538 S5.540	
30-31 GHz S5.542	FIXED-SATELLITE (Earth-to-space) MOBILE-SATELLITE (Earth-to-space) Standard Frequency and Time Signal-Satellite (space-to-Earth)		**30-31 GHz** FIXED-SATELLITE (Earth-to-space) MOBILE-SATELLITE (Earth-to-space) Standard Frequency and Time Signal-Satellite (space-to-Earth)		**30-31 GHz** Standard Frequency and Time Signal-Satellite (space-to-Earth)	**30-31 GHz** FIXED-SATELLITE (Earth-to-space) MOBILE-SATELLITE (Earth-to-space) H195
31-31.3 GHz S5.149	FIXED MOBILE Standard Frequency and Time Signal-Satellite (space-to-Earth) Space Research S5.544 S5.545		**31-31.3 GHz** FIXED MOBILE Standard Frequency and Time Signal-Satellite (space-to-Earth) Space Research S5.544 S5.149		**31-31.3 GHz** Standard Frequency and Time Signal-Satellite (space-to-Earth) Space Research S5.544 S5.149	**31-31.3 GHz** FIXED MOBILE S5.149 H139

INTERNATIONAL ALLOCATION				ALLOCATION IN THE REPUBLIC OF HUNGARY		
RADIO REGULATIONS			RR ALLOCATION RELEVANT TO THE REPUBLIC OF HUNGARY	GOVERNMENTAL	CIVIL	COMMON
REGION 1	REGION 2	REGION 3				
31.3-31.5 GHz EARTH EXPLORATION-SATELLITE (passive) RADIO ASTRONOMY SPACE RESEARCH (passive) S5.340			**31.3-31.5 GHz** EARTH EXPLORATION-SATELLITE (passive) RADIO ASTRONOMY SPACE RESEARCH (passive) S5.340	**31.3-31.5 GHz** S5.340	**31.3-31.5 GHz** EARTH EXPLORATION-SATELLITE (passive) RADIO ASTRONOMY SPACE RESEARCH (passive) S5.340	
31.5-31.8 GHz EARTH EXPLORATION-SATELLITE (passive) RADIO ASTRONOMY SPACE RESEARCH (passive) Fixed Mobile except aeronautical mobile S5.149 S5.546	**31.5-31.8 GHz** EARTH EXPLORATION-SATELLITE (passive) RADIO ASTRONOMY SPACE RESEARCH (passive) S5.340	**31.5-31.8 GHz** EARTH EXPLORATION-SATELLITE (passive) RADIO ASTRONOMY SPACE RESEARCH (passive) Fixed Mobile except aeronautical mobile S5.149	**31.5-31.8 GHz** EARTH EXPLORATION-SATELLITE (passive) FIXED S5.546 MOBILE except aeronautical mobile S5.546 RADIO ASTRONOMY SPACE RESEARCH (passive) S5.149	**31.5-31.8 GHz** S5.149	**31.5-31.8 GHz** EARTH EXPLORATION-SATELLITE (passive) FIXED S5.546 H139 RADIO ASTRONOMY SPACE RESEARCH (passive) S5.149	
31.8-32 GHz FIXED S5.547A RADIONAVIGATION SPACE RESEARCH (deep space) (space-to-Earth) S5.547 S5.547B S5.548			**31.8-32 GHz** FIXED S5.547A RADIONAVIGATION SPACE RESEARCH (deep space) (space-to-Earth) S5.547 S5.548		**31.8-32 GHz** FIXED S5.547 S5.547A H195A SPACE RESEARCH (deep space) (space-to-Earth) S5.548	**31.8-32 GHz** RADIONAVIGATION
32-32.3 GHz FIXED S5.547A INTER-SATELLITE RADIONAVIGATION SPACE RESEARCH (deep space) (space-to-Earth) S5.547 S5.547C S5.548			**32-32.3 GHz** FIXED S5.547A INTER-SATELLITE RADIONAVIGATION SPACE RESEARCH (deep space) (space-to-Earth) S5.547 S5.548		**32-32.3 GHz** FIXED S5.547 S5.547A H195A INTER-SATELLITE SPACE RESEARCH (deep space) (space-to-Earth) S5.548	**32-32.3 GHz** RADIONAVIGATION S5.548
32.3-33 GHz FIXED S5.547A INTER-SATELLITE RADIONAVIGATION S5.547 S5.547D S5.548			**32.3-33 GHz** FIXED S5.547A INTER-SATELLITE RADIONAVIGATION S5.547 S5.548		**32.3-33 GHz** FIXED S5.547 S5.547A H195A INTER-SATELLITE S5.548	**32.3-33 GHz** RADIONAVIGATION S5.548
33-33.4 GHz FIXED S5.547A RADIONAVIGATION S5.547 S5.547E			**33-33.4 GHz** FIXED S5.547A RADIONAVIGATION S5.547		**33-33.4 GHz** FIXED S5.547 S5.547A H195A	**33-33.4 GHz** RADIONAVIGATION

INTERNATIONAL ALLOCATION				ALLOCATION IN THE REPUBLIC OF HUNGARY		
RADIO REGULATIONS			RR ALLOCATION RELEVANT TO THE REPUBLIC OF HUNGARY	GOVERNMENTAL	CIVIL	COMMON
REGION 1	REGION 2	REGION 3				
33.4-34.2 GHz	RADIOLOCATION S5.549		**33.4-34.2 GHz** RADIOLOCATION	**33.4-34.2 GHz** RADIOLOCATION H43		
34.2-34.7 GHz	RADIOLOCATION SPACE RESEARCH (deep space) (Earth-to-space) S5.549		**34.2-34.7 GHz** RADIOLOCATION SPACE RESEARCH (deep space) (Earth-to-space)	**34.2-34.7 GHz** RADIOLOCATION H43	**34.2-34.7 GHz** SPACE RESEARCH (deep space) (Earth-to-space)	
34.7-35.2 GHz	RADIOLOCATION Space Research S5.550 S5.549		**34.7-35.2 GHz** RADIOLOCATION Space Research	**34.7-35.2 GHz** RADIOLOCATION H43	**34.7-35.2 GHz** Space Research	
35.2-35.5 GHz	METEOROLOGICAL AIDS RADIOLOCATION S5.549		**35.2-35.5 GHz** METEOROLOGICAL AIDS RADIOLOCATION	**35.2-35.5 GHz** RADIOLOCATION H43		**35.2-35.5 GHz** METEOROLOGICAL AIDS
35.5-36 GHz	METEOROLOGICAL AIDS EARTH EXPLORATION-SATELLITE (active) RADIOLOCATION SPACE RESEARCH (active) S5.549 S5.551A		**35.5-36 GHz** METEOROLOGICAL AIDS EARTH EXPLORATION-SATELLITE (active) RADIOLOCATION SPACE RESEARCH (active) S5.551A	**35.5-36 GHz** RADIOLOCATION H43	**35.5-36 GHz** EARTH EXPLORATION-SATELLITE (active) SPACE RESEARCH (active) S5.551A	**35.5-36 GHz** METEOROLOGICAL AIDS
36-37 GHz	EARTH EXPLORATION-SATELLITE (passive) FIXED MOBILE SPACE RESEARCH (passive) S5.149		**36-37 GHz** EARTH EXPLORATION-SATELLITE (passive) FIXED MOBILE SPACE RESEARCH (passive) S5.149	**36-37 GHz** FIXED MOBILE S5.149 H43	**36-37 GHz** EARTH EXPLORATION-SATELLITE (passive) SPACE RESEARCH (passive) S5.149	
37-37.5 GHz	FIXED MOBILE SPACE RESEARCH (space-to-Earth)		**37-37.5 GHz** FIXED MOBILE SPACE RESEARCH (space-to-Earth)	**37-37.5 GHz** H197	**37-37.5 GHz** FIXED H196 SPACE RESEARCH (space-to-Earth)	
37.5-38 GHz	FIXED FIXED-SATELLITE (space-to-Earth) MOBILE SPACE RESEARCH (space-to-Earth) Earth Exploration-Satellite (space-to-Earth)		**37.5-38 GHz** FIXED FIXED-SATELLITE (space-to-Earth) MOBILE SPACE RESEARCH (space-to-Earth)	**37.5-37.926 GHz** H197	**37.5-37.926 GHz** FIXED H196 SPACE RESEARCH (space-to-Earth) Earth Exploration-Satellite (space-to-Earth)	

INTERNATIONAL ALLOCATION				ALLOCATION IN THE REPUBLIC OF HUNGARY		
RADIO REGULATIONS			RR ALLOCATION RELEVANT TO THE REPUBLIC OF HUNGARY	GOVERNMENTAL	CIVIL	COMMON
REGION 1	REGION 2	REGION 3				
			Earth Exploration-Satellite (space-to-Earth)	**37.926-38 GHz** FIXED H196 H197	**37.926-38 GHz** SPACE RESEARCH (space-to-Earth) Earth Exploration-Satellite (space-to-Earth)	
38-39.5 GHz	FIXED FIXED-SATELLITE (space-to-Earth) MOBILE Earth Exploration-Satellite (space-to-Earth)		**38-39.5 GHz** FIXED FIXED-SATELLITE (space-to-Earth) MOBILE Earth Exploration-Satellite (space-to-Earth)	**38-38.178 GHz** FIXED H196 H197	**38-38.178 GHz** Earth Exploration-Satellite (space-to-Earth)	
				38.178-39.186 GHz H197	**38.178-39.186 GHz** FIXED H196 Earth Exploration-Satellite (space-to-Earth)	
				39.186-39.5 GHz FIXED H196 H197	**39.186-39.5 GHz** Earth Exploration-Satellite (space-to-Earth)	
39.5-40 GHz	FIXED FIXED-SATELLITE (space-to-Earth) MOBILE MOBILE-SATELLITE (space-to-Earth) Earth Exploration-Satellite (space-to-Earth)		**39.5-40 GHz** FIXED FIXED-SATELLITE (space-to-Earth) MOBILE MOBILE-SATELLITE (space-to-Earth) Earth Exploration-Satellite (space-to-Earth)	**39.5-40 GHz** FIXED-SATELLITE (space-to-Earth) H39	**39.5-40 GHz** Earth Exploration-Satellite (space-to-Earth)	**39.5-40 GHz** FIXED MOBILE H198
40-40.5 GHz	EARTH EXPLORATION-SATELLITE (Earth-to-space) FIXED FIXED-SATELLITE (space-to-Earth) MOBILE MOBILE-SATELLITE (space-to-Earth) SPACE RESEARCH (Earth-to-space) Earth Exploration-Satellite (space-to-Earth)		**40-40.5 GHz** EARTH EXPLORATION-SATELLITE (Earth-to-space) FIXED FIXED-SATELLITE (space-to-Earth) MOBILE MOBILE-SATELLITE (space-to-Earth) SPACE RESEARCH (Earth-to-space) Earth Exploration-Satellite (space-to-Earth)	**40-40.5 GHz** FIXED-SATELLITE (space-to-Earth) H39	**40-40.5 GHz** EARTH EXPLORATION-SATELLITE (Earth-to-space) SPACE RESEARCH (Earth-to-space) Earth Exploration-Satellite (space-to-Earth)	**40-40.5 GHz** FIXED MOBILE H198

INTERNATIONAL ALLOCATION			RR ALLOCATION RELEVANT TO THE REPUBLIC OF HUNGARY	ALLOCATION IN THE REPUBLIC OF HUNGARY		
RADIO REGULATIONS				GOVERNMENTAL	CIVIL	COMMON
REGION 1	REGION 2	REGION 3				
40.5-42.5 GHz FIXED BROADCASTING BROADCASTING-SATELLITE Mobile S5.551B S5.551D	**40.5-42.5 GHz** FIXED FIXED-SATELLITE (space-to-Earth) S5.551B S5.551E BROADCASTING BROADCASTING-SATELLITE Mobile S5.551C S5.551F		**40.5-42.5 GHz** FIXED BROADCASTING BROADCASTING-SATELLITE Mobile		**40.5-42.5 GHz** FIXED H199	
42.5-43.5 GHz	FIXED FIXED-SATELLITE (Earth-to-space) S5.552 MOBILE except aeronautical mobile RADIO ASTRONOMY S5.149		**42.5-43.5 GHz** FIXED FIXED-SATELLITE (Earth-to-space) S5.552 MOBILE except aeronautical mobile RADIO ASTRONOMY S5.149		**42.5-43.5 GHz** FIXED H199 RADIO ASTRONOMY S5.149	
43.5-47 GHz	MOBILE S5.553 MOBILE-SATELLITE RADIONAVIGATION RADIONAVIGATION-SATELLITE S5.554		**43.5-47 GHz** MOBILE S5.553 MOBILE-SATELLITE RADIONAVIGATION RADIONAVIGATION-SATELLITE S5.554	**43.5-45.5 GHz** MOBILE S5.553 MOBILE-SATELLITE S5.554 H43		
						45.5-47 GHz MOBILE S5.553 MOBILE-SATELLITE RADIONAVIGATION RADIONAVIGATION-SATELLITE S5.554
47-47.2 GHz	AMATEUR AMATEUR-SATELLITE		**47-47.2 GHz** AMATEUR AMATEUR-SATELLITE		**47-47.2 GHz** AMATEUR AMATEUR-SATELLITE	
47.2-50.2 GHz	FIXED FIXED-SATELLITE (Earth-to-space) S5.552 MOBILE S5.149 S5.340 S5.552A S5.555		**47.2-50.2 GHz** FIXED FIXED-SATELLITE (Earth-to-space) S5.552 MOBILE S5.149 S5.340 S5.552A S5.555		**47.2-48.5 GHz** FIXED S5.552A H199A	**47.2-48.5 GHz** FIXED-SATELLITE (Earth-to-space) S5.552
					48.5-50.2 GHz S5.555	**48.5-50.2 GHz** FIXED H199B FIXED-SATELLITE (Earth-to-space) S5.552 S5.149 S5.340

INTERNATIONAL ALLOCATION				ALLOCATION IN THE REPUBLIC OF HUNGARY		
RADIO REGULATIONS			RR ALLOCATION RELEVANT TO THE REPUBLIC OF HUNGARY	GOVERNMENTAL	CIVIL	COMMON
REGION 1	REGION 2	REGION 3				
50.2-50.4 GHz EARTH EXPLORATION-SATELLITE (passive) SPACE RESEARCH (passive) S5.340 S5.555A			**50.2-50.4 GHz** EARTH EXPLORATION-SATELLITE (passive) SPACE RESEARCH (passive) S5.340 S5.555A	**50.2-50.4 GHz** S5.340	**50.2-50.4 GHz** EARTH EXPLORATION-SATELLITE (passive) SPACE RESEARCH (passive) S5.340	
50.4-51.4 GHz FIXED FIXED-SATELLITE (Earth-to-space) MOBILE Mobile-Satellite (Earth-to-space)			**50.4-51.4 GHz** FIXED FIXED-SATELLITE (Earth-to-space) MOBILE Mobile-Satellite (Earth-to-space)			**50.4-51.4 GHz** FIXED FIXED-SATELLITE (Earth-to-space) H39 MOBILE Mobile-Satellite (Earth-to-space) H39 H139
51.4-52.6 GHz FIXED MOBILE S5.547 S5.556			**51.4-52.6 GHz** FIXED MOBILE S5.547 S5.556		**51.4-52.6 GHz** FIXED S5.547 H195A S5.556	
52.6-54.25 GHz EARTH EXPLORATION-SATELLITE (passive) SPACE RESEARCH (passive) S5.340 S5.556			**52.6-54.25 GHz** EARTH EXPLORATION-SATELLITE (passive) SPACE RESEARCH (passive) S5.340 S5.556	**52.6-54.25 GHz** S5.340	**52.6-54.25 GHz** EARTH EXPLORATION-SATELLITE (passive) SPACE RESEARCH (passive) S5.340 S5.556	
54.25-55.78 GHz EARTH EXPLORATION-SATELLITE (passive) INTER-SATELLITE S5.556A SPACE RESEARCH (passive) S5.556B			**54.25-55.78 GHz** EARTH EXPLORATION-SATELLITE (passive) INTER-SATELLITE S5.556A SPACE RESEARCH (passive)		**54.25-55.78 GHz** EARTH EXPLORATION-SATELLITE (passive) INTER-SATELLITE S5.556A SPACE RESEARCH (passive)	
55.78-56.9 GHz EARTH EXPLORATION-SATELLITE (passive) FIXED INTER-SATELLITE S5.556A MOBILE S5.558 SPACE RESEARCH (passive) S5.547 S5.557			**55.78-56.9 GHz** EARTH EXPLORATION-SATELLITE (passive) FIXED INTER-SATELLITE S5.556A MOBILE S5.558 SPACE RESEARCH (passive) S5.547		**55.78-56.9 GHz** EARTH EXPLORATION-SATELLITE (passive) FIXED S5.547 H195A INTER-SATELLITE S5.556A SPACE RESEARCH (passive)	

INTERNATIONAL ALLOCATION				ALLOCATION IN THE REPUBLIC OF HUNGARY		
RADIO REGULATIONS			RR ALLOCATION RELEVANT TO THE REPUBLIC OF HUNGARY	GOVERNMENTAL	CIVIL	COMMON
REGION 1	REGION 2	REGION 3				
56.9-57 GHz EARTH EXPLORATION-SATELLITE (passive) FIXED INTER-SATELLITE S5.558A MOBILE S5.558 SPACE RESEARCH (passive) S5.547 S5.557			**56.9-57 GHz** EARTH EXPLORATION-SATELLITE (passive) FIXED INTER-SATELLITE S5.558A MOBILE S5.558 SPACE RESEARCH (passive) S5.547		**56.9-57 GHz** EARTH EXPLORATION-SATELLITE (passive) FIXED S5.547 H195A INTER-SATELLITE S5.558A SPACE RESEARCH (passive)	
57-58.2 GHz EARTH EXPLORATION-SATELLITE (passive) FIXED INTER-SATELLITE S5.556A MOBILE S5.558 SPACE RESEARCH (passive) S5.547 S5.557			**57-58.2 GHz** EARTH EXPLORATION-SATELLITE (passive) FIXED INTER-SATELLITE S5.556A MOBILE S5.558 SPACE RESEARCH (passive) S5.547	**57-58.2 GHz** FIXED S5.547 H199C	**57-58.2 GHz** EARTH EXPLORATION-SATELLITE (passive) FIXED S5.547 H199C INTER-SATELLITE S5.556A SPACE RESEARCH (passive)	
58.2-59 GHz EARTH EXPLORATION-SATELLITE (passive) FIXED MOBILE SPACE RESEARCH (passive) S5.547 S5.556			**58.2-59 GHz** EARTH EXPLORATION-SATELLITE (passive) FIXED MOBILE SPACE RESEARCH (passive) S5.547 S5.556	**58.2-59 GHz** FIXED S5.547 H199C	**58.2-59 GHz** EARTH EXPLORATION-SATELLITE (passive) FIXED S5.547 H199C SPACE RESEARCH (passive) S5.556	
59-59.3 GHz EARTH EXPLORATION-SATELLITE (passive) FIXED INTER-SATELLITE S5.556A MOBILE S5.558 RADIOLOCATION S5.559 SPACE RESEARCH (passive)			**59-59.3 GHz** EARTH EXPLORATION-SATELLITE (passive) FIXED INTER-SATELLITE S5.556A MOBILE S5.558 RADIOLOCATION S5.559 SPACE RESEARCH (passive)	**59-59.3 GHz** RADIOLOCATION S5.559 H195	**59-59.3 GHz** EARTH EXPLORATION-SATELLITE (passive) SPACE RESEARCH (passive)	**59-59.3 GHz** FIXED H139 H195 INTER-SATELLITE S5.556A MOBILE S5.558 H139 H195

INTERNATIONAL ALLOCATION				ALLOCATION IN THE REPUBLIC OF HUNGARY		
RADIO REGULATIONS			RR ALLOCATION RELEVANT TO THE REPUBLIC OF HUNGARY	GOVERNMENTAL	CIVIL	COMMON
REGION 1	REGION 2	REGION 3				
59.3-64 GHz FIXED INTER-SATELLITE MOBILE S5.558 RADIOLOCATION S5.559 S5.138			**59.3-64 GHz** FIXED INTER-SATELLITE MOBILE S5.558 RADIOLOCATION S5.559 S5.138	**59.3-61 GHz** RADIOLOCATION S5.559 H195		**59.3-61 GHz** FIXED H139 H195 INTER-SATELLITE MOBILE S5.558 H139 H195
				61-62 GHz H31 H151	**61-62 GHz** H31 H151	**61-62 GHz** FIXED H139 INTER-SATELLITE MOBILE S5.558 H139 RADIOLOCATION S5.559 H139 S5.138 H30
						62-63 GHz FIXED H198 INTER-SATELLITE MOBILE S5.558 H198 RADIOLOCATION S5.559
					63-64 GHz MOBILE S5.558 H200	**63-64 GHz** INTER-SATELLITE
64-65 GHz FIXED INTER-SATELLITE MOBILE except aeronautical mobile S5.547 S5.556			**64-65 GHz** FIXED INTER-SATELLITE MOBILE except aeronautical mobile S5.547 S5.556	**64-65 GHz** FIXED S5.547 H195A	**64-65 GHz** FIXED S5.547 H195A S5.556	
65-66 GHz EARTH EXPLORATION-SATELLITE FIXED INTER-SATELLITE MOBILE except aeronautical mobile SPACE RESEARCH S5.547			**65-66 GHz** EARTH EXPLORATION-SATELLITE FIXED INTER-SATELLITE MOBILE except aeronautical mobile SPACE RESEARCH S5.547	**65-66 GHz** FIXED S5.547 H195A MOBILE except aeronautical mobile H198	**65-66 GHz** EARTH EXPLORATION-SATELLITE FIXED S5.547 H195A MOBILE except aeronautical mobile SPACE RESEARCH H198	

INTERNATIONAL ALLOCATION				ALLOCATION IN THE REPUBLIC OF HUNGARY		
RADIO REGULATIONS			RR ALLOCATION RELEVANT TO THE REPUBLIC OF HUNGARY	GOVERNMENTAL	CIVIL	COMMON
REGION 1	REGION 2	REGION 3				
66-71 GHz S5.554	INTER-SATELLITE MOBILE S5.553 S5.558 MOBILE-SATELLITE RADIONAVIGATION RADIONAVIGATION-SATELLITE S5.554		**66-71 GHz** INTER-SATELLITE MOBILE S5.553 S5.558 MOBILE-SATELLITE RADIONAVIGATION RADIONAVIGATION-SATELLITE S5.554			**66-71 GHz** MOBILE S5.553 S5.558 MOBILE-SATELLITE RADIONAVIGATION RADIONAVIGATION-SATELLITE S5.554
71-74 GHz S5.149 S5.556	FIXED FIXED-SATELLITE (Earth-to-space) MOBILE MOBILE-SATELLITE (Earth-to-space) S5.149 S5.556		**71-74 GHz** FIXED FIXED-SATELLITE (Earth-to-space) MOBILE MOBILE-SATELLITE (Earth-to-space) S5.149 S5.556		**71-74 GHz** S5.556	**71-74 GHz** FIXED H139 FIXED-SATELLITE (Earth-to-space) H39 MOBILE H139 MOBILE-SATELLITE (Earth-to-space) H39 S5.149
74-75.5 GHz 	FIXED FIXED-SATELLITE (Earth-to-space) MOBILE Space Research (space-to-Earth) 		**74-75.5 GHz** FIXED FIXED-SATELLITE (Earth-to-space) MOBILE Space Research (space-to-Earth) 		**74-75.5 GHz** FIXED H139 FIXED-SATELLITE (Earth-to-space) MOBILE H139 Space Research (space-to-Earth) 	
75.5-76 GHz 	AMATEUR AMATEUR-SATELLITE Space Research (space-to-Earth) 		**75.5-76 GHz** AMATEUR AMATEUR-SATELLITE Space Research (space-to-Earth) 		**75.5-76 GHz** AMATEUR AMATEUR-SATELLITE Space Research (space-to-Earth) 	
76-81 GHz S5.560	RADIOLOCATION Amateur Amateur-Satellite Space Research (space-to-Earth) S5.560		**76-81 GHz** RADIOLOCATION Amateur Amateur-Satellite Space Research (space-to-Earth) S5.560		**76-81 GHz** Amateur Amateur-Satellite Space Research (space-to-Earth) S5.560 H201	**76-81 GHz** RADIOLOCATION H197

INTERNATIONAL ALLOCATION				ALLOCATION IN THE REPUBLIC OF HUNGARY		
RADIO REGULATIONS			RR ALLOCATION RELEVANT TO THE REPUBLIC OF HUNGARY	GOVERNMENTAL	CIVIL	COMMON
REGION 1	REGION 2	REGION 3				
81-84 GHz	FIXED FIXED-SATELLITE (space-to-Earth) MOBILE MOBILE-SATELLITE (space-to-Earth) Space Research (space-to-Earth)		**81-84 GHz** FIXED FIXED-SATELLITE (space-to-Earth) MOBILE MOBILE-SATELLITE (space-to-Earth) Space Research (space-to-Earth)		**81-84 GHz** Space Research (space-to-Earth)	**81-84 GHz** FIXED H139 FIXED-SATELLITE (space-to-Earth) H39 MOBILE H139 MOBILE-SATELLITE (space-to-Earth) H39
84-86 GHz	FIXED MOBILE BROADCASTING BROADCASTING-SATELLITE S5.561		**84-86 GHz** FIXED MOBILE BROADCASTING BROADCASTING-SATELLITE S5.561		**84-86 GHz** BROADCASTING BROADCASTING-SATELLITE S5.561	**84-86 GHz** FIXED MOBILE S5.561
86-92 GHz	EARTH EXPLORATION-SATELLITE (passive) RADIO ASTRONOMY SPACE RESEARCH (passive) S5.340		**86-92 GHz** EARTH EXPLORATION-SATELLITE (passive) RADIO ASTRONOMY SPACE RESEARCH (passive) S5.340	**86-92 GHz** S5.340	**86-92 GHz** EARTH EXPLORATION-SATELLITE (passive) RADIO ASTRONOMY SPACE RESEARCH (passive) S5.340	
92-94 GHz	FIXED FIXED-SATELLITE (Earth-to-space) MOBILE RADIOLOCATION S5.149 S5.556		**92-94 GHz** FIXED FIXED-SATELLITE (Earth-to-space) MOBILE RADIOLOCATION S5.149 S5.556		**92-94 GHz** S5.556	**92-94 GHz** FIXED FIXED-SATELLITE (Earth-to-space) MOBILE RADIOLOCATION H197 S5.149
94-94.1 GHz	EARTH EXPLORATION-SATELLITE (active) RADIOLOCATION SPACE RESEARCH (active) S5.562		**94-94.1 GHz** EARTH EXPLORATION-SATELLITE (active) RADIOLOCATION SPACE RESEARCH (active) S5.562		**94-94.1 GHz** EARTH EXPLORATION-SATELLITE (active) SPACE RESEARCH (active) S5.562	**94-94.1 GHz** RADIOLOCATION H197
94.1-95 GHz	FIXED FIXED-SATELLITE (Earth-to-space) MOBILE RADIOLOCATION		**94.1-95 GHz** FIXED FIXED-SATELLITE (Earth-to-space) MOBILE RADIOLOCATION			**94.1-95 GHz** FIXED FIXED-SATELLITE (Earth-to-space) MOBILE RADIOLOCATION H197

INTERNATIONAL ALLOCATION				ALLOCATION IN THE REPUBLIC OF HUNGARY		
RADIO REGULATIONS			RR ALLOCATION RELEVANT TO THE REPUBLIC OF HUNGARY	GOVERNMENTAL	CIVIL	COMMON
REGION 1	REGION 2	REGION 3				
95-100 GHz MOBILE S5.553 MOBILE-SATELLITE RADIONAVIGATION RADIONAVIGATION-SATELLITE Radiolocation S5.149 S5.554 S5.555			**95-100 GHz** MOBILE S5.553 MOBILE-SATELLITE RADIONAVIGATION RADIONAVIGATION-SATELLITE Radiolocation S5.149 S5.554 S5.555		**95-100 GHz** S5.555	**95-100 GHz** MOBILE S5.553 MOBILE-SATELLITE RADIONAVIGATION RADIONAVIGATION-SATELLITE Radiolocation H197 S5.149 S5.554
100-102 GHz EARTH EXPLORATION-SATELLITE (passive) FIXED MOBILE SPACE RESEARCH (passive) S5.341			**100-102 GHz** EARTH EXPLORATION-SATELLITE (passive) FIXED MOBILE SPACE RESEARCH (passive) S5.341		**100-102 GHz** EARTH EXPLORATION-SATELLITE (passive) SPACE RESEARCH (passive) S5.341	**100-102 GHz** FIXED MOBILE H139
102-105 GHz FIXED FIXED-SATELLITE (space-to-Earth) MOBILE S5.341			**102-105 GHz** FIXED FIXED-SATELLITE (space-to-Earth) MOBILE S5.341		**102-105 GHz** S5.341	**102-105 GHz** FIXED H139 FIXED-SATELLITE (space-to-Earth) MOBILE H139
105-116 GHz EARTH EXPLORATION-SATELLITE (passive) RADIO ASTRONOMY SPACE RESEARCH (passive) S5.340 S5.341			**105-116 GHz** EARTH EXPLORATION-SATELLITE (passive) RADIO ASTRONOMY SPACE RESEARCH (passive) S5.340 S5.341	**105-116 GHz** S5.340	**105-116 GHz** EARTH EXPLORATION-SATELLITE (passive) RADIO ASTRONOMY SPACE RESEARCH (passive) S5.340 S5.341	
116-119.98 GHz EARTH EXPLORATION-SATELLITE (passive) FIXED INTER-SATELLITE MOBILE S5.558 SPACE RESEARCH (passive) S5.341			**116-119.98 GHz** EARTH EXPLORATION-SATELLITE (passive) FIXED INTER-SATELLITE MOBILE S5.558 SPACE RESEARCH (passive) S5.341		**116-119.98 GHz** EARTH EXPLORATION-SATELLITE (passive) SPACE RESEARCH (passive) S5.341	**116-119.98 GHz** FIXED INTER-SATELLITE MOBILE S5.558

INTERNATIONAL ALLOCATION				ALLOCATION IN THE REPUBLIC OF HUNGARY		
RADIO REGULATIONS			RR ALLOCATION RELEVANT TO THE REPUBLIC OF HUNGARY	GOVERNMENTAL	CIVIL	COMMON
REGION 1	REGION 2	REGION 3				
119.98-120.02 GHz EARTH EXPLORATION-SATELLITE (passive) FIXED INTER-SATELLITE MOBILE S5.558 SPACE RESEARCH (passive) Amateur S5.341			**119.98-120.02 GHz** EARTH EXPLORATION-SATELLITE (passive) FIXED INTER-SATELLITE MOBILE S5.558 SPACE RESEARCH (passive) Amateur S5.341		**119.98-120.02 GHz** EARTH EXPLORATION-SATELLITE (passive) SPACE RESEARCH (passive) Amateur S5.341	**119.98-120.02 GHz** FIXED INTER-SATELLITE MOBILE S5.558
120.02-126 GHz EARTH EXPLORATION-SATELLITE (passive) FIXED INTER-SATELLITE MOBILE S5.558 SPACE RESEARCH (passive) S5.138			**120.02-126 GHz** EARTH EXPLORATION-SATELLITE (passive) FIXED INTER-SATELLITE MOBILE S5.558 SPACE RESEARCH (passive) S5.138	**120.02-126 GHz** H31	**120.02-126 GHz** EARTH EXPLORATION-SATELLITE (passive) SPACE RESEARCH (passive) H31	**120.02-126 GHz** FIXED INTER-SATELLITE MOBILE S5.558 S5.138 H30
126-134 GHz FIXED INTER-SATELLITE MOBILE S5.558 RADIOLOCATION S5.559			**126-134 GHz** FIXED INTER-SATELLITE MOBILE S5.558 RADIOLOCATION S5.559			**126-134 GHz** FIXED INTER-SATELLITE MOBILE S5.558 RADIOLOCATION S5.559
134-142 GHz MOBILE S5.553 MOBILE-SATELLITE RADIONAVIGATION RADIONAVIGATION-SATELLITE Radiolocation S5.149 S5.340 S5.554 S5.555			**134-142 GHz** MOBILE S5.553 MOBILE-SATELLITE RADIONAVIGATION RADIONAVIGATION-SATELLITE Radiolocation S5.149 S5.340 S5.554 S5.555		**134-142 GHz** S5.555	**134-142 GHz** MOBILE S5.553 MOBILE-SATELLITE RADIONAVIGATION RADIONAVIGATION-SATELLITE Radiolocation S5.149 S5.340 S5.554
142-144 GHz AMATEUR AMATEUR-SATELLITE			**142-144 GHz** AMATEUR AMATEUR-SATELLITE		**142-144 GHz** AMATEUR AMATEUR-SATELLITE	
144-149 GHz RADIOLOCATION Amateur Amateur-Satellite S5.149 S5.555			**144-149 GHz** RADIOLOCATION Amateur Amateur-Satellite S5.149 S5.555		**144-149 GHz** Amateur Amateur-Satellite S5.149 S5.555	**144-149 GHz** RADIOLOCATION S5.149

INTERNATIONAL ALLOCATION				ALLOCATION IN THE REPUBLIC OF HUNGARY		
RADIO REGULATIONS			RR ALLOCATION RELEVANT TO THE REPUBLIC OF HUNGARY	GOVERNMENTAL	CIVIL	COMMON
REGION 1	REGION 2	REGION 3				
149-150 GHz	FIXED FIXED-SATELLITE (space-to-Earth) MOBILE		**149-150 GHz** FIXED FIXED-SATELLITE (space-to-Earth) MOBILE			**149-150 GHz** FIXED FIXED-SATELLITE (space-to-Earth) MOBILE
150-151 GHz	EARTH EXPLORATION-SATELLITE (passive) FIXED FIXED-SATELLITE (space-to-Earth) MOBILE SPACE RESEARCH (passive) S5.149 S5.385		**150-151 GHz** EARTH EXPLORATION-SATELLITE (passive) FIXED FIXED-SATELLITE (space-to-Earth) MOBILE SPACE RESEARCH (passive) S5.149 S5.385		**150-151 GHz** EARTH EXPLORATION-SATELLITE (passive) SPACE RESEARCH (passive) S5.149 S5.385	**150-151 GHz** FIXED FIXED-SATELLITE (space-to-Earth) MOBILE S5.149
151-156 GHz	FIXED FIXED-SATELLITE (space-to-Earth) MOBILE		**151-156 GHz** FIXED FIXED-SATELLITE (space-to-Earth) MOBILE			**151-156 GHz** FIXED FIXED-SATELLITE (space-to-Earth) MOBILE
156-158 GHz	EARTH EXPLORATION-SATELLITE (passive) FIXED FIXED-SATELLITE (space-to-Earth) MOBILE		**156-158 GHz** EARTH EXPLORATION-SATELLITE (passive) FIXED FIXED-SATELLITE (space-to-Earth) MOBILE		**156-158 GHz** EARTH EXPLORATION-SATELLITE (passive)	**156-158 GHz** FIXED FIXED-SATELLITE (space-to-Earth) MOBILE
158-164 GHz	FIXED FIXED-SATELLITE (space-to-Earth) MOBILE		**158-164 GHz** FIXED FIXED-SATELLITE (space-to-Earth) MOBILE			**158-164 GHz** FIXED FIXED-SATELLITE (space-to-Earth) MOBILE
164-168 GHz	EARTH EXPLORATION-SATELLITE (passive) RADIO ASTRONOMY SPACE RESEARCH (passive)		**164-168 GHz** EARTH EXPLORATION-SATELLITE (passive) RADIO ASTRONOMY SPACE RESEARCH (passive)		**164-168 GHz** EARTH EXPLORATION-SATELLITE (passive) RADIO ASTRONOMY SPACE RESEARCH (passive)	
168-170 GHz	FIXED MOBILE		**168-170 GHz** FIXED MOBILE			**168-170 GHz** FIXED MOBILE

INTERNATIONAL ALLOCATION				ALLOCATION IN THE REPUBLIC OF HUNGARY		
RADIO REGULATIONS			RR ALLOCATION RELEVANT TO THE REPUBLIC OF HUNGARY	GOVERNMENTAL	CIVIL	COMMON
REGION 1	REGION 2	REGION 3				
170-174.5 GHz S5.149 S5.385	FIXED INTER-SATELLITE MOBILE S5.558		**170-174.5 GHz** FIXED INTER-SATELLITE MOBILE S5.558 S5.149 S5.385		**170-174.5 GHz** S5.385	**170-174.5 GHz** FIXED INTER-SATELLITE MOBILE S5.558 S5.149
174.5-176.5 GHz S5.149 S5.385	EARTH EXPLORATION-SATELLITE (passive) FIXED INTER-SATELLITE MOBILE S5.558 SPACE RESEARCH (passive)		**174.5-176.5 GHz** EARTH EXPLORATION-SATELLITE (passive) FIXED INTER-SATELLITE MOBILE S5.558 SPACE RESEARCH (passive) S5.149 S5.385		**174.5-176.5 GHz** EARTH EXPLORATION-SATELLITE (passive) SPACE RESEARCH (passive) S5.149 S5.385	**174.5-176.5 GHz** FIXED INTER-SATELLITE MOBILE S5.558 S5.149
176.5-182 GHz S5.149 S5.385	FIXED INTER-SATELLITE MOBILE S5.558		**176.5-182 GHz** FIXED INTER-SATELLITE MOBILE S5.558 S5.149 S5.385		**176.5-182 GHz** S5.385	**176.5-182 GHz** FIXED INTER-SATELLITE MOBILE S5.558 S5.149
182-185 GHz S5.340 S5.563	EARTH EXPLORATION-SATELLITE (passive) RADIO ASTRONOMY SPACE RESEARCH (passive)		**182-185 GHz** EARTH EXPLORATION-SATELLITE (passive) RADIO ASTRONOMY SPACE RESEARCH (passive) S5.340	**182-185 GHz** S5.340	**182-185 GHz** EARTH EXPLORATION-SATELLITE (passive) RADIO ASTRONOMY SPACE RESEARCH (passive) S5.340	
185-190 GHz S5.149 S5.385	FIXED INTER-SATELLITE MOBILE S5.558		**185-190 GHz** FIXED INTER-SATELLITE MOBILE S5.558 S5.149 S5.385		**185-190 GHz** S5.385	**185-190 GHz** FIXED INTER-SATELLITE MOBILE S5.558 S5.149
190-200 GHz S5.341 S5.554	MOBILE S5.553 MOBILE-SATELLITE RADIONAVIGATION RADIONAVIGATION-SATELLITE		**190-200 GHz** MOBILE S5.553 MOBILE-SATELLITE RADIONAVIGATION RADIONAVIGATION-SATELLITE S5.341 S5.554		**190-200 GHz** S5.341	**190-200 GHz** MOBILE S5.553 MOBILE-SATELLITE RADIONAVIGATION RADIONAVIGATION-SATELLITE S5.554

INTERNATIONAL ALLOCATION				ALLOCATION IN THE REPUBLIC OF HUNGARY		
RADIO REGULATIONS			RR ALLOCATION RELEVANT TO THE REPUBLIC OF HUNGARY	GOVERNMENTAL	CIVIL	COMMON
REGION 1	REGION 2	REGION 3				
200-202 GHz EARTH EXPLORATION-SATELLITE (passive) FIXED MOBILE SPACE RESEARCH (passive) S5.341			**200-202 GHz** EARTH EXPLORATION-SATELLITE (passive) FIXED MOBILE SPACE RESEARCH (passive) S5.341		**200-202 GHz** EARTH EXPLORATION-SATELLITE (passive) SPACE RESEARCH (passive) S5.341	**200-202 GHz** FIXED MOBILE
202-217 GHz FIXED FIXED-SATELLITE (Earth-to-space) MOBILE S5.341			**202-217 GHz** FIXED FIXED-SATELLITE (Earth-to-space) MOBILE S5.341		**202-217 GHz** S5.341	**202-217 GHz** FIXED FIXED-SATELLITE (Earth-to-space) MOBILE
217-231 GHz EARTH EXPLORATION-SATELLITE (passive) RADIO ASTRONOMY SPACE RESEARCH (passive) S5.340 S5.341			**217-231 GHz** EARTH EXPLORATION-SATELLITE (passive) RADIO ASTRONOMY SPACE RESEARCH (passive) S5.340 S5.341	**217-231 GHz** S5.340	**217-231 GHz** EARTH EXPLORATION-SATELLITE (passive) RADIO ASTRONOMY SPACE RESEARCH (passive) S5.340 S5.341	
231-235 GHz FIXED FIXED-SATELLITE (space-to-Earth) MOBILE Radiolocation			**231-235 GHz** FIXED FIXED-SATELLITE (space-to-Earth) MOBILE Radiolocation			**231-235 GHz** FIXED FIXED-SATELLITE (space-to-Earth) MOBILE Radiolocation
235-238 GHz EARTH EXPLORATION-SATELLITE (passive) FIXED FIXED-SATELLITE (space-to-Earth) MOBILE SPACE RESEARCH (passive)			**235-238 GHz** EARTH EXPLORATION-SATELLITE (passive) FIXED FIXED-SATELLITE (space-to-Earth) MOBILE SPACE RESEARCH (passive)		**235-238 GHz** EARTH EXPLORATION-SATELLITE (passive) SPACE RESEARCH (passive)	**235-238 GHz** FIXED FIXED-SATELLITE (space-to-Earth) MOBILE
238-241 GHz FIXED FIXED-SATELLITE (space-to-Earth) MOBILE Radiolocation			**238-241 GHz** FIXED FIXED-SATELLITE (space-to-Earth) MOBILE Radiolocation			**238-241 GHz** FIXED FIXED-SATELLITE (space-to-Earth) MOBILE Radiolocation

INTERNATIONAL ALLOCATION				ALLOCATION IN THE REPUBLIC OF HUNGARY		
RADIO REGULATIONS			RR ALLOCATION RELEVANT TO THE REPUBLIC OF HUNGARY	GOVERNMENTAL	CIVIL	COMMON
REGION 1	REGION 2	REGION 3				
241-248 GHz S5.138	RADIOLOCATION Amateur Amateur-Satellite S5.138		**241-248 GHz** RADIOLOCATION Amateur Amateur-Satellite S5.138	**241-248 GHz** H31	**241-248 GHz** Amateur Amateur-Satellite H31	**241-248 GHz** RADIOLOCATION S5.138 H30
248-250 GHz	AMATEUR AMATEUR-SATELLITE		**248-250 GHz** AMATEUR AMATEUR-SATELLITE		**248-250 GHz** AMATEUR AMATEUR-SATELLITE	
250-252 GHz S5.149 S5.555	EARTH EXPLORATION-SATELLITE (passive) SPACE RESEARCH (passive) S5.149 S5.555		**250-252 GHz** EARTH EXPLORATION-SATELLITE (passive) SPACE RESEARCH (passive) S5.149 S5.555	**250-252 GHz** S5.149	**250-252 GHz** EARTH EXPLORATION-SATELLITE (passive) SPACE RESEARCH (passive) S5.149 S5.555	
252-265 GHz S5.149 S5.385 S5.554 S5.555 S5.564	MOBILE S5.553 MOBILE-SATELLITE RADIONAVIGATION RADIONAVIGATION-SATELLITE S5.149 S5.385 S5.554 S5.555 S5.564		**252-265 GHz** MOBILE S5.553 MOBILE-SATELLITE RADIONAVIGATION RADIONAVIGATION-SATELLITE S5.149 S5.385 S5.554 S5.555		**252-265 GHz** S5.385 S5.555	**252-265 GHz** MOBILE S5.553 MOBILE-SATELLITE RADIONAVIGATION RADIONAVIGATION-SATELLITE S5.149 S5.554
265-275 GHz S5.149	FIXED FIXED-SATELLITE (Earth-to-space) MOBILE RADIO ASTRONOMY S5.149		**265-275 GHz** FIXED FIXED-SATELLITE (Earth-to-space) MOBILE RADIO ASTRONOMY S5.149		**265-275 GHz** RADIO ASTRONOMY	**265-275 GHz** FIXED FIXED-SATELLITE (Earth-to-space) MOBILE S5.149
275-400 GHz	(Not allocated) S5.565		**275-400 GHz** (Not allocated) S5.565			**275-400 GHz** (Not allocated) S5.565

Annex 1 to the National Table of Frequency Allocations

National Allocation and Utilisation of Frequency Bands in the Republic of Hungary

1 INTRODUCTION

The worldwide growing interest in telecommunication makes great demands on the utilisation of the radio frequency spectrum.

The achievements in radio technology and the radio services using the radio frequency spectrum have become important elements of the economy of the countries as well as of the security and welfare of the peoples. These radio services take their share of the radio frequency spectrum as of a “natural” resource to ensure efficient telecommunications, important connections in public telecommunication networks, safety of maritime, air and land transport, broadcasting services, weather forecasts, exploration of natural resources of the Earth, and to accomplish many other tasks meeting the needs of modern society.

The radio frequency spectrum, however, is a limited resource, that is why its allocation, assignment, licensing, and use need much circumspection in order to avoid harmful interference which could interrupt or restrict the operation of different radio services.

Managing the radio frequency spectrum is widely known as frequency management. It can be defined as the entirety of legal, administrative, and technical procedures being necessary to ensure the operation of the radio stations in the different radio services at any time such that they neither cause nor endure harmful interference. A further goal of frequency management is to make the use of the radio frequency spectrum as efficient as possible.

For the frequency management the radio frequency spectrum is much like e.g. coal or oil for the energy management or water for the water management. The radio frequency spectrum differs, however, in many aspects from the above-mentioned natural resources:

– it can be used without being consumed and it is wasted when not utilised;

– it has frequency, time, and space dimensions and these are related to each other;

– it is available to anyone on an international level;

– it is also wasted if it is used to fulfil needs which could be met more easily otherwise or if the characteristics of its use are chosen improperly;

– it, too, can be polluted.

The arbitrarily chosen upper limit of the radio frequency spectrum is 3 000 GHz.

In the Republic of Hungary the antecedents of frequency management can be dated back to the early 1920s, practical frequency management began in the 1940s. In the 1960s, following the allocation of the frequency bands on a national level, an attempt was made at harmonising the use of a wide range of radio services.

These attempts, however, did not result in decisive achievements. Frequency management was controlled on a company level. Conflicting company and administration interests inhibited an overall ordering of the frequency bands and the assertion of the national interests. The difficulties arising also in everyday life were realised by the government in 1989, and an independent frequency management organisation was established in the framework of a reorganisation of the public administration domain. In addition, legislative efforts were made to ensure that regulation of telecommunications and frequency management, too, be provided by an Act.

In 1993 the Act on Frequency Management was enacted by the Hungarian Parliament.

On the basis of Section 3, subsection (1), paragraph *d)* of Act LXII of 1993 on Frequency Management (hereinafter referred to as AFM), and with regard to the

– social needs,

– interests of the national defence, national security, order protection and other governmental users,

– interests of the industrial, entrepreneurial and service sectors as well as that of the citizens,

– expected use of new radio services,

– harmonisation with the frequency use in Europe,

– international agreements,

– relevant technical requirements and standards in force,

– impact of the expected modifications in some parts of the bands on the users,

– needs of the public,

the Government established, for the first time with its Government Decree No. 144/1994 (XI.15.)Korm., a NATIONAL TABLE OF FREQUENCY ALLOCATIONS (NTFA) applying to the Republic of Hungary. The National Table of Frequency Allocations (hereinafter referred to as the Table) is being subject to permanent development and has thus become part of the European harmonisation.

The Table contains information about the worldwide allocation of the frequency bands, ensures publicity for the frequency use in Hungary, and gives a survey of the different radio services.

It presents the regular use of the radio frequency spectrum for terrestrial, space and astronomical purposes.

It specifies the allocation of the frequency bands required by radiocommunication used for civil and governmental purposes.

The Table, the Radio Regulations (RR*), as well as the decisions, resolutions, recommendations and agreements adopted by the European Conference of Postal and Telecommunications Administrations (CEPT), the North Atlantic Treaty Organisation (NATO) and other international organisations (interested in broadcasting, space radiocommunications, air traffic, navigation, railway, health care, international pursuit of criminals, space research, etc.) define the main characteristics of the radio services, the frequency bands (frequencies) available, the technical characteristics of radio equipment, the planning methods, and the other (functional, operational, traffic, etc.) conditions.

The use of the Table facilitates the work of planners, manufacturers, and users acting in the field of radiocommunications. It simplifies the submission of correct frequency requests and supports frequency management authorities in managing affairs.

2 STRUCTURE AND SCOPE OF THE NATIONAL TABLE OF FREQUENCY ALLOCATIONS

The Radio Regulations and the Table deal with the allocation of the radio frequency spectrum between 9 kHz and 275 GHz. The frequency ranges below 9 kHz and between 275 GHz and 400 GHz are not allocated for the time being, in accordance with international practice.

The structure of the TABLE

The Table consists of three main parts.

The first part contains the “International Allocation”.

Frequency management has been asserted throughout the world, including Hungary, in accordance with the Constitution and Convention adopted by the 189 member states of the International Telecommunication Union (ITU), a specialised agency of the UNO (promulgated in Hungary with the Government Decree No. 191/1997 (XI.4.)Korm.).

All states concerned cooperate in making the decisions on the allocation of the radio frequency spectrum and in setting the band limits of radio services in the framework of the World Radiocommunication Conferences convened by the Plenipotentiary Conference of the member states of the Union. The geographical borders of the three Regions are indicated in Figure 1.

* The interpretation of the abbreviations can be found in Annex 32.

The above is contained in the RR published as part of the Convention.

The “International Allocation” part of the Table deals with the frequency allocations pertinent to the three Regions. The Republic of Hungary belongs to Region 1. The allocations and provisions relevant to the Republic of Hungary are listed in a separate column of the Table. The numbering of the provisions in Article S5 of the RR begins with S5.53. The provisions define frequency utilisation different from the radio services entered in the Table, limitations as well as technical requirements and prescriptions relating to the traffic and other procedures.

The member states of the ITU undertook the obligation to enforce the provisions of the Constitution, the Convention and the RR in their respective countries as well as in their relations to other member states.

The second part of the Table contains the frequency allocation relevant to the Republic of Hungary according to the RR. This part specifies radio services and frequency bands that can be protected against interference on an international level.

The third part of the Table contains the national allocation, i.e. the frequency bands allocated to the different radio services and available to governmental, civil or common purposes as well as the national footnotes pertinent to the different applications. It specifies the frequencies and frequency bands actually used in the Republic of Hungary, as well as those which may be planned for civil purposes, and those which may not be used for civil purposes.

GOVERNMENTAL use[*,**]

Governmental organs specified in the AFM and in Act CXXV of 1995 on the National Security Services have exclusive rights for using frequencies and operating radiocommunication equipment in the frequency bands allocated to the radio services listed in the column headed GOVERNMENTAL.

CIVIL use[*,**]

In the frequency bands allocated to the radio services listed in the column headed CIVIL, only non-governmental organisations, institutions, legal and natural persons may apply for a frequency assignment and request a radio licence observing the legal and procedural conditions set forth in the AFM and other legal rules. Governmental organs may also request frequencies from the frequency bands allocated to the civil use if a national footnote refers explicitly to the possibility to do so.

COMMON use[**]

[*] CIVIL or GOVERNMENTAL (defence, national security, order protection, etc.) interests may justify that the respective frequency management organs mutually request frequencies from the frequency bands allocated to GOVERNMENTAL or CIVIL use, for temporary utilisation within a given time period, in connection with exceptional demands, events or cases arising unpredictably from the frequency management viewpoint. Mutual understanding between the two competent frequency management organs will be required for the actual use in such cases.

[**] The use of frequencies within Hungary by the armed forces of states parties to the North Atlantic Treaty and other participant states of the Partnership for Peace, related to military activities shall be considered governmental, that related to providing programme services shall be considered civil.

The frequency bands allocated to the radio services listed in the column headed COMMON may be used for both GOVERNMENTAL and CIVIL purposes. In these bands, frequency assignments and the introduction of radio services shall be subject to an agreement and/or successful coordination between the two frequency management organs competent in the governmental and civil domain, respectively.

In the columns headed “ALLOCATION IN THE REPUBLIC OF HUNGARY”, the numbered national footnotes with the prefix “H” specify the frequency use requirements pertinent to the Republic of Hungary in accordance with the terminology of the RR provisions.

Possibilities of CIVIL applications

In the columns CIVIL and COMMON, the footnotes with the prefix “H” contain in accordance with the AFM the denomination of the radiocommunication systems which may be established in the given part of the frequency band. Also contained are the frequency band (or frequency) that may be used, the conditions imposed on the given application (mode of operation, technical characteristics) and the references to items in which the relevant prescriptions to the given radio service or application can be found.

Validity of the Table

Efforts being made to satisfy international requirements and national demands as well as the application of new technologies result in a continuous change in the allocation of the frequency bands.

That is why the Table is revised when necessary, but at least once every three years.

The Table does not entitle to any use of frequencies or frequency bands, changes in the conditions of use, or omission of any obligation whatsoever. Frequency assignments and granting of radio licences are governed by the AFM.

The international coordination of radio frequencies is of vital importance and shall be in accordance with relevant rules of the RR, resolutions of the Regional and World Radiocommunication Conferences and other international agreements.

3 GENERAL PRINCIPLES OF USING FREQUENCY BANDS ACCORDING TO THE ALLOCATIONS

1. The Table and the frequency utilisation should conform to the RR and the European harmonisation processes as far as possible.

2. The highest frequency referred to in the national allocation is 275 GHz. Frequency use demands emerging in the range of 275 to 3 000 GHz shall be handled in accordance with the principles of the RR.

3. In the Republic of Hungary, the validity of the maritime mobile service as defined in the RR extends to the inland waterways as well.

4. The obligation of the frequency management organs to coordinate with each other is stipulated in a separate rule.

5. According to the national footnotes of the Table, there are three categories for the applicability of radiocommunication systems or groups of equipment:

– *assignable:* in the thus termed frequency bands, frequencies may be assigned for the purpose given and under the conditions specified in the respective footnote after the Table has come into force or after the date of assignment given in the respective footnote,

– *reserved:* in the thus termed frequency bands, frequencies may be assigned for the purpose given in the respective footnote even before the forthcoming amendment of the Table, on the basis of a respective bulletin of the Ministry of Transport, Communications and Water Management, if the appropriate conditions of the frequency utilisation are met,

– *planned:* in the thus termed frequency bands, frequencies shall not be assigned for the purpose given in the respective footnote before the forthcoming amendment of the Table. In such cases the role of the word “planned” is to prepare the introduction of the future worldwide or European telecommunication systems in Hungary.

6. The general interpretation of the RR provisions and the footnotes with the prefix ”H” in the Table is as follows:

If the provision or the footnote:

– starts with “S5.”, then it is an RR provision,

– starts with “H”, then it is a national footnote,

– is entered along with a given radio service, then it applies to that radio service only,

– is entered at the bottom of a box, directly above the line limiting a frequency band, then it may be applied to all radio services in that box.

The RR provisions and the national footnotes shall not be interpreted independently. Their position (along with a radio service or at the bottom of the box), the appropriate box of the Table and the other RR provisions and national footnotes indicated there shall be taken into account as well.

7. The signs of the RR provisions of crucial importance to the Republic of Hungary that are listed in the second part of the Table are marked by a bold setting in Annex 2.

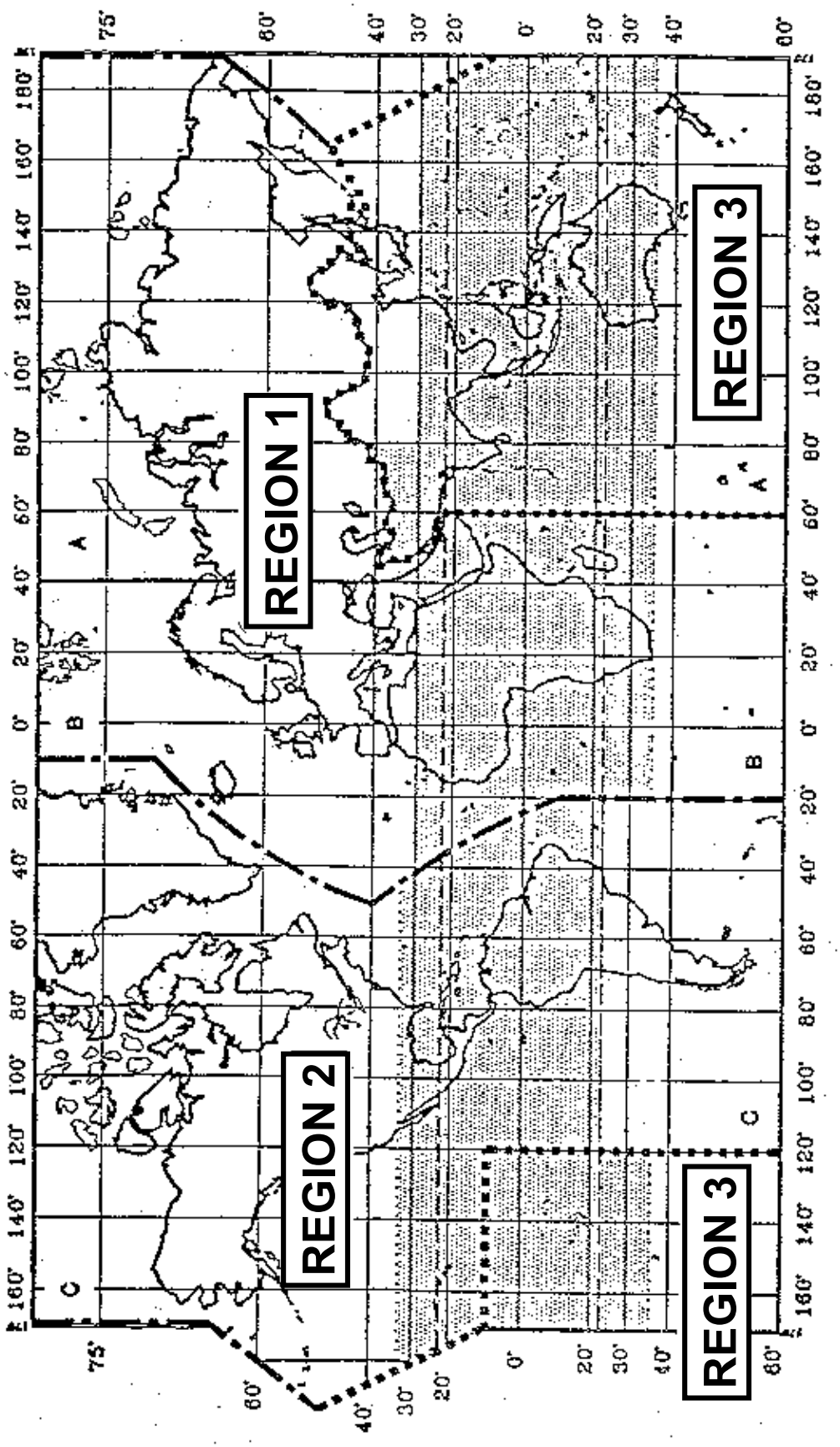


Figure 1

Provisions referred to in the Table of Frequency Allocations of the Radio Regulations

S5.53 Administrations authorizing the use of frequencies below 9 kHz shall ensure that no harmful interference is caused thereby to the services to which the bands above 9 kHz are allocated.

S5.54 Administrations conducting scientific research using frequencies below 9 kHz are urged to advise other administrations that may be concerned in order that such research may be afforded all practicable protection from harmful interference.

S5.55 **Additional allocation:** in Armenia, Azerbaijan, Bulgaria, Russian Federation, Georgia, Kazakstan, Kyrgyzstan, Tajikistan, Turkmenistan and Ukraine, the band 14-17 kHz is also allocated to the radionavigation service on a primary basis. (WRC-97)*

S5.56 The stations of services to which the bands 14-19.95 kHz and 20.05-70 kHz and in Region 1 also the bands 72-84 kHz and 86-90 kHz are allocated may transmit standard frequency and time signals. Such stations shall be afforded protection from harmful interference. In Armenia, Azerbaijan, Belarus, Bulgaria, Georgia, Kazakstan, Mongolia, Uzbekistan, Kyrgyzstan, Slovakia, the Czech Republic, Russian Federation, Tajikistan, Turkmenistan and Ukraine, the frequencies 25 kHz and 50 kHz will be used for this purpose under the same conditions. (WRC-97)

S5.57 The use of the bands 14-19.95 kHz, 20.05-70 kHz and 70-90 kHz (72-84 kHz and 86-90 kHz in Region 1) by the maritime mobile service is limited to coast radiotelegraph stations (A1A and F1B only). Exceptionally, the use of class J2B or J7B emissions is authorized subject to the necessary bandwidth not exceeding that normally used for class A1A or F1B emissions in the band concerned.

S5.58 **Additional allocation:** in Armenia, Azerbaijan, Bulgaria, Georgia, Kazakstan, Kyrgyzstan, Russian Federation, Tajikistan, Turkmenistan and Ukraine, the band 67-70 kHz is also allocated to the radionavigation service on a primary basis. (WRC-97)

S5.59 **Different category of service:** in Bangladesh, the Islamic Republic of Iran and Pakistan, the allocation of the bands 70-72 kHz and 84-86 kHz to the fixed and maritime mobile service is on a primary basis (see No. **S5.33**).

S5.60 In the bands 70-90 kHz (70-86 kHz in Region 1) and 110-130 kHz (112-130 kHz in Region 1), pulsed radionavigation systems may be used on condition that they do not cause harmful interference to other services to which these bands are allocated.

S5.61 In Region 2, the establishment and operation of stations in the maritime radionavigation service in the bands 70-90 kHz and 110-130 kHz shall be subject to agreement obtained under No. **S9.21** with administrations whose services, operating in accordance with the Table*, may be affected. However, stations of the fixed, maritime mobile

---

* Note: in Annex 2, the term "(WRC-97)" at the end of the provision indicates that the present form of the provision has been adopted by the World Radiocommunication Conference (Geneva, 1997).

* Note: in Annex 2, the term Table stands for the Table of Frequency Allocations of the Radio Regulations.

and radiolocation services shall not cause harmful interference to stations in the maritime radionavigation service established under such agreements.

S5.62 Administrations which operate stations in the radionavigation service in the band 90-110 kHz are urged to coordinate technical and operating characteristics in such a way as to avoid harmful interference to the services provided by these stations.

S5.63 (SUP - WRC-97)

S5.64 Only classes A1A or F1B, A2C, A3C, F1C or F3C emissions are authorized for stations of the fixed service in the bands allocated to this service between 90 kHz and 160 kHz (148.5 kHz in Region 1) and for stations of the maritime mobile service in the bands allocated to this service between 110 kHz and 160 kHz (148.5 kHz in Region 1). Exceptionally, class J2B or J7B emissions are also authorized in the bands between 110 kHz and 160 kHz (148.5 kHz in Region 1) for stations of the maritime mobile service.

S5.65 **Different category of service:** in Bangladesh, the Islamic Republic of Iran and Pakistan, the allocation of the bands 112-117.6 kHz and 126-129 kHz to the fixed and maritime mobile services is on a primary basis (see No. **S5.33**).

S5.66 **Different category of service:** in Germany, the allocation of the band 115-117.6 kHz to the fixed and maritime mobile services is on a primary basis (see No. **S5.33**) and to the radionavigation service on a secondary basis (see No. **S5.32**).

S5.67 **Additional allocation:** in Azerbaijan, Bulgaria, Mongolia, Kyrgyzstan, Romania, Turkmenistan and Ukraine, the band 130-148.5 kHz is also allocated to the radionavigation service on a secondary basis. Within and between these countries this service shall have an equal right to operate. (WRC-97)

S5.68 **Alternative allocation:** in Angola, Botswana, Burundi, the Congo, Malawi, Dem. Rep. of the Congo, Rwanda and South Africa, the band 160-200 kHz is allocated to the fixed service on a primary basis.

S5.69 **Additional allocation:** in Somalia, the band 200-255 kHz is also allocated to the aeronautical radionavigation service on a primary basis.

S5.70 **Alternative allocation:** in Angola, Botswana, Burundi, Cameroon, the Central African Republic, the Congo, Ethiopia, Kenya, Lesotho, Madagascar, Malawi, Mozambique, Namibia, Nigeria, Oman, Dem. Rep. of the Congo, Rwanda, South Africa, Swaziland, Tanzania, Chad, Zambia and Zimbabwe, the band 200-283.5 kHz is allocated to the aeronautical radionavigation service on a primary basis.

S5.71 **Alternative allocation:** in Tunisia, the band 255-283.5 kHz is allocated to the broadcasting service on a primary basis.

S5.72 Norwegian stations of the fixed service situated in northern areas (north of 60° N) subject to auroral disturbances are allowed to continue operation on four frequencies in the bands 283.5-490 kHz and 510-526.5 kHz.

S5.73 The band 285-325 kHz (283.5-325 kHz in Region 1) in the maritime radionavigation service may be used to transmit supplementary navigational information using narrow-band techniques, on condition that no harmful interference is caused to radiobeacon stations operating in the radionavigation service. (WRC-97)

S5.74 **Additional allocation:** in Region 1, the frequency band 285.3-285.7 kHz is also allocated to the maritime radionavigation service (other than radiobeacons) on a primary basis.

S5.75 **Different category of service:** in Armenia, Azerbaijan, Belarus, Georgia, Kazakstan, Moldova, Kyrgyzstan, Russian Federation, Tajikistan, Turkmenistan, Ukraine and the Black Sea areas of Bulgaria and Romania, the allocation of the band 315-325 kHz to the maritime radionavigation service is on a primary basis under the condition that in the Baltic Sea area, the assignment of frequencies in this band to new stations in the maritime or aeronautical radionavigation services shall be subject to prior consultation between the administrations concerned.

S5.76 The frequency 410 kHz is designated for radio direction-finding in the maritime radionavigation service. The other radionavigation services to which the band 405-415 kHz is allocated shall not cause harmful interference to radio direction-finding in the band 406.5-413.5 kHz.

S5.77 **Different category of service:** in Australia, China, the French Overseas Territories of Region 3, India, Indonesia, the Islamic Republic of Iran, Japan, Pakistan, Papua New Guinea and Sri Lanka, the allocation of the band 415-495 kHz to the aeronautical radionavigation service is on a primary basis. Administrations in these countries shall take all practical steps necessary to ensure that aeronautical radionavigation stations in the band 435-495 kHz do not cause interference to reception by coast stations of ship stations transmitting on frequencies designated for ship stations on a worldwide basis (see No. **S52.39**).

S5.78 **Different category of service:** in Cuba, the United States of America and Mexico, the allocation of the band 415-435 kHz to the aeronautical radionavigation service is on a primary basis.

S5.79 The use of the bands 415-495 kHz and 505-526.5 kHz (505-510 kHz in Region 2) by the maritime mobile service is limited to radiotelegraphy.

S5.79A When establishing coast stations in the NAVTEX service on the frequencies 490 kHz, 518 kHz and 4 209.5 kHz, administrations are strongly recommended to coordinate the operating characteristics in accordance with the procedures of the International Maritime Organization (IMO) (see Resolution **339 (Rev.WRC-97)**). (WRC-97)

S5.80 In Region 2, the use of the band 435-495 kHz by the aeronautical radionavigation service is limited to non-directional beacons not employing voice transmission.

S5.81 The bands 490-495 kHz and 505-510 kHz shall be subject to the provisions of Appendix **S13**, § 15 1), Part A2. (WRC-97)

S5.82 In the maritime mobile service, the frequency 490 kHz is, from the date of full implementation of the GMDSS (see Resolution **331 (Rev.WRC-97)**), to be used exclusively for the transmission by coast stations of navigational and meteorological warnings and urgent information to ships, by means of narrow-band direct-printing telegraphy. The conditions for use of the frequency 490 kHz are prescribed in Articles **S31** and **S52**. In using the band 415-495 kHz for the aeronautical radionavigation service, administrations are requested to ensure that no harmful interference is caused to the frequency 490 kHz. (WRC-97)

S5.83 The frequency 500 kHz is an international distress and calling frequency for Morse radiotelegraphy. The conditions for its use are prescribed in Articles **S31** and **S52**, and in Appendix **S13**.

S5.84 The conditions for the use of the frequency 518 kHz by the maritime mobile service are prescribed in Articles **S31** and **S52** and in Appendix **S13**. (WRC-97)

S5.85 Not used.

S5.86 In Region 2, in the band 525-535 kHz the carrier power of broadcasting stations shall not exceed 1 kW during the day and 250 W at night.

S5.87 **Additional allocation:** in Angola, Botswana, Lesotho, Malawi, Mozambique, Namibia, South Africa, Swaziland, Zambia and Zimbabwe, the band 526.5-535 kHz is also allocated to the mobile service on a secondary basis.

S5.87A **Additional allocation:** in Uzbekistan, the band 526.5-1 606.5 kHz is also allocated to the radionavigation service on a primary basis. Such use is subject to agreement obtained under No. **S9.21** with administrations concerned and limited to ground-based radiobeacons in operation on 27 October 1997 until the end of their lifetime. (WRC-97)

S5.88 **Additional allocation:** in China, the band 526.5-535 kHz is also allocated to the aeronautical radionavigation service on a secondary basis.

S5.89 In Region 2, the use of the band 1 605-1 705 kHz by stations of the broadcasting service is subject to the Plan established by the Regional Administrative Radio Conference (Rio de Janeiro, 1988).

The examination of frequency assignments to stations of the fixed and mobile services in the band 1 625-1 705 kHz shall take account of the allotments appearing in the Plan established by the Regional Administrative Radio Conference (Rio de Janeiro, 1988).

S5.90 In the band 1 605-1 705 kHz, in cases where a broadcasting station of Region 2 is concerned, the service area of the maritime mobile stations in Region 1 shall be limited to that provided by ground-wave propagation.

S5.91 **Additional allocation:** in the Philippines and Sri Lanka, the band 1 606.5-1 705 kHz is also allocated to the broadcasting service on a secondary basis. (WRC-97)

S5.92 Some countries of Region 1 use radiodetermination systems in the bands 1 606.5-1 625 kHz, 1 635-1 800 kHz, 1 850-2 160 kHz, 2 194-2 300 kHz, 2 502-2 850 kHz and 3 500-3 800 kHz, subject to agreement obtained under No. **S9.21**. The radiated mean power of these stations shall not exceed 50 W.

S5.93 **Additional allocation:** in Angola, Armenia, Azerbaijan, Belarus, Bulgaria, Georgia, Hungary, Kazakstan, Latvia, Lithuania, Moldova, Mongolia, Nigeria, Uzbekistan, Poland, Kyrgyzstan, Slovakia, the Czech Republic, Russian Federation, Tajikistan, Chad, Turkmenistan and Ukraine, the bands 1 625-1 635 kHz, 1 800-1 810 kHz and 2 160-2 170 kHz are also allocated to the fixed and land mobile services on a primary basis, subject to agreement obtained under No. **S9.21**.

S5.94 Not used.

S5.95 Not used.

S5.96 In Germany, Armenia, Azerbaijan, Belarus, Denmark, Estonia, Finland, Georgia, Hungary, Ireland, Israel, Jordan, Kazakstan, Latvia, Lithuania, Malta, Moldova, Norway, Uzbekistan, Poland, Kyrgyzstan, Slovakia, the Czech Republic, the United Kingdom, Russian Federation, Sweden, Tajikistan, Turkmenistan and Ukraine, administrations may allocate up to 200 kHz to their amateur service in the bands 1 715-1 800 kHz and 1 850-2 000 kHz. However, when allocating the bands within this range to their amateur service, administrations shall, after prior consultation with administrations of neighbouring countries, take such steps as may be necessary to prevent harmful interference from their amateur service to the fixed and mobile services of other countries. The mean power of any amateur station

shall not exceed 10 W.

S5.97 In Region 3, the Loran system operates either on 1 850 kHz or 1 950 kHz, the bands occupied being 1 825-1 875 kHz and 1 925-1 975 kHz respectively. Other services to which the band 1 800-2 000 kHz is allocated may use any frequency therein on condition that no harmful interference is caused to the Loran system operating on 1 850 kHz or 1 950 kHz.

S5.98 **Alternative allocation:** in Angola, Armenia, Austria, Azerbaijan, Belarus, Belgium, Bulgaria, Cameroon, the Congo, Denmark, Egypt, Eritrea, Spain, Ethiopia, Georgia, Greece, Italy, Kazakstan, Lebanon, Lithuania, Moldova, the Netherlands, Syria, Kyrgyzstan, Russian Federation, Somalia, Tajikistan, Tunisia, Turkmenistan, Turkey and Ukraine, the band 1 810-1 830 kHz is allocated to the fixed and mobile, except aeronautical mobile, services on a primary basis. (WRC-97)

S5.99 **Additional allocation:** in Saudi Arabia, Bosnia and Herzegovina, Iraq, Libya, Uzbekistan, Slovakia, the Czech Republic, Romania, Slovenia, Chad, Togo and Yugoslavia, the band 1 810-1 830 kHz is also allocated to the fixed and mobile, except aeronautical mobile, services on a primary basis. (WRC-97)

S5.100 In Region 1, the authorization to use the band 1 810-1 830 kHz by the amateur service in countries situated totally or partially north of 40° N shall be given only after consultation with the countries mentioned in Nos. **S5.98** and **S5.99** to define the necessary steps to be taken to prevent harmful interference between amateur stations and stations of other services operating in accordance with Nos. **S5.98** and **S5.99**.

S5.101 **Alternative allocation:** in Burundi and Lesotho, the band 1 810-1 850 kHz is allocated to the fixed and mobile, except aeronautical mobile, services on a primary basis.

S5.102 **Alternative allocation:** in Argentina, Bolivia, Chile, Mexico, Paraguay, Peru, Uruguay and Venezuela, the band 1 850-2 000 kHz is allocated to the fixed, mobile except aeronautical mobile, radiolocation and radionavigation services on a primary basis.

S5.103 In Region 1, in making assignments to stations in the fixed and mobile services in the bands 1 850-2 045 kHz, 2 194-2 498 kHz, 2 502-2 625 kHz and 2 650-2 850 kHz, administrations should bear in mind the special requirements of the maritime mobile service.

S5.104 In Region 1, the use of the band 2 025-2 045 kHz by the meteorological aids service is limited to oceanographic buoy stations.

S5.105 In Region 2, except in Greenland, coast stations and ship stations using radiotelephony in the band 2 065-2 107 kHz shall be limited to class J3E emissions and to a peak envelope power not exceeding 1 kW. Preferably, the following carrier frequencies should be used: 2 065.0 kHz, 2 079.0 kHz, 2 082.5 kHz, 2 086.0 kHz, 2 093.0 kHz, 2 096.5 kHz, 2 100.0 kHz and 2 103.5 kHz. In Argentina and Uruguay, the carrier frequencies 2 068.5 kHz and 2 075.5 kHz are also used for this purpose, while the frequencies within the band 2 072-2 075.5 kHz are used as provided in No. **S52.165**.

S5.106 In Regions 2 and 3, provided no harmful interference is caused to the maritime mobile service, the frequencies between 2 065 kHz and 2 107 kHz may be used by stations of the fixed service communicating only within national borders and whose mean power does not exceed 50 W. In notifying the frequencies, the attention of the Bureau* should be drawn to these provisions.

* Note: in Annex 2, the term Bureau stands for the ITU Radiocommunication Bureau.

S5.107 **Additional allocation:** in Saudi Arabia, Botswana, Eritrea, Ethiopia, Iraq, Lesotho, Libya, Somalia, Swaziland and Zambia, the band 2 160-2 170 kHz is also allocated to the fixed and mobile, except aeronautical mobile (R), services on a primary basis. The mean power of stations in these services shall not exceed 50 W. (WRC-97)

S5.108 The carrier frequency 2 182 kHz is an international distress and calling frequency for radiotelephony. The conditions for the use of the band 2 173.5-2 190.5 kHz are prescribed in Articles **S31** and **S52** and in Appendix **S13**.

S5.109 The frequencies 2 187.5 kHz, 4 207.5 kHz, 6 312 kHz, 8 414.5 kHz, 12 577 kHz and 16 804.5 kHz are international distress frequencies for digital selective calling. The conditions for the use of these frequencies are prescribed in Article **S31**.

S5.110 The frequencies 2 174.5 kHz, 4 177.5 kHz, 6 268 kHz, 8 376.5 kHz, 12 520 kHz and 16 695 kHz are international distress frequencies for narrow-band direct-printing telegraphy. The conditions for the use of these frequencies are prescribed in Article **S31**.

S5.111 The carrier frequencies 2 182 kHz, 3 023 kHz, 5 680 kHz, 8 364 kHz and the frequencies 121.5 MHz, 156.8 MHz and 243 MHz may also be used, in accordance with the procedures in force for terrestrial radiocommunication services, for search and rescue operations concerning manned space vehicles. The conditions for the use of the frequencies are prescribed in Article **S31** and in Appendix **S13**.

The same applies to the frequencies 10 003 kHz, 14 993 kHz and 19 993 kHz, but in each of these cases emissions must be confined in a band of ±3 kHz about the frequency.

S5.112 **Alternative allocation:** in Bosnia and Herzegovina, Cyprus, Denmark, France, Greece, Iceland, Italy, Malta, Norway, Sri Lanka, Turkey and Yugoslavia, the band 2 194-2 300 kHz is allocated to the fixed and mobile, except aeronautical mobile, services on a primary basis. (WRC-97)

S5.113 For the conditions for the use of the bands 2 300-2 495 kHz (2 498 kHz in Region 1), 3 200-3 400 kHz, 4 750-4 995 kHz and 5 005-5 060 kHz by the broadcasting service, see Nos. **S5.16** to **S5.20**, **S5.21** and **S23.3** to **S23.10**.

S5.114 **Alternative allocation:** in Bosnia and Herzegovina, Cyprus, Denmark, France, Greece, Iraq, Italy, Malta, Norway, Turkey and Yugoslavia, the band 2 502-2 625 kHz is allocated to the fixed and mobile, except aeronautical mobile, services on a primary basis. (WRC-97)

S5.115 The carrier (reference) frequencies 3 023 kHz and 5 680 kHz may also be used, in accordance with Article **S31** and Appendix **S13** by stations of the maritime mobile service engaged in coordinated search and rescue operations.

S5.116 Administrations are urged to authorize the use of the band 3 155-3 195 kHz to provide a common worldwide channel for low power wireless hearing aids. Additional channels for these devices may be assigned by administrations in the bands between 3 155 kHz and 3 400 kHz to suit local needs.

It should be noted that frequencies in the range 3 000 kHz to 4 000 kHz are suitable for hearing aid devices which are designed to operate over short distances within the induction field.

S5.117 **Alternative allocation:** in Bosnia and Herzegovina, Cyprus, Côte d'Ivoire, Denmark, Egypt, France, Greece, Iceland, Italy, Liberia, Malta, Norway, Sri Lanka, Togo, Turkey and Yugoslavia, the band 3 155-3 200 kHz is allocated to the fixed and mobile, except aeronautical mobile, services on a primary basis. (WRC-97)

S5.118 **Additional allocation:** in the United States, Japan, Mexico, Peru and Uruguay, the band 3 230-3 400 kHz is also allocated to the radiolocation service on a secondary basis.

S5.119 **Additional allocation:** in Honduras, Mexico, Peru and Venezuela, the band 3 500-3 750 kHz is also allocated to the fixed and mobile services on a primary basis.

S5.120 For the use of the bands allocated to the amateur service at 3.5 MHz, 7.0 MHz, 10.1 MHz, 14.0 MHz, 18.068 MHz, 21.0 MHz, 24.89 MHz and 144 MHz in the event of natural disasters, see Resolution **640**[*].

S5.121 Not used.

S5.122 **Alternative allocation:** in Argentina, Bolivia, Chile, Ecuador, Paraguay, Peru and Uruguay, the band 3 750-4 000 kHz is allocated to the fixed and mobile, except aeronautical mobile, services on a primary basis.

S5.123 **Additional allocation:** in Botswana, Lesotho, Malawi, Mozambique, Namibia, South Africa, Swaziland, Zambia and Zimbabwe, the band 3 900-3 950 kHz is also allocated to the broadcasting service on a primary basis, subject to agreement obtained under No. **S9.21**.

S5.124 **Additional allocation:** in Canada, the band 3 950-4 000 kHz is also allocated to the broadcasting service on a primary basis. The power of broadcasting stations operating in this band shall not exceed that necessary for a national service within the frontier of this country and shall not cause harmful interference to other services operating in accordance with the Table.

S5.125 **Additional allocation:** in Greenland, the band 3 950-4 000 kHz is also allocated to the broadcasting service on a primary basis. The power of the broadcasting stations operating in this band shall not exceed that necessary for a national service and shall in no case exceed 5 kW.

S5.126 In Region 3, the stations of those services to which the band 3 995-4 005 kHz is allocated may transmit standard frequency and time signals.

S5.127 The use of the band 4 000-4 063 kHz by the maritime mobile service is limited to ship stations using radiotelephony (see No. **S52.220** and Appendix **S17**).

S5.128 In Afghanistan, Argentina, Armenia, Azerbaijan, Belarus, Botswana, Burkina Faso, Central African Republic, China, Georgia, India, Kazakstan, Mali, Niger, Kyrgyzstan, Russian Federation, Tajikistan, Chad, Turkmenistan and Ukraine, in the bands 4 063-4 123 kHz, 4 130-4 133 kHz and 4 408-4 438 kHz, stations of limited power in the fixed service which are situated at least 600 km from the coast may operate on condition that harmful interference is not caused to the maritime mobile service. (WRC-97)

S5.129 On condition that harmful interference is not caused to the maritime mobile service, the frequencies in the bands 4 063-4 123 kHz and 4 130-4 438 kHz may be used exceptionally by stations in the fixed service communicating only within the boundary of the

[*] This Resolution was abrogated by WRC-97.

country in which they are located with a mean power not exceeding 50 W.

S5.130 The conditions for the use of the carrier frequencies 4 125 kHz and 6 215 kHz are prescribed in Articles **S31** and **S52** and in Appendix **S13**.

S5.131 The frequency 4 209.5 kHz is used exclusively for the transmission by coast stations of meteorological and navigational warnings and urgent information to ships by means of narrow-band direct-printing techniques. (WRC-97)

S5.132 The frequencies 4 210 kHz, 6 314 kHz, 8 416.5 kHz, 12 579 kHz, 16 806.5 kHz, 19 680.5 kHz, 22 376 kHz and 26 100.5 kHz are the international frequencies for the transmission of maritime safety information (MSI) (see Appendix **S17**).

S5.133 **Different category of service:** in Armenia, Azerbaijan, Belarus, Georgia, Kazakstan, Latvia, Lithuania, Moldova, Uzbekistan, Kyrgyzstan, Russian Federation, Tajikistan, Turkmenistan and Ukraine, the allocation of the band 5 130-5 250 kHz to the mobile, except aeronautical mobile, service is on a primary basis (see No. **S5.33**).

S5.134 The use of the bands 5 900-5 950 kHz, 7 300-7 350 kHz, 9 400-9 500 kHz, 11 600-11 650 kHz, 12 050-12 100 kHz, 13 570-13 600 kHz, 13 800-13 870 kHz, 15 600-15 800 kHz, 17 480-17 550 kHz and 18 900-19 020 kHz by the broadcasting service is limited to single-sideband emissions with the characteristics specified in Appendix **S11** or to any other spectrum-efficient modulation techniques recommended by ITU-R. Access to these bands shall be subject to the decisions of a competent conference. (WRC-97)

S5.135 (SUP - WRC-97)

S5.136 The band 5 900-5 950 kHz is allocated, until 1 April 2007, to the fixed service on a primary basis, as well as to the following services: in Region 1 to the land mobile service on a primary basis, in Region 2 to the mobile except aeronautical mobile (R) service on a primary basis, and in Region 3 to the mobile except aeronautical mobile (R) service on a secondary basis, subject to application of the procedure referred to in Resolution **21 (Rev.WRC-95)**. After 1 April 2007, frequencies in this band may be used by stations in the above-mentioned services, communicating only within the boundary of the country in which they are located, on the condition that harmful interference is not caused to the broadcasting service. When using frequencies for these services, administrations are urged to use the minimum power required and to take account of the seasonal use of frequencies by the broadcasting service published in accordance with the Radio Regulations.

S5.137 On condition that harmful interference is not caused to the maritime mobile service, the bands 6 200-6 213.5 kHz and 6 220.5-6 525 kHz may be used exceptionally by stations in the fixed service, communicating only within the boundary of the country in which they are located, with a mean power not exceeding 50 W. At the time of notification of these frequencies, the attention of the Bureau will be drawn to the above conditions.

S5.138 The following bands:

6 765-6 795 kHz	(centre frequency 6 780 kHz),
433.05-434.79 MHz	(centre frequency 433.92 MHz) in Region 1 except in the countries mentioned in No. **S5.280**,
61-61.5 GHz	(centre frequency 61.25 GHz),
122-123 GHz	(centre frequency 122.5 GHz), and
244-246 GHz	(centre frequency 245 GHz)

are designated for industrial, scientific and medical (ISM) applications. The use of these frequency bands for ISM applications shall be subject to special authorization by the administration concerned, in agreement with other administrations whose radiocommunication services might be affected. In applying this provision, administrations shall have due regard to the latest relevant ITU-R Recommendations.

S5.139 **Different category of service:** in Armenia, Azerbaijan, Belarus, Georgia, Kazakstan, Latvia, Lithuania, Moldova, Mongolia, Uzbekistan, Kyrgyzstan, Russian Federation, Tajikistan, Turkmenistan and Ukraine, the allocation of the band 6 765-7 000 kHz to the land mobile service is on a primary basis (see No. **S5.33**).

S5.140 **Additional allocation:** in Angola, Iraq, Rwanda, Somalia and Togo, the band 7 000-7 050 kHz is also allocated to the fixed service on a primary basis.

S5.141 **Alternative allocation:** in Egypt, Eritrea, Ethiopia, Guinea, Libya and Madagascar, the band 7 000-7 050 kHz is allocated to the fixed service on a primary basis. (WRC-97)

S5.142 The use of the band 7 100-7 300 kHz in Region 2 by the amateur service shall not impose constraints on the broadcasting service intended for use within Region 1 and Region 3.

S5.143 The band 7 300-7 350 kHz is allocated, until 1 April 2007, to the fixed service on a primary basis and to the land mobile service on a secondary basis, subject to application of the procedure referred to in Resolution **21 (Rev.WRC-95)**. After 1 April 2007, frequencies in this band may be used by stations in the above-mentioned services, communicating only within the boundary of the country in which they are located, on condition that harmful interference is not caused to the broadcasting service. When using frequencies for these services, administrations are urged to use the minimum power required and to take account of the seasonal use of frequencies by the broadcasting service published in accordance with the Radio Regulations.

S5.144 In Region 3, the stations of those services to which the band 7 995-8 005 kHz is allocated may transmit standard frequency and time signals.

S5.145 The conditions for the use of the carrier frequencies 8 291 kHz, 12 290 kHz and 16 420 kHz are prescribed in Articles **S31** and **S52** and in Appendix **S13**.

S5.146 The bands 9 400-9 500 kHz, 11 600-11 650 kHz, 12 050-12 100 kHz, 15 600-15 800 kHz, 17 480-17 550 kHz and 18 900-19 020 kHz are allocated to the fixed service on a primary basis until 1 April 2007, subject to application of the procedure referred to in Resolution **21 (Rev.WRC-95)**. After 1 April 2007, frequencies in these bands may be used by stations in the fixed service, communicating only within the boundary of the country in which they are located, on condition that harmful interference is not caused to the broadcasting service. When using frequencies in the fixed service, administrations are urged to use the minimum power required and to take account of the seasonal use of frequencies by the broadcasting service published in accordance with the Radio Regulations.

S5.147 On condition that harmful interference is not caused to the broadcasting service, frequencies in the bands 9 775-9 900 kHz, 11 650-11 700 kHz and 11 975-12 050 kHz may be used by stations in the fixed service communicating only within the boundary of the country in which they are located, each station using a total radiated power not exceeding 24 dBW.

S5.148 (SUP - WRC-97)

S5.149 In making assignments to stations of other services to which the bands:
13 360-13 410 kHz,
25 550-25 670 kHz,
37.5-38.25 MHz,
73-74.6 MHz in Regions 1 and 3,
150.05-153 MHz in Region 1,
322-328.6 MHz*,
406.1-410 MHz,
608-614 MHz in Regions 1 and 3,
1 330-1 400 MHz*,
1 610.6-1 613.8 MHz*,
1 660-1 670 MHz,
1 718.8-1 722.2 MHz*,
2 655-2 690 MHz,
3 260-3 267 MHz*,
3 332-3 339 MHz*,
3 345.8-3 352.5 MHz*,
4 825-4 835 MHz*,
4 950-4 990 MHz,
4 990-5 000 MHz,
6 650-6 675.2 MHz*,
10.6-10.68 GHz,
14.47-14.5 GHz*,
22.01-22.21 GHz*,
22.21-22.5 GHz,
22.81-22.86 GHz*,
23.07-23.12 GHz*,
31.2-31.3 GHz,
31.5-31.8 GHz in Regions 1 and 3,
36.43-36.5 GHz*,
42.5-43.5 GHz,
42.77-42.87 GHz*,
43.07-43.17 GHz*,
43.37-43.47 GHz*,
48.94-49.04 GHz*,
72.77-72.91 GHz*,
93.07-93.27 GHz*,
97.88-98.08 GHz*,
140.69-140.98 GHz*,
144.68-144.98 GHz*,
145.45-145.75 GHz*,
146.82-147.12 GHz*,
150-151 GHz*,
174.42-175.02 GHz*,
177-177.4 GHz*,
178.2-178.6 GHz*,
181-181.46 GHz*,
186.2-186.6 GHz*,

250-251 GHz*,
257.5-258 GHz*,
261-265 GHz,
262.24-262.76 GHz*,
265-275 GHz,
265.64-266.16 GHz*,
267.34-267.86 GHz*,
271.74-272.26 GHz*

are allocated (* indicates radio astronomy use for spectral line observations), administrations are urged to take all practicable steps to protect the radio astronomy service from harmful interference. Emissions from spaceborne or airborne stations can be particularly serious sources of interference to the radio astronomy service (see Nos. **S4.5** and **S4.6** and Article **S29**). (WRC-97)

S5.150 The following bands:

13 553-13 567 kHz	(centre frequency 13 560 kHz),
26 957-27 283 kHz	(centre frequency 27 120 kHz),
40.66-40.70 MHz	(centre frequency 40.68 MHz),
902-928 MHz	in Region 2 (centre frequency 915 MHz),
2 400-2 500 MHz	(centre frequency 2 450 MHz),
5 725-5 875 MHz	(centre frequency 5 800 MHz), and
24-24.25 GHz	(centre frequency 24.125 GHz)

are also designated for industrial, scientific and medical (ISM) applications. Radiocommunication services operating within these bands must accept harmful interference which may be caused by these applications. ISM equipment operating in these bands is subject to the provisions of No. **S15.13**.

S5.151 The bands 13 570-13 600 kHz and 13 800-13 870 kHz are allocated, until 1 April 2007, to the fixed service on a primary basis and to the mobile except aeronautical mobile (R) service on a secondary basis, subject to application of the procedure referred to in Resolution **21 (Rev.WRC-95)**. After 1 April 2007, frequencies in these bands may be used by stations in the above-mentioned services, communicating only within the boundary of the country in which they are located, on the condition that harmful interference is not caused to the broadcasting service. When using frequencies in these services, administrations are urged to use the minimum power required and to take account of the seasonal use of frequencies by the broadcasting service published in accordance with the Radio Regulations.

S5.152 **Additional allocation:** in Armenia, Azerbaijan, China, Côte d'Ivoire, Georgia, the Islamic Republic of Iran, Kazakstan, Moldova, Uzbekistan, Kyrgyzstan, Russian Federation, Tajikistan, Turkmenistan and Ukraine, the band 14 250-14 350 kHz is also allocated to the fixed service on a primary basis. Stations of the fixed service shall not use a radiated power exceeding 24 dBW. (WRC-97)

S5.153 In Region 3, the stations of those services to which the band 15 995-16 005 kHz is allocated may transmit standard frequency and time signals.

S5.154 **Additional allocation:** in Armenia, Azerbaijan, Georgia, Kazakstan, Moldova, Uzbekistan, Kyrgyzstan, Russian Federation, Tajikistan, Turkmenistan and Ukraine, the band 18 068-18 168 kHz is also allocated to the fixed service on a primary basis for use within their boundaries, with a peak envelope power not exceeding 1 kW. (WRC-97)

S5.155 **Additional allocation:** in Armenia, Azerbaijan, Belarus, Bulgaria, Georgia, Hungary, Kazakstan, Moldova, Mongolia, Uzbekistan, Kyrgyzstan, Slovakia, the Czech Republic, Russian Federation, Tajikistan, Turkmenistan and Ukraine, the band 21 850-21 870 kHz is also allocated to the aeronautical mobile (R) services on a primary basis.

S5.155A In Armenia, Azerbaijan, Belarus, Bulgaria, Georgia, Hungary, Kazakstan, Moldova, Mongolia, Uzbekistan, Kyrgyzstan, Slovakia, the Czech Republic, Russian Federation, Tajikistan, Turkmenistan and Ukraine, the use of the band 21 850-21 870 kHz by the fixed service is limited to provision of services related to aircraft flight safety.

S5.155B The band 21 870-21 924 kHz is used by the fixed service for provision of services related to aircraft flight safety.

S5.156 **Additional allocation:** in Nigeria, the band 22 720-23 200 kHz is also allocated to the meteorological aids service (radiosondes) on a primary basis.

S5.156A The use of the band 23 200-23 350 kHz by the fixed service is limited to provision of services related to aircraft flight safety.

S5.157 The use of the band 23 350-24 000 kHz by the maritime mobile service is limited to inter-ship radiotelegraphy.

S5.158 Not used.

S5.159 Not used.

S5.160 **Additional allocation:** in Botswana, Burundi, Lesotho, Malawi, Namibia, Dem. Rep. of the Congo, Rwanda and Swaziland, the band 41-44 MHz is also allocated to the aeronautical radionavigation service on a primary basis. (WRC-97)

S5.161 **Additional allocation:** in the Islamic Republic of Iran and Japan, the band 41-44 MHz is also allocated to the radiolocation service on a secondary basis.

S5.162 **Additional allocation:** in Australia and New Zealand, the band 44-47 MHz is also allocated to the broadcasting service on a primary basis.

S5.162A **Additional allocation:** in Germany, Austria, Belgium, Bosnia and Herzegovina, China, Vatican, Denmark, Spain, Estonia, Finland, France, Ireland, Iceland, Italy, Latvia, The Former Yugoslav Republic of Macedonia, Liechtenstein, Lithuania, Luxembourg, Moldova, Monaco, Norway, the Netherlands, Poland, Portugal, Slovakia, the Czech Republic, the United Kingdom, Russian Federation, Sweden, Switzerland and Turkey, the band 46-68 MHz is also allocated to the radiolocation service on a secondary basis. This use is limited to the operation of wind profiler radars in accordance with Resolution **217 (WRC-97)**. (WRC-97)

S5.163 **Additional allocation:** in Armenia, Azerbaijan, Belarus, Estonia, Georgia, Hungary, Kazakstan, Latvia, Lithuania, Moldova, Mongolia, Uzbekistan, Kyrgyzstan, Slovakia, the Czech Republic, Russian Federation, Tajikistan, Turkmenistan and Ukraine, the bands 47-48.5 MHz and 56.5-58 MHz are also allocated to the fixed and land mobile services on a secondary basis.

S5.164 **Additional allocation:** in Albania, Germany, Austria, Belgium, Bosnia and Herzegovina, Bulgaria, Côte d'Ivoire, Denmark, Spain, Finland, France, Gabon, Greece, Ireland, Israel, Italy, Jordan, Lebanon, Libya, Liechtenstein, Luxembourg, Madagascar, Mali, Malta, Morocco, Mauritania, Monaco, Nigeria, Norway, the Netherlands, Poland, Syria, the United Kingdom, Senegal, Slovenia, Sweden, Switzerland, Swaziland, Togo, Tunisia, Turkey and Yugoslavia the band 47-68 MHz, in Romania the band 47-58 MHz and in the Czech Republic the band 66-68 MHz, are also allocated to the land mobile service on a primary basis. However, stations of the land mobile service in the countries mentioned in connection with each band referred to in this footnote shall not cause harmful interference to, or claim protection from, existing or planned broadcasting stations of countries other than those mentioned in connection with the band. (WRC-97)

S5.165 **Additional allocation:** in Angola, Cameroon, the Congo, Madagascar, Mozambique, Somalia, Sudan, Tanzania and Chad, the band 47-68 MHz is also allocated to the fixed and mobile, except aeronautical mobile, services on a primary basis.

S5.166 **Alternative allocation:** in New Zealand, the band 50-51 MHz is allocated to the fixed, mobile and broadcasting services on a primary basis; the band 53-54 MHz is allocated to the fixed and mobile services on a primary basis.

S5.167 **Alternative allocation:** in Bangladesh, Brunei Darussalam, India, Indonesia, the Islamic Republic of Iran, Malaysia, Pakistan, Singapore and Thailand, the band 50-54 MHz is allocated to the fixed, mobile and broadcasting services on a primary basis.

S5.168 **Additional allocation:** in Australia, China and the Democratic People's Republic of Korea, the band 50-54 MHz is also allocated to the broadcasting service on a primary basis.

S5.169 **Alternative allocation:** in Botswana, Burundi, Lesotho, Malawi, Namibia, Dem. Rep. of the Congo, Rwanda, South Africa, Swaziland, Zambia and Zimbabwe, the band 50-54 MHz is allocated to the amateur service on a primary basis.

S5.170 **Additional allocation:** in New Zealand, the band 51-53 MHz is also allocated to the fixed and mobile services on a primary basis.

S5.171 **Additional allocation:** in Botswana, Burundi, Lesotho, Malawi, Mali, Namibia, Dem. Rep. of the Congo, Rwanda, South Africa, Swaziland and Zimbabwe, the band 54-68 MHz is also allocated to the fixed and mobile, except aeronautical mobile, services on a primary basis.

S5.172 **Different category of service:** in the French Overseas Departments in Region 2, Guyana, Jamaica and Mexico, the allocation of the band 54-68 MHz to the fixed and mobile services is on a primary basis (see No. **S5.33**).

S5.173 **Different category of service:** in the French Overseas Departments in Region 2, Guyana, Jamaica and Mexico, the allocation of the band 68-72 MHz to the fixed and mobile services is on a primary basis (see No. **S5.33**).

S5.174 **Alternative allocation:** in Bulgaria, Hungary, Poland and Romania, the band 68-73 MHz is allocated to the broadcasting service on a primary basis and used in accordance with the decisions in the Final Acts of the Special Regional Conference (Geneva, 1960). (WRC-97)

S5.175 **Alternative allocation:** in Armenia, Azerbaijan, Belarus, Estonia, Georgia, Kazakstan, Latvia, Lithuania, Moldova, Mongolia, Uzbekistan, Kyrgyzstan, Russian Federation, Tajikistan, Turkmenistan and Ukraine, the bands 68-73 MHz and 76-87.5 MHz are allocated to the broadcasting service on a primary basis. The services to which these bands are allocated in other countries and the broadcasting service in the countries listed above are subject to agreements with the neighbouring countries concerned.

S5.176 **Additional allocation:** in Australia, China, the Republic of Korea, the Philippines, the Democratic People's Republic of Korea and Western Samoa, the band 68-74 MHz is also allocated to the broadcasting service on a primary basis.

S5.177 **Additional allocation:** in Armenia, Azerbaijan, Belarus, Bulgaria, Estonia, Georgia, Kazakstan, Latvia, Lithuania, Moldova, Mongolia, Uzbekistan, Poland, Kyrgyzstan, Russian Federation, Tajikistan, Turkmenistan and Ukraine, the band 73-74 MHz is also allocated to the broadcasting service on a primary basis, subject to agreement obtained under No. **S9.21**. (WRC-97)

S5.178 **Additional allocation:** in Colombia, Costa Rica, Cuba, El Salvador, Guatemala, Guyana, Honduras and Nicaragua, the band 73-74.6 MHz is also allocated to the fixed and mobile services on a secondary basis.

S5.179 **Additional allocation:** in Armenia, Azerbaijan, Belarus, Bulgaria, China, Georgia, Kazakstan, Latvia, Lithuania, Moldova, Mongolia, Kyrgyzstan, Slovakia, the Czech Republic, Russian Federation, Tajikistan, Turkmenistan and Ukraine, the bands 74.6-74.8 MHz and 75.2-75.4 MHz are also allocated to the aeronautical radionavigation service, on a primary basis, for ground-based transmitters only.

S5.180 The frequency 75 MHz is assigned to marker beacons. Administrations shall refrain from assigning frequencies close to the limits of the guardband to stations of other services which, because of their power or geographical position, might cause harmful interference or otherwise place a constraint on marker beacons.

Every effort should be made to improve further the characteristics of airborne receivers and to limit the power of transmitting stations close to the limits 74.8 MHz and 75.2 MHz.

S5.181 **Additional allocation:** in Germany, Austria, Cyprus, Denmark, Egypt, France, Greece, Israel, Italy, Japan, Jordan, Lebanon, Malta, Morocco, Monaco, Norway, Syria, Sweden and Switzerland, the band 74.8-75.2 MHz is also allocated to the mobile service on a secondary basis, subject to agreement obtained under No. **S9.21**. In order to ensure that harmful interference is not caused to stations of the aeronautical radionavigation service, stations of the mobile service shall not be introduced in the band until it is no longer required for the aeronautical radionavigation service by any administration which may be identified in the application of the procedure invoked under No. **S9.21**. (WRC-97)

S5.182 **Additional allocation:** in Western Samoa, the band 75.4-87 MHz is also allocated to the broadcasting service on a primary basis.

S5.183 **Additional allocation:** in China, the Republic of Korea, Japan, the Philippines and the Democratic People's Republic of Korea, the band 76-87 MHz is also allocated to the broadcasting service on a primary basis.

S5.184 **Additional allocation:** in Bulgaria and Romania, the band 76-87.5 MHz is also allocated to the broadcasting service on a primary basis and used in accordance with the decisions contained in the Final Acts of the Special Regional Conference (Geneva, 1960). (WRC-97)

S5.185 **Different category of service:** in the United States, the French Overseas Departments in Region 2, Guyana, Jamaica, Mexico and Paraguay, the allocation of the band 76-88 MHz to the fixed and mobile services is on a primary basis (see No. **S5.33**).

S5.186 (SUP - WRC-97)

S5.187 **Alternative allocation:** in Albania, the band 81-87.5 MHz is allocated to the broadcasting service on a primary basis and used in accordance with the decisions contained in the Final Acts of the Special Regional Conference (Geneva, 1960).

S5.188 **Additional allocation:** in Australia, the band 85-87 MHz is also allocated to the broadcasting service on a primary basis. The introduction of the broadcasting service in Australia is subject to special agreements between the administrations concerned.

S5.189 Not used.

S5.190 **Additional allocation:** in Monaco, the band 87.5-88 MHz is also allocated to the land mobile service on a primary basis, subject to agreement obtained under No. **S9.21**. (WRC-97)

S5.191 Not used.

S5.192 **Additional allocation:** in China and the Republic of Korea, the band 100-108 MHz is also allocated to the fixed and mobile services on a primary basis. (WRC-97)

S5.193 Not used.

S5.194 **Additional allocation:** in Azerbaijan, Lebanon, Syria, Kyrgyzstan, Somalia and Turkmenistan, the band 104-108 MHz is also allocated to the mobile, except aeronautical mobile (R), service on a secondary basis. (WRC-97)

S5.195 Not used.

S5.196 Not used.

S5.197 **Additional allocation:** in Germany, Austria, Cyprus, Denmark, Egypt, France, Italy, Japan, Jordan, Lebanon, Malta, Morocco, Monaco, Norway, Pakistan, Syria, and Sweden, the band 108-111.975 MHz is also allocated to the mobile service on a secondary basis, subject to agreement obtained under No. **S9.21**. In order to ensure that harmful interference is not caused to stations of the aeronautical radionavigation service, stations of the mobile service shall not be introduced in the band until it is no longer required for the aeronautical radionavigation service by any administration which may be identified in the application of the procedures invoked under No. **S9.21**. (WRC-97)

S5.198 **Additional allocation:** the band 117.975-136 MHz is also allocated to the aeronautical mobile-satellite (R) service on a secondary basis, subject to agreement obtained under No. **S9.21**. (WRC-97)

S5.199 The bands 121.45-121.55 MHz and 242.95-243.05 MHz are also allocated to the mobile-satellite service for the reception on board satellites of emissions from emergency position-indicating radiobeacons transmitting at 121.5 MHz and 243 MHz (see Appendix **S13**).

S5.200 In the band 117.975-136 MHz, the frequency 121.5 MHz is the aeronautical emergency frequency and, where required, the frequency 123.1 MHz is the aeronautical frequency auxiliary to 121.5 MHz. Mobile stations of the maritime mobile service may communicate on these frequencies under the conditions laid down in Article **S31** and Appendix **S13** for distress and safety purposes with stations of the aeronautical mobile service.

S5.201 **Additional allocation:** in Angola, Armenia, Azerbaijan, Belarus, Bulgaria, Estonia, Georgia, Hungary, the Islamic Republic of Iran, Iraq, Japan, Kazakstan, Latvia, Moldova, Mongolia, Mozambique, Uzbekistan, Papua New Guinea, Poland, Kyrgyzstan, Slovakia, the Czech Republic, Romania, Russian Federation, Tajikistan, Turkmenistan and Ukraine, the band 132-136 MHz is also allocated to the aeronautical mobile (OR) service on a primary basis. In assigning frequencies to stations of the aeronautical mobile (OR) service, the administration shall take account of the frequencies assigned to stations in the aeronautical mobile (R) service. (WRC-97)

S5.202 **Additional allocation:** in Saudi Arabia, Armenia, Azerbaijan, Belarus, Bulgaria, United Arab Emirates, Georgia, the Islamic Republic of Iran, Jordan, Kazakstan, Latvia, Moldova, Oman, Uzbekistan, Poland, Syria, Kyrgyzstan, Slovakia, the Czech Republic, Romania, Russian Federation, Tajikistan, Turkmenistan, Turkey and Ukraine, the band 136-137 MHz is also allocated to the aeronautical mobile (OR) service on a primary basis. In assigning frequencies to stations of the aeronautical mobile (OR) service, the administration shall take account of the frequencies assigned to stations in the aeronautical mobile (R) service. (WRC-97)

S5.203 In the band 136-137 MHz, existing operational meteorological satellites may continue to operate, under the conditions defined in No. **S4.4** with respect to the aeronautical mobile service, until 1 January 2002. Administrations shall not authorize new frequency assignments in this band to stations in the meteorological-satellite service. (WRC-97)

S5.203A **Additional allocation:** in Israel, Mauritania, Qatar and Zimbabwe, the band 136-137 MHz is also allocated to the fixed and mobile, except aeronautical mobile (R), services on a secondary basis until 1 January 2005. (WRC-97)

S5.203B **Additional allocation:** in Saudi Arabia, United Arab Emirates, Jordan, Oman and Syria, the band 136-137 MHz is also allocated to the fixed and mobile, except aeronautical mobile, services on a secondary basis until 1 January 2005. (WRC-97)

S5.204 **Different category of service:** in Afghanistan, Saudi Arabia, Bahrain, Bangladesh, Bosnia and Herzegovina, Brunei Darussalam, China, Cuba, the United Arab Emirates, India, Indonesia, the Islamic Republic of Iran, Iraq, Malaysia, Oman, Pakistan, Philippines, Qatar, Singapore, Sri Lanka, Thailand, Yemen and Yugoslavia, the band 137-138 MHz is allocated to the fixed and mobile, except aeronautical mobile (R), services on a primary basis (see No. **S5.33**).

S5.205 **Different category of service:** in Israel and Jordan, the allocation of the band 137-138 MHz to the fixed and mobile, except aeronautical mobile, services is on a primary basis (see No. **S5.33**).

S5.206 **Different category of service:** in Armenia, Austria, Azerbaijan, Belarus, Bulgaria, Egypt, Finland, France, Georgia, Greece, Hungary, Kazakstan, Lebanon, Moldova, Mongolia, Uzbekistan, Poland, Kyrgyzstan, Syria, Slovakia, the Czech Republic, Romania, Russian Federation, Tajikistan, Turkmenistan and Ukraine, the allocation of the band 137-138 MHz to the aeronautical mobile (OR) service is on a primary basis (see No. **S5.33**).

S5.207 **Additional allocation:** in Australia, the band 137-144 MHz is also allocated to the broadcasting service on a primary basis until that service can be accommodated within regional broadcasting allocations.

S5.208 The use of the band 137-138 MHz by the mobile-satellite service is subject to coordination under No. **S9.11A**. (WRC-97)

S5.208A In making assignments to space stations in the mobile-satellite service in the bands 137-138 MHz, 387-390 MHz and 400.15-401 MHz, administrations shall take all practicable steps to protect the radio astronomy service in the bands 150.05-153 MHz, 322-328.6 MHz, 406.1-410 MHz and 608-614 MHz from harmful interference from unwanted emissions. The threshold levels of interference detrimental to the radio astronomy service are shown in Table 1 of Recommendation ITU-R RA.769-1. (WRC-97)

S5.209 The use of the bands 137-138 MHz, 148-150.05 MHz, 399.9-400.05 MHz, 400.15-401 MHz, 454-456 MHz and 459-460 MHz by the mobile-satellite service is limited to non-geostationary-satellite systems. (WRC-97)

S5.210 **Additional allocation:** in Austria, France, Italy, Liechtenstein, Slovakia, the Czech Republic, the United Kingdom and Switzerland, the bands 138-143.6 MHz and 143.65-144 MHz are also allocated to the space research service (space-to-Earth) on a secondary basis. (WRC-97)

S5.211 **Additional allocation:** in Germany, Saudi Arabia, Austria, Bahrain, Belgium, Bosnia and Herzegovina, Denmark, the United Arab Emirates, Spain, Finland, Greece, Ireland, Israel, Kenya, Kuwait, The Former Yugoslav Republic of Macedonia, Liechtenstein, Luxembourg, Mali, Malta, Norway, the Netherlands, Qatar, the United Kingdom, Slovenia, Somalia, Sweden, Switzerland, Tanzania, Tunisia, Turkey and Yugoslavia, the band 138-144 MHz is also allocated to the maritime mobile and land mobile services on a primary basis.

S5.212 **Alternative allocation:** in Angola, Botswana, Burundi, Cameroon, the Central African Republic, the Congo, Gabon, Gambia, Ghana, Guinea, Iraq, Jordan, Lesotho, Liberia, Libya, Malawi, Mozambique, Namibia, Nigeria, Oman, Dem. Rep. of the Congo, Rwanda, Sierra Leone, South Africa, Swaziland, Chad, Togo, Zaire, Zambia and Zimbabwe, the band 138-144 MHz is allocated to the fixed and mobile services on a primary basis.

S5.213 **Additional allocation:** in China, the band 138-144 MHz is also allocated to the radiolocation service on a primary basis.

S5.214 **Additional allocation:** in Bosnia and Herzegovina, Croatia, Eritrea, Ethiopia, Kenya, The Former Yugoslav Republic of Macedonia, Malta, Slovenia, Somalia, Sudan, Tanzania and Yugoslavia, the band 138-144 MHz is also allocated to the fixed service on a primary basis.

S5.215 Not used.

S5.216 **Additional allocation:** in China, the band 144-146 MHz is also allocated to the aeronautical mobile (OR) service on a secondary basis.

S5.217 **Alternative allocation:** in Afghanistan, Bangladesh, Cuba, Guyana and India, the band 146-148 MHz is allocated to the fixed and mobile services on a primary basis.

S5.218 **Additional allocation:** the band 148-149.9 MHz is also allocated to the space operation service (Earth-to-space) on a primary basis, subject to agreement obtained under No. **S9.21**. The bandwidth of any individual transmission shall not exceed ±25 kHz.

S5.219 The use of the band 148-149.9 MHz by the mobile-satellite service is subject to coordination under No. **S9.11A**. The mobile-satellite service shall not constrain the development and use of the fixed, mobile and space operation services in the band 148-149.9 MHz.

S5.220 The use of the bands 149.9-150.05 MHz and 399.9-400.05 MHz by the mobile-satellite service is subject to coordination under No. **S9.11A**. The mobile-satellite service shall not constrain the development and use of the radionavigation-satellite service in the bands 149.9-150.05 MHz and 399.9-400.05 MHz. (WRC-97)

S5.221 Stations of the mobile-satellite service in the band 148-149.9 MHz shall not cause harmful interference to, or claim protection from, stations of the fixed or mobile services operating in accordance with the Table of Frequency Allocations in the following countries: Albania, Algeria, Germany, Saudi Arabia, Australia, Austria, Bahrain, Bangladesh, Barbados, Belarus, Belgium, Benin, Bosnia and Herzegovina, Brunei Darussalam, Bulgaria, Cameroon, China, Cyprus, Congo, the Republic of Korea, Croatia, Cuba, Denmark, Egypt, the United Arab Emirates, Eritrea, Spain, Estonia, Ethiopia, Finland, France, Gabon, Ghana, Greece, Guinea, Guinea Bissau, Hungary, India, the Islamic Republic of Iran, Ireland, Iceland, Israel, Italy, Jamaica, Japan, Jordan, Kazakstan, Kenya, Kuwait, Latvia, The Former Yugoslav Republic of Macedonia, Lebanon, Libya, Liechtenstein, Luxembourg, Malaysia, Mali, Malta, Mauritania, Moldova, Mongolia, Mozambique, Namibia, Norway, New Zealand, Oman, Uganda, Uzbekistan, Pakistan, Panama, Papua New Guinea, Paraguay, the Netherlands, Philippines, Poland, Portugal, Qatar, Syria, Kyrgyzstan, Slovakia, Romania, the United Kingdom, Russian Federation, Senegal, Sierra Leone, Singapore, Slovenia, Sri Lanka, South Africa, Sweden, Switzerland, Swaziland, Tanzania, Chad, Thailand, Togo, Tonga, Trinidad and Tobago, Tunisia, Turkey, Ukraine, Viet Nam, Yemen, Yugoslavia, Zambia, and Zimbabwe. (WRC-97)

S5.222 Emissions of the radionavigation-satellite service in the bands 149.9-150.05 MHz and 399.9-400.05 MHz may also be used by receiving earth stations of the space research service.

S5.223 Recognizing that the use of the band 149.9-150.05 MHz by the fixed and mobile services may cause harmful interference to the radionavigation-satellite service, administrations are urged not to authorize such use in application of No. **S4.4**.

S5.224 (SUP - WRC-97)

S5.224A The use of the bands 149.9-150.05 MHz and 399.9-400.05 MHz by the mobile-satellite service (Earth-to-space) is limited to the land mobile-satellite service (Earth-to-space) until 1 January 2015. (WRC-97)

S5.224B The allocation of the bands 149.9-150.05 MHz and 399.9-400.05 MHz to the radionavigation-satellite service shall be effective until 1 January 2015. (WRC-97)

S5.225 **Additional allocation:** in Australia and India, the band 150.05-153 MHz is also allocated to the radio astronomy service on a primary basis.

S5.226 The frequency 156.8 MHz is the international distress, safety and calling frequency for the maritime mobile VHF radiotelephone service. The conditions for the use of this frequency are contained in Article **S31** and Appendix **S13**.

In the bands 156-156.7625 MHz, 156.8375-157.45 MHz, 160.6-160.975 MHz and 161.475-162.05 MHz, each administration shall give priority to the maritime mobile service on only such frequencies as are assigned to stations of the maritime mobile service by the administration (see Articles **S31** and **S52**, and Appendix **S13**).

Any use of frequencies in these bands by stations of other services to which they are allocated should be avoided in areas where such use might cause harmful interference to the maritime mobile VHF radiocommunication service.

However, the frequency 156.8 MHz and the frequency bands in which priority is given to the maritime mobile service may be used for radiocommunications on inland waterways subject to agreement between interested and affected administrations and taking into account current frequency usage and existing agreements.

S5.227 In the maritime mobile VHF service the frequency 156.525 MHz is to be used exclusively for digital selective calling for distress, safety and calling. The conditions for the use of this frequency are prescribed in Articles **S31** and **S52**, and Appendices **S13** and **S18**.

S5.228 Not used.

S5.229 **Alternative allocation:** in Morocco, the band 162-174 MHz is allocated to the broadcasting service on a primary basis. The use of this band shall be subject to agreement with administrations having services, operating or planned, in accordance with the Table which are likely to be affected. Stations in existence on 1 January 1981, with their technical characteristics as of that date, are not affected by such agreement.

S5.230 **Additional allocation:** in China, the band 163-167 MHz is also allocated to the space operation service (space-to-Earth) on a primary basis, subject to agreement obtained under No. **S9.21**.

S5.231 **Additional allocation:** in Afghanistan, China and Pakistan, the band 167-174 MHz is also allocated to the broadcasting service on a primary basis. The introduction of the broadcasting service into this band shall be subject to agreement with the neighbouring countries in Region 3 whose services are likely to be affected.

S5.232 **Additional allocation:** in Japan, the band 170-174 MHz is also allocated to the broadcasting service on a primary basis.

S5.233 **Additional allocation:** in China, the band 174-184 MHz is also allocated to the space research (space-to-Earth) and the space operation (space-to-Earth) services on a primary basis, subject to agreement obtained under No. **S9.21**. These services shall not cause harmful interference to, or claim protection from, existing or planned broadcasting stations.

S5.234 **Different category of service:** in Mexico, the allocation of the band 174-216 MHz to the fixed and mobile services is on a primary basis (see No. **S5.33**).

S5.235 **Additional allocation:** in Germany, Austria, Belgium, Denmark, Spain, Finland, France, Israel, Italy, Liechtenstein, Malta, Monaco, Norway, the Netherlands, the United Kingdom, Sweden and Switzerland, the band 174-223 MHz is also allocated to the land mobile service on a primary basis. However, the stations of the land mobile service shall not cause harmful interference to, or claim protection from, broadcasting stations, existing or planned, in countries other than those listed in this footnote.

S5.236 Not used.

S5.237 **Additional allocation:** in the Congo, Eritrea, Ethiopia, Gambia, Guinea, Libya, Malawi, Mali, Senegal, Sierra Leone, Somalia, Tanzania and Zimbabwe, the band 174-223 MHz is also allocated to the fixed and mobile services on a secondary basis. (WRC-97)

S5.238 **Additional allocation:** in Bangladesh, India, Pakistan and the Philippines, the band 200-216 MHz is also allocated to the aeronautical radionavigation service on a primary basis.

S5.239 Not used.

S5.240 **Additional allocation:** in China and India, the band 216-223 MHz is also allocated to the aeronautical radionavigation service on a primary basis and to the radiolocation service on a secondary basis.

S5.241 In Region 2, no new stations in the radiolocation service may be authorized in the band 216-225 MHz. Stations authorized prior to 1 January 1990 may continue to operate on a secondary basis.

S5.242 **Additional allocation:** in Canada, the band 216-220 MHz is also allocated to the land mobile service on a primary basis.

S5.243 **Additional allocation:** in Somalia, the band 216-225 MHz is also allocated to the aeronautical radionavigation service on a primary basis, subject to not causing harmful interference to existing or planned broadcasting services in other countries.

S5.244 (SUP - WRC-97)

S5.245 **Additional allocation:** in Japan, the band 222-223 MHz is also allocated to the aeronautical radionavigation service on a primary basis and to the radiolocation service on a secondary basis.

S5.246 **Alternative allocation:** in Spain, France, Israel and Monaco, the band 223-230 MHz is allocated to the broadcasting and land mobile services on a primary basis (see No. **S5.33**) on the basis that, in the preparation of frequency plans, the broadcasting service shall have prior choice of frequencies; and allocated to the fixed and mobile, except land mobile, services on a secondary basis. However, the stations of the land mobile service shall not cause harmful interference to, or claim protection from, existing or planned broadcasting stations in Morocco and Algeria.

S5.247 **Additional allocation:** in Saudi Arabia, Bahrain, the United Arab Emirates, Jordan, Oman, Qatar and Syria, the band 223-235 MHz is also allocated to the aeronautical radionavigation service on a primary basis.

S5.248 Not used.

S5.249 Not used.

S5.250 **Additional allocation:** in China, the band 225-235 MHz is also allocated to the radio astronomy service on a secondary basis.

S5.251 **Additional allocation:** in Nigeria, the band 230-235 MHz is also allocated to the aeronautical radionavigation service on a primary basis, subject to agreement obtained under No. **S9.21**.

S5.252 **Alternative allocation:** in Botswana, Lesotho, Malawi, Mozambique, Namibia, South Africa, Swaziland, Zambia and Zimbabwe, the bands 230-238 MHz and 246-254 MHz are allocated to the broadcasting service on a primary basis, subject to agreement obtained under No. **S9.21**.

S5.253 Not used.

S5.254 The bands 235-322 MHz and 335.4-399.9 MHz may be used by the mobile-satellite service, subject to agreement obtained under No. **S9.21**, on condition that stations in this service do not cause harmful interference to those of other services operating or planned to be operated in accordance with the Table of Frequency Allocations.

S5.255 The bands 312-315 MHz (Earth-to-space) and 387-390 MHz (space-to-Earth) in the mobile-satellite service may also be used by non-geostationary-satellite systems. Such use is subject to coordination under No. **S9.11A**.

S5.256 The frequency 243 MHz is the frequency in this band for use by survival craft stations and equipment used for survival purposes (see Appendix **S13**).

S5.257 The band 267-272 MHz may be used by administrations for space telemetry in their countries on a primary basis, subject to agreement obtained under No. **S9.21**.

S5.258 The use of the band 328.6-335.4 MHz by the aeronautical radionavigation service is limited to Instrument Landing Systems (glide path).

S5.259 **Additional allocation:** in Germany, Austria, Cyprus, the Republic of Korea, Denmark, Egypt, Spain, France, Greece, Israel, Italy, Japan, Jordan, Malta, Morocco, Monaco, Norway, the Netherlands, Syria and Sweden, the band 328.6-335.4 MHz is also allocated to the mobile service on a secondary basis, subject to agreement obtained under No. **S9.21**. In order to ensure that harmful interference is not caused to stations of the aeronautical radionavigation service, stations of the mobile service shall not be introduced in the band until it is no longer required for the aeronautical radionavigation service by any administration which may be identified in the application of the procedure invoked under No. **S9.21**. (WRC-97)

S5.260 Recognizing that the use of the band 399.9-400.05 MHz by the fixed and mobile services may cause harmful interference to the radionavigation satellite service, administrations are urged not to authorize such use in application of No. **S4.4**.

S5.261 Emissions shall be confined in a band of ±25 kHz about the standard frequency 400.1 MHz.

S5.262 **Additional allocation:** in Saudi Arabia, Armenia, Azerbaijan, Bahrain, Belarus, Bosnia and Herzegovina, Bulgaria, Colombia, Costa Rica, Cuba, Egypt, the United Arab Emirates, Ecuador, Estonia, Georgia, Hungary, Indonesia, the Islamic Republic of Iran, Iraq, Israel, Jordan, Kazakstan, Kuwait, Liberia, Malaysia, Moldova, Nigeria, Uzbekistan, Pakistan, the Philippines, Qatar, Syria, Kyrgyzstan, Slovakia, Romania, Russian Federation, Singapore, Somalia, Sri Lanka, Tajikistan, Turkmenistan, Ukraine and Yugoslavia, the band 400.05-401 MHz is also allocated to the fixed and mobile services on a primary basis.

S5.263 The band 400.15-401 MHz is also allocated to the space research service in the space-to-space direction for communications with manned space vehicles. In this application, the space research service will not be regarded as a safety service.

S5.264 The use of the band 400.15-401 MHz by the mobile-satellite service is subject to coordination under No. **S9.11A**. The power flux-density limit indicated in Annex 1 of Appendix **S5** shall apply until such time as a competent world radiocommunication conference revises it.

S5.265 Not used.

S5.266 The use of the band 406-406.1 MHz by the mobile-satellite service is limited to low power satellite emergency position-indicating radiobeacons (see also Article **S31** and Appendix **S13**).

S5.267 Any emission capable of causing harmful interference to the authorized uses of the band 406-406.1 MHz is prohibited.

S5.268 Use of the band 410-420 MHz by the space research service is limited to communications within 5 km of an orbiting, manned space vehicle. The power flux-density at the surface of the Earth produced by emissions from extra-vehicular activities shall not exceed -153 dB(W/m^2) for $0° \le \delta \le 5°$, $-153 + 0.077\ (\delta - 5)$ dB(W/m^2) for $5° \le \delta \le 70°$ and -148 dB(W/m^2) for $70° \le \delta \le 90°$, where δ is the angle of arrival of the radio-frequency wave and the reference bandwidth is 4 kHz. No. **S4.10** does not apply to extra-vehicular activities. In this frequency band the space research (space-to-space) service shall not claim protection from, nor constrain the use and development of, stations of the fixed and mobile services. (WRC-97)

S5.269 **Different category of service:** in Australia, the United States, India, Japan and the United Kingdom, the allocation of the bands 420-430 MHz and 440-450 MHz to the radiolocation service is on a primary basis (see No. **S5.33**).

S5.270 **Additional allocation:** in Australia, the United States, Jamaica and the Philippines, the bands 420-430 MHz and 440-450 MHz are also allocated to the amateur service on a secondary basis.

S5.271 **Additional allocation:** in Azerbaijan, Belarus, China, Estonia, India, Latvia, Lithuania, Kyrgyzstan, Turkmenistan and Ukraine, the band 420-460 MHz is also allocated to the aeronautical radionavigation service (radio altimeters) on a secondary basis. (WRC-97)

S5.272 **Different category of service:** in France, the allocation of the band 430-434 MHz to the amateur service is on a secondary basis (see No. **S5.32**).

S5.273 **Different category of service:** in Denmark, Libya and Norway, the allocation of the bands 430-432 MHz and 438-440 MHz to the radiolocation service is on a secondary basis (see No. **S5.32**).

S5.274 **Alternative allocation:** in Denmark, Norway and Sweden, the bands 430-432 MHz and 438-440 MHz are allocated to the fixed and mobile, except aeronautical mobile, services on a primary basis.

S5.275 **Additional allocation:** in Bosnia and Herzegovina, Croatia, Estonia, Finland, Latvia, The Former Yugoslav Republic of Macedonia, Libya, Slovenia and Yugoslavia, the bands 430-432 MHz and 438-440 MHz are also allocated to the fixed and mobile, except aeronautical mobile, services on a primary basis. (WRC-97)

S5.276 **Additional allocation:** in Afghanistan, Algeria, Saudi Arabia, Bahrain, Bangladesh, Brunei Darussalam, Burkina Faso, Burundi, Egypt, the United Arab Emirates, Ecuador, Eritrea, Ethiopia, Greece, Guinea, India, Indonesia, the Islamic Republic of Iran, Iraq, Israel, Italy, Jordan, Kenya, Kuwait, Lebanon, Libya, Liechtenstein, Malaysia, Malta, Nigeria, Oman, Pakistan, the Philippines, Qatar, Syria, Democratic People's Republic of Korea, Singapore, Somalia, Switzerland, Tanzania, Thailand, Togo, Turkey and Yemen, the band 430-440 MHz is also allocated to the fixed service on a primary basis and the bands 430-435 MHz and 438-440 MHz are also allocated to the mobile, except aeronautical mobile, service on a primary basis. (WRC-97)

S5.277 **Additional allocation:** in Angola, Armenia, Azerbaijan, Belarus, Cameroon, the Congo, Djibouti, Gabon, Georgia, Hungary, Kazakstan, Latvia, Mali, Moldova, Mongolia, Uzbekistan, Pakistan, Poland, Kyrgyzstan, Slovakia, the Czech Republic, Romania, Russian Federation, Rwanda, Tajikistan, Chad, Turkmenistan and Ukraine, the band 430-440 MHz is also allocated to the fixed service on a primary basis. (WRC-97)

S5.278 **Different category of service:** in Argentina, Colombia, Costa Rica, Cuba, Guyana, Honduras, Panama and Venezuela, the allocation of the band 430-440 MHz to the amateur service is on a primary basis (see No. **S5.33**).

S5.279 **Additional allocation:** in Mexico, the bands 430-435 MHz and 438-440 MHz are also allocated on a primary basis to the land mobile service, subject to agreement obtained under No. **S9.21**.

S5.280 In Germany, Austria, Bosnia and Herzegovina, Croatia, The Former Yugoslav Republic of Macedonia, Liechtenstein, Portugal, Slovenia, Switzerland and Yugoslavia, the band 433.05-434.79 MHz (centre frequency 433.92 MHz) is designated for industrial, scientific and medical (ISM) applications. Radiocommunication services of these countries operating within this band must accept harmful interference which may be caused by these applications. ISM equipment operating in this band is subject to the provisions of No. **S15.13**.

S5.281 **Additional allocation:** in the French Overseas Departments in Region 2 and India, the band 433.75-434.25 MHz is also allocated to the space operation service (Earth-to-space) on a primary basis. In France and in Brazil, the band is allocated to the same service on a secondary basis.

S5.282 In the bands 435-438 MHz, 1 260-1 270 MHz, 2 400-2 450 MHz, 3 400-3 410 MHz (in Regions 2 and 3 only) and 5 650-5 670 MHz, the amateur-satellite service may operate subject to not causing harmful interference to other services operating in accordance with the Table (see No. **S5.43**). Administrations authorizing such use shall ensure that any harmful interference caused by emissions from a station in the amateur-satellite service is immediately eliminated in accordance with the provisions of No. **S25.11**. The use of the bands 1 260-1 270 MHz and 5 650-5 670 MHz by the amateur-satellite service is limited to the Earth-to-space direction.

S5.283 **Additional allocation:** in Austria, the band 438-440 MHz is also allocated to the fixed and mobile, except aeronautical mobile, services on a primary basis.

S5.284 **Additional allocation:** in Canada, the band 440-450 MHz is also allocated to the amateur service on a secondary basis.

S5.285 **Different category of service:** in Canada, the allocation of the band 440-450 MHz to the radiolocation service is on a primary basis (see No. **S5.33**).

S5.286 The band 449.75-450.25 MHz may be used for the space operation service (Earth-to-space) and the space research service (Earth-to-space), subject to agreement obtained under No. **S9.21**.

S5.286A The use of the bands 454-456 MHz and 459-460 MHz by the mobile-satellite service is subject to coordination under No. **S9.11A**. (WRC-97)

S5.286B The use of the band 454-455 MHz in the countries listed in No. **S5.286D**, 455-456 MHz and 459-460 MHz in Region 2, and 454-456 MHz and 459-460 MHz in the countries listed in No. **S5.286E**, by stations in the mobile-satellite service, shall not cause harmful interference to, or claim protection from, stations of the fixed or mobile services operating in accordance with the Table of Frequency Allocations. (WRC-97)

S5.286C The use of the band 454-455 MHz in the countries listed in No. **S5.286D**, 455-456 MHz and 459-460 MHz in Region 2, and 454-456 MHz and 459-460 MHz in the countries listed in No. **S5.286E**, by stations in the mobile-satellite service, shall not constrain the development and use of the fixed and mobile services operating in accordance with the Table of Frequency Allocations. (WRC-97)

S5.286D **Additional allocation:** in Canada, the United States, Mexico and Panama, the band 454-455 MHz is also allocated to the mobile-satellite service (Earth-to-space) on a primary basis. (WRC-97)

S5.286E **Additional allocation:** in Cape Verde, Indonesia, Nepal, Nigeria and Papua New Guinea, the bands 454-456 MHz and 459-460 MHz are also allocated to the mobile-satellite (Earth-to-space) service on a primary basis. (WRC-97)

S5.287 In the maritime mobile service, the frequencies 457.525 MHz, 457.550 MHz, 457.575 MHz, 467.525 MHz, 467.550 MHz and 467.575 MHz may be used by on-board communication stations. Where needed, equipment designed for 12.5 kHz channel spacing using also the additional frequencies 457.5375 MHz, 457.5625 MHz, 467.5375 MHz and 467.5625 MHz may be introduced for on-board communications. The use of these frequencies in territorial waters may be subject to the national regulations of the administration concerned. The characteristics of the equipment used shall conform to those specified in Recommendation ITU-R M.1174 (see Resolution **341 (WRC-97)**). (WRC-97)

S5.288 In the territorial waters of the United States and the Philippines, the preferred frequencies for use by on-board communication stations shall be 457.525 MHz, 457.550 MHz, 457.575 MHz and 457.600 MHz paired, respectively, with 467.750 MHz, 467.775 MHz, 467.800 MHz and 467.825 MHz. The characteristics of the equipment used shall conform to those specified in Recommendation ITU-R M.1174.

S5.289 Earth exploration-satellite service applications, other than the meteorological-satellite service, may also be used in the bands 460-470 MHz and 1 690-1 710 MHz for space-to-Earth transmissions subject to not causing harmful interference to stations operating in accordance with the Table.

S5.290 **Different category of service:** in Afghanistan, Armenia, Azerbaijan, Belarus, China, Japan, Kazakstan, Mongolia, Uzbekistan, Kyrgyzstan, Slovakia, the Czech Republic, Russian Federation, Tajikistan, Turkmenistan and Ukraine, the allocation of the band 460-470 MHz to the meteorological-satellite service (space-to-Earth) is on a primary basis (see No. **S5.33**), subject to agreement obtained under No. **S9.21**. (WRC-97)

S5.291 **Additional allocation:** in China, the band 470-485 MHz is also allocated to the space research (space-to-Earth) and the space operation (space-to-Earth) services on a primary basis subject to agreement obtained under No. **S9.21** and subject to not causing harmful interference to existing and planned broadcasting stations.

S5.291A **Additional allocation:** in Germany, Austria, Denmark, Estonia, Finland, Liechtenstein, Norway, Netherlands, the Czech Republic and Switzerland, the band 470-494 MHz is also allocated to the radiolocation service on a secondary basis. This use is limited to the operation of wind profiler radars in accordance with Resolution **217 (WRC-97)**. (WRC-97)

S5.292 **Different category of service:** in Mexico and Venezuela, the allocation of the band 470-512 MHz to the fixed and mobile services, and in Argentina and Uruguay to the mobile service, is on a primary basis (see No. **S5.33**), subject to agreement obtained under No. **S9.21**.

S5.293 **Different category of service:** in Chile, Colombia, Cuba, the United States, Guyana, Honduras, Jamaica, Mexico and Panama, the allocation of the bands 470-512 MHz and 614-806 MHz to the fixed and mobile services is on a primary basis (see No. **S5.33**), subject to agreement obtained under No. **S9.21**.

S5.294 **Additional allocation:** in Burundi, Cameroon, the Congo, Ethiopia, Israel, Kenya, Lebanon, Libya, Malawi, Senegal, Sudan, Syria, and Yemen, the band 470-582 MHz is also allocated to the fixed service on a secondary basis.

S5.295 Not used.

S5.296 **Additional allocation:** in Germany, Austria, Belgium, Cyprus, Denmark, Spain, Finland, France, Ireland, Israel, Italy, Libya, Malta, Morocco, Monaco, Norway, the Netherlands, Portugal, Syria, the United Kingdom, Sweden, Switzerland, Swaziland and Tunisia, the band 470-790 MHz is also allocated on a secondary basis to the land mobile service, intended for applications ancillary to broadcasting. Stations of the land mobile service in the countries listed in this footnote shall not cause harmful interference to existing or planned stations operating in accordance with the Table of Frequency Allocations in countries other than those listed in this footnote. (WRC-97)

S5.297 **Additional allocation:** in Costa Rica, Cuba, El Salvador, the United States, Guatemala, Guyana, Honduras, Jamaica, Mexico and Venezuela, the band 512-608 MHz is also allocated to the fixed and mobile services on a primary basis, subject to agreement obtained under No. **S9.21**.

S5.298 **Additional allocation:** in India, the band 549.75-550.25 MHz is also allocated to the space operation service (space-to-Earth) on a secondary basis.

S5.299 Not used.

S5.300 **Additional allocation:** in Israel, Libya, Syria and Sudan, the band 582-790 MHz is also allocated to the fixed and mobile, except aeronautical mobile, services on a secondary basis.

S5.301 Not used.

S5.302 **Additional allocation:** in the United Kingdom, the band 590-598 MHz is also allocated to the aeronautical radionavigation service on a primary basis. All new assignments to stations in the aeronautical radionavigation service, including those transferred from the adjacent bands, shall be subject to coordination with the Administrations of the following countries: Germany, Belgium, Denmark, Spain, France, Ireland, Luxembourg, Morocco, Norway and the Netherlands.

S5.303 Not used.

S5.304 **Additional allocation:** in the African Broadcasting Area (see Nos. **S5.10** to **S5.13**), the band 606-614 MHz is also allocated to the radio astronomy service on a primary basis.

S5.305 **Additional allocation:** in China, the band 606-614 MHz is also allocated to the radio astronomy service on a primary basis.

S5.306 **Additional allocation:** in Region 1, except in the African Broadcasting Area (see Nos. **S5.10** to **S5.13**), and in Region 3, the band 608-614 MHz is also allocated to the radio astronomy service on a secondary basis.

S5.307 **Additional allocation:** in India, the band 608-614 MHz is also allocated to the radio astronomy service on a primary basis.

S5.308 Not used.

S5.309 **Different category of service:** in Costa Rica, El Salvador and Honduras, the allocation of the band 614-806 MHz to the fixed service is on a primary basis (see No. **S5.33**), subject to agreement obtained under No. **S9.21**.

S5.310 (SUP - WRC-97)

S5.311 Within the frequency band 620-790 MHz, assignments may be made to television stations using frequency modulation in the broadcasting-satellite service subject to agreement between the administrations concerned and those having services, operating in accordance with the Table, which may be affected (see Resolutions **33 (Rev. WRC-97)** and **507**). Such stations shall not produce a power flux-density in excess of the value –129 dB(W/m^2) for angles of arrival less than 20° (see Recommendation **705**) within the territories of other countries without the consent of the administrations of those countries.

S5.312 **Additional allocation:** in Armenia, Azerbaijan, Belarus, Bulgaria, Georgia, Hungary, Kazakstan, Latvia, Moldova, Mongolia, Uzbekistan, Poland, Kyrgyzstan, Slovakia, the Czech Republic, Romania, Russian Federation, Tajikistan, Turkmenistan and Ukraine, the band 645-862 MHz is also allocated to the aeronautical radionavigation service on a primary basis. (WRC-97)

S5.313 (SUP - WRC-97)

S5.314 **Additional allocation:** in Austria, Italy, Uzbekistan, the United Kingdom and Swaziland, the band 790-862 MHz is also allocated to the land mobile service on a secondary basis. (WRC-97)

S5.315 **Alternative allocation:** in Greece, Italy, Morocco and Tunisia, the band 790-838 MHz is allocated to the broadcasting service on a primary basis.

S5.316 **Additional allocation:** in Germany, Bosnia and Herzegovina, Burkina Faso, Cameroon, Côte d'Ivoire, Croatia, Denmark, Egypt, Finland, Israel, Kenya, the Former Yugoslav Republic of Macedonia, Libya, Liechtenstein, Monaco, Norway, the Netherlands, Portugal, Syria, Sweden, Switzerland and Yugoslavia, the band 790-830 MHz, and in these same countries and in Spain, France, Gabon and Malta, the band 830-862 MHz, are also allocated to the mobile, except aeronautical mobile, service on a primary basis. However, stations of the mobile service in the countries mentioned in connection with each band referred to in this footnote shall not cause harmful interference to, or claim protection from, stations of services operating in accordance with the Table in countries other than those mentioned in connection with the band. (WRC-97)

S5.317 **Additional allocation:** in Region 2 (except Brazil and the United States), the band 806-890 MHz is also allocated to the mobile-satellite service on a primary basis, subject to agreement obtained under No. **S9.21**. The use of this service is intended for operation within national boundaries.

S5.318 **Additional allocation:** in Canada, the United States and Mexico, the bands 849-851 MHz and 894-896 MHz are also allocated to the aeronautical mobile service on a primary basis, for public correspondence with aircraft. The use of the band 849-851 MHz is limited to transmissions from aeronautical stations and the use of the band 894-896 MHz is limited to transmissions from aircraft stations.

S5.319 **Additional allocation:** in Belarus, Russian Federation and Ukraine, the bands 806-840 MHz (Earth-to-space) and 856-890 MHz (space-to-Earth) are also allocated to the mobile-satellite, except aeronautical mobile-satellite (R), service. The use of these bands by this service shall not cause harmful interference to, or claim protection from, services in other countries operating in accordance with the Table of Frequency Allocations and is subject to special agreements between the administrations concerned.

S5.320 **Additional allocation:** in Region 3, the bands 806-890 MHz and 942-960 MHz are also allocated to the mobile-satellite, except aeronautical mobile-satellite (R), service on a primary basis, subject to agreement obtained under No. **S9.21**. The use of this service is limited to operation within national boundaries. In seeking such agreement, appropriate protection shall be afforded to services operating in accordance with the Table, to ensure that no harmful interference is caused to such services.

S5.321 **Alternative allocation:** in Italy, the band 838-854 MHz is allocated to the broadcasting service on a primary basis as from 1 January 1995.

S5.322 In Region 1, in the band 862-960 MHz, stations of the broadcasting service shall be operated only in the African Broadcasting Area (see Nos. **S5.10** to **S5.13**) excluding Algeria, Egypt, Spain, Libya, Morocco, Nigeria, South Africa, Tanzania and Zimbabwe, subject to agreement obtained under No. **S9.21**. (WRC-97)

S5.323 **Additional allocation:** in Armenia, Azerbaijan, Belarus, Bulgaria, Hungary, Kazakstan, Latvia, Moldova, Mongolia, Uzbekistan, Poland, Kyrgyzstan, Slovakia, the Czech Republic, Romania, Russian Federation, Tajikistan, Turkmenistan and Ukraine, the band 862-960 MHz is also allocated to the aeronautical radionavigation service on a primary basis. Such use is subject to agreement obtained under No. **S9.21** with administrations concerned and limited to ground-based radiobeacons in operation on 27 October 1997 until the end of their lifetime. (WRC-97)

S5.324 Not used.

S5.325 **Different category of service:** in the United States, the allocation of the band 890-942 MHz to the radiolocation service is on a primary basis (see No. **S5.33**), subject to agreement obtained under No. **S9.21**.

S5.326 **Different category of service:** in Chile, the band 903-905 MHz is allocated to the mobile, except aeronautical mobile, service on a primary basis, subject to agreement obtained under No. **S9.21**.

S5.327 **Different category of service:** in Australia, the allocation of the band 915-928 MHz to the radiolocation service is on a primary basis (see No. **S5.33**).

S5.328 The band 960-1 215 MHz is reserved on a worldwide basis for the use and development of airborne electronic aids to air navigation and any directly associated ground-based facilities.

S5.329 Use of the radionavigation-satellite service in the band 1 215-1 260 MHz shall be subject to the condition that no harmful interference is caused to the radionavigation service authorized under No. **S5.331**.

S5.330 **Additional allocation:** in Angola, Saudi Arabia, Bahrain, Bangladesh, Cameroon, China, the United Arab Emirates, Eritrea, Ethiopia, Guyana, India, Indonesia, the Islamic Republic of Iran, Iraq, Israel, Japan, Jordan, Kuwait, Lebanon, Libya, Morocco, Mozambique, Nepal, Nigeria, Pakistan, the Philippines, Qatar, Syria, Somalia, Sudan, Sri Lanka, Chad, Togo and Yemen, the band 1 215-1 300 MHz is also allocated to the fixed and mobile services on a primary basis. (WRC-97)

S5.331 **Additional allocation:** in Algeria, Germany, Austria, Bahrain, Belgium, Benin, Bosnia and Herzegovina, Burundi, Cameroon, China, Croatia, Denmark, the United Arab Emirates, France, Greece, India, the Islamic Republic of Iran, Iraq, Kenya, The Former Yugoslav Republic of Macedonia, Liechtenstein, Luxembourg, Mali, Mauritania, Norway, Oman, Pakistan, the Netherlands, Portugal, Qatar, Senegal, Slovenia, Somalia, Sudan, Sri Lanka, Sweden, Switzerland, Turkey and Yugoslavia, the band 1 215-1 300 MHz is also allocated to the radionavigation service on a primary basis.

S5.332 In the band 1 215-1 300 MHz, active spaceborne sensors in the earth exploration-satellite and space research services shall not cause harmful interference to, claim protection from, or otherwise impose constraints on operation or development of the radiolocation service, the radionavigation-satellite service and other services allocated on a primary basis. (WRC-97)

S5.333 (SUP - WRC-97)

S5.334 **Additional allocation:** in Canada and the United States, the bands 1 240-1 300 MHz and 1 350-1 370 MHz are also allocated to the aeronautical radionavigation service on a primary basis.

S5.335 In Canada and the United States in the band 1 240-1 300 MHz, active spaceborne sensors in the earth exploration-satellite and space research services shall not cause interference to, claim protection from, or otherwise impose constraints on operation or development of the aeronautical radionavigation service. (WRC-97)

S5.336 Not used.

S5.337 The use of the bands 1 300-1 350 MHz, 2 700-2 900 MHz and 9 000-9 200 MHz by the aeronautical radionavigation service is restricted to ground-based radars and to associated airborne transponders which transmit only on frequencies in these bands and only when actuated by radars operating in the same band.

S5.338 In Azerbaijan, Bulgaria, Mongolia, Poland, Kyrgyzstan, Slovakia, the Czech Republic, Romania, Turkmenistan and Ukraine, existing installations of the radionavigation service may continue to operate in the band 1 350-1 400 MHz. (WRC-97)

S5.339 The bands 1 370-1 400 MHz, 2 640-2 655 MHz, 4 950-4 990 MHz and 15.20-15.35 GHz are also allocated to the space research (passive) and earth exploration-satellite (passive) services on a secondary basis.

S5.340 All emissions are prohibited in the following bands:

1 400-1 427 MHz,	
2 690-2 700 MHz,	except those provided for by Nos. **S5.421** and **S5.422**,
10.68-10.7 GHz,	except those provided for by No. **S5.483**,
15.35-15.4 GHz,	except those provided for by No. **S5.511**,
23.6-24 GHz,	
31.3-31.5 GHz,	
31.5-31.8 GHz,	in Region 2,
48.94-49.04 GHz,	from airborne stations,
50.2-50.4 GHz*,	except those provided for by No. **S5.555A**,
52.6-54.25 GHz,	
86-92 GHz,	
105-116 GHz,	
140.69-140.98 GHz,	from airborne stations and from space stations in the space-to-Earth direction,
182-185 GHz,	except those provided for by No. **S5.563**,
217-231 GHz.	(WRC-97)

S5.341 In the bands 1 400-1 727 MHz, 101-120 GHz and 197-220 GHz, passive research is being conducted by some countries in a programme for the search for intentional emissions of extraterrestrial origin.

S5.342 **Additional allocation:** in Belarus, Russian Federation and Ukraine, the band 1 429-1 535 MHz is also allocated to the aeronautical mobile service on a primary basis exclusively for the purposes of aeronautical telemetry within the national territory. As of 1 April 2007, the use of the band 1 452-1 492 MHz is subject to agreement between the administrations concerned.

S5.343 In Region 2, the use of the band 1 435-1 535 MHz by the aeronautical mobile service for telemetry has priority over other uses by the mobile service.

S5.344 **Alternative allocation:** in the United States, the band 1 452-1 525 MHz is allocated to the fixed and mobile services on a primary basis (see also No. **S5.343**).

S5.345 Use of the band 1 452-1 492 MHz by the broadcasting-satellite service, and by the broadcasting service, is limited to digital audio broadcasting and is subject to the provisions of Resolution **528 (WARC-92)**.

S5.346 Not used.

S5.347 **Different category of service:** in Bangladesh, Bosnia and Herzegovina, Botswana, Bulgaria, Burkina Faso, Cuba, Denmark, Egypt, Greece, Ireland, Italy, Jordan, Kenya, Mozambique, Portugal, Sri Lanka, Swaziland, Yemen, Yugoslavia and Zimbabwe, the

---

* S5.340.1 The allocation to the earth exploration-satellite service (passive) and the space research service (passive) in the band 50.2-50.4 GHz should not impose undue constraints on the use of the adjacent bands by the primary allocated services in those bands. (WRC-97)

allocation of the band 1 452-1 492 MHz to the broadcasting-satellite service and the broadcasting service is on a secondary basis until 1 April 2007. (WRC-97)

S5.348 The use of the band 1 492-1 525 MHz by the mobile-satellite service is subject to coordination under No. **S9.11A**. However, no coordination threshold in Article **S21** for space stations of the mobile-satellite service with respect to terrestrial services shall apply to the situation referred to in No. **S5.343**. With respect to the situation referred to in No. **S5.343**, the requirement for coordination in the band 1492-1525 MHz will be determined by band overlap.

S5.348A In the band 1 492-1 525 MHz, the coordination threshold in terms of the power flux-density levels at the surface of the Earth in application of No. S.9.11A for space stations in the mobile-satellite (space-to-Earth) service, with respect to the land mobile service use for specialized mobile radios or used in conjunction with public switched telecommunication networks (PSTN) operating within the territory of Japan, shall be –150 dB(W/m^2) in any 4 kHz band for all angles of arrival, instead of those given in Table S5-2 of Appendix **S5**. The above threshold level of the power flux-density shall apply until it is changed by a competent world radiocommunication conference.

S5.349 **Different category of service:** in Saudi Arabia, Azerbaijan, Bahrain, Bosnia and Herzegovina, Cameroon, Egypt, the United Arab Emirates, France, the Islamic Republic of Iran, Iraq, Israel, Kazakstan, Kuwait, The Former Yugoslav Republic of Macedonia, Lebanon, Morocco, Mongolia, Oman, Qatar, Syria, Kyrgyzstan, Romania, Turkmenistan, Ukraine, Yemen and Yugoslavia, the allocation of the band 1 525-1 530 MHz to the mobile, except aeronautical mobile, service is on a primary basis (see No. **S5.33**). (WRC-97)

S5.350 **Additional allocation:** in Azerbaijan, Kyrgyzstan, Turkmenistan and Ukraine, the band 1 525-1 530 MHz is also allocated to the aeronautical mobile service on a primary basis. (WRC-97)

S5.351 The bands 1 525-1 544 MHz, 1 545-1 559 MHz, 1 626.5-1 645.5 MHz and 1 646.5-1 660.5 MHz shall not be used for feeder links of any service. In exceptional circumstances, however, an earth station at a specified fixed point in any of the mobile-satellite services may be authorized by an administration to communicate via space stations using these bands.

S5.352 (SUP - WRC-97)

S5.352A In the band 1 525-1 530 MHz, stations in the mobile-satellite service, except stations in the maritime mobile-satellite service, shall not cause harmful interference to, or claim protection from, stations of the fixed service in France and French overseas territories in Region 3, Algeria, Saudi Arabia, Egypt, Guinea, India, Israel, Italy, Jordan, Kuwait, Mali, Malta, Morocco, Mauritania, Nigeria, Oman, Pakistan, Philippines, Qatar, Syria, Tanzania, Viet Nam and Yemen notified prior to 1 April 1998. (WRC-97)

S5.353 (SUP - WRC-97)

S5.353A In applying the procedures of No. **S9.11A** to the mobile-satellite service in the bands 1 530-1 544 MHz and 1 626.5-1 645.5 MHz, priority shall be given to accommodating the spectrum requirements for distress, urgency and safety communications of the Global Maritime Distress and Safety System (GMDSS). Maritime mobile-satellite distress, urgency and safety communications shall have priority access and immediate availability over all other mobile satellite communications operating within a network. Mobile-satellite systems shall not cause unacceptable interference to, or claim protection from, distress, urgency and safety communications of the GMDSS. Account shall be taken of the priority of safety-related communications in the other mobile-satellite services. (See Resolution **218 (WRC-97)**.) (WRC-97)

S5.354 The use of the bands 1 525-1 559 MHz and 1 626.5-1 660.5 MHz by the mobile-satellite services is subject to coordination under No. **S9.11A**.

S5.355 **Additional allocation:** in Bahrain, Bangladesh, the Congo, Egypt, the United Arab Emirates, Eritrea, Ethiopia, the Islamic Republic of Iran, Iraq, Israel, Jordan, Kuwait, Lebanon, Malta, Morocco, Oman, Qatar, Syria, Somalia, Sudan, Sri Lanka, Chad, Togo, Yemen and Zambia, the bands 1 540-1 645.5 MHz and 1 646.5-1 660 MHz are also allocated to the fixed service on a secondary basis. (WRC-97)

S5.356 The use of the band 1 544-1 545 MHz by the mobile-satellite service (space-to-Earth) is limited to distress and safety communications (see Article **S31**).

S5.357 Transmissions in the band 1 545-1 555 MHz from terrestrial aeronautical stations directly to aircraft stations, or between aircraft stations, in the aeronautical mobile (R) service are also authorized when such transmissions are used to extend or supplement the satellite-to-aircraft links.

S5.357A In applying the procedures of No. **S9.11A** to the mobile-satellite service in the bands 1 545-1 555 MHz and 1 646.5-1 656.5 MHz, priority shall be given to accommodating the spectrum requirements of the aeronautical mobile-satellite (R) service providing transmission of messages with priority 1 to 6 in Article **S44**. Aeronautical mobile-satellite (R) service communications with priority 1 to 6 in Article **S44** shall have priority access and immediate availability, by pre-emption if necessary, over all other mobile-satellite communications operating within a network. Mobile-satellite systems shall not cause unacceptable interference to, or claim protection from, aeronautical mobile-satellite (R) service communications with priority 1 to 6 in Article **S44**. Account shall be taken of the priority of safety-related communications in the other mobile-satellite services. (See Resolution **218 (WRC-97)**.) (WRC-97)

S5.358 (SUP - WRC-97)

S5.359 **Additional allocation:** in Germany, Saudi Arabia, Armenia, Austria, Azerbaijan, Belarus, Benin, Bulgaria, Cameroon, Spain, France, Gabon, Georgia, Greece, Guinea, Guinea-Bissau, Hungary, Jordan, Kazakstan, Kuwait, Latvia, Libya, Mali, Mauritania, Moldova, Mongolia, Nigeria, Uganda, Uzbekistan, Pakistan, Poland, Syria, Kyrgyzstan, the Democratic People's Republic of Korea, Romania, Russian Federation, Senegal, Swaziland, Tajikistan, Tanzania, Turkmenistan, Ukraine, Zambia and Zimbabwe the bands 1 550-1 645.5 MHz and 1 646.5-1 660 MHz are also allocated to the fixed service on a primary basis. Administrations are urged to make all practicable efforts to avoid the implementation of new fixed-service stations in the bands 1 550-1 555 MHz, 1 610-1 645.5 MHz and 1 646.5-1 660 MHz.

S5.360 (SUP - WRC-97)

S5.361 (SUP - WRC-97)

S5.362 (SUP - WRC-97)

S5.362A In the United States, in the bands 1 555-1 559 MHz and 1 656.5-1 660.5 MHz, the aeronautical mobile-satellite (R) service shall have priority access and immediate availability, by pre-emption if necessary, over all other mobile-satellite communications operating within a network. Mobile-satellite systems shall not cause unacceptable interference to, or claim protection from, aeronautical mobile-satellite (R) service communications with priority 1 to 6 in Article **S44**. Account shall be taken of the priority of safety-related communications in the other mobile-satellite services. (WRC-97)

S5.363 **Alternative allocation:** in Sweden, the band 1 590-1 626.5 MHz is allocated to the aeronautical radionavigation service on a primary basis.

S5.364 The use of the band 1 610-1 626.5 MHz by the mobile-satellite service (Earth-to-space) and by the radiodetermination-satellite service (Earth-to-space) is subject to coordination under No. **S9.11A**. A mobile earth station operating in either of the services in this band shall not produce a peak e.i.r.p. density in excess of -15 dB(W/4 kHz) in the part of the band used by systems operating in accordance with the provisions of No. **S5.366** (to which No. **S4.10** applies), unless otherwise agreed by the affected administrations. In the part of the band where such systems are not operating, the mean e.i.r.p. density of a mobile earth station shall not exceed –3 dB(W/4 kHz). Stations of the mobile-satellite service shall not claim protection from stations in the aeronautical radionavigation service, stations operating in accordance with the provisions of No. **S5.366** and stations in the fixed service operating in accordance with the provisions of No. **S5.359**. Administrations responsible for the coordination of mobile-satellite networks shall make all practicable efforts to ensure protection of stations operating in accordance with the provisions of No. **S5.366**.

S5.365 The use of the band 1 613.8-1 626.5 MHz by the mobile-satellite service (space-to-Earth) is subject to coordination under No. **S9.11A**.

S5.366 The band 1 610-1 626.5 MHz is reserved on a worldwide basis for the use and development of airborne electronic aids to air navigation and any directly associated ground-based or satellite-borne facilities. Such satellite use is subject to agreement obtained under No. **S9.21**.

S5.367 **Additional allocation:** The bands 1 610-1 626.5 MHz and 5 000-5 150 MHz are also allocated to the aeronautical mobile-satellite (R) service on a primary basis, subject to agreement obtained under No. **S9.21**.

S5.368 With respect to the radiodetermination-satellite and mobile-satellite services the provisions of No. **S4.10** do not apply in the band 1 610-1 626.5 MHz, with the exception of the aeronautical radionavigation-satellite service.

S5.369 **Different category of service:** in Angola, Australia, Burundi, China, Côte d'Ivoire, Eritrea, Ethiopia, India, the Islamic Republic of Iran, Israel, Jordan, Lebanon, Liberia, Libya, Madagascar, Mali, Pakistan, Papua New Guinea, Dem. Rep. of the Congo, Syria, Senegal, Sudan, Swaziland, Togo and Zambia, the allocation of the band 1 610-1 626.5 MHz to the radiodetermination-satellite service (Earth-to-space) is on a primary basis (see No. **S5.33**), subject to agreement obtained under No. **S9.21** from countries not listed in this provision. (WRC-97)

S5.370 **Different category of service:** in Venezuela, the allocation to the radiodetermination-satellite service in the band 1 610-1 626.5 MHz (Earth-to-space) is on a secondary basis.

S5.371 **Additional allocation:** in Region 1, the bands 1 610-1 626.5 MHz (Earth-to-space) and 2 483.5-2 500 MHz (space-to-Earth) are also allocated to the radiodetermination-satellite service on a secondary basis, subject to agreement obtained under No. **S9.21**.

S5.372 Harmful interference shall not be caused to stations of the radio astronomy service using the band 1 610.6-1 613.8 MHz by stations of the radiodetermination-satellite and mobile-satellite services (No. **S29**.13 applies).

S5.373 Not used.

S5.373A (SUP - WRC-97)

S5.374 Mobile earth stations in the mobile-satellite service operating in the bands 1 631.5-1 634.5 MHz and 1 656.5-1 660 MHz shall not cause harmful interference to stations in the fixed service operating in the countries listed in No. **S5.359**. (WRC-97)

S5.375 The use of the band 1 645.5-1 646.5 MHz by the mobile-satellite service (Earth-to-space) and for inter-satellite links is limited to distress and safety communications (see Article **S31**).

S5.376 Transmissions in the band 1 646.5-1 656.5 MHz from aircraft stations in the aeronautical mobile (R) service directly to terrestrial aeronautical stations, or between aircraft stations, are also authorized when such transmissions are used to extend or supplement the aircraft-to-satellite links.

S5.376A Mobile earth stations operating in the band 1 660-1 660.5 MHz shall not cause harmful interference to stations in the radio astronomy service. (WRC-97)

S5.377 In the band 1 675-1 710 MHz, stations in the mobile-satellite service shall not cause harmful interference to, nor constrain the development of, the meteorological-satellite and meteorological aids services (see Resolution **213 (Rev.WRC-95)**) and the use of this band shall be subject to coordination under No. **S9.11A**.

S5.378 Not used.

S5.379 **Additional allocation:** in Bangladesh, India, Indonesia, Nigeria and Pakistan, the band 1 660.5-1 668.4 MHz is also allocated to the meteorological aids service on a secondary basis.

S5.379A Administrations are urged to give all practicable protection in the band 1 660.5-1 668.4 MHz for future research in radio astronomy, particularly by eliminating air-to-ground transmissions in the meteorological aids service in the band 1 664.4-1 668.4 MHz as soon as practicable.

S5.380 The bands 1 670-1 675 MHz and 1 800-1 805 MHz are intended for use, on a worldwide basis, by administrations wishing to implement aeronautical public correspondence. The use of the band 1 670-1 675 MHz by stations in the systems for public correspondence with aircraft is limited to transmissions from aeronautical stations and the use of the band 1 800-1 805 MHz is limited to transmissions from aircraft stations.

S5.381 **Additional allocation:** in Afghanistan, Costa Rica, Cuba, India, the Islamic Republic of Iran, Malaysia, Pakistan and Sri Lanka, the band 1 690-1 700 MHz is also allocated to the fixed and mobile, except aeronautical mobile, services on a primary basis. (WRC-97)

S5.382 **Different category of service:** in Saudi Arabia, Armenia, Austria, Azerbaijan, Bahrain, Belarus, Bosnia and Herzegovina, Bulgaria, the Congo, Egypt, the United Arab Emirates, Eritrea, Ethiopia, Guinea, Hungary, Iraq, Israel, Jordan, Kazakstan, Kuwait, the Former Yugoslav Republic of Macedonia, Lebanon, Mauritania, Moldova, Mongolia, Oman, Uzbekistan, Poland, Qatar, Syria, Kyrgyzstan, Romania, Russian Federation, Somalia, Tajikistan, Tanzania, Turkmenistan, Ukraine, Yemen and Yugoslavia, the allocation of the band 1 690-1 700 MHz to the fixed and mobile, except aeronautical mobile, services is on a primary basis (see No. **S5.33**), and in the Democratic People's Republic of Korea, the allocation of the band 1 690-1 700 MHz to the fixed service is on a primary basis (see No. **S5.33**) and to the mobile, except aeronautical mobile, service on a secondary basis. (WRC-97)

S5.383 Not used.

S5.384 **Additional allocation:** in India, Indonesia and Japan, the band 1 700-1 710 MHz is also allocated to the space research service (space-to-Earth) on a primary basis. (WRC-97)

S5.385 **Additional allocation:** the bands 1 718.8-1 722.2 MHz, 150-151 GHz, 174.42-175.02 GHz, 177-177.4 GHz, 178.2-178.6 GHz, 181-181.46 GHz, 186.2-186.6 GHz and 257.5-258 GHz are also allocated to the radio astronomy service on a secondary basis for spectral line observations.

S5.386 **Additional allocation:** the band 1 750-1 850 MHz is also allocated to the space operation (Earth-to-space) and space research (Earth-to-space) services in Region 2, in Australia, India, Indonesia and Japan on a primary basis, subject to agreement obtained under No. **S9.21**, having particular regard to troposcatter systems.

S5.387 **Additional allocation:** in Armenia, Azerbaijan, Belarus, Georgia, Kazakstan, Mali, Mongolia, Uzbekistan, Kyrgyzstan, Slovakia, the Czech Republic, Romania, Russian Federation, Tajikistan, Turkmenistan and Ukraine, the band 1 770-1 790 MHz is also allocated to the meteorological-satellite service on a primary basis, subject to agreement obtained under No. **S9.21**. (WRC-97)

S5.388 The bands 1 885-2 025 MHz and 2 110-2 200 MHz are intended for use, on a worldwide basis, by administrations wishing to implement International Mobile Telecommunications-2000 (IMT-2000). Such use does not preclude the use of these bands by other services to which they are allocated. The bands should be made available for IMT-2000 in accordance with Resolution **212 (Rev.WRC-97)**. (WRC-97)

S5.389 Not used.

S5.389A The use of the bands 1 980-2 010 MHz and 2 170-2 200 MHz by the mobile-satellite service is subject to coordination under No. **S9.11A** and to the provisions of Resolution **716 (WRC-95)**. The use of these bands shall not commence before 1 January 2000; however the use of the band 1 980-1 990 MHz in Region 2 shall not commence before 1 January 2005.

S5.389B The use of the band 1 980-1 990 MHz by the mobile-satellite service shall not cause harmful interference to or constrain the development of the fixed and mobile services in Argentina, Brazil, Canada, Chile, Ecuador, the United States, Honduras, Jamaica, Mexico, Peru, Suriname, Trinidad and Tobago, Uruguay and Venezuela.

S5.389C The use of the bands 2 010-2 025 MHz and 2 160-2 170 MHz in Region 2 by the mobile-satellite service shall not commence before 1 January 2002 and is subject to coordination under No. **S9.11**A and to the provisions of Resolution **716 (WRC-95)**. (WRC-97)

S5.389D In Canada and the United States the use of the bands 2 010-2 025 MHz and 2 160-2 170 MHz by the mobile-satellite service shall not commence before 1 January 2000.

S5.389E The use of the bands 2 010-2 025 MHz and 2 160-2 170 MHz by the mobile-satellite service in Region 2 shall not cause harmful interference to or constrain the development of the fixed and mobile services in Regions 1 and 3.

S5.389F In Algeria, Benin, Cape Verde, Egypt, Mali, Syria and Tunisia, the use of the bands 1 980-2 010 MHz and 2 170-2 200 MHz by the mobile-satellite service shall neither cause harmful interference to the fixed and mobile services, nor hamper the development of those services prior to 1 January 2005, nor shall the former service request protection from the

latter services.

S5.390 In Argentina, Brazil, Chile, Colombia, Cuba, Ecuador and Suriname, the use of the bands 2 010-2 025 MHz and 2 160-2 170 MHz by the mobile-satellite services shall not cause harmful interference to stations in the fixed and mobile services before 1 January 2005. After this date, the use of these bands is subject to coordination under No. **S9.11A** and to the provisions of Resolution **716 (WRC-95)**. (WRC-97)

S5.391 In making assignments to the mobile service in the bands 2 025-2 110 MHz and 2 200-2 290 MHz, administrations shall not introduce high-density mobile systems, as described in Recommendation ITU-R SA.1154, and shall take that Recommendation into account for the introduction of any other type of mobile system. (WRC-97)

S5.392 Administrations are urged to take all practicable measures to ensure that space-to-space transmissions between two or more non-geostationary satellites, in the space research, space operations and Earth exploration-satellite services in the bands 2 025-2 110 MHz and 2 200-2 290 MHz, shall not impose any constraints on Earth-to-space, space-to-Earth and other space-to-space transmissions of those services and in those bands between geostationary and non-geostationary satellites.

S5.392A **Additional allocation:** in Russian Federation, the band 2 160-2 200 MHz is also allocated to the space research service (space-to-Earth) on a primary basis until 1 January 2005. Stations in the space research service shall not cause harmful interference to, or claim protection from, stations in the fixed and mobile services operating in this frequency band.

S5.393 **Additional allocation:** in the United States, India and Mexico, the band 2 310-2 360 MHz is also allocated to the broadcasting-satellite service (sound) and complementary terrestrial sound broadcasting service on a primary basis. Such use is limited to digital audio broadcasting and is subject to the provisions of Resolution **528 (WARC-92)**. (WRC-97)

S5.394 In the United States, the use of the band 2 300-2 390 MHz by the aeronautical mobile service for telemetry has priority over other uses by the mobile services. In Canada, the use of the band 2 300-2 483.5 MHz by the aeronautical mobile service for telemetry has priority over other uses by the mobile services.

S5.395 In France, the use of the band 2 310-2 360 MHz by the aeronautical mobile service for telemetry has priority over other uses by the mobile service.

S5.396 Space stations of the broadcasting-satellite service in the band 2 310-2 360 MHz operating in accordance with No. **S5.393** that may affect the services to which this band is allocated in other countries shall be coordinated and notified in accordance with Resolution **33 (Rev.WRC-97)**. Complementary terrestrial broadcasting stations shall be subject to bilateral coordination with neighbouring countries prior to their bringing into use.

S5.397 **Different category of service:** in France, the band 2 450-2 500 MHz is allocated on a primary basis to the radiolocation service (see No. **S5.33**). Such use is subject to agreement with administrations having services operating or planned to operate in accordance with the Table of Frequency Allocations which may be affected.

S5.398 In respect of the radiodetermination-satellite service in the band 2 483.5-2 500 MHz, the provisions of No. **S4.10** do not apply.

S5.399 In Region 1, in countries other than those listed in No. **S5.400**, harmful interference shall not be caused to, or protection shall not be claimed from, stations of the radiolocation service by stations of the radiodetermination satellite service.

S5.400 **Different category of service:** in Angola, Australia, Bangladesh, Burundi, China, Eritrea, Ethiopia, India, the Islamic Republic of Iran, Jordan, Lebanon, Liberia, Libya, Madagascar, Mali, Pakistan, Papua New Guinea, Dem. Rep. of the Congo, Syria, Sudan, Swaziland, Togo and Zambia, the allocation of the band 2 483.5-2 500 MHz to the radiodetermination-satellite service (space-to-Earth) is on a primary basis (see No. **S5.33**), subject to agreement obtained under No. **S9.21** from countries not listed in this provision. (WRC-97)

S5.401 Not used.

S5.402 The use of the band 2 483.5-2 500 MHz by the mobile-satellite and the radiodetermination-satellite services is subject to the coordination under No. **S9.11A**. Administrations are urged to take all practicable steps to prevent harmful interference to the radio astronomy service from emissions in the 2 483.5-2 500 MHz band, especially those caused by second-harmonic radiation that would fall into the 4 990-5 000 MHz band allocated to the radio astronomy service worldwide.

S5.403 Subject to agreement obtained under No. **S9.21**, the band 2 520-2 535 MHz (until 1 January 2005 the band 2 500-2 535 MHz) may also be used for the mobile-satellite (space-to-Earth), except aeronautical mobile-satellite, service for operation limited to within national boundaries. The provisions of No. **S9.11A** apply.

S5.404 **Additional allocation:** in India and the Islamic Republic of Iran, the band 2 500-2 516.5 MHz may also be used for the radiodetermination-satellite service (space-to-Earth) for operation limited to within national boundaries, subject to agreement obtained under No. **S9.21**.

S5.405 **Additional allocation:** in France, the band 2 500-2 550 MHz is also allocated to the radiolocation service on a primary basis. Such use is subject to agreement with the administrations having services operating or planned to operate in accordance with the Table which may be affected.

S5.406 Not used.

S5.407 In the band 2 500-2 520 MHz, the power flux-density at the surface of the Earth from space stations operating in the mobile-satellite (space-to-Earth) service shall not exceed –152 dB(W/m^2/4 kHz) in Argentina, unless otherwise agreed by the administrations concerned.

S5.408 **Additional allocation:** in the United Kingdom, the band 2 500-2 600 MHz is also allocated to the radiolocation service on a secondary basis.

S5.409 Administrations shall make all practicable efforts to avoid developing new tropospheric scatter systems in the band 2 500-2 690 MHz.

S5.410 The band 2 500-2 690 MHz may be used for tropospheric scatter systems in Region 1, subject to agreement obtained under No. **S9.21**.

S5.411 When planning new tropospheric scatter radio-relay links in the band 2 500-2 690 MHz, all possible measures shall be taken to avoid directing the antennae of these links towards the geostationary-satellite orbit.

S5.412 **Alternative allocation:** in Azerbaijan, Bulgaria, Kyrgyzstan, Turkmenistan and Ukraine, the band 2 500-2 690 MHz is allocated to the fixed and mobile, except aeronautical

mobile, services on a primary basis. (WRC-97)

S5.413 In the design of systems in the broadcasting-satellite service in the bands between 2 500 MHz and 2 690 MHz, administrations are urged to take all necessary steps to protect the radio astronomy service in the band 2 690-2 700 MHz.

S5.414 The allocation of the frequency band 2 500-2 520 MHz to the mobile-satellite service (space-to-Earth) shall be effective on 1 January 2005 and is subject to coordination under No. **S9.11A**.

S5.415 The use of the bands 2 500-2 690 MHz in Region 2 and 2 500-2 535 MHz and 2 655-2 690 MHz in Region 3 by the fixed-satellite service is limited to national and regional systems, subject to agreement obtained under No. **S9.21**, giving particular attention to the broadcasting-satellite service in Region 1. In the direction space-to-Earth, the power flux-density at the Earth's surface shall not exceed the values given in Article **S21**, Table **S21-4**.

S5.415A **Additional allocation:** in Japan, subject to agreement obtained under No. **S9.21**, the band 2 515-2 535 MHz may also be used for the aeronautical mobile-satellite service (space-to-Earth) for operation limited to within its national boundary from 1 January 2000. (WRC-97)

S5.416 The use of the band 2 520-2 670 MHz by the broadcasting-satellite service is limited to national and regional systems for community reception, subject to agreement obtained under No. **S9.21**. The power flux-density at the Earth's surface shall not exceed the values given in Article **S21**, Table **S21-4**.

S5.417 **Alternative allocation:** in Germany and Greece, the band 2 520-2 670 MHz is allocated to the fixed service on a primary basis.

S5.418 **Additional allocation:** in Bangladesh, Belarus, China, Rep. of Korea, India, Japan, Pakistan, Russian Federation, Singapore, Sri Lanka, Thailand and Ukraine the band 2 535-2 655 MHz is also allocated to the broadcasting-satellite service (sound) and complementary terrestrial broadcasting service on a primary basis. Such use is limited to digital audio broadcasting and is subject to provisions of Resolution **528 (WARC-92)**. The provisions of No. **S5.416** and Article **S21**, Table **S21-4**, do not apply to this additional allocation.

S5.419 The allocation of the frequency band 2 670-2 690 MHz to the mobile-satellite service shall be effective from 1 January 2005. When introducing systems of the mobile-satellite service in this band, administrations shall take all necessary steps to protect the satellite systems operating in this band prior to 3 March 1992. The coordination of mobile-satellite systems in the band shall be in accordance with No. **S9.11A**.

S5.420 The band 2 655-2 670 MHz (until 1 January 2005 the band 2 655-2 690 MHz) may also be used for the mobile-satellite (Earth-to-space), except aeronautical mobile-satellite, service for operation limited to within national boundaries, subject to agreement obtained under No. **S9.21**. The coordination under No. **S9.11A** applies.

S5.420A **Additional allocation:** in Japan, subject to agreement obtained under No. **S9.21**, the band 2 670-2 690 MHz may also be used for the aeronautical mobile-satellite service (Earth-to-space) for operation limited to within its national boundary from 1 January 2000. (WRC-97)

S5.421 **Additional allocation:** in Germany and Austria, the band 2 690-2 695 MHz is also allocated to the fixed service on a primary basis. Such use is limited to equipment in operation by 1 January 1985.

S5.422 **Additional allocation:** in Saudi Arabia, Armenia, Azerbaijan, Bahrain, Belarus, Bosnia and Herzegovina, Brunei Darussalam, the Central African Republic, the Congo, Côte d'Ivoire, Cuba, Egypt, the United Arab Emirates, Eritrea, Ethiopia, Gabon, Georgia, Guinea, Guinea-Bissau, the Islamic Republic of Iran, Iraq, Israel, Jordan, Kazakstan, Lebanon, Malaysia, Mali, Morocco, Mauritania, Moldova, Mongolia, Nigeria, Oman, Uzbekistan, Pakistan, the Philippines, Qatar, Syria, Kyrgyzstan, Dem Rep. of the Congo, Romania, Russian Federation, Somalia, Tajikistan, Tunisia, Turkmenistan, Ukraine, Yemen, Yugoslavia and Zambia, the band 2 690-2 700 MHz is also allocated to the fixed and mobile, except aeronautical mobile, services on a primary basis. Such use is limited to equipment in operation by 1 January 1985. (WRC-97)

S5.423 In the band 2 700-2 900 MHz, ground-based radars used for meteorological purposes are authorized to operate on a basis of equality with stations of the aeronautical radionavigation service.

S5.424 **Additional allocation:** in Canada, the band 2 850-2 900 MHz is also allocated to the maritime radionavigation service, on a primary basis, for use by shore-based radars.

S5.425 In the band 2 900-3 100 MHz, the use of the shipborne interrogator-transponder system (SIT) shall be confined to the sub-band 2 930 -2 950 MHz.

S5.426 The use of the band 2 900-3 100 MHz by the aeronautical radionavigation service is limited to ground-based radars.

S5.427 In the bands 2 900-3 100 MHz and 9 300-9 500 MHz, the response from radar transponders shall not be capable of being confused with the response from radar beacons (racons) and shall not cause interference to ship or aeronautical radars in the radionavigation service, having regard, however, to No. **S4.9**.

S5.428 **Additional allocation:** in Azerbaijan, Bulgaria, Cuba, Kazakstan, Mongolia, Poland, Kyrgyzstan, Romania, Turkmenistan and Ukraine, the band 3 100-3 300 MHz is also allocated to the radionavigation service on a primary basis. (WRC-97)

S5.429 **Additional allocation:** in Saudi Arabia, Bahrain, Bangladesh, Brunei Darussalam, China, the Congo, the Republic of Korea, the United Arab Emirates, India, Indonesia, the Islamic Republic of Iran, Iraq, Israel, Japan, Jordan, Kuwait, Lebanon, Libya, Malaysia, Oman, Pakistan, Qatar, Syria, Democratic People's Republic of Korea and Yemen, the band 3 300-3 400 MHz is also allocated to the fixed and mobile services on a primary basis. The countries bordering the Mediterranean shall not claim protection for their fixed and mobile services from the radiolocation service. (WRC-97)

S5.430 **Additional allocation:** in Azerbaijan, Bulgaria, Cuba, Mongolia, Poland, Kyrgyzstan, Romania, Turkmenistan and Ukraine, the band 3 300-3 400 MHz is also allocated to the radionavigation service on a primary basis. (WRC-97)

S5.431 **Additional allocation:** in Germany, Israel, Nigeria and the United Kingdom, the band 3 400-3 475 MHz is also allocated to the amateur service on a secondary basis.

S5.432 **Different category of service:** in the Republic of Korea, Indonesia, Japan and Pakistan, the allocation of the band 3 400-3 500 MHz to the mobile, except aeronautical mobile, service is on a primary basis (see No. **S5.33**). (WRC-97)

S5.433 In Regions 2 and 3, in the band 3 400-3 600 MHz the radiolocation service is allocated on a primary basis. However, all administrations operating radiolocation systems in this band are urged to cease operations by 1985. Thereafter, administrations shall take all practicable steps to protect the fixed-satellite service and coordination requirements shall not be imposed on the fixed-satellite service.

S5.434 (SUP - WRC-97)

S5.435 In Japan, in the band 3 620-3 700 MHz, the radiolocation service is excluded.

S5.436 Not used.

S5.437 **Additional allocation:** in Germany and Norway, the band 4 200-4 210 MHz is also allocated to the fixed service on a secondary basis. (WRC-97)

S5.438 Use of the band 4 200-4 400 MHz by the aeronautical radionavigation service is reserved exclusively for radio altimeters installed on board aircraft and for the associated transponders on the ground. However, passive sensing in the earth exploration-satellite and space research services may be authorized in this band on a secondary basis (no protection is provided by the radio altimeters).

S5.439 **Additional allocation:** in China, the Islamic Republic of Iran and Libya, the band 4 200-4 400 MHz is also allocated to the fixed service on a secondary basis. (WRC-97)

S5.440 The standard frequency and time signal-satellite service may be authorized to use the frequency 4 202 MHz for space-to-Earth transmissions and the frequency 6 427 MHz for Earth-to-space transmissions. Such transmissions shall be confined within the limits of ±2 MHz of these frequencies, subject to agreement obtained under No. **S9.21**.

S5.441 The use of the bands 4 500-4 800 MHz (space-to-Earth), 6 725-7 025 MHz (Earth-to-space) by the fixed-satellite service shall be in accordance with the provisions of Appendix **S30B**. The use of the bands 10.7-10.95 GHz (space-to-Earth), 11.2-11.45 GHz (space-to-Earth) and 12.75-13.25 GHz (Earth-to-space) by geostationary-satellite systems in the fixed-satellite service shall be in accordance with the provisions of Appendix **S30B**. The use of the bands 10.7-10.95 GHz (space-to-Earth), 11.2-11.45 GHz (space-to-Earth) and 12.75-13.25 GHz (Earth-to-space) by non-geostationary-satellite systems in the fixed-satellite service shall be in accordance with the provisions of Resolution **130 (WRC-97)**. (WRC-97)

S5.442 In the bands 4 825-4 835 MHz and 4 950-4 990 MHz, the allocation to the mobile service is restricted to the mobile, except aeronautical mobile, service.

S5.443 **Different category of service:** in Argentina, Australia and Canada, the allocation of the bands 4 825-4 835 MHz and 4 950-4 990 MHz to the radio astronomy service is on a primary basis (see No. **S5.33**).

S5.444 The band 5 000-5 150 MHz is to be used for the operation of the international standard system (microwave landing system) for precision approach and landing. The requirements of this system shall take precedence over other uses of this band. For the use of this band, No. **S5.444A** and Resolution **114 (WRC-95)** apply.

S5.444A **Additional allocation:** the band 5 091-5 150 MHz is also allocated to the fixed-satellite service (Earth-to-space) on a primary basis. This allocation is limited to feeder links of non-geostationary mobile-satellite systems and is subject to coordination under No. **S9.11A**.

In the band 5 091-5 150 MHz, the following conditions also apply:

- prior to 1 January 2010, the use of the band 5 091-5 150 MHz by feeder links of non-geostationary-satellite systems in the mobile-satellite service shall be made in accordance with Resolution **114 (WRC-95)**;
- prior to 1 January 2010, the requirements of existing and planned international standard systems for the aeronautical radionavigation service which cannot be met in the 5 000-5 091 MHz band, shall take precedence over other uses of this band;
- after 1 January 2008, no new assignments shall be made to stations providing feeder links of non-geostationary mobile-satellite systems;
- after 1 January 2010, the fixed-satellite service will become secondary to the aeronautical radionavigation service.

S5.445 Not used.

S5.446 **Additional allocation:** in the countries listed in Nos. **S5.369** and **S5.400**, the band 5 150-5 216 MHz is also allocated to the radiodetermination-satellite service (space-to-Earth) on a primary basis, subject to agreement obtained under No. **S9.21**. In Region 2, the band is also allocated to the radiodetermination-satellite service (space-to-Earth) on a primary basis. In Regions 1 and 3, except those countries listed in Nos. **S5.369** and **S5.400**, the band is also allocated to the radiodetermination-satellite service (space-to-Earth) on a secondary basis. The use by the radiodetermination-satellite service is limited to feeder links in conjunction with the radiodetermination-satellite service operating in the bands 1 610-1 626.5 MHz and/or 2 483.5-2 500 MHz. The total power flux-density at the Earth's surface shall in no case exceed –159 dBW/m^2 in any 4 kHz band for all angles of arrival.

S5.447 **Additional allocation:** in Germany, Austria, Belgium, Denmark, Spain, Finland, France, Greece, Israel, Italy, Japan, Jordan, Lebanon, Liechtenstein, Luxembourg, Malta, Morocco, Norway, Pakistan, the Netherlands, Portugal, Syria, the United Kingdom, Sweden, Switzerland and Tunisia, the band 5 150-5 250 MHz is also allocated to the mobile service, on a primary basis, subject to agreement obtained under No. **S9.21**.

S5.447A The allocation to the fixed-satellite service (Earth-to-space) is limited to feeder links of non-geostationary-satellite systems in the mobile-satellite service and is subject to coordination under No. **S9.11A**.

S5.447B **Additional allocation:** the band 5 150-5 216 MHz is also allocated to the fixed-satellite service (space-to-Earth) on a primary basis. This allocation is limited to feeder links of non-geostationary-satellite systems in the mobile-satellite service and is subject to provisions of No. **S9.11A**. The power flux-density at the Earth's surface produced by space stations of the fixed-satellite service operating in the space-to-Earth direction in the band 5 150-5 216 MHz shall in no case exceed –164 dB(W/m^2) in any 4 kHz band for all angles of arrival.

S5.447C Administrations responsible for fixed-satellite service networks in the band 5 150-5 250 MHz operated under Nos. **S5.447A** and **S5.447B** shall coordinate on an equal basis in accordance with No. **S9.11A** with administrations responsible for non-geostationary-satellite networks operated under No. **S5.446** and brought into use prior to 17 November 1995. Satellite networks operated under No. **S5.446** brought into use after 17 November 1995 shall not claim protection from, and shall not cause harmful interference to, stations of the fixed-satellite service operated under Nos. **S5.447A** and **S5.447B**.

S5.447D The allocation of the band 5 250-5 255 MHz to the space research service on a primary basis is limited to active spaceborne sensors. Other uses of the band by the space research service are on a secondary basis. (WRC-97)

S5.448 **Additional allocation:** in Austria, Azerbaijan, Bulgaria, Libya, Mongolia, Kyrgyzstan, Slovakia, the Czech Republic, Romania, Turkmenistan and Ukraine, the band 5 250-5 350 MHz is also allocated to the radionavigation service on a primary basis. (WRC-97)

S5.448A The use of the frequency band 5 250-5 350 MHz by the earth exploration-satellite (active) and space research (active) services shall not constrain the future development and deployment of the radiolocation service. (WRC-97)

S5.448B The earth exploration-satellite (active) service operating in the band 5 350-5 460 MHz shall not cause harmful interference to, or constrain the use and development of, the aeronautical radionavigation service. (WRC-97)

S5.449 The use of the band 5 350-5 470 MHz by the aeronautical radionavigation service is limited to airborne radars and associated airborne beacons.

S5.450 **Additional allocation:** in Austria, Azerbaijan, Bulgaria, the Islamic Republic of Iran, Mongolia, Kyrgyzstan, Slovakia, the Czech Republic, Romania, Turkmenistan and Ukraine, the band 5 470-5 650 MHz is also allocated to the aeronautical radionavigation service on a primary basis. (WRC-97)

S5.451 **Additional allocation:** in the United Kingdom, the band 5 470-5 850 MHz is also allocated to the land mobile service on a secondary basis. The power limits specified in Nos. **S21.2**, **S21.3**, **S21.4** and **S21.5** shall apply in the band 5 725-5 850 MHz.

S5.452 Between 5 600 MHz and 5 650 MHz, ground-based radars used for meteorological purposes are authorized to operate on a basis of equality with stations of the maritime radionavigation service.

S5.453 **Additional allocation:** in Saudi Arabia, Bahrain, Bangladesh, Brunei Darussalam, Cameroon, the Central African Republic, China, the Congo, the Republic of Korea, Egypt, the United Arab Emirates, Gabon, Guinea, India, Indonesia, the Islamic Republic of Iran, Iraq, Israel, Japan, Jordan, Kuwait, Lebanon, Libya, Madagascar, Malaysia, Nigeria, Oman, Pakistan, the Philippines, Qatar, Syria, Democratic People's Republic of Korea, Singapore, Swaziland, Tanzania, Chad, and Yemen, the band 5 650-5 850 MHz is also allocated to the fixed and mobile services on a primary basis. (WRC-97)

S5.454 **Different category of service:** in Armenia, Azerbaijan, Belarus, Bulgaria, Georgia, Kazakstan, Mongolia, Uzbekistan, Kyrgyzstan, Russian Federation, Tajikistan, Turkmenistan and Ukraine, the allocation of the band 5 670-5 725 MHz to the space research service is on a primary basis (see No. **S5.33**). (WRC-97)

S5.455 **Additional allocation:** in Armenia, Azerbaijan, Belarus, Bulgaria, Cuba, Georgia, Hungary, Kazakstan, Latvia, Moldova, Mongolia, Uzbekistan, Poland, Kyrgyzstan, Slovakia, Russian Federation, Tajikistan, Turkmenistan and Ukraine, the band 5 670-5 850 MHz is also allocated to the fixed service on a primary basis.

S5.456 **Additional allocation:** in Germany and in Cameroon, the band 5 755-5 850 MHz is also allocated to the fixed service on a primary basis.

S5.457 Not used.

S5.458 In the band 6 425-7 075 MHz, passive microwave sensor measurements are carried out over the oceans. In the band 7 075-7 250 MHz, passive microwave sensor measurements are carried out. Administrations should bear in mind the needs of the Earth exploration-satellite (passive) and space research (passive) services in their future planning of the bands 6 425-7 025 MHz and 7 075-7 250 MHz.

S5.458A In making assignments in the band 6 700-7 075 MHz to space stations of the fixed-satellite service, administrations are urged to take all practicable steps to protect spectral line observations of the radio astronomy service in the band 6 650-6 675.2 MHz from harmful interference from unwanted emissions.

S5.458B The space-to-Earth allocation to the fixed-satellite service in the band 6 700-7 075 MHz is limited to feeder links for non-geostationary satellite systems of the mobile-satellite service and is subject to coordination under No. **S9.11A**. The use of the band 6 700-7 075 MHz (space-to-Earth) by feeder links for non-geostationary satellite systems in the mobile-satellite service is not subject to No. **S22.2**.

S5.458C Administrations making submissions in the band 7 025-7 075 MHz (Earth-to-space) for geostationary-satellite systems in the fixed-satellite service after 17 November 1995 shall consult on the basis of relevant ITU-R Recommendations with the administrations that have notified and brought into use non-geostationary-satellite systems in this frequency band before 18 November 1995 upon request of the latter administrations. This consultation shall be with a view to facilitating shared operation of both geostationary-satellite systems in the fixed-satellite service and non-geostationary-satellite systems in this band.

S5.459 **Additional allocation:** in Russian Federation, the frequency bands 7 100-7 155 MHz and 7 190-7 235 MHz are also allocated to the space operation service (Earth-to-space) on a primary basis, subject to agreement obtained under No. **S9.21**. (WRC-97)

S5.460 **Additional allocation:** the band 7 145-7 235 MHz is also allocated to the space research (Earth-to-space) service on a primary basis, subject to agreement obtained under No. **S9.21**. The use of the band 7 145-7 190 MHz is restricted to deep space; no emissions to deep space shall be effected in the band 7 190-7 235 MHz.

S5.461 **Additional allocation:** the bands 7 250-7 375 MHz (space-to-Earth) and 7 900-8 025 MHz (Earth-to-space) are also allocated to the mobile-satellite service on a primary basis, subject to agreement obtained under No. **S9.21**.

S5.461A The use of the band 7 450-7 550 MHz by the meteorological-satellite service (space-to-Earth) is limited to geostationary-satellite systems. Non-geostationary meteorological-satellite systems in this band notified before 30 November 1997 may continue to operate on a primary basis until the end of their lifetime. (WRC-97)

S5.461B The use of the band 7 750-7 850 MHz by the meteorological-satellite service (space-to-Earth) is limited to non-geostationary satellite systems. (WRC-97)

S5.462 (SUP - WRC-97)

S5.462A In Regions 1 and 3 (except for Japan), in the band 8 025-8 400 MHz, the earth exploration-satellite service using geostationary satellites shall not produce a power flux-density in excess of the following provisional values for angles of arrival (θ), without the consent of the affected administration:

–174 dB(W/m^2) in a 4 kHz band	for $0° \le \theta < 5°$
–174 + 0.5 (θ – 5) dB(W/m^2) in a 4 kHz band	for $5° \le \theta < 25°$
–164 dB(W/m^2) in a 4 kHz band	for $25° \le \theta \le 90°$

These values are subject to study under Resolution **124 (WRC-97)**. (WRC-97)

S5.463 Aircraft stations are not permitted to transmit in the band 8 025-8 400 MHz. (WRC-97)

S5.464 (SUP - WRC-97)

S5.465 In the space research service, the use of the band 8 400-8 450 MHz is limited to deep space.

S5.466 **Different category of service:** in Israel, Malaysia, Singapore and Sri Lanka, the allocation of the band 8 400-8 500 MHz to the space research service is on a secondary basis (see No. **S5.32**). (WRC-97)

S5.467 **Alternative allocation:** in the United Kingdom, the band 8 400-8 500 MHz is allocated to the radiolocation and space research services on a primary basis.

S5.468 **Additional allocation:** in Saudi Arabia, Bahrain, Bangladesh, Brunei Darussalam, Burundi, Cameroon, China, the Congo, Costa Rica, Egypt, the United Arab Emirates, Gabon, Guyana, Indonesia, the Islamic Republic of Iran, Iraq, Jamaica, Jordan, Kuwait, Lebanon, Libya, Malaysia, Mali, Morocco, Mauritania, Nepal, Nigeria, Oman, Pakistan, Qatar, Syria, Democratic People's Republic of Korea, Senegal, Singapore, Somalia, Swaziland, Tanzania, Chad, Togo, Tunisia and Yemen, the band 8 500-8 750 MHz is also allocated to the fixed and mobile services on a primary basis. (WRC-97)

S5.469 **Additional allocation:** in Armenia, Azerbaijan, Belarus, Bulgaria, Georgia, Hungary, Kazakstan, Lithuania, Moldova, Mongolia, Uzbekistan, Poland, Kyrgyzstan, Slovakia, the Czech Republic, Romania, Russian Federation, Tajikistan, Turkmenistan and Ukraine, the band 8 500-8 750 MHz is also allocated to the land mobile and radionavigation services on a primary basis.

S5.469A In the band 8 550-8 650 MHz, stations in the earth exploration-satellite service (active) and space research service (active) shall not cause harmful interference to, or constrain the use and development of, stations of the radiolocation service. (WRC-97)

S5.470 The use of the band 8 750-8 850 MHz by the aeronautical radionavigation service is limited to airborne Doppler navigation aids on a centre frequency of 8 800 MHz.

S5.471 **Additional allocation:** in Algeria, Germany, Bahrain, Belgium, China, the United Arab Emirates, France, Greece, Indonesia, the Islamic Republic of Iran, Libya, the Netherlands, Qatar and Sudan, the bands 8 825-8 850 MHz and 9 000-9 200 MHz are also allocated to the maritime radionavigation service, on a primary basis, for use by shore-based radars only.

S5.472 In the bands 8 850-9 000 MHz and 9 200-9 225 MHz, the maritime radionavigation service is limited to shore-based radars.

S5.473 **Additional allocation:** in Armenia, Austria, Azerbaijan, Belarus, Bulgaria, Cuba, Georgia, Hungary, Kazakstan, Moldova, Mongolia, Uzbekistan, Poland, Kyrgyzstan. Slovakia, the Czech Republic, Romania, Russian Federation, Tajikistan, Turkmenistan and Ukraine, the bands 8 850-9 000 MHz and 9 200-9 300 MHz are also allocated to the radionavigation service on a primary basis.

S5.474 In the band 9 200-9 500 MHz, search and rescue transponders (SART) may be used, having due regard to the appropriate ITU-R Recommendation (see also Article **S31**).

S5.475 The use of the band 9 300-9 500 MHz by the aeronautical radionavigation service is limited to airborne weather radars and ground-based radars. In addition, ground-based radar beacons in the aeronautical radionavigation service are permitted in the band 9 300-9 320 MHz on condition that harmful interference is not caused to the maritime radionavigation service. In the band 9 300-9 500 MHz, ground-based radars used for meteorological purposes have priority over other radiolocation devices.

S5.476 In the band 9 300-9 320 MHz in the radionavigation service, the use of shipborne radars, other than those existing on 1 January 1976, is not permitted until 1 January 2001.

S5.476A In the band 9 500-9 800 MHz, stations in the earth exploration-satellite service (active) and space research service (active) shall not cause harmful interference to, or constrain the use and development of, stations of the radionavigation and radiolocation services. (WRC-97)

S5.477 **Different category of service:** in Algeria, Saudi Arabia, Austria, Bahrain, Bangladesh, Brunei Darussalam, Cameroon, the Republic of Korea, Egypt, the United Arab Emirates, Eritrea, Ethiopia, Guyana, India, Indonesia, the Islamic Republic of Iran, Iraq, Jamaica, Japan, Jordan, Kuwait, Lebanon, Liberia, Malaysia, Nigeria, Oman, Pakistan, Qatar, Democratic People's Republic of Korea, Singapore, Somalia, Sudan, Sweden, Trinidad and Tobago, and Yemen, the allocation of the band 9 800-10 000 MHz to the fixed service is on a primary basis (see No. **S5.33**). (WRC-97)

S5.478 **Additional allocation:** in Azerbaijan, Bulgaria, Kazakstan, Mongolia, Kyrgyzstan, Slovakia, the Czech Republic, Romania, Turkmenistan and Ukraine, the band 9 800-10 000 MHz is also allocated to the radionavigation service on a primary basis. (WRC-97)

S5.479 The band 9 975-10 025 MHz is also allocated to the meteorological-satellite service on a secondary basis for use by weather radars.

S5.480 **Additional allocation:** in Brazil, Costa Rica, Ecuador, Guatemala, Honduras and Mexico, the band 10-10.45 GHz is also allocated to the fixed and mobile services on a primary basis. (WRC-97)

S5.481 **Additional allocation:** in Germany, Angola, China, Ecuador, Spain, Japan, Morocco, Nigeria, Oman, Democratic People’s Republic of Korea, Sweden, Tanzania and Thailand, the band 10.45-10.5 GHz is also allocated to the fixed and mobile services on a primary basis.

S5.482 In the band 10.6-10.68 GHz, stations of the fixed and mobile, except aeronautical mobile, services shall be limited to a maximum equivalent isotropically radiated power of 40 dBW and the power delivered to the antenna shall not exceed –3 dBW. These limits may be exceeded subject to agreement obtained under No. **S9.21**. However, in Saudi Arabia, Armenia, Azerbaijan, Bahrain, Bangladesh, Belarus, China, the United Arab Emirates,

Georgia, India, Indonesia, the Islamic Republic of Iran, Iraq, Japan, Kazakstan, Kuwait, Latvia, Lebanon, Moldova, Nigeria, Uzbekistan, Pakistan, the Philippines, Qatar, Syria, Kyrgyzstan, Russian Federation, Tajikistan, Turkmenistan and Ukraine, the restrictions on the fixed and mobile, except aeronautical mobile, services are not applicable.

S5.483 **Additional allocation:** in Saudi Arabia, Armenia, Azerbaijan, Bahrain, Belarus, Bosnia and Herzegovina, China, Colombia, the Republic of Korea, Costa Rica, Egypt, the United Arab Emirates, Georgia, the Islamic Republic of Iran, Iraq, Israel, Japan, Jordan, Kazakstan, Kuwait, Latvia, Lebanon, Moldova, Mongolia, Uzbekistan, Pakistan, Qatar, Kyrgyzstan, Democratic People's Republic of Korea, Romania, Russian Federation, Tajikistan, Turkmenistan, Ukraine, Yemen and Yugoslavia, the band 10.68-10.7 GHz is also allocated to the fixed and mobile, except aeronautical mobile, services on a primary basis. Such use is limited to equipment in operation by 1 January 1985. (WRC-97)

S5.484 In Region 1, the use of the band 10.7-11.7 GHz by the fixed-satellite service (Earth-to-space) is limited to feeder links for the broadcasting-satellite service.

S5.484A The use of the bands 10.95-11.2 GHz (space-to-Earth), 11.45-11.7 GHz (space-to-Earth), 11.7-12.2 GHz (space-to-Earth) in Region 2, 12.2-12.75 GHz (space-to-Earth) in Region 3, 12.5-12.75 GHz (space-to-Earth) in Region 1, 13.75-14.5 GHz (Earth-to-space), 17.8-18.6 GHz (space-to-Earth), 19.7-20.2 GHz (space-to-Earth), 27.5-28.6 GHz (Earth-to-space), 29.5-30 GHz (Earth-to-space) by non-geostationary- and geostationary-satellite systems in the fixed-satellite service is subject to the provisions of Resolution **130 (WRC-97)**. The use of the band 17.8-18.1 GHz (space-to-Earth) by non-geostationary fixed-satellite service systems is also subject to the provisions of Resolution **538 (WRC-97)**. (WRC-97)

S5.485 In Region 2, in the band 11.7-12.2 GHz, transponders on space stations in the fixed-satellite service may be used additionally for transmissions in the broadcasting-satellite service, provided that such transmissions do not have a maximum e.i.r.p. greater than 53 dBW per television channel and do not cause greater interference or require more protection from interference than the coordinated fixed-satellite service frequency assignments. With respect to the space services, this band shall be used principally for the fixed-satellite service.

S5.486 **Different category of service:** in Mexico and the United States, the allocation of the band 11.7-12.1 GHz to the fixed service is on a secondary basis (see No. **S5.32**).

S5.487 In the band 11.7-12.5 GHz in Regions 1 and 3, the fixed, fixed-satellite, mobile, except aeronautical mobile, and broadcasting services, in accordance with their respective allocations, shall not cause harmful interference to broadcasting-satellite stations operating in accordance with the provisions of Appendix **S30**.

S5.487A Additional allocation: in Region 1, the band 11.7-12.5 GHz, in Region 2, the band 12.2-12.7 GHz and, in Region 3, the band 11.7-12.2 GHz, are also allocated to the fixed-satellite service (space-to-Earth) on a primary basis, limited to non-geostationary systems and subject to the provisions of Resolution **538 (WRC-97)**. (WRC-97)

S5.488 The use of the bands 11.7-12.2 GHz by the fixed-satellite service in Region 2 and 12.2-12.7 GHz by the broadcasting-satellite service in Region 2 is limited to national and subregional systems. The use of the band 11.7-12.2 GHz by the fixed-satellite service in Region 2 is subject to previous agreement between the administrations concerned and those having services, operating or planned to operate in accordance with the Table, which may be affected (see Articles **S9** and **S11**). For the use of the band 12.2-12.7 GHz by the broadcasting-satellite service in Region 2, see Appendix **S30**.

S5.489 **Additional allocation:** in Peru, the band 12.1-12.2 GHz is also allocated to the fixed service on a primary basis.

S5.490 In Region 2, in the band 12.2-12.7 GHz, existing and future terrestrial radiocommunication services shall not cause harmful interference to the space services operating in conformity with the broadcasting-satellite Plan for Region 2 contained in Appendix **S30**.

S5.491 **Additional allocation:** in Region 3, the band 12.2-12.5 GHz is also allocated to the fixed-satellite (space-to-Earth) service on a primary basis, limited to national and sub-regional systems. The power flux-density limits in Article **S21**, Table **S21-4** shall apply to this frequency band. The introduction of the service in relation to the broadcasting-satellite service in Region 1 shall follow the procedures specified in Article 7 of Appendix **S30**, with the applicable frequency band extended to cover 12.2-12.5 GHz.

S5.492 Assignments to stations of the broadcasting-satellite service in conformity with the appropriate regional Plan in Appendix **S30** may also be used for transmissions in the fixed-satellite service (space-to-Earth), provided that such transmissions do not cause more interference or require more protection from interference than the broadcasting-satellite service transmissions operating in conformity with this Plan. With respect to the space services, this band shall be used principally for the broadcasting-satellite service. (WRC-97)

S5.493 The broadcasting-satellite service in the band 12.5-12.75 GHz in Region 3 is limited to a power flux-density not exceeding –111 dB(W/m^2)/27 MHz for all conditions and for all methods of modulation at the edge of the service area. (WRC-97)

S5.494 **Additional allocation:** in Algeria, Angola, Saudi Arabia, Bahrain, Cameroon, the Central African Republic, the Congo, Côte d'Ivoire, Egypt, the United Arab Emirates, Eritrea, Ethiopia, Gabon, Ghana, Guinea, Iraq, Israel, Jordan, Kuwait, Lebanon, Libya, Madagascar, Mali, Morocco, Mongolia, Nigeria, Qatar, Dem. Rep. of the Congo, Syria, Senegal, Somalia, Sudan, Chad, Togo and Yemen, the band 12.5-12.75 GHz is also allocated to the fixed and mobile, except aeronautical mobile, services on a primary basis. (WRC-97)

S5.495 **Additional allocation:** in Bosnia and Herzegovina, Croatia, Denmark, France, Greece, Liechtenstein, Monaco, Norway, Uganda, Portugal, Romania, Slovenia, Switzerland, Tanzania, Tunisia and Yugoslavia, the band 12.5-12.75 GHz is also allocated to the fixed and mobile, except aeronautical mobile, services on a secondary basis. (WRC-97)

S5.496 **Additional allocation:** in Austria, Azerbaijan, Kyrgyzstan, Turkmenistan and Ukraine, the band 12.5-12.75 GHz is also allocated to the fixed service and the mobile, except aeronautical mobile, service on a primary basis. However, stations in these services shall not cause harmful interference to fixed-satellite service earth stations of countries in Region 1 other than those listed in this footnote. Coordination of these earth stations is not required with stations of the fixed and mobile services of the countries listed in this footnote. The power flux-density limit at the Earth's surface given in Article **S21**, Table **S21-4**, for the fixed-satellite service shall apply on the territory of the countries listed in this footnote. (WRC-97)

S5.497 The use of the band 13.25-13.4 GHz by the aeronautical radionavigation service is limited to Doppler navigation aids.

S5.498 (SUP - WRC-97)

S5.498A The Earth exploration-satellite (active) and space research (active) services operating in the band 13.25-13.4 GHz shall not cause harmful interference to, or constrain the use and development of, the aeronautical radionavigation service. (WRC-97)

S5.499 **Additional allocation:** in Bangladesh, India and Pakistan, the band 13.25-14 GHz is also allocated to the fixed service on a primary basis.

S5.500 **Additional allocation:** in Algeria, Angola, Saudi Arabia, Bahrain, Brunei Darussalam, Cameroon, the Republic of Korea, Egypt, the United Arab Emirates, Gabon, Indonesia, the Islamic Republic of Iran, Iraq, Israel, Jordan, Kuwait, Lebanon, Madagascar, Malaysia, Mali, Malta, Morocco, Mauritania, Nigeria, Pakistan, Qatar, Syria, Senegal, Singapore, Sudan, Chad and Tunisia, the band 13.4-14 GHz is also allocated to the fixed and mobile services on a primary basis. (WRC-97)

S5.501 **Additional allocation:** in Austria, Azerbaijan, Bulgaria, Hungary, Japan, Mongolia, Kyrgyzstan, Romania, the United Kingdom, Turkmenistan and Ukraine, the band 13.4-14 GHz is also allocated to the radionavigation service on a primary basis. (WRC-97)

S5.501A The allocation of the band 13.4-13.75 GHz to the space research service on a primary basis is limited to active spaceborne sensors. Other uses of the band by the space research service are on a secondary basis. (WRC-97)

S5.501B In the band 13.4-13.75 GHz, the Earth exploration-satellite (active) and space research (active) services shall not cause harmful interference to, or constrain the use and development of, the radiolocation service. (WRC-97)

S5.502 In the band 13.75-14 GHz, the e.i.r.p. of any emission from an earth station in the fixed-satellite service shall be at least 68 dBW, and should not exceed 85 dBW, with a minimum antenna diameter of 4.5 m. In addition the e.i.r.p., averaged over one second, radiated by a station in the radiolocation or radionavigation services towards the geostationary-satellite orbit shall not exceed 59 dBW.

S5.503 In the band 13.75-14 GHz, geostationary space stations in the space research service for which information for advance publication has been received by the Bureau prior to 31 January 1992 shall operate on an equal basis with stations in the fixed-satellite service; after that date, new geostationary space stations in the space research service will operate on a secondary basis. The e.i.r.p. density of emissions from any earth station in the fixed-satellite service shall not exceed 71 dBW in any 6 MHz band in the frequency range 13.772-13.778 GHz until those geostationary space stations in the space research service for which information for advance publication has been received by the Bureau prior to 31 January 1992 cease to operate in this band. Automatic power control may be used to increase the e.i.r.p. density above 71 dBW in any 6 MHz band in this frequency range to compensate for rain attenuation, to the extent that the power-flux density at the fixed-satellite service space station does not exceed the value resulting from use of an e.i.r.p. of 71 dBW in any 6 MHz band in clear sky conditions.

S5.503A Until 1 January 2000, stations in the fixed-satellite service shall not cause harmful interference to non-geostationary space stations in the space research and Earth exploration-satellite services. After that date, these non-geostationary space stations will operate on a secondary basis in relation to the fixed-satellite service. Additionally, when planning earth stations in the fixed-satellite service to be brought into service between 1 January 2000 and 1 January 2001, in order to accommodate the needs of spaceborne precipitation radars operating in the band 13.793-13.805 GHz, advantage should be taken of the consultation process and the information given in Recommendation ITU-R SA.1071.

S5.504 The use of the band 14-14.3 GHz by the radionavigation service shall be such as to provide sufficient protection to space stations of the fixed-satellite service.

S5.505 **Additional allocation:** in Algeria, Angola, Saudi Arabia, Australia, Bahrain, Bangladesh, Botswana, Brunei Darussalam, Cameroon, China, the Congo, the Republic of Korea, Egypt, the United Arab Emirates, Gabon, Guatemala, Guinea, India, Indonesia, the Islamic Republic of Iran, Iraq, Israel, Japan, Jordan, Kuwait, Lesotho, Lebanon, Malaysia, Mali, Morocco, Mauritania, Oman, Pakistan, the Philippines, Qatar, Syria, the Democratic People's Republic of Korea, Senegal, Singapore, Somalia, Sudan, Swaziland, Tanzania, Chad and Yemen, the band 14-14.3 GHz is also allocated to the fixed service on a primary basis. (WRC-97)

S5.506 The band 14-14.5 GHz may be used, within the fixed-satellite service (Earth-to-space), for feeder links for the broadcasting-satellite service, subject to coordination with other networks in the fixed-satellite service. Such use of feeder links is reserved for countries outside Europe.

S5.507 Not used.

S5.508 **Additional allocation:** in Germany, Austria, Bosnia and Herzegovina, France, Greece, Ireland, Iceland, Italy, The Former Yugoslav Republic of Macedonia, Libya, Liechtenstein, Portugal, the United Kingdom, Slovenia, Switzerland, Turkey and Yugoslavia, the band 14.25-14.3 GHz is also allocated to the fixed service on a primary basis. (WRC-97)

S5.509 **Additional allocation:** in Japan and Pakistan the band 14.25-14.3 GHz is also allocated to the mobile, except aeronautical mobile, service on a primary basis.

S5.510 The use of the band 14.5-14.8 GHz by the fixed-satellite service (Earth-to-space) is limited to feeder links for the broadcasting-satellite service. This use is reserved for countries outside Europe.

S5.511 **Additional allocation:** in Saudi Arabia, Bahrain, Bosnia and Herzegovina, Cameroon, Egypt, the United Arab Emirates, Guinea, the Islamic Republic of Iran, Iraq, Israel, Kuwait, Lebanon, Libya, Pakistan, Qatar, Syria, Slovenia, Somalia and Yugoslavia, the band 15.35-15.4 GHz is also allocated to the fixed and mobile services on a secondary basis. (WRC-97)

S5.511A Use of the band 15.43-15.63 GHz by the fixed-satellite service (space-to-Earth (see Resolution **123 (WRC-97)**) and Earth-to-space) is limited to feeder links of non-geostationary systems in the mobile-satellite service, subject to coordination under No. **S9.11A**. In the space-to-Earth direction, the minimum earth station elevation angle above and gain towards the local horizontal plane and the minimum coordination distances to protect an earth station from harmful interference shall be in accordance with Recommendation ITU-R S.1341. Also in the space-to-Earth direction, harmful interference shall not be caused to stations of the radio astronomy service using the band 15.35-15.4 GHz. The threshold levels of interference and associated power flux-density limits which are detrimental to the radio astronomy service are given in Recommendation ITU-R RA.769-1. Special measures will need to be employed to protect the radio astronomy service in the band 15.35-15.4 GHz. (WRC-97)

S5.511B (SUP - WRC-97)

S5.511C Stations operating in the aeronautical radionavigation service shall limit the effective e.i.r.p. in accordance with Recommendation ITU-R S.1340. The minimum coordination distance required to protect the aeronautical radionavigation stations (No. **S4.10** applies) from harmful interference from feeder-link earth stations and the maximum e.i.r.p. transmitted towards the local horizontal plane by a feeder-link earth station shall be in accordance with Recommendation ITU-R S.1340. (WRC-97)

S5.511D Fixed-satellite service systems for which complete information for advance publication has been received by the Bureau by 21 November 1997 may operate in the bands 15.4-15.43 GHz and 15.63-15.7 GHz in the space-to-Earth direction and 15.63-15.65 GHz in the Earth-to-space direction. In the bands 15.4-15.43 GHz and 15.65-15.7 GHz, emissions from a non-geostationary space station shall not exceed the power flux-density limits at the Earth's surface of –146 dB(W/m^2/MHz) for any angle of arrival. In the band 15.63-15.65 GHz, where an administration plans emissions from a non-geostationary space station that exceed –146 dB(W/m^2/MHz) for any angle of arrival, it shall coordinate under No. **S9.11A** with the affected administrations. Stations in the fixed-satellite service operating in the band 15.63-15.65 GHz in the Earth-to-space direction shall not cause harmful interference to stations in the aeronautical radionavigation service (No. **S4.10** applies). (WRC-97)

S5.512 **Additional allocation:** in Algeria, Angola, Saudi Arabia, Austria, Bahrain, Bangladesh, Bosnia and Herzegovina, Brunei Darussalam, Cameroon, the Congo, Costa Rica, Egypt, El Salvador, the United Arab Emirates, Finland, Guatemala, India, Indonesia, the Islamic Republic of Iran, Jordan, Kuwait, Libya, Malaysia, Morocco, Mozambique, Nepal, Nicaragua, Oman, Pakistan, Qatar, Singapore, Slovenia, Somalia, Sudan, Swaziland, Tanzania, Chad, Yemen and Yugoslavia, the band 15.7-17.3 GHz is also allocated to the fixed and mobile services on a primary basis. (WRC-97)

S5.513 **Additional allocation:** in Israel, the band 15.7-17.3 GHz is also allocated to the fixed and mobile services on a primary basis. These services shall not claim protection from or cause harmful interference to services operating in accordance with the Table in countries other than those included in No. **S5.512**.

S5.513A Spaceborne active sensors operating in the band 17.2-17.3 GHz shall not cause harmful interference to, or constrain the development of, the radiolocation and other services allocated on a primary basis. (WRC-97)

S5.514 **Additional allocation:** in Algeria, Germany, Angola, Saudi Arabia, Austria, Bahrain, Bangladesh, Bosnia and Herzegovina, Cameroon, Costa Rica, El Salvador, the United Arab Emirates, Finland, Guatemala, Honduras, India, the Islamic Republic of Iran, Iraq, Israel, Japan, Jordan, Kuwait, Libya, Nepal, Nicaragua, Oman, Pakistan, Qatar, Slovenia, Sudan, Sweden and Yugoslavia, the band 17.3-17.7 GHz is also allocated to the fixed and mobile services on a secondary basis. The power limits given in Nos. **S21.3** and **S21.5** shall apply. (WRC-97)

S5.515 In the band 17.3-17.8 GHz, sharing between the fixed-satellite service (Earth-to-space) and the broadcasting-satellite service shall also be in accordance with the provisions of § 1 of Annex 4 of Appendix **S30A/30A**.

S5.516 The use of the band 17.3-18.1 GHz by geostationary-satellite systems in the fixed-satellite service (Earth-to-space) is limited to feeder links for the broadcasting-satellite service. For the use of the band 17.3-17.8 GHz in Region 2 by feeder links for the broadcasting-satellite service in the band 12.2-12.7 GHz, see Article **S11**. The use of the bands 17.3-18.1 GHz (Earth-to-space) in Regions 1 and 3 and 17.8-18.1 GHz (Earth-to-space) in Region 2 by non-geostationary-satellite systems in the fixed-satellite service is subject to the provisions of Resolution **538 (WRC-97)**. (WRC-97)

S5.517 In Region 2, the allocation to the broadcasting-satellite service in the band 17.3-17.8 GHz shall come into effect on 1 April 2007. After that date, use of the fixed-satellite (space-to-Earth) service in the band 17.7-17.8 GHz shall not claim protection from and shall not cause harmful interference to operating systems in the broadcasting-satellite service.

S5.518 **Different category of service:** in Region 2, the allocation of the band 17.7-17.8 GHz to the mobile service is on a primary basis until 31 March 2007.

S5.519 **Additional allocation:** the band 18.1-18.3 GHz is also allocated to the meteorological-satellite service (space-to-Earth) on a primary basis. Its use is limited to geostationary satellites and shall be in accordance with the provisions of Article **S21**, Table **S21-4**.

S5.520 The use of the band 18.1-18.4 GHz by the fixed-satellite service (Earth-to-space) is limited to feeder links for the broadcasting-satellite service.

S5.521 **Alternative allocation:** in Germany, Denmark, the United Arab Emirates, Greece, Slovakia and the Czech Republic, the band 18.1-18.4 GHz is allocated to the fixed, fixed-satellite (space-to-Earth) and mobile services on a primary basis (see No. **S5.33**). The provisions of No. **S5.519** also apply. (WRC-97)

S5.522 In making assignments to stations in the fixed and mobile services, administrations are invited to take account of passive sensors in the Earth-exploration satellite and space research services operating in the band 18.6-18.8 GHz. In this band, administrations should endeavour to limit as far as possible both the power delivered by the transmitter to the antenna and the e.i.r.p. in order to reduce the risk of interference to passive sensors to the minimum.

S5.523 In assigning frequencies to stations in the fixed-satellite service in the direction space-to-Earth, administrations are requested to limit as far as practicable the power flux-density at the Earth's surface in the band 18.6-18.8 GHz, in order to reduce the risk of interference to passive sensors in the earth exploration-satellite and space research services.

S5.523A The use of the bands 18.8-19.3 GHz (space-to-Earth) and 28.6-29.1 GHz (Earth-to-space) by geostationary and non-geostationary fixed-satellite service networks is subject to the application of the provisions of No. **S9.11A** and No. **S22.2** does not apply. Administrations having geostationary-satellite networks under coordination prior to 18 November 1995 shall cooperate to the maximum extent possible to coordinate pursuant to No. **S9.11A** with non-geostationary-satellite networks for which notification information has been received by the Bureau prior to that date, with a view to reaching results acceptable to all the parties concerned. Non-geostationary-satellite networks shall not cause unacceptable interference to geostationary fixed-satellite service networks for which complete Appendix **S4** notification information is considered as having been received by the Bureau prior to 18 November 1995. (WRC-97)

S5.523B The use of the band 19.3-19.6 GHz (Earth-to-space) by the fixed-satellite service is limited to feeder links for non-geostationary-satellite systems in the mobile-satellite service. Such use is subject to the application of the provisions of No. **S9.11A**, and No. **S22.2** does not apply.

S5.523C No. **S22.2** of the Radio Regulations shall continue to apply in the bands 19.3-19.6 GHz and 29.1-29.4 GHz, between feeder links of non-geostationary mobile-satellite service networks and those fixed-satellite service networks for which complete Appendix **S4** coordination information, or notification information, is considered as having been received by the Bureau prior to 18 November 1995. (WRC-97)

S5.523D The use of the band 19.3-19.7 GHz (space-to-Earth) by geostationary fixed-satellite service systems and by feeder links for non-geostationary-satellite systems in the mobile-satellite service is subject to the application of the provisions of No. **S9.11A**, but not

subject to the provisions of No. **S22.2**. The use of this band for other non-geostationary fixed-satellite service systems, or for the cases indicated in Nos. **S5.523C** and **S5.523E**, is not subject to the provisions of No. **S9.11A** and shall continue to be subject to Articles **S9** (except No. **S9.11A**) and **S11** procedures, and to the provisions of No. **S22.2**. (WRC-97)

S5.523E No. **S22.2** of the Radio Regulations shall continue to apply in the bands 19.6-19.7 GHz and 29.4-29.5 GHz, between feeder links of non-geostationary mobile-satellite service networks and those fixed-satellite service networks for which complete Appendix **S4** coordination information, or notification information, is considered as having been received by the Bureau by 21 November 1997. (WRC-97)

S5.524 **Additional allocation:** in Afghanistan, Algeria, Angola, Saudi Arabia, Bahrain, Bangladesh, Brunei Darussalam, Cameroon, China, the Congo, the Republic of Korea, Costa Rica, Egypt, the United Arab Emirates, Gabon, Guatemala, Guinea, India, Islamic Republic of Iran, Iraq, Israel, Japan, Jordan, Kuwait, Lebanon, Malaysia, Mali, Morocco, Mauritania, Nepal, Nigeria, Oman, Pakistan, the Philippines, Qatar, Dem. Rep. of the Congo, Syria, Democratic People's Republic of Korea, Singapore, Somalia, Sudan, Tanzania, Chad, Togo and Tunisia, the band 19.7-21.2 GHz is also allocated to the fixed and mobile services on a primary basis. This additional use shall not impose any limitation on the power flux-density of space stations in the fixed-satellite service in the band 19.7-21.2 GHz and of space stations in the mobile-satellite service in the band 19.7-20.2 GHz where the allocation to the mobile-satellite service is on a primary basis in the latter band. (WRC-97)

S5.525 In order to facilitate interregional coordination between networks in the mobile-satellite and fixed-satellite services, carriers in the mobile-satellite service that are most susceptible to interference shall, to the extent practicable, be located in the higher parts of the bands 19.7-20.2 GHz and 29.5-30 GHz.

S5.526 In the bands 19.7-20.2 GHz and 29.5-30 GHz in Region 2, and in the bands 20.1-20.2 GHz and 29.9-30 GHz in Regions 1 and 3, networks which are both in the fixed-satellite service and in the mobile-satellite service may include links between earth stations at specified or unspecified points or while in motion, through one or more satellites for point-to-point and point-to-multipoint communications.

S5.527 In the bands 19.7-20.2 GHz and 29.5-30 GHz, the provisions of No. **S4.10** do not apply with respect to the mobile-satellite service.

S5.528 The allocation to the mobile-satellite service is intended for use by networks which use narrow spot-beam antennas and other advanced technology at the space stations. Administrations operating systems in the mobile-satellite service in the band 19.7-20.1 GHz in Region 2 and in the band 20.1-20.2 GHz shall take all practicable steps to ensure the continued availability of these bands for administrations operating fixed and mobile systems in accordance with the provisions of No. **S5.524**.

S5.529 The use of the bands 19.7-20.1 GHz and 29.5-29.9 GHz by the mobile-satellite service in Region 2 is limited to satellite networks which are both in the fixed-satellite service and in the mobile-satellite service as described in No. **S5.526**.

S5.530 In Regions 1 and 3, the allocation to the broadcasting-satellite service in the band 21.4-22 GHz shall come into effect on 1 April 2007. The use of this band by the broadcasting-satellite service after that date and on an interim basis prior to that date is subject to the provisions of Resolution **525 (WARC-92)**.

S5.531 **Additional allocation:** in Japan, the band 21.4-22 GHz is also allocated to the broadcasting service on a primary basis.

S5.532 The use of the band 22.21-22.5 GHz by the Earth exploration-satellite (passive) and space research (passive) services shall not impose constraints upon the fixed and mobile, except aeronautical mobile, services.

S5.533 The inter-satellite service shall not claim protection from harmful interference from airport surface detection equipment stations of the radionavigation service.

S5.534 **Additional allocation:** in Japan, the band 24.65-25.25 GHz is also allocated to the radionavigation service on a primary basis until 2008.

S5.535 In the band 24.75-25.25 GHz, feeder links to stations of the broadcasting-satellite service shall have priority over other uses in the fixed-satellite service (Earth-to-space). Such other uses shall protect and shall not claim protection from existing and future operating feeder-link networks to such broadcasting satellite stations.

S5.535A The use of the band 29.1-29.5 GHz (Earth-to-space) by the fixed-satellite service is limited to geostationary-satellite systems and feeder links to non-geostationary-satellite systems in the mobile-satellite service. Such use is subject to the application of the provisions of No. **S9.11A**, but not subject to the provisions of No. **S22.2**, except as indicated in Nos. **S5.523C** and **S5.523E** where such use is not subject to the provisions of No. **S9.11A** and shall continue to be subject to Articles **S9** (except No. **S9.11A**) and **S11** procedures, and to the provisions of No. **S22.2**. (WRC-97)

S5.536 Use of the 25.25-27.5 GHz band by the inter-satellite service is limited to space research and Earth exploration-satellite applications, and also transmissions of data originating from industrial and medical activities in space.

S5.536A Administrations installing earth exploration-satellite earth stations cannot claim protection from fixed and mobile stations operated by neighbouring administrations. In addition, earth stations operating in the earth exploration-satellite service should take into account Recommendation ITU-R SA.1278. (WRC-97)

S5.536B In Germany, Saudi Arabia, Austria, Belgium, Brazil, Bulgaria, China, the Republic of Korea, Denmark, Egypt, United Arab Emirates, Spain, Estonia, Finland, France, Hungary, India, Islamic Republic of Iran, Ireland, Israel, Italy, Jordan, Kenya, Kuwait, Lebanon, Libya, Liechtenstein, Lithuania, Moldova, Norway, Oman, Uganda, Pakistan, the Philippines, Poland, Portugal, Syria, Slovakia, Czech Republic, Romania, the United Kingdom, Singapore, Sweden, Switzerland, Tanzania, Turkey, Viet Nam and Zimbabwe, earth stations operating in the Earth exploration-satellite service in the band 25.5-27 GHz shall not claim protection from, or constrain the use and deployment of, stations of the fixed and mobile services. (WRC-97)

S5.537 Space services using non-geostationary satellites operating in the inter-satellite service in the band 27-27.5 GHz are exempt from the provisions of No. **S22.2**.

S5.538 **Additional allocation:** the bands 27.500-27.501 GHz and 29.999-30.000 GHz are also allocated to the fixed-satellite service (space-to-Earth) on a primary basis for the beacon transmissions intended for up-link power control. Such space-to-Earth transmissions shall not exceed an equivalent isotropically radiated power (e.i.r.p.) of 10 dBW in the direction of adjacent satellites on the geostationary-satellite orbit. In the band 27.500-27.501 GHz, such space-to-Earth transmissions shall not produce a power flux-density in excess of the values specified in Article **S21**, Table **S21-4** on the Earth's surface.

S5.539 The band 27.5-30 GHz may be used by the fixed-satellite service (Earth-to-space)

for the provision of feeder links for the broadcasting-satellite service.

S5.540 **Additional allocation:** the band 27.501-29.999 GHz is also allocated to the fixed-satellite service (space-to-Earth) on a secondary basis for beacon transmissions intended for up-link power control.

S5.541 In the band 28.5-30 GHz, the earth exploration-satellite service is limited to the transfer of data between stations and not to the primary collection of information by means of active or passive sensors.

S5.541A Feeder links of non-geostationary networks in the mobile-satellite service and geostationary networks in the fixed-satellite service operating in the band 29.1-29.5 GHz (Earth-to-space) shall employ uplink adaptive power control or other methods of fade compensation, such that the earth station transmissions shall be conducted at the power level required to meet the desired link performance while reducing the level of mutual interference between both networks. These methods shall apply to networks for which Appendix **S4** coordination information is considered as having been received by the Bureau after 17 May 1996 and until they are changed by a future competent world radiocommunication conference. Administrations submitting Appendix **S4** information for coordination before this date are encouraged to utilize these techniques to the extent practicable. These methods are also subject to review by ITU-R (see Resolution **121 (Rev.WRC-97)**). (WRC-97)

S5.542 **Additional allocation:** in Algeria, Saudi Arabia, Bahrain, Bangladesh, Brunei Darussalam, Cameroon, China, the Congo, the Republic of Korea, Egypt, the United Arab Emirates, Eritrea, Ethiopia, Guinea, India, the Islamic Republic of Iran, Iraq, Japan, Jordan, Kuwait, Lebanon, Malaysia, Mali, Morocco, Mauritania, Nepal, Pakistan, the Philippines, Qatar, Syria, Democratic People's Republic of Korea, Somalia, Sudan, Sri Lanka and Chad, the band 29.5-31 GHz is also allocated to the fixed and mobile services on a secondary basis. The power limits specified in Nos. **S21.3** and **S21.5** shall apply. (WRC-97)

S5.543 The band 29.95-30 GHz may be used for space-to-space links in the Earth exploration-satellite service for telemetry, tracking, and control purposes, on a secondary basis.

S5.544 In the band 31-31.3 GHz the power flux-density limits specified in Article **S21**, Table **S21-4** shall apply to the space research service.

S5.545 **Different category of service:** in Armenia, Azerbaijan, Belarus, Bulgaria, Georgia, Kazakstan, Mongolia, Kyrgyzstan, Russian Federation, Tajikistan, Turkmenistan and Ukraine, the allocation of the band 31-31.3 GHz to the space research service is on a primary basis (see No. **S5.33**). (WRC-97)

S5.546 **Different category of service:** in Saudi Arabia, Armenia, Azerbaijan, Belarus, Bulgaria, Egypt, United Arab Emirates, Spain, Estonia, Finland, Georgia, Hungary, the Islamic Republic of Iran, Israel, Jordan, Kazakstan, Latvia, Lebanon, Moldova, Mongolia, Uzbekistan, Poland, Syria, Kyrgyzstan, Romania, the United Kingdom, Russian Federation, Tajikistan, Turkmenistan, Turkey and Ukraine, the allocation of the band 31.5-31.8 GHz to the fixed and mobile, except aeronautical mobile, services is on a primary basis (see No. **S5.33**). (WRC-97)

S5.547 The bands 31.8-33.4 GHz, 51.4-52.6 GHz, 55.78-59 GHz and 64-66 GHz are available for high-density applications in the fixed service (see Resolution **726 (WRC-97)**). (WRC-97)

S5.547A Use of the band 31.8-33.4 GHz by the fixed service shall be in accordance with Resolution **126 (WRC-97)**. (WRC-97)

S5.547B **Alternative allocation:** in the United States, the band 31.8-32 GHz is allocated to the radionavigation and space research (deep space) (space-to-Earth) services on a primary basis. (WRC-97)

S5.547C **Alternative allocation:** in the United States, the band 32-32.3 GHz is allocated to the inter-satellite, radionavigation and space research (deep space) (space-to-Earth) services on a primary basis. (WRC-97)

S5.547D **Alternative allocation:** in the United States, the band 32.3-33 GHz is allocated to the inter-satellite and radionavigation services on a primary basis. (WRC-97)

S5.547E **Alternative allocation:** in the United States, the band 33-33.4 GHz is allocated to the radionavigation service on a primary basis. (WRC-97)

S5.548 In designing systems for the inter-satellite and radionavigation services in the band 32-33 GHz, and for the space research service (deep space) in the band 31.8-32.3 GHz, administrations shall take all necessary measures to prevent harmful interference between these services, bearing in mind the safety aspects of the radionavigation service (see Recommendation **707**).

S5.549 **Additional allocation:** in Saudi Arabia, Bahrain, Bangladesh, Egypt, the United Arab Emirates, Gabon, Indonesia, the Islamic Republic of Iran, Iraq, Israel, Jordan, Kuwait, Lebanon, Libya, Malaysia, Mali, Malta, Morocco, Mauritania, Nepal, Nigeria, Oman, Pakistan, the Philippines, Qatar, Dem. Rep. of the Congo, Syria, Senegal, Singapore, Somalia, Sudan, Sri Lanka, Togo, Tunisia and Yemen, the band 33.4-36 GHz is also allocated to the fixed and mobile services on a primary basis. (WRC-97)

S5.550 **Different category of service:** in Armenia, Azerbaijan, Belarus, Bulgaria, Georgia, Kazakstan, Mongolia, Uzbekistan, Kyrgyzstan, Russian Federation, Tajikistan, Turkmenistan and Ukraine, the allocation of the band 34.7-35.2 GHz to the space research service is on a primary basis (see No. **S5.33**). (WRC-97)

S5.551 (SUP - WRC-97)

S5.551A In the band 35.5-36.0 GHz, active spaceborne sensors in the earth exploration-satellite and space research services shall not cause harmful interference to, claim protection from, or otherwise impose constraints on operation or development of the radiolocation service, the meteorological aids service and other services allocated on a primary basis. (WRC-97)

S5.551B The use of the band 41.5-42.5 GHz by the fixed-satellite service (space-to-Earth) is subject to Resolution **128 (WRC-97)**. (WRC-97)

S5.551C **Alternative allocation:** in the French overseas territories in Regions 2 and 3, the Republic of Korea and India, the band 40.5-42.5 GHz is allocated to the broadcasting, broadcasting-satellite and fixed services on a primary basis. (WRC-97)

S5.551D **Additional allocation:** in Algeria, Saudi Arabia, Bahrain, Benin, Cameroon, Egypt, United Arab Emirates, Israel, Jordan, Kuwait, Lebanon, Libya, Mali, Morocco, Mauritania, Nigeria, Oman, Qatar, Syria, Tunisia and Yemen, the band 40.5-42.5 GHz is also allocated to the fixed-satellite service (space-to-Earth) on a primary basis. The use of this band by the fixed-satellite service shall be in accordance with Resolution **134 (WRC-97)**. (WRC-97)

S5.551E Use of the band 40.5-42.5 GHz by the fixed-satellite service shall be in accordance with Resolution **134 (WRC-97)**. (WRC-97)

S5.551F **Different category of service:** in Japan, the allocation of the band 41.5-42.5 GHz to the mobile service is on a primary basis (see No. **S5.33**). (WRC-97)

S5.552 The allocation of the spectrum for the fixed-satellite service in the bands 42.5-43.5 GHz and 47.2-50.2 GHz for Earth-to-space transmission is greater than that in the band 37.5-39.5 GHz for space-to-Earth transmission in order to accommodate feeder links to broadcasting satellites. Administrations are urged to take all practicable steps to reserve the band 47.2-49.2 GHz for feeder links for the broadcasting-satellite service operating in the band 40.5-42.5 GHz.

S5.552A The allocation to the fixed service in the bands 47.2-47.5 GHz and 47.9-48.2 GHz is designated for use by high altitude platform stations. The use of the bands 47.2-47.5 GHz and 47.9-48.2 GHz is subject to the provisions of Resolution **122 (WRC-97)**. (WRC-97)

S5.553 In the bands 43.5-47 GHz, 66-71 GHz, 95-100 GHz, 134-142 GHz, 190-200 GHz and 252-265 GHz, stations in the land mobile service may be operated subject to not causing harmful interference to the space radiocommunication services to which these bands are allocated (see No. **S5.43**).

S5.554 In the bands 43.5-47 GHz, 66-71 GHz, 95-100 GHz, 134-142 GHz, 190-200 GHz and 252-265 GHz, satellite links connecting land stations at specified fixed points are also authorized when used in conjunction with the mobile-satellite service or the radionavigation-satellite service.

S5.555 **Additional allocation:** the bands 48.94-49.04 GHz, 97.88-98.08 GHz, 140.69-140.98 GHz, 144.68-144.98 GHz, 145.45-145.75 GHz, 146.82-147.12 GHz, 250-251 GHz and 262.24-262.76 GHz are also allocated to the radio astronomy service on a primary basis.

S5.555A The band 50.2-50.4 GHz is also allocated, on a primary basis, to the fixed and mobile services until 1 July 2000. (WRC-97)

S5.556 In the bands 51.4-54.25 GHz, 58.2-59 GHz, 64-65 GHz, 72.77-72.91 GHz and 93.07-93.27 GHz, radio astronomy observations may be carried out under national arrangements.

S5.556A Use of the bands 54.25-56.9 GHz, 57-58.2 GHz and 59-59.3 GHz by the inter-satellite service is limited to satellites in the geostationary-satellite orbit. The single-entry power flux-density at all altitudes from 0 km to 1 000 km above the Earth's surface produced by a station in the inter-satellite service, for all conditions and for all methods of modulation, shall not exceed -147 dB(W/m^2/100 MHz) for all angles of arrival. (WRC-97)

S5.556B **Additional allocation:** in Japan, the band 54.25-55.78 GHz is also allocated to the mobile service on a primary basis for low-density use. (WRC-97)

S5.557 **Additional allocation:** in Japan, the band 55.78-58.2 GHz is also allocated to the radiolocation service on a primary basis. (WRC-97)

S5.558 In the bands 55.78-58.2 GHz, 59-64 GHz, 66-71 GHz, 116-134 GHz, 170-182 GHz and 185-190 GHz, stations in the aeronautical mobile service may be operated subject to not causing harmful interference to the inter-satellite service (see No. **S5.43**). (WRC-97)

S5.558A Use of the band 56.9-57 GHz by inter-satellite systems is limited to links between satellites in geostationary-satellite orbit and to transmissions from non-geostationary satellites in high-Earth orbit to those in low-Earth orbit. For links between satellites in the geostationary-satellite orbit, the single entry power flux-density at all altitudes from 0 km to 1 000 km above the Earth's surface, for all conditions and for all methods of modulation, shall not exceed –147 dB(W/m^2/100 MHz) for all angles of arrival. (WRC-97)

S5.559 In the bands 59-64 GHz and 126-134 GHz, airborne radars in the radiolocation service may be operated subject to not causing harmful interference to the inter-satellite service (see No. **S5.43**).

S5.560 In the band 78-79 GHz radars located on space stations may be operated on a primary basis in the Earth exploration-satellite service and in the space research service.

S5.561 In the band 84-86 GHz, stations in the fixed, mobile and broadcasting services shall not cause harmful interference to broadcasting-satellite stations operating in accordance with the decisions of the appropriate frequency assignment planning conference for the broadcasting-satellite service.

S5.562 The use of the band 94-94.1 GHz by the Earth exploration-satellite (active) and space research (active) services is limited to spaceborne cloud radars. (WRC-97)

S5.563 **Additional allocation:** in the United Kingdom, the band 182-185 GHz is also allocated to the fixed and mobile services on a primary basis.

S5.564 **Additional allocation:** in Germany, Argentina, Spain, Finland, France, India, Italy and the Netherlands, the band 261-265 GHz is also allocated to the radio astronomy service on a primary basis. (WRC-97)

S5.565 The frequency band 275-400 GHz may be used by administrations for experimentation with, and development of, various active and passive services. In this band a need has been identified for the following spectral line measurements for passive services:

- radio astronomy service: 278-280 GHz and 343-348 GHz;
- Earth exploration-satellite service (passive) and space research service (passive): 275-277 GHz, 300-302 GHz, 324-326 GHz, 345-347 GHz, 363-365 GHz and 379-381 GHz.

Future research in this largely unexplored spectral region may yield additional spectral lines and continuum bands of interest to the passive services. Administrations are urged to take all practicable steps to protect these passive services from harmful interference until the next competent world radiocommunication conference.

Annex 3 to the National Table of Frequency Allocations

National Footnotes of the National Table of Frequency Allocations

H1 The frequencies 2 275 Hz and 457 kHz may also be assigned to devices used for locating persons in danger, under the conditions specified in Annex 2 to Recommendation CEPT/ERC/REC 70-03.

H2 **In the band below 9 kHz, frequencies may also be assigned to short range inductive devices on a tertiary basis.**

H3 The civil purpose use of the bands allocated to the aeronautical radionavigation and aeronautical mobile (R) services will be in accordance with the conditions specified in ICAO Annex 10.

H4 In the bands 9-148 kHz, 6 765-6 795 kHz, 7 300-9 500 kHz, 13 553-13 567 kHz and 26 957-27 283 kHz, frequencies may also be assigned to short range inductive devices (SRDs) on a tertiary basis. Frequency assignments shall be subject to the conditions specified in Annex 9 to Recommendation CEPT/ERC/REC 70-03 and in Annex 4.

H5 In the band 16-146 kHz, frequencies may also be assigned to inductive on-site paging equipment on a tertiary basis. The frequency management parameters of such equipment shall meet the conditions specified in Annex 5 established according to Decision ERC/DEC/(96)19.

H6 In the band 24-495 kHz, frequencies may be assigned to voice and signal transmission systems using carrier frequency methods. Such systems shall operate on a tertiary basis.

H7 Frequency assignments to low power carrier frequency equipment used within a building or a plot of land may only be made in the band 30-148.5 kHz. Such equipment shall operate on a tertiary basis.

H8 The band 130-148.5 kHz is also allocated to the radionavigation service on a secondary basis.

H9 The band 135.7-137.8 kHz is also allocated to the amateur service on a secondary basis according to Recommendation CEPT/ERC/REC 62-01.

H10 The bands 148.5-255 kHz and 526.5-1 606.5 kHz are also allocated to the aeronautical radionavigation service on a secondary basis.

H11 In the band 283.5-315 kHz, frequency assignments will be made in accordance with the provisions of the “Regional Administrative Conference for the Planning of the Maritime Radionavigation Service (Radiobeacons) in the European Maritime Area (Geneva, 1985)”.

H12 According to the NATO Joint Civil/Military Frequency Agreement (NJFA), frequencies in the bands 283.5-495 kHz, 505-526.5 kHz, 960-1 375 MHz, 1 559-1 610 MHz, 2 025-2 070 MHz, 2 200-2 245 MHz, 2 700-3 410 MHz, 5 250-5 850 MHz, 13.4-14 GHz, 17.3-17.7 GHz and 24.05-24.25 GHz may also be assigned for NATO purposes.

H13 Not used.

H14 In the bands 415-495 kHz, 505-526.5 kHz, 1 606.5-1 625 kHz, 1 635-1 800 kHz and 2 045-2 160 kHz, frequency assignments will be made in accordance with the provisions of the "Regional Administrative Conference for the Planning of the MF Maritime Mobile and Aeronautical Radionavigation Services (Region 1) (Geneva, 1985)".

H15 In the band 526.5-1 606.5 kHz, frequency assignments will be made in accordance with the provisions of the "Regional Administrative LF/MF Broadcasting Conference (Regions 1 and 3) (Geneva, 1975)". The frequency management parameters of transmitters shall meet the conditions specified in Annex 6 and Annex 7.

The frequency list of Hungarian broadcasting transmitting stations can be obtained from the frequency management authority.

H16 The technical characteristics of equipment used in the maritime mobile service shall conform to CEPT Recommendation T/R 34-01.

H17 In the bands 2 502-2 650 kHz, 3 500-3 800 kHz, 4 438-4 650 kHz and 5 250-5 450 kHz, frequencies for civil use in the mobile service may be assigned for purposes specified in the Recommendations of the Danube Commission (CD/SES 47/14 and CD/SES 47/22) only.

H18 In the parts of the band 2 502-25 550 kHz, the civil purpose use of the fixed service is restricted to foreign representations enjoying diplomatic immunities, to diplomatic communications of the Ministry of Foreign Affairs and to organisations obligated as well as to social and charitable organisations volunteering to accomplish certain tasks during a state of national crisis, state of emergency, state of danger or state of disaster and when preparing for these states.

H19 In the bands 2 850-3 025 kHz, 3 400-3 500 kHz, 4 650-4 700 kHz, 5 480-5 680 kHz, 6 525-6 685 kHz, 8 815-8 965 kHz, 10 005-10 100 kHz, 11 275-11 400 kHz, 13 260-13 360 kHz, 17 900-17 970 kHz and 21 924-22 000 kHz, frequency assignments in the aeronautical mobile (R) service will be made in accordance with the provisions of Appendix S27 to the RR.

H20 Civil use different from the RR: in the bands 2 850-3 025 kHz and 6 765-7 000 kHz, frequencies may also be assigned in the maritime mobile service for purposes specified in the Recommendations of the Danube Commission (CD/SES 47/14 and CD/SES 47/22).

H21 In the bands 3 025-3 155 kHz, 3 900-3 950 kHz, 4 700-4 750 kHz, 5 680-5 730 kHz, 6 685-6 765 kHz, 8 965-9 040 kHz, 11 175-11 275 kHz, 13 200-13 260 kHz, 15 010-15 100 kHz and 17 970-18 030 kHz, frequency assignments in the aeronautical mobile (OR) service will be made in accordance with the provisions of Appendix S26 to the RR.

H22 In the band 3 155-3 230 kHz, frequencies for civil purposes in the mobile service may be assigned on a secondary basis only, to low power wireless hearing aids. The output power of such devices shall not exceed 10 mW.

H23 In the band 3 230-3 400 kHz, frequencies for civil use in the mobile service may only be assigned for purposes specified in the Recommendations of the Danube Commission (CD/SES 47/14 and CD/SES 47/22), and, on a secondary basis, to low power wireless hearing aids. The output power of wireless hearing aids shall not exceed 10 mW.

H24 Not used.

H25 In the bands 4 063-4 438 kHz, 6 200-6 525 kHz, 8 195-8 815 kHz, 12 230-13 200 kHz, 16 360-17 410 kHz, 18 780-18 900 kHz, 19 680-19 800 kHz, 22 000-22 855 kHz, 25 070-25 210 kHz and 26 100-26 175 kHz, frequency assignments in the maritime mobile service will be made in accordance with the provisions of Appendix S17 to the RR. In these bands, frequencies may also be assigned for governmental use, subject to successful coordination with the civil frequency management organ.

H26 Not used.

H27 In the band 5 900-5 950 kHz, fixed service equipment for civil purposes may be operated by 1 April 2007 at the latest. No new frequency assignments shall be made.

In the bands 9 400-9 500 kHz, 11 600-11 650 kHz and 15 600-15 800 kHz, equipment used in the fixed and mobile services may be operated by 1 January 2002 at the latest. In the bands 13 570-13 600 kHz and 17 480-17 550 kHz, such equipment may be operated by 1 January 2007 at the latest. No new frequency assignments shall be made.

H28 In the bands 5 950-6 200 kHz, 7 100-7 300 kHz, 9 500-9 900 kHz, 11 650-12 050 kHz, 13 600-13 800 kHz, 15 100-15 600 kHz, 17 550-17 900 kHz, 21 450-21 850 kHz and 25 670-26 100 kHz, frequency assignments in the broadcasting service will be made in accordance with Article S12 of the RR.

H29 Governmental use different from the RR: in the bands 5 950-6 200 kHz, 7 100-7 300 kHz, 9 500-9 900 kHz, 11 650-12 050 kHz, 13 600-13 800 kHz, 15 100-15 600 kHz, 17 550-17 900 kHz, 21 450-21 850 kHz and 25 670-26 100 kHz, also fixed and land mobile service equipment for governmental purposes may operate on a secondary basis, probably until 2005.

H30 In the bands 6 765-6 795 kHz, 13 553-13 567 kHz, 26 957-27 283 kHz, 40.66-40.7 MHz, 433.05-434.79 MHz, 2 400-2 500 MHz, 5 725-5 875 MHz, 24-24.25 GHz, 61-61.5 GHz, 122-123 GHz and 244-246 GHz, the technical characteristics of industrial, scientific, medical, domestic and other high frequency equipment shall conform to standard MSZ EN 55011.

H31 In the bands 6 765-6 795 kHz, 13 553-13 567 kHz, 26 957-27 283 kHz, 40.66-40.7 MHz, 433.05-434.79 MHz, 2 400-2 483.5 MHz, 5 725-5 875 MHz, 24-24.25 GHz, 61-61.5 GHz, 122-123 GHz and 244-246 GHz, frequencies may also be assigned to short range devices (SRDs) used for telemetry, telecommand, alarm, data transmission and other similar purposes, on a tertiary basis under the conditions specified in Annex 1 to Recommendation CEPT/ERC/REC 70-03. In the band 433.05-434.79 MHz, frequencies may also be assigned to wireless audio applications. To video applications (camera links), only frequencies in the bands above 2 400 MHz may be assigned.

The frequency management parameters of devices operating in the bands 26 957-27 283 kHz, 40.66-40.7 MHz and 433.05-434.79 MHz shall meet the conditions specified in Annex 8 established according to Decision ERC/DEC/(98)05. The frequency management parameters of devices operating in the bands 2 400-2 483.5 MHz, 5 725-5 875 MHz and 24-24.25 GHz shall meet the conditions specified in Annex 9 established according to Decision ERC/DEC/(99)07.

H32 Not used.

H33 Not used.

H34 In the band 26 510-27 860 kHz, any low power CB equipment using class A3E (AM) and J3E (SSB) emissions, having been licensed in the fixed and mobile services before 30 November 1994, may be operated by 31 December 2001 at the latest. No new frequency assignments shall be made.

H35 The frequencies 26 545 kHz, 26 595 kHz, 26 645 kHz, 26 695 kHz, 26 745 kHz, 27 445 kHz, 27 495 kHz, 27 545 kHz, 27 595 kHz and 27 645 kHz may only be assigned to narrow-band (10 kHz channel spacing) short range devices (SRDs) used for telemetry, telecommand, teleindicator and property protection purposes. Frequency assignments shall be subject to the conditions specified in row "c" of the table in Annex 1 to Recommendation CEPT/ERC/REC 70-03, except the frequency band. Such devices shall operate on a tertiary basis. Devices bearing a radio licence valid at the effective date of the Table may operate until 31 December 2002 on a secondary basis.

The frequency management parameters of such devices shall meet the conditions specified in Annex 8 established according to Decision ERC/DEC/(98)05.

H36 The 40 channels of the band 26 960-27 410 kHz may only be assigned to CEPT PR 27 equipment conforming to standard MSZ ETS 300 135 and using class F3E or G3E emissions (frequency or phase modulation), under the conditions specified in Decisions ERC/DEC/(96)02 or ERC/DEC/(98)11.

H37 The frequencies 26 995 kHz, 27 045 kHz, 27 095 kHz, 27 145 kHz and 27 195 kHz may also be assigned to toy controllers (SRDs) on a tertiary basis under the conditions specified in Annex 1 to Recommendation CEPT/ERC/REC 70-03, except the channel spacing. Such devices shall operate with a channel spacing of 10 kHz.

The frequency management parameters of such devices shall meet the conditions specified in Annex 8 established according to Decision ERC/DEC/(98)05.

H37A The frequencies 26 995 kHz, 27 045 kHz, 27 095 kHz, 27 145 kHz, 27 195 kHz, 40.665 MHz, 40.675 MHz, 40.685 MHz and 40.695 MHz may also be assigned to model control short range devices (SRDs) on a tertiary basis under the conditions specified in Annex 8 to Recommendation CEPT/ERC/REC 70-03. Devices bearing a radio licence valid at the effective date of the Table may operate until 31 December 2002 on a secondary basis.

In the band 34.995-35.225 MHz, frequency assignments on a primary basis may only be made to flying model control short range devices (SRDs), under the conditions specified in Annex 8 to Recommendation CEPT/ERC/REC 70-03.

The frequency management parameters of such devices shall meet the conditions specified in Annex 8 established according to Decision ERC/DEC/(98)05.

H37B On the frequencies 26 995 kHz, 27 045 kHz, 27 095 kHz, 27 145 kHz, 27 195 kHz, 40.665 MHz, 40.675 MHz, 40.685 MHz, 40.695 MHz and in the band 433.05-434.79 MHz, frequencies may also be assigned to low power equipment used for telemetry, telecommand, teleindicator and property protection purposes, on a tertiary basis. Such equipment shall operate with a channel spacing of 10 kHz below 50 MHz and with a channel spacing of 25 kHz in the band 433.05-434.79 MHz. The effective radiated power shall not exceed 100 mW. Equipment bearing a radio licence valid at the effective date of the Table may operate until 31 December 2002 on a secondary basis.

The frequency management parameters of such equipment shall meet the conditions specified in Annex 8 established according to Decision ERC/DEC/(98)05.

H38 The frequency 27 095 kHz may also be assigned to the harmonised Eurobalise European Train Control System (ETCS) on a secondary basis under the conditions specified in Annex 4 to Recommendation CEPT/ERC/REC 70-03.

H39 According to the NATO Joint Civil/Military Frequency Agreement (NJFA), the bands 30.3-30.5 MHz, 32.15-32.45 MHz, 41-45 MHz, 73.3-74.1 MHz, 79-79.7 MHz, 39.5-40.5 GHz, 50.4-51.4 GHz, 71-74 GHz and 81-84 GHz are harmonised NATO bands type 3.

H40 In the band 34.9-38.5 MHz, frequencies may also be assigned to wireless microphones using analogue or digital angle modulation, on a tertiary basis under the conditions specified in Annex 10 to Recommendation CEPT/ERC/REC 70-03, except the frequency band. Equipment bearing a radio licence valid at the effective date of the Table may operate until 31 December 2002 on a secondary basis.

The frequency management parameters of such equipment shall meet the conditions specified in Annex 10 established according to Decision ERC/DEC/(96)15.

H41 Not used.

H42 The frequencies 40.665 MHz, 40.675 MHz, 40.685 MHz and 40.695 MHz may also be assigned to on-site paging equipment for private purposes, on a secondary basis. The frequency management parameters of such equipment shall meet the conditions specified in Annex 5 established according to Decision ERC/DEC/(96)19.

H43 The bands 45-47 MHz, 225-399.9 MHz, 4 400-5 000 MHz, 14.62-15.23 GHz, 15.7-17.1 GHz, 20.2-21.2 GHz, 33.4-37 GHz and 43.5-45.5 GHz are harmonised NATO bands type 1. In these bands, frequency assignments may be made under the conditions specified in the NATO Joint Civil/Military Frequency Agreement (NJFA) only, unless provided otherwise by the allocation or another footnote.

H44 In the bands 48.5-56.5 MHz, 58-66 MHz and 174-230 MHz, a system D television broadcasting service operates in accordance with the provisions of the “Regional Agreement for the European Broadcasting Area (Stockholm, 1961)”. The technical characteristics of transmitters shall conform to standard MSZ-17-302-4. The frequency management parameters of transposers shall meet the conditions specified in Annex 11.

The frequency list of Hungarian broadcasting transmitting stations can be obtained from the frequency management authority.

H45 In the band 48.5-73 MHz, no new frequency assignments shall be made with the exception of frequency reassignments concerning the transmitting network operating in the band 66-73 MHz at the effective date of the Table and broadcasting a national public service programme.

H46 The band 48.5-73 MHz is planned for the land mobile service.

H47 In the band 60-70 MHz, fixed and land mobile service equipment for governmental purposes may operate on a secondary basis by 31 December 2004 at the latest.

H48 In the band 66-73 MHz, VHF-FM sound broadcasting service operates in accordance with the provisions of the "Special Regional Conference (Geneva, 1960)" and the "Regional Agreement for the European Broadcasting Area (Stockholm, 1961)". The frequency management parameters of transmitters shall meet the conditions specified in Annex 12.

The frequency list of Hungarian broadcasting transmitting stations can be obtained from the frequency management authority.

H49 The use of the bands 73-74.8 MHz and 75.2-87.5 MHz is earmarked for governmental purposes. The mobile service use of the bands 146-149.9 MHz, 150.05-156.7625 MHz, 156.8375-169.4125 MHz and 169.8125-174 MHz is earmarked for civil purposes according to CEPT Recommendation T/R 25-08.

H50 In the duplex band 73-74.8 MHz/77.5-79.3 MHz (band 80 MHz/A), frequencies may only be assigned to equipment of non-public mobile radiotelephone systems with repeater stations.

In the duplex band 77-77.5 MHz/81.5-82 MHz (band 80 MHz/B), frequencies may only be assigned to equipment of non-public local mobile radiotelephone systems with repeater stations.

Frequencies for which no assignment can be made for the above purposes due to technical reasons (limitations ensuing from international coordination or EMC analysis) may only be assigned to single frequency simplex mobile services.

H51 The frequency management parameters of fixed and land mobile service equipment shall meet the conditions specified in Annex 13 established according to Decisions ERC/DEC/(96)07, ERC/DEC/(96)10, ERC/DEC/(96)11, ERC/DEC/(96)12 and ERC/DEC/(96)14, or shall conform to standard MSZ ETS 300 086, with the exception of equipment having been purchased before 4 December 1997.

H52 Not used.

H53 Civil use different from the RR: in the duplex band 74.8-74.84 MHz/ 79.3-79.34 MHz, fixed and mobile service equipment may operate until its radio licence, valid at the effective date of the Table, expires, but by 31 December 2000 at the latest. In the band 74.8-74.84 MHz, no new frequency assignments shall be made.

H54 In the simplex band 79.3-79.34 MHz, frequencies may only be assigned to equipment of non-public mobile radiotelephone systems.

H55 In the simplex bands 79.34-79.58 MHz (80 MHz/S-2) and 79.58-79.7 MHz (80 MHz/S-1), frequencies may only be assigned to equipment of non-public short range mobile radiotelephone systems.

H56 The band 84-87.5 MHz is planned for mobile service purposes. No frequencies shall be assigned before decision as to the harmonised use of the band is made.

H57 In the band 87.5-108 MHz, VHF-FM sound broadcasting service operates in accordance with the provisions of the "Regional Administrative Conference for the Planning of VHF Sound Broadcasting (Region 1 and Part of Region 3) (Geneva, 1984)". In designing the site and radiation characteristics of transmitting stations, Recommendations ITU-R IS.1009-1 and M.441-1 shall be taken into account. The frequency management parameters of transmitters shall meet the conditions specified in Annex 14 established according to Decision ERC/DEC/(96)13.

The frequency list of Hungarian broadcasting transmitting stations can be obtained from the frequency management authority.

H58 Not used.

H59 In the band 108-137 MHz, receiving equipment in the aeronautical radionavigation and aeronautical mobile services, not complying with the provisions of Volume I, Sections 3.1.4 and 3.3.8, and Volume III, Part II, Section 2.3.3 of ICAO Annex 10, may operate until 31 December 2000 in the domestic air traffic.

For receiving equipment of aircraft taking part in the international air traffic, exemption may be given from the above-mentioned requirements in justified cases, on condition that such equipment may operate by 31 December 2000 at the latest. Such exemption shall be approved by the aviation authority.

Any receiving equipment put into operation after the effective date of the Table shall comply with the above-mentioned provisions.

H60 In the band 117.975-137 MHz, equipment in the civil aeronautical mobile service with a channel spacing exceeding 25 kHz, as specified in Volume III, Part II, Chapter 2 of ICAO Annex 10, may operate by 31 December 2001 at the latest in the uncontrolled airspace.

Any equipment put into operation after the effective date of the Table shall comply with the above-mentioned provisions.

H61 In the band 117.975-137 MHz, the 8.33 kHz channel spacing shall be introduced in the aeronautical mobile service in addition to the 25 kHz one, according to Volume V, Chapter 4, Section 4.1.2 of ICAO Annex 10. In the band 132-134.8 MHz, the 8.33 kHz channel spacing shall be introduced in the international air traffic according to the Plan adopted by the 38th Meeting of the ICAO EANPG (1996). The frequency management parameters of radio transmitters and receivers operating at aeronautical stations, using amplitude modulation and 8.33 kHz channel spacing shall meet the conditions specified in Annex 15 established according to Decision ERC/DEC/(98)28.

H62 In the mobile-satellite service, the frequencies 121.5 MHz and 243 MHz may only be assigned to emergency position-indicating radiobeacons (EPIRBs). The technical characteristics of radiobeacons shall conform to Annex XI to CEPT Recommendation T/R 34-01.

H63 In the band 132-136 MHz, footnotes H3, H59, H60 and H61 shall be applied when the aeronautical mobile (OR) service is used for civil purposes.

H64 Not used.

H64A The bands 137-137.025 MHz, 137.175-137.825 MHz and 400.15-401 MHz (space-to-Earth), and the bands 148-150.05 MHz and 399.9-400.05 MHz (Earth-to-space) are planned for the non-voice NGSO applications of the satellite personal communication systems (S-PCS) in the mobile-satellite service on a primary basis according to Decision ERC/DEC/(99)06. The bands 137.025-137.175 MHz, 137.825-138 MHz and 387-390 MHz (space-to-Earth), and the band 312-315 MHz (Earth-to-space) are planned for the same use as mentioned above, on a secondary basis, according to Decision ERC/DEC/(99)06.

H65 In the bands 146-149.9 MHz and 216-222 MHz, frequencies may also be assigned to wireless microphones using analogue or digital angle modulation, on a secondary basis. Frequency assignments shall be subject to the conditions specified in row "d" of the table entitled "Professional radio microphones" of Annex 10 to Recommendation CEPT/ERC/REC 70-03, except the frequency band.

The frequency management parameters of such equipment shall meet the conditions specified in Annex 10 established according to Decision ERC/DEC/(96)15.

H66 In the band 148-149.9 MHz, except the frequency 149.3 MHz and in the bands 156.375-156.7625 MHz, 156.8375-156.875 MHz, 160.975-161.475 MHz and 165.2-167.3 MHz, only simplex frequencies may be assigned to radio equipment in the mobile service.

In the bands 156-156.375 MHz and 156.875-157.45 MHz (transmitting frequencies of mobile stations), and in the bands 160.6-160.975 MHz and 161.475-162.05 MHz (transmitting frequencies of base stations), frequencies may only be assigned to private purpose and non-public radio systems.

H66A The carrier frequencies for equipment of the civil applications identified in footnotes H66, H75, H89, H93, H98 and H99 may be assigned according to the provisions of Section 2.1 of CEPT Recommendation T/R 25-08 as well. Equipment using other carrier frequencies may operate by 31 December 2005 at the latest.

H67 The frequencies 148.250 MHz, 148.350 MHz, 148.400 MHz, 148.450 MHz and 148.550 MHz may only be assigned to portable receipt acknowledging transmitters of on-site paging systems for private purposes on a secondary basis. The frequency management parameters of such equipment shall meet the conditions specified in Annex 5 established according to Decision ERC/DEC/(96)19.

H68 The frequencies 149.3 MHz and 163.7 MHz are reserved for nationwide use by the land mobile service.

H69 Governmental use different from the RR: in the band 149.9-150.05 MHz, fixed and land mobile service equipment is also operating. Any equipment bearing a licence valid at the effective date of the Table may operate until 31 December 2002. No new frequency assignments shall be made.

H70 In the band 150.980-151.160 MHz, frequencies may also be assigned to telemetry and telecommand equipment on a secondary basis. Such equipment shall operate with a channel spacing of 20 kHz (the nominal frequency of the first channel being 150.99 MHz). The effective radiated power shall not exceed 100 mW.

The frequency management parameters of such equipment shall meet the conditions specified in Annex 8 established according to Decision ERC/DEC/(98)05.

H71 Governmental use different from the RR: in the bands 154-156 MHz, 169.8125-174 MHz, 790-862 MHz, 2 500-2 690 MHz and 5 925-7 075 MHz, radiolocation equipment will probably operate until 2008. No new frequency assignments or purchase of equipment shall be made.

H71A In the bands 156.0125-157.4375 MHz, 160.6125-160.9625 MHz and 161.4875-162.0375 MHz, frequencies may also be assigned to shipborne radio stations used in the maritime mobile service and located on deep-sea vessels, under the conditions specified in Articles S31 and S52 of the RR and Appendices S13 and S18 to the RR.

In the maritime mobile service, the operating frequencies 161.975 MHz and 162.025 MHz may only be assigned to the Universal Shipborne Automatic Identification System (AIS) according to Decision ERC/DEC/(99)17.

The frequency management parameters of VHF shipborne radiotelephone transmitters and receivers for the maritime mobile service shall meet the conditions specified in Annex 16 established according to Decision ERC/DEC/(96)20.

The frequency management parameters of VHF shipborne radiotelephone equipment and associated equipment for Class "D" Digital Selective Calling (DSC) used in the maritime mobile service shall meet the conditions specified in Annex 17 established according to Decision ERC/DEC/(99)14.

H71B The frequencies/frequency bands 156.0125-156.4875 MHz, 156.625 MHz, 156.725 MHz, 156.775 MHz, 156.825 MHz, 156.875 MHz, 156.975 MHz, 157.0375-157.0875 MHz, 157.175 MHz, 157.275 MHz, 157.325 MHz, 157.375 MHz, 157.425 MHz, 161.575 MHz, 161.6375-161.6875 MHz, 161.775 MHz, 161.875 MHz, 161.925 MHz, 161.975 MHz and 162.025 MHz are reserved for the inland waterway mobile service under the conditions specified in Article S52 of the RR and Appendix S18 to the RR.

H72 The frequencies 156.300 MHz, 156.375 MHz, 156.450 MHz and 156.625 MHz may only be assigned to equipment of inland waterway mobile emergency service radio systems used to carry the traffic of coordinated search and rescue operations.

H72A In the bands 156.375-156.7625 MHz, 156.8375-156.875 MHz, 160.975-161.475 MHz and 165.2-167.3 MHz, fixed service equipment bearing a radio licence valid at the effective date of the Table may operate by 31 December 2002 at the latest. No new frequency assignments shall be made.

H73 In the bands 156.4875-156.7625 MHz, 156.8375-157.4125 MHz and 161.4875-162.0125 MHz, frequencies may be assigned to coast and ship stations in the mobile service on inland waterways. Frequency assignments shall be subject to the conditions specified in the Recommendations of the Danube Commission (CD/SES 47/14, CD/SES 47/22 and CD/SES 50/29).

The frequency management parameters of VHF shipborne radiotelephone equipment and associated equipment for Class "D" Digital Selective Calling (DSC) used in the inland waterway mobile service shall meet the conditions specified in Annex 17 established according to Decision ERC/DEC/(99)14.

H74 The frequency 156.8 MHz is a distress, safety and calling frequency in the maritime, inland waterway and aeronautical mobile services. Its use is regulated by Articles S31 and S52 of the RR, Appendices S13 and S18 to the RR, and by the Recommendations of the Danube Commission (CD/SES 47/14 and CD/SES 47/22).

H75 In the band 157.45-160.6 MHz (transmitting frequencies of mobile stations) and in the band 162.05-165.2 MHz (transmitting frequencies of base stations), except the frequency 163.7 MHz, frequencies may only be assigned to private purpose and non-public radio systems, with a duplex spacing of 4.6 MHz only.

In the sub-band 159.6-160.6/164.2-165.2 MHz, frequencies may also be assigned to narrow-band (channel separation less than 10 kHz) radio equipment intended for analogue and/or digital communication (speech and/or data). The frequency management parameters of such equipment shall meet the conditions specified in Annex 18.

H76 In the bands 157.45-160.6 MHz and 162.05-165.2 MHz, no new frequency assignments shall be made to equipment of the fixed service.

H77 Not used.

H78 For civil purposes, the band 169.4125-169.8125 MHz shall be used for the pan-European public radio paging system (ERMES) under the conditions specified in Council Directive 90/544/EEC, Decision ERC/DEC/(94)02 and CEPT Recommendation T/R 25-07.

Subscriber equipment complying only partly with standards MSZ ETS 300 133/1 to 7 may be manufactured with the purpose of putting it on the domestic market, may be imported and operated until the next revision of the Table, but by 31 December 2002 at the latest.

H79 In the band 169.8125-174 MHz, frequencies for civil purposes may be assigned to civil self-defence bodies only, according to the agreement between the governmental and civil frequency management organs.

H79A In the bands 174-216 MHz, 470-862 MHz and 1 785-1 800 MHz, frequencies may also be assigned to wireless microphones using analogue or digital angle modulation, on a secondary basis under the conditions specified in Annex 10 to Recommendation CEPT/ERC/REC 70-03.

The frequency management parameters of such equipment shall meet the conditions specified in Annex 10 established according to Decision ERC/DEC/(96)15.

H80 In the band 190-214 MHz, frequencies may also be assigned to low power transmitting equipment for transmission of television news, on a secondary basis and with geographical restrictions.

H81 In the band 214-223 MHz, frequencies may also be assigned to low power transmitting equipment for transmission of radio news, on a secondary basis and with geographical restrictions.

H82 In the band 222-230 MHz (TV channel 12), no new frequency assignments shall be made to television broadcasting transmitters. Channel 12 television transmitters bearing a radio licence valid at the effective date of the Table may operate by 31 December 2002 at the latest.

H83 The band 223-230 MHz is reserved for Terrestrial Digital Audio Broadcasting (T-DAB) in accordance with the provisions of the Special Arrangement signed at the CEPT T-DAB Planning Meeting (Wiesbaden, 1995).

H84 In the band 230-231.6 MHz, frequencies may also be assigned to Terrestrial Digital Audio Broadcasting (T-DAB) on a temporary basis in the area of Budapest until 31 December 2002, subject to successful coordination with the governmental frequency management organ.

H85 The frequency 318 MHz may also be assigned to indoor low power teleindicator equipment and vehicle antitheft devices on a tertiary basis. The effective radiated power of such equipment shall not exceed 1 mW. Equipment bearing a radio licence valid at the effective date of the Table may operate until 31 December 2002 on a secondary basis.

H86 In the band 380-385/390-395 MHz, frequencies may only be assigned to the digital land mobile system for the emergency services under the conditions specified in Decision ERC/DEC/(96)01 and CEPT Recommendations T/R 02-02 and T/R 22-05.

In the above-mentioned band, frequencies may also be assigned to digital land mobile systems used for governmental purposes.

H86A In the band 402-405 MHz, frequencies may also be assigned to ultra low power active medical implants on a tertiary basis under the conditions specified in Annex 12 to Recommendation CEPT/ERC/REC 70-03.

The frequency management parameters of such equipment shall meet the conditions specified in Annex 8 established according to Decision ERC/DEC/(98)05.

H86B In the mobile-satellite service, the frequency 406.025 MHz may only be assigned to float-free emergency position-indicating radiobeacons (EPIRBs).

H87 The band 410-420/420-430 MHz is earmarked for the digital Trans European Trunked Radio System (TETRA) according to Decision ERC/DEC/(96)04 and under the conditions specified in CEPT Recommendations T/R 22-05 and T/R 25-08.

H88 In the bands 410-413.75 MHz and 420-423.75 MHz, fixed and mobile service equipment bearing a licence valid at the effective date of the Table may operate until 31 December 2004. No new frequency assignments shall be made.

H89 The band 417.25-420/427.25-430 MHz is reserved for providing public telecommunication service only.

The band 410-413.75/420-423.75 MHz is planned for telecommunication service.

H90 In the bands 413.75-417.25 MHz, 423.75-427.25 MHz, 862-864.1 MHz, 869-873 MHz, 878-882 MHz, 914-919 MHz, 921-935 MHz and 959-960 MHz, equipment may operate probably until 2008. No new frequency assignments shall be made with the exception of the bands 413.75-417.25 MHz and 423.75-427.25 MHz. In the bands 413.75-417.25 MHz and 423.75-427.25 MHz, frequencies may be assigned for use in the fixed and mobile services on a temporary basis until 31 December 2002.

H91 Not used.

H92 In the bands 420-430 MHz, 440-442 MHz, 445-447 MHz, 450-451.3 MHz and 460-461.3 MHz, any civil equipment bearing a radio licence valid on 30 November 1994 may operate by 31 December 2000 at the latest.

H93 The band 442-445/447-450 MHz, except the frequency 444.4 MHz, is allocated to the fixed service, except the FWA applications. In the band, frequencies may only be assigned to equipment of systems with a channel spacing of 12.5 kHz.

Carrier frequencies coinciding with the band limits 442 MHz, 445 MHz, 447 MHz and 450 MHz shall be assigned neither for civil nor for governmental purposes.

H94 Not used.

H95 Use different from the RR: at the centre frequency 444 MHz, altimeters of the aeronautical radionavigation service operate as well, on a secondary basis. Civil equipment bearing a licence valid at the effective date of the Table may operate until 31 December 2001. No new frequency assignments shall be made.

H96 The frequency 444.4 MHz may only be assigned to on-site paging equipment for private purposes. The frequency management parameters of such equipment shall meet the conditions specified in Annex 5 established according to Decision ERC/DEC/(96)19.

H97 In the band 446-446.1 MHz, frequencies may also be assigned to short range business radio (PMR 446) equipment on a tertiary basis under the conditions specified in Decision ERC/DEC/(98)25. The frequency management parameters of such equipment shall meet the conditions specified in Section III of Annex 13 established according to Decision ERC/DEC/(96)11.

H98 The band 450-451.3/460-461.3 MHz is reserved for public mobile voice and/or data transmission radio systems.

H99 In the band 451.3-452.74/461.3-462.74 MHz, frequencies may only be assigned to equipment of mobile single and multichannel voice and/or data transmission radio systems for private or non-public purposes. In the band, no frequency assignments shall be made to radiocommunication networks used exclusively for providing telecommunication service.

H100 The bands 455.16-457.38/465.16-467.38 MHz and 458.56-460/ 468.56-470 MHz shall be used for a nationwide, modified NMT 450 public mobile radiocommunication system. The technical characteristics of the equipment shall conform to standard MSZ ETS 300 086.

H101 The band 457.38-458.48/467.38-468.48 MHz shall be used for a non-public railway (UIC) mobile radio system under the conditions specified in UIC Technical Regulations 751-3 ORI (3rd edition).

The use of the band 457.5875-458.1125/467.5875-468.1125 MHz for such purposes is subject to the conditions specified in CEPT Recommendation T/R 22-01.

In the band 457.38-458.48/467.38-468.48 MHz, frequencies may also be assigned to other non-public analogue mobile radio systems, with geographical separation.

H102 The frequencies 457.525 MHz, 457.5375 MHz, 457.550 MHz, 457.5625 MHz, 457.575 MHz, 467.525 MHz, 467.5375 MHz, 467.550 MHz, 467.5625 MHz and 467.575 MHz may also be assigned to radiotelephone equipment for shipborne communication. Frequency assignments shall be subject to the conditions specified in No. S5.287 of the RR and in CEPT Recommendation T/R 32-02.

H103 In the bands 458.48-458.56 MHz and 468.48-468.56 MHz, only simplex frequencies may be assigned to equipment of mobile radiotelephone systems, and to base stations and receipt acknowledging transmitters of on-site paging systems for private purposes, with a channel spacing of 12.5 kHz. Frequency assignments shall be subject to the conditions specified in CEPT Recommendation T/R 25-08.

The effective radiated power of equipment in radiotelephone systems and of base stations of paging systems shall not exceed 2 W, that of receipt acknowledging transmitters 50 mW. Other frequency management parameters of paging equipment shall meet the conditions specified in Annex 5 established according to Decision ERC/DEC/(96)19. To equipment of radiotelephone systems, footnote H51 shall be applied.

H104 The band 470-478 MHz is allocated to the fixed and mobile services on a secondary basis. The frequency band shall not be used for broadcasting.

The bands 470-472 MHz and 476-478 MHz are for civil use while the band 472-476 MHz is for governmental use.

H105 The band 470-862 MHz is earmarked for the television broadcasting service in accordance with the provisions of the “Regional Agreement for the European Broadcasting Area (Stockholm, 1961)", the London Amendment Plan of 1969, and the Multilateral Coordination Agreement (Chester, 1997) of the CEPT member countries. In the bands 478-654 MHz, 670-734 MHz and 742-790 MHz, system K and system G analogue television broadcasting services operate. In the bands 478-798 MHz, 814-822 MHz and 846-854 MHz, new frequency assignments for analogue systems may be made to system G transmitters only, except transposers. The technical characteristics of transmitters shall conform to standard MSZ-17-302-4. The frequency management parameters of transposers shall meet the conditions specified in Annex 11.

The frequency list of Hungarian broadcasting transmitting stations can be obtained from the frequency management authority.

H106 In the bands 478-654 MHz, 678-734 MHz and 742-782 MHz, frequencies may also be assigned to transportable low power transmitting equipment for transmission of radio and television news, and to low power transmitting equipment for transmission of radio programmes, on a secondary basis and with geographical restrictions.

H107 In the bands 654-678 MHz, 734-742 MHz and 782-838 MHz, new frequency assignments for television broadcasting shall be subject to successful coordination with the governmental frequency management organ.

H108 The bands 718-726 MHz and 742-766 MHz are also allocated to the aeronautical radionavigation service for governmental purposes, on a primary basis. In these bands, new frequency assignments for television broadcasting shall be subject to successful coordination with the governmental frequency management organ.

H109 In the bands 790-798 MHz, 814-822 MHz and 846-854 MHz (TV channels 61, 64 and 68) frequencies may be assigned to analogue television broadcasting transmitters only for one purpose: replacement of the Kabhegy television broadcasting transmitter operating in the band 222-230 MHz (TV channel 12).

H110 The band 790-862 MHz is reserved for Terrestrial Digital Video Broadcasting (DVB-T) according to the Multilateral Coordination Agreement (Chester, 1997) of the CEPT member countries.

H111 In the mobile service, the band 862-870 MHz is reserved for single frequency simplex applications according to CEPT Recommendation T/R 75-02.

This footnote does not exclude the application of footnotes H112A, H114, H115 and H116.

H112 The allocation of the bands 862-864.1 MHz, 869-873 MHz, 878-882 MHz, 914-919 MHz, 921-935 MHz and 959-960 MHz to the aeronautical radionavigation service for governmental purposes is on a primary basis until 31 December 2007.

H112A In the band 863-865 MHz, frequencies may also be assigned to wireless microphones using analogue or digital angle modulation and to wireless audio applications, on a tertiary basis under the conditions specified in Annex 10 and Annex 13 to Recommendation CEPT/ERC/REC 70-03.

The frequency management parameters of wireless microphones shall meet the conditions specified in Annex 10 established according to Decision ERC/DEC/(96)15. The frequency management parameters of equipment used in wireless audio applications shall meet the conditions specified in Annex 8 established according to Decision ERC/DEC/(98)05.

H113 Not used.

H114 In the bands 868-868.6 MHz, 868.7-869.2 MHz, 869.4-869.65 MHz and 869.7-870 MHz, frequencies may only be assigned to short range devices (SRDs) used for telemetry, telecommand, alarm, data transmission and other similar purposes, on a tertiary basis under the conditions specified in Annex 1 to Recommendation CEPT/ERC/REC 70-03. In the bands 868.6-868.7 MHz, 869.25-869.3 MHz and 869.65-869.7 MHz, frequencies may only be assigned to alarm systems on a tertiary basis under the conditions specified in Annex 7 to Recommendation CEPT/ERC/REC 70-03.

The frequency management parameters of such devices and systems shall meet the conditions specified in Annex 8 established according to Decision ERC/DEC/(98)05.

H115 The band 869.3-869.4 MHz is reserved for short range devices (SRDs) used for telemetry, telecommand, alarm, data transmission and other similar purposes, on a tertiary basis under the conditions specified in Annex 1 to Recommendation CEPT/ERC/REC 70-03.

The frequency management parameters of such devices shall meet the conditions specified in Annex 8 established according to Decision ERC/DEC/(98)05.

H116 In the band 869.2-869.25 MHz, frequencies may only be assigned to social alarm systems on a tertiary basis according to Decision ERC/DEC/(97)06 and under the conditions specified in Annex 7 to Recommendation CEPT/ERC/REC 70-03.

The frequency management parameters of such systems shall meet the conditions specified in Annex 8 established according to Decision ERC/DEC/(98)05.

H117 The band 870-876/915-921 MHz is planned for the non-public, digital Trans European Trunked Radio System (TETRA) according to Decision ERC/DEC/(96)04 and under the conditions specified in CEPT Recommendations T/R 22-05 and T/R 25-08. The use of the band 870-874/915-919 MHz for this purpose may commence only following the cessation of the governmental use of the bands 870-873 MHz and 915-919 MHz.

H118 In the band 876-880/921-925 MHz, frequencies may only be assigned to the pan-European railway non-public, digital trunked radio systems (GSM-R) under the conditions specified in CEPT Recommendation T/R 25-09. Frequency assignments shall be subject to successful coordination with the governmental frequency management organ.

H119 In the bands 880-882 MHz and 925-935 MHz, frequency assignments for civil use may only be made according to an agreement between the frequency management organs.

H120 The band 880-890/925-935 MHz is planned for the extension of the GSM band according to Decision ERC/DEC/(97)02.

H121 The band 890-915/935-960 MHz is earmarked for the pan-European public mobile radiocommunication system (GSM) according to Council Directive 87/372/EEC and Decision ERC/DEC/(94)01. In the bands 890.1-897.9/935.1-942.9 MHz, 897.9-905.9/942.9-950.9 MHz and 905.9-913.9/950.9-958.9 MHz frequencies may only be assigned on a nationwide basis and in the band 913.9-914.9/958.9-959.9 MHz only outside cities for providing GSM telecommunication service taking footnote H122 into account.

The frequency management parameters of GSM 900 (Phase 2) Base Station System (BSS) equipment shall meet the conditions specified in Annex 19 established according to Decision ERC/DEC/(98)06.

H122 In the band 890-897.5/935-942.5 MHz, also analogue fixed wireless access local loop (AREH) systems may operate in the fixed service by 4 November 2003 at the latest. No new frequency assignments shall be made in the band for AREH purposes.

In this band, no frequency assignments shall be made in the 0.4 MHz wide guardband between the frequency bands of GSM and AREH applications.

H123 In the band 914-915/959-960 MHz, no frequency assignments shall be made to cordless telephones (CT1) and CT1 telecommunication systems for private purposes. Equipment and systems bearing a licence valid at the effective date of the Table may operate by 31 December 2007 at the latest.

H124 According to the NATO Joint Civil/Military Frequency Agreement (NJFA), frequencies in the bands 1 350-1 375 MHz, 1 492-1 525 MHz, 2 520-2 575 MHz and 2 615-2 670 MHz may also be assigned for NATO purposes until 2007.

In the band 1 492-1 525 MHz, frequency assignments shall be subject to successful coordination with the civil frequency management organ.

H125 Not used.

H126 The bands 1 375-1 400 MHz (terminal-to-central station) and 1 427-1 452 MHz (central station-to-terminal) are reserved for radio equipment of low capacity digital point-to-multipoint systems under the conditions specified in Annex B to CEPT Recommendation T/R 13-01.

H127 In the band 1 427-1 525 MHz, frequencies may only be assigned to radio equipment of low capacity digital point-to-multipoint systems. Such equipment shall operate with a channel spacing of 2 or 4 MHz. The capacity of central stations shall be 2 or 4 Mbit/s. The frequency band of the central station-to-terminal links is 1 427-1 476 MHz and that of the terminal-to-central station links is 1 476-1 525 MHz.

The value of the first pair of frequencies is:

1 428.5/1 477.5 MHz (for a channel spacing of 2 MHz),

and

1 429.5/1 478.5 MHz (for a channel spacing of 4 MHz),

respectively.

In the band 1 451.5-1 467.5/1 500.5-1 516.5 MHz, equipment may operate until 31 December 2002, from 1 January 2002 on a secondary basis. In the bands 1 427-1 451.5 MHz, 1 467.5-1 500.5 MHz and 1 516.5-1 525 MHz, equipment may probably operate until 2007.

H128 The band 1 452-1 467.5 MHz is reserved for Terrestrial Digital Audio Broadcasting (T-DAB) on a primary basis, in accordance with the provisions of the Special Arrangement signed at the CEPT T-DAB Planning Meeting (Wiesbaden, 1995).

H129 In the bands 1 525-1 544 MHz, 1 545-1 574.5 MHz, 1 576.5-1 645.5 MHz, 1 646.5-1 670 MHz, 1 675-1 710 MHz and 1 900-2 100 MHz, fixed service equipment for governmental purposes will probably operate until 2005. No frequency assignments shall be made to additional equipment.

H130 The bands 1 525-1 544 MHz and 1 555-1 559 MHz shall be used in the mobile-satellite service for space-to-Earth links of space radiocommunication systems providing either data communications or both voice and data communications (e.g. Inmarsat-A, -B, -C, -D, -M, -phone, EMS-MSSAT, -PRODAT).

The bands 1 626.5-1 645.5 MHz and 1 656.5-1 660.5 MHz shall be used in the mobile-satellite service for Earth-to-space links of the above-mentioned space radiocommunication systems.

H131 Not used.

H132 The bands 1 545-1 555 MHz (space-to-Earth) and 1 646.5-1 656.5 MHz (Earth-to-space) shall be used in the mobile-satellite service for space radiocommunication systems of aircraft providing both voice and data communications (e.g. Inmarsat-Aero).

H133 In the sub-bands 1 550-1 574.5 MHz, 1 576.5-1 645.5 MHz and 1 646.5-1 660 MHz of the band 1 550-1 660 MHz, only radio equipment of low capacity digital point-to-multipoint systems may operate in the fixed service, probably until 2005. No frequency assignments shall be made to additional equipment.

H133A In the radionavigation-satellite service (space-to-Earth), the Global Positioning System (GPS) operates on 1 575.42 MHz. In order to protect GPS from interference, fixed service equipment operating in the band 1 574.5-1 576.5 MHz may operate until its licence, valid at the effective date of the Table, expires. No new frequency assignments shall be made.

H133B In the bands 1 613.8-1 626.5 MHz, 2 170-2 200 MHz and 2 483,5-2 500 MHz (space-to-Earth) and in the bands 1 610-1 626.5 MHz and 1 980-2 010 MHz (Earth-to-space), satellite personal communication services (S-PCS) are planned according to Decision ERC/DEC/(97)03.

H134 In the band 1 670-1 675/1 800-1 805 MHz, frequencies may only be assigned to the Terrestrial Flight Telecommunications System (TFTS) according to Decisions ERC/DEC/(92)01 and ERC/DEC/(97)08.

H135 In the fixed and mobile services, the band 1 710-1 785/1 805-1 880 MHz is earmarked exclusively for the DCS 1800 digital cellular radiocommunication system, under the conditions specified in Decision ERC/DEC/(95)03 and CEPT Recommendation T/R 22-07. In the bands 1 710.1-1 725.1/1 805.1-1 820.1 MHz, 1 743.1-1 758.1/1 838.1-1 853.1 MHz and 1 758.1-1 773.1/1 853.1-1 868.1 MHz, frequencies may only be assigned in the mobile service for providing DCS 1800 public telecommunication service.

The frequency management parameters of DCS 1800 (Phase 2) Base Station System (BSS) equipment shall meet the conditions specified in Annex 19 established according to Decision ERC/DEC/(98)06.

H136 Not used.

H137 Not used.

H137A The band 1 775.7-1 781.7/1 870.7-1 876.7 MHz is reserved exclusively for the DCS 1800 public digital cellular radiocommunication system in the fixed service for FWA use.

The frequency management parameters of DCS 1800 (Phase 2) Base Station System (BSS) equipment shall meet the conditions specified in Annex 19 established according to Decision ERC/DEC/(98)06.

H138 Not used.

H139 In the bands 1 785-1 800 MHz, 5 850-5 925 MHz, 31-31.3 GHz, 31.5-31.8 GHz, 50.4-51.4 GHz, 59-62 GHz, 71-75.5 GHz, 81-84 GHz and 100-103 GHz, no frequencies shall be assigned unless provided otherwise by the allocation or another footnote. No frequencies shall be assigned before an additional amendment of the Table is made following the decision as to the harmonised European use of these bands.

H140 In the fixed and mobile services, the band 1 880-1 900 MHz shall be used for systems of the Digital European Cordless Telecommunications (DECT) according to Council Directive 91/287/EEC, Decision ERC/DEC/(94)03 and CEPT Recommendation T/R 22-02.

H141 In the fixed and mobile services, the bands 1 900-1 980 MHz, 2 010-2 025 MHz and 2 110-2 170 MHz are planned for terrestrial applications of the Universal Mobile Telecommunications System (UMTS), under the conditions specified in Decision ERC/DEC/(97)07.

H142 In the bands 1 904-1 990 MHz and 2 010-2 180 MHz, only equipment bearing a radio licence valid on 30 November 1994 may be used in the fixed and mobile services for civil purposes, by 31 December 2004 at the latest. No frequency assignments shall be made to additional equipment.

H143 The bands 1 980-2 010 MHz and 2 170-2 200 MHz are planned for satellite applications of the Universal Mobile Telecommunications System (UMTS), under the conditions specified in Decisions ERC/DEC/(97)03, ERC/DEC/(97)04 and ERC/DEC/(97)07.

H144 Not used.

H145 Use different from the RR: altimeters of the aeronautical radionavigation service operating on 2 000 MHz and bearing a licence valid at the effective date of the Table may probably operate until 2008. No new frequency assignments shall be made.

H146 The bands 2 025-2 110 MHz and 2 200-2 290 MHz are planned for low and medium capacity (2 to 34 Mbit/s) point-to-point digital radio-relay equipment under the conditions specified in Annex C to CEPT Recommendation T/R 13-01.

H147 In the bands 2 100-2 300 MHz, 2 500-2 690 MHz, 6 425-7 075 MHz, 7 750-8 275 MHz and 13.045-13.185 GHz, frequency assignments for civil use shall be subject to successful coordination with the governmental frequency management organ, because of governmental use different from the RR.

H148 In the band 2 300-2 500 MHz, radiolocation equipment will probably operate until 2008, on a secondary basis. No new frequency assignments or purchase of equipment shall be made.

H149 In the band 2 400-2 483.5 MHz, frequencies may also be assigned to equipment of spread spectrum Radio Local Area Networks (RLANs) in the fixed service on a tertiary basis under the conditions specified in Annex 3 to Recommendation CEPT/ERC/REC 70-03.

The processing gain shall be at least 10 dB.

The frequency management parameters of such equipment shall meet the conditions specified in Annex 20 established according to Decision ERC/DEC/(96)17.

H150 Not used.

H151 In the bands 2 400-2 483.5 MHz, 5 725-5 875 MHz, 24-24.25 GHz and 61-61.5 GHz, frequencies may also be assigned to radio equipment of low capacity (64 kbit/s to 2 Mbit/s) digital spread spectrum point-to-point and point-to-multipoint systems on a tertiary basis. Frequency assignments shall be subject to the conditions specified in Annex 1 to Recommendation CEPT/ERC/REC 70-03.

The processing gain shall be at least 10 dB.

The frequency management parameters of equipment operating in the bands 2 400-2 483.5 MHz, 5 725-5 875 MHz and 24-24.25 GHz shall meet the conditions specified in Annex 9 established according to Decision ERC/DEC/(99)07.

H152 In the bands 2 400-2 483.5 MHz, 9 200-9 975 MHz, 10.5-10.6 GHz, 13.4-14 GHz and 24.05-24.25 GHz, frequencies may also be assigned to equipment for detecting movement and equipment for alert on a tertiary basis. Frequency assignments shall be subject to the conditions specified in Annex 6 to Recommendation CEPT/ERC/REC 70-03, except the equivalent isotropically radiated power (e.i.r.p.) in the band 10.5-10.6 GHz, **where the e.i.r.p. of such equipment shall not exceed 25 mW.**

The frequency management parameters of such equipment shall meet the conditions specified in Annex 9 established according to Decision ERC/DEC/(99)07.

Equipment for detecting movement with an e.i.r.p. exceeding the limit values given in Annex 6 to Recommendation CEPT/ERC/REC 70-03 for the above-mentioned frequency bands, except the band 10.5-10.6 GHz, and bearing a radio licence valid at the effective date of the Table may operate by 31 December 2005 at the latest. For the band 10.5-10.6 GHz, the same applies to equipment for detecting movement with an e.i.r.p. exceeding the 25 mW limit given above and bearing a radio licence valid at the effective date of the Table.

H153 In the band 2 446-2 454 MHz, frequencies may also be assigned to Automatic container and Vehicle Identification (AVI) systems for railways on a tertiary basis under the conditions specified in Annex 4 to Recommendation CEPT/ERC/REC 70-03.

The frequency management parameters of such equipment shall meet the conditions specified in Annex 21 established according to Decision ERC/DEC/(98)30.

H154 Governmental use different from the RR: in the bands 2 500-2 690 MHz, 5 925-7 075 MHz, 7 750-8 275 MHz and 11.7-13.25 GHz, aeronautical radionavigation equipment will probably operate until 2008. No new frequency assignments or purchase of equipment shall be made.

H155 In the fixed service, the band 2 520-2 670 MHz is planned digital radio-relay equipment under the conditions specified in Annex D to CEPT Recommendation T/R 13-01.

H156 The bands 3 410-3 500 MHz (terminal-to-central station) and 3 510-3 600 MHz (central station-to-terminal) are reserved for cellular digital point-to-multipoint FWA systems under the conditions specified in Section B1 of Annex B to Recommendation CEPT/ERC/REC 14-03.

For systems with a static capacity arrangement, the capacity of terminals shall not exceed 144 kbit/s and, when used for voice transmission, shall be at least 4.8 kbit/s. Systems applied shall support the use of terminals with a capacity of 9.6 kbit/s and

64 kbit/s.

For systems with a dynamic capacity arrangement and for packet-switched systems, no capacity limits apply to terminals.

H156A The band 3 500-3 510 MHz is planned for cellular digital point-to-multipoint FWA systems with TDD transmission under the conditions specified in Section B1 of Annex B to Recommendation CEPT/ERC/REC 14-03.

H157 The band 3 600-3 800 MHz is planned for cellular digital point-to-multipoint FWA systems under the conditions specified in Part 2, Section B2.2.1 of Annex B to Recommendation CEPT/ERC/REC 12-08.

H158 In the band 3 800-4 200 MHz, frequencies may only be assigned to high capacity digital (140/155 Mbit/s) and analogue radio-relay equipment under the conditions specified in Recommendation ITU-R F.382-7. No frequency assignments shall be made to additional analogue radio-relay equipment.

H159 In the band 5 150-5 250 MHz, frequencies may also be assigned to equipment of High Performance Radio Local Area Networks (HIPERLANs) on a tertiary basis, according to Decision ERC/DEC/(96)03 and under the conditions specified in Annex 3 to Recommendation CEPT/ERC/REC 70-03.

H159A In the band 5 725-5 850 MHz, frequencies may also be assigned in the fixed service to radio equipment of low capacity (not exceeding 2 Mbit/s) digital spread spectrum point-to-point systems on a tertiary basis.

The processing gain shall be at least 10 dB. The e.i.r.p. of such equipment shall not exceed (6 + 0.5L) dBW, L being the distance covered, in kilometres. L shall not exceed 30 km.

H160 In the band 5 725-7 075 MHz, no frequency assignments shall be made to Very Small Aperture Terminals (VSATs) in the fixed-satellite service.

H161 In the band 5 795-5 815 MHz, frequencies may also be assigned to equipment used in Road Transport Telematic (RTT) systems for road-to-vehicle links, under the conditions specified in Decision ERC/DEC/(92)02 and Annex 5 to Recommendation CEPT/ERC/REC 70-03.

H162 In the band 5 925-6 425 MHz, frequencies may only be assigned to high capacity digital (min. 140/155 Mbit/s) and analogue radio-relay equipment under the conditions specified in Recommendation CEPT/ERC/REC 14-01 or in Recommendation ITU-R F.383-5. No frequency assignments shall be made to additional analogue radio-relay equipment.

H163 In the band 6 425-7 125 MHz, frequencies may only be assigned to high capacity (min. 140/155 Mbit/s) digital radio-relay equipment under the conditions specified in Recommendation CEPT/ERC/REC 14-02 or in Recommendation ITU-R F.384-6.

Transportable radio-relay equipment may also be operated in the band, probably until 2008; however, no frequency assignments shall be made to additional transportable radio-relay equipment.

H164 In the band 7 250-7 425 MHz, any civil purpose radio-relay equipment in the fixed service bearing a radio licence valid at the effective date of the Table may be operated until its radio licence, valid at the effective date of the Table, expires, but by 31 December 2000 at the latest. No new frequency assignments shall be made.

H165 According to the NATO Joint Civil/Military Frequency Agreement (NJFA), the band 7 250-7 300 MHz is a harmonised NATO band type 1 for space-to-Earth links of the maritime and land mobile-satellite services, whereas the band 7 975-8 025 MHz is a harmonised NATO band type 1 for Earth-to-space links of these services.

H166 According to the NATO Joint Civil/Military Frequency Agreement (NJFA), the band 7 250-7 750 MHz is a harmonised NATO band type 1 for space-to-Earth links of the fixed-satellite service, whereas the band 7 900-8 400 MHz is a harmonised NATO band type 1 for Earth-to-space links of this service.

H167 In the band 7 300-7 750 MHz, the transportable earth stations of the fixed-satellite service (space-to-Earth) cannot claim protection from other services.

H168 In the bands 7 425-7 725 MHz and 7 900-8 200 MHz, frequencies may only be assigned to fixed low and medium capacity (2 to 68 Mbit/s) digital radio-relay equipment. In the band 8 200-8 500 MHz, frequencies may only be assigned to fixed and transportable low and medium capacity (2 to 68 Mbit/s) digital radio-relay equipment. The frequency management parameters of such equipment shall meet the conditions specified in Annex 22.

H169 In the band 7 425-8 500 MHz, radio-relay equipment not complying with the conditions of footnotes H168 and H170 but bearing a radio licence valid at the effective date of the Table may probably operate until 2005.

H170 In the band 7 725-7 900 MHz, in the fixed and mobile, except aeronautical mobile, services, frequencies may only be assigned to point-to-point analogue radio-relay equipment used for transmission of radio and television news and programmes.

The channel bandwidth of television transmission is 28 MHz, the centre frequencies of the channels are:

7 743 MHz, 7 771 MHz, … 7 883 MHz.

The channel bandwidth of sound radio transmission is 1.75 MHz. In the band of a television channel, 16 sound radio channels can be transmitted.

H171 In the bands 7 900-7 975 MHz and 8 025-8 400 MHz, the transportable earth stations of the fixed-satellite service (Earth-to-space) shall not cause harmful interference to other services.

H172 In the band 7 900-8 400 MHz, frequency assignments shall be subject to successful coordination between the governmental and civil frequency management organs.

H173 Not used.

H173A In the band 9 000-9 500 MHz, frequencies may be assigned to shipborne radar stations and turning speed meter equipment on inland waterways under the conditions specified in the Recommendations of the Danube Commission (CD/SES 53/25 and CD/SES 53/32).

H174 In the bands 10-10.45 GHz and 10.5-10.55 GHz, in the fixed and mobile services, frequencies may only be assigned to point-to-point analogue radio-relay equipment used for transmission of radio and television news and programmes. Frequency assignments shall be subject to the conditions specified in recommends 3 of Recommendation CEPT/ERC/REC 12-05 and in Annex 23. In the band 10.55-10.68 GHz, in the fixed and mobile, except aeronautical mobile, services, frequencies may

only be assigned to the above-mentioned equipment, under the same conditions.

The channel bandwidth of television transmission is 28 MHz. The channel bandwidth of sound radio transmission is 1.75 MHz. In the band of a television channel, 16 sound radio channels can be transmitted.

In the bands 10.136-10.308 GHz and 10.5-10.68 GHz, no frequency assignments shall be made to additional equipment, as from 1 January 2002.

H174A The bands 10.15-10.3 GHz and 10.5-10.65 GHz are planned for radio equipment of digital point-to-multipoint systems according to recommends 1 of Recommendation CEPT/ERC/REC 12-05.

H174B In the band 10.434-10.5 GHz, frequencies may only be assigned to video applications (camera links) on a tertiary basis. The spectrum of the signals shall not overlap the band limits given. The e.i.r.p. of equipment in such applications shall not exceed 100 mW.

H175 In the band 10.6-10.68 GHz, equipment for detecting movement bearing a radio licence valid at the effective date of the Table may operate by 31 December 2005 at the latest. No new frequency assignments shall be made.

H176 In the band 10.7-11.7 GHz, frequencies may only be assigned to high capacity (min. 140/155 Mbit/s) digital radio-relay equipment. Frequency assignments shall be subject to the conditions specified in Recommendation CEPT/ERC/REC 12-06 or, except the centre frequencies 10 715 MHz and 11 245 MHz (1-1'), in recommends 1 of Recommendation ITU-R F.387-7. Geographical restrictions referring to equipment installed in Budapest and its surroundings are contained in Annex 24.

Analogue radio-relay equipment bearing a radio licence valid at the effective date of the Table may operate by 31 December 2005 at the latest. No new frequency assignments shall be made to analogue radio-relay equipment.

H177 In the band 10.7-11.7 GHz, video and sound channel signals broadcasted for programme allocation purposes in the fixed-satellite service are to provide the programme distribution networks (head stations of cable television systems).

Individual reception is also allowed in the band, but it cannot claim protection from interference.

The frequency management parameters of receiving earth equipment suitable for the reception of video and sound channel signals, broadcasted from telecommunication satellites operated in the band 10.95-11.7 GHz and from broadcasting satellites operated in the band 11.7-12.5 GHz, shall meet the conditions specified in Annex 25.

H178 The bands 10.7-11.7 GHz and 12.5-12.75 GHz (space-to-Earth) may be used on a tertiary basis, the band 14-14.25 GHz (Earth-to-space) on a secondary basis, for the EUTELTRACS land mobile-satellite system as well, according to Annex 3 to Recommendation CEPT/ERC/REC 21-15.

H179 In the bands 10.7-11.7 GHz and 12.5-12.75 GHz (space-to-Earth), and in the band 14-14.5 GHz (Earth-to-space), the use of VSAT terminals, too, may be licensed in the fixed-satellite service.

H180 In the bands 10.7-11.7 GHz and 12.5-12.75 GHz (space-to-Earth), and in the bands 12.75-13.25 GHz and 13.75-14.5 GHz (Earth-to-space), the use of SNG terminals, too, may be licensed in the fixed-satellite service.

H181 Assignments of broadcasting-satellite channels, allotted to Hungary according to the Plan of Appendix S30 to the RR, shall be subject to the conditions stated herein.

H182 In the band 11.7-12.5 GHz, only the programme allocation and distribution system intended to cover the Budapest area and operating in the band 12.3-12.5 GHz is licensed in the fixed service.

The band 11.7-12.5 GHz is planned, in the fixed service, for regional multipoint video distribution (MVDS) and allocation systems, depending on the outcome of the review of Appendix S30 to the RR.

Interference-free operation of broadcasting-satellite channels bearing a licence for providing programme services is to be warranted during the operation of the systems.

H183 In the band 12.75-13.25 GHz, frequencies may only be assigned to fixed low and medium capacity (2 to 68 Mbit/s) digital radio-relay equipment under the conditions specified in Recommendation CEPT/ERC/REC 12-02. In the case of a channel spacing of 28 MHz, frequency assignments to additional equipment may be made in channels 3 and 5 only, with a capacity of at least 34 Mbit/s.

The frequency management parameters of such equipment shall meet the conditions specified in Annex 26.

H184 In the sub-bands 14.5-14.774 GHz, 14.809-15.194 GHz and 15.229-15.35 GHz of the band 14.5-15.35 GHz, frequencies may only be assigned to fixed low capacity (2 to 16 Mbit/s) digital radio-relay equipment. Frequency assignments shall be subject to the conditions specified for the channel spacings of 14 MHz and 7 MHz in Recommendation ITU-R F.636-3. A channel spacing of 3.5 MHz is also allowed in the band. Such equipment may probably operate until 2018.

H185 The bands 14.5-14.62 GHz and 15.23-15.35 GHz are planned for fixed low capacity (2 to 16 Mbit/s) digital radio-relay equipment under the conditions specified for the channel spacings of 14 MHz, 7 MHz, 3.5 MHz and 1.75 MHz in Recommendation CEPT/ERC/REC 12-07.

H185A In the bands 14.774-14.809 GHz and 15.194-15.229 GHz, equipment bearing a radio licence valid at the effective date of the Table may operate by 31 December 2004 at the latest. No new frequency assignments shall be made.

H185B In the bands 14.774-14.809 GHz and 15.194-15.229 GHz, frequency assignments shall be subject to successful coordination with the civil frequency management organ, until cessation of the fixed service use for civil purposes.

H186 In the band 16.6-17.3 GHz, frequencies for civil purposes in the radiolocation service may be assigned to speed measuring equipment only.

H187 The band 17.1-17.3 GHz is planned for equipment of High Performance Radio Local Area Networks (HIPERLANs) on a tertiary basis, under the conditions specified in Annex 3 to Recommendation CEPT/ERC/REC 70-03.

H188 The band 17.3-17.7 GHz is reserved for Multipoint Video Distribution Systems (MVDSs) according to ERC Report 25.

H189 In the band 17.7-19.7 GHz, frequencies may only be assigned to medium and high capacity (34 Mbit/s, 2 × 34 Mbit/s and 140/155 Mbit/s) point-to-point digital radio-relay equipment under the conditions specified in Annex A to Recommendation CEPT/ERC/REC 12-03. Channel bandwidths to be used are: 27.5 MHz and 55 MHz. The frequency management parameters of such equipment shall meet the conditions specified in Annex 27.

In the band 18.6-18.8 GHz, the equivalent isotropically radiated power of such equipment shall not exceed 40 dBW, and the power delivered to the antenna shall not exceed –3 dBW.

Frequency assignments for governmental purposes shall be subject to successful coordination with the civil frequency management organ.

H189A In the fixed-satellite service, the bands 17.8-18.6 GHz (space-to-Earth) and 27.6-28.4 GHz (Earth-to-space) are planned for the gateway stations of NGSO satellite space radiocommunication systems.

H189B In the fixed-satellite service, the bands 18.8-19.3 GHz (space-to-Earth) and 28.6-29.1 GHz (Earth-to-space) are planned on a tertiary basis for the end user links of NGSO satellite space radiocommunication systems.

H190 In the bands 21.2-21.4 GHz and 22.6-23 GHz, in the fixed and mobile services, frequencies may only be assigned to point-to-point analogue radio-relay equipment used for transmission of radio and television news and programmes, under the conditions specified in Annex 28.

The channel bandwidth of television transmission is 28 MHz. The channel bandwidth of sound radio transmission is 1.75 MHz. In the band of a television channel, 16 sound radio channels can be transmitted.

H191 In the band 21.4-22 GHz, any equipment of the fixed service bearing a radio licence valid at the effective date of the Table may operate until 31 December 2000. No new frequency assignments shall be made.

H192 In the band 22-22.6/23-23.6 GHz, frequencies may only be assigned to fixed low and medium capacity (2 to 51 Mbit/s) point-to-point digital radio-relay equipment under the conditions specified in Annex A to CEPT Recommendation T/R 13-02.

The frequency management parameters of such equipment shall meet the conditions specified in Annex 29 established according to Decision ERC/DEC/(98)09.

In the sub-band 22-22.442/23-23.45 GHz used for civil purposes, the channel spacing shall be 3.5 MHz, 7 MHz and 14 MHz.

In the sub-band 22.442-22.6/23.45-23.6 GHz used for governmental purposes, the channel spacing shall be 3.5 MHz, 7 MHz, 14 MHz and 28 MHz.

H193 In the fixed service, the band 24.25-24.5 GHz is reserved for fixed and transportable point-to-point analogue radio-relay equipment used for transmission of radio and television news and programmes, according to ERC Report 25.

H194 The band 24.5-26.5 GHz is reserved for radio-relay equipment of cellular digital point-to-multipoint systems, and for point-to-point digital radio-relay equipment used for transmission within a cell and between cells, under the conditions specified in Annex B to CEPT Recommendation T/R 13-02.

The frequency management parameters of point-to-point equipment shall meet the conditions specified in Annex 30 established according to Decision ERC/DEC/(99)09.

For point-to-multipoint systems, the central station-to-terminal links and the terminal-to-central station links shall be implemented in the band 24.5-25.5 GHz, and in the band 25.5-26.5 GHz, respectively.

H195 According to the NATO Joint Civil/Military Frequency Agreement (NJFA), the bands 26.5-27.5 GHz, 30-31 GHz and 59-61 GHz are harmonised NATO bands type 2.

H195A The bands 31.8-33.4 GHz, 51.4-52.6 GHz, 55.78-57 GHz and 64-66 GHz are planned for high density applications in the fixed service (HDFS) according to RR No. S5.547 and RR Resolution 726 (WRC-97) and under the conditions specified in Recommendations CEPT/ERC/REC 12-11 and CEPT/ERC/REC 12-12.

H196 In the band 37-39.5 GHz, frequencies may only be assigned to fixed low, medium and high capacity point-to-point digital radio-relay equipment under the conditions specified in CEPT Recommendation T/R 12-01.

The frequency management parameters of such equipment shall meet the conditions specified in Annex 31 established according to Decision ERC/DEC/(98)08.

The band shall be used with a channel spacing of 3.5 MHz, 7 MHz, 14 MHz, 28 MHz and 56 MHz.

The band is planned for point-to-multipoint links as well, under the conditions specified in CEPT Recommendation T/R 12-01.

H197 According to the NATO Joint Civil/Military Frequency Agreement (NJFA), the bands 37-39.5 GHz, 77-81 GHz and 92-100 GHz may also be used for NATO purposes in the future.

H198 The bands 39.5-40.5 GHz, 62-63 GHz and 65-66 GHz are planned, in the fixed and mobile services, for Mobile Broadband Systems (MBSs) according to ERC Report 25. No frequency assignments shall be made to other fixed and mobile service applications.

H199 The band 40.5-43.5 GHz is reserved for Multimedia Wireless Systems (MWSs) according to Decision ERC/DEC/(99)15. Within this frequency band, the band 40.5-42.5 GHz is reserved for Multipoint Video Distribution Systems (MVDSs) according to CEPT Recommendation T/R 52-01.

H199A The bands 47.2-47.5 GHz and 47.9-48.2 GHz are planned for high altitude platform stations (HAPSs) according to RR No. S5.552A and RR Resolution 122 (WRC-97).

H199B The band 48.5-50.2 GHz is planned for fixed digital radio systems according to Recommendation CEPT/ERC/REC 12-10.

H199C In the band 57-59 GHz, frequencies may only be assigned to radio equipment of fixed digital point-to-point and point-to-multipoint systems under the conditions specified in Recommendation CEPT/ERC/REC 12-09. Installation of the systems does not require prior frequency planning; however, a frequency assignment decision and a radio licence are obligatory.

Frequency assignments for governmental purposes shall be subject to successful coordination with the civil frequency management organ.

H200 In the band 63-64 GHz, frequencies may also be assigned to equipment used in Road Transport Telematic (RTT) systems for vehicle-to-vehicle links, under the conditions specified in Decision ERC/DEC/(92)02 and Annex 5 to Recommendation CEPT/ERC/REC 70-03.

H201 In the band 76-77 GHz, frequencies may also be assigned to vehicular radars of Road Transport Telematic (RTT) systems, under the conditions specified in Decision ERC/DEC/(92)02 and Annex 5 to Recommendation CEPT/ERC/REC 70-03.

Annex 4 to the National Table of Frequency Allocations

Frequency management requirements for short range inductive devices (SRDs) operating in the bands 135-148 kHz, 7 300-7 400 kHz and 8 800-9 500 kHz

(see footnote H4)

Frequency band (kHz)	Maximum allowed level of the magnetic field strength at 10 m (dBμA/m)
135-148	$37.7 - 3 \log_2(f/135)$
7 300-7 400	9
8 800-9 500	9

where f is the frequency in kHz

Channel spacing: not specified, in fact the whole frequency band may be assigned.

Type of antenna:
– integral,
– dedicated (type approved with the device),
– external coil loop.

Duty cycle: given by the manufacturer.

Definitions, test conditions and methods of measurement are contained in European Standard EN 300 330.

Annex 5 to the National Table of Frequency Allocations

Frequency management requirements for on-site paging equipment and systems

(see footnotes H5, H42, H67, H96 and H103)

I Radio paging equipment

1 Limits for transmitter parameters

1.1 *Frequency error*

Channel separation (kHz)	Frequency error limits (kHz)			
	f < 47 MHz	47 ≤ f ≤ 137 MHz	137 < f ≤ 300 MHz	300 < f ≤ 470 MHz
10/12.5	± 0.60	± 1.00	± 1.00 (B) ± 1.50 (P)	± 1.00 (B) ± 2.50 (P)
20/25	± 0.60	± 1.35	± 2.00	± 2.00 (B) ± 2.50 (P)

Table 1

Note:

f carrier frequency in MHz

B base station

P pocket station

1.2 *Carrier power (conducted)*

For base stations: ≤5 W

For pocket stations: ≤0.05 W

1.3 *Effective radiated power*

For base stations: ≤5 W

For pocket stations: ≤0.05 W

1.4 *Adjacent channel power*

Channel separation (kHz)	Limits
10	20 µW
12.5	60 dB below carrier power, without the need to be below 0.2 µW
20/25	70 dB below carrier power, without the need to be below 0.2 µW

Table 2

1.5 *Frequency deviation*

Channel separation (kHz)	Maximum permissible frequency deviation (kHz)
10	2
12.5	2.5
20	4
25	5

Table 3

1.6 *Spurious emissions*

Conducted

Frequency range	Tx operating	Tx stand-by
9 kHz ≤ f ≤ 1 GHz	0.25 µW	2.0 nW
1 GHz < f ≤ 4 GHz	1.0 µW	20 nW

Table 4

Hungary

Radiated

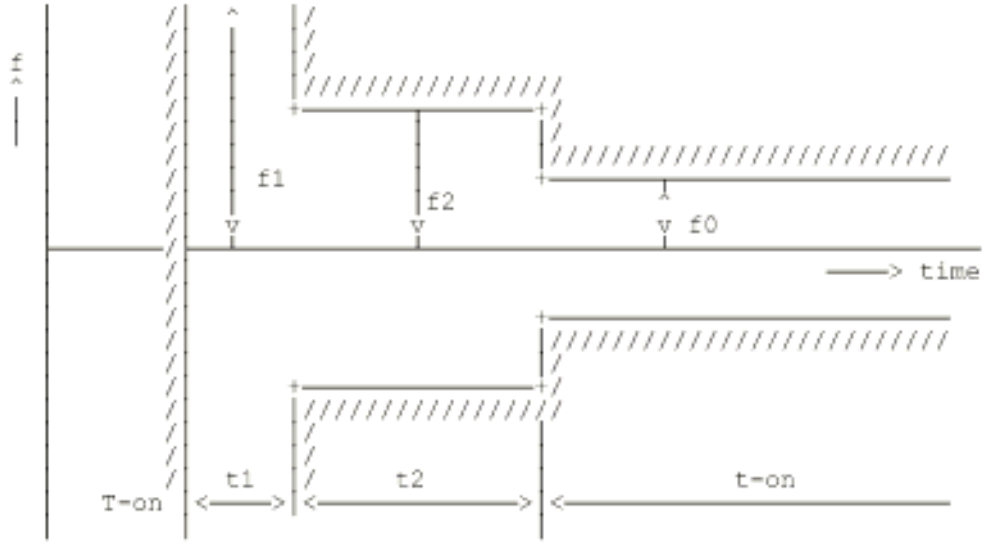
Frequency range	Tx operating	Tx stand-by
25 MHz ≤ f ≤ 1 GHz	0.25 μW	2.0 nW
1 GHz < f ≤ 4 GHz	1.0 μW	20 nW

Table 5

1.7 *Transmitter transient behaviour*

For base station transmitters: see Figure 1.

Transmitter switch on condition



Transmitter switch off condition

Transient time (ms)	Carrier frequency ≤ 300 MHz	Carrier frequency > 300 MHz
t1	5	10
t2	20	25
t3	5	10

Table 6

Note:

f0 frequency tolerance in the steady state

f1 frequency tolerance which may be greater than half the channel separation

f2 frequency tolerance which shall not be greater than half the channel separation

For pocket transmitters there is no limitation.

2 Limits for base station receiver parameters

2.1 *Receiver sensitivity*

For analogue speech transmission:	Under normal test conditions:	≤ +6 dBμV emf
	Under extreme test conditions:	≤ +12 dBμV emf
For message transmission:	Under normal test conditions:	≤ +3 dBμV emf
	Under extreme test conditions:	≤ +9 dBμV emf

Table 7

2.2 *Co-channel rejection (for analogue speech and message transmission)*

For a channel separation of 20 kHz and 25 kHz: –8 dB…0 dB

For a channel separation of 10 kHz and 12.5 kHz: –12 dB…0 dB

2.3 *Adjacent channel selectivity (for analogue speech and message transmission)*

Test conditions	Channel separation	
	10 kHz / 12.5 kHz	20 kHz / 25 kHz
Normal	≥60 dB	≥70 dB
Extreme	≥50 dB	≥60 dB

Table 8

2.4 *Spurious response rejection*

For analogue speech and message transmission: not less than 70 dB

2.5 *Intermodulation response rejection*

For analogue speech and message transmission: not less than 60 dB

2.6 *Blocking*

For analogue speech and message transmission: not less than 70 dB

2.7 *Spurious radiations*

In the frequency range 9 kHz…1 GHz: 2 nW

In the frequency range 1 GHz…4 GHz: 20 nW

3 Spurious radiations from pocket receivers

In the frequency range below 1 GHz: 2 nW

In the frequency range above 1 GHz: 20 nW

II Inductive paging equipment

1 Limits for transmitter parameters

1.1 *Carrier power*

The carrier power under normal and extreme test conditions shall not exceed 20 W.

1.2 *Range of operating frequencies*

The lowest operating frequency ≥ 16 + $fe + \frac{fb}{2}$ (kHz),

the highest operating frequency ≤ 146 – $fe - \frac{fb}{2}$ (kHz)

where

fe is the frequency error of the carrier in kHz,

fb is the modulation bandwidth in kHz.

1.3 *Frequency error*

The maximum frequency error shall be within ±1 % of the nominal carrier frequency.

1.4 *Modulation bandwidth*

No limit is specified, but the largest bandwidth measured shall be used to determine the range of operating frequencies.

1.5 *Spurious emissions*

a) conducted

9 kHz…16 kHz:	40 dB below carrier
146 kHz…1 MHz:	< 1 μW
1 MHz…25 MHz:	< 250 nW

b) radiated, below 25 MHz

9 kHz…16 kHz:	descending from 53 dBμA/m	to 48 dBμA/m
146 kHz…1 MHz:	descending from 28.5 dBμA/m	to 12 dBμA/m
1 MHz…25 MHz:	descending from 12 dBμA/m	to 2 dBμA/m

The limit is decreasing linearly with the logarithm of the frequency.

c) radiated, above 25 MHz

Frequency range	25 MHz < f ≤ 1 GHz	1 GHz < f ≤ 4 GHz
Tx operating	0.25 μW	1.0 μW
Tx stand-by	2.0 nW	20 nW

2 Limits for receiver parameters

2.1 *Spurious radiations*

a) radiated, below 25 MHz

9 kHz…16 kHz: descending from 41 dBμA/m to 36 dBμA/m

146 kHz…1 MHz: descending from 16.5 dBμA/m to 0 dBμA/m

1 MHz…25 MHz: descending from 0 dBμA/m to –10 dBμA/m

The limit is decreasing linearly with the logarithm of the frequency.

b) radiated, above 25 MHz

The power of any spurious component in the specified range of frequencies shall not exceed 2 nW below 1 GHz, and shall not exceed 20 nW above 1 GHz.

Definitions, test conditions and methods of measurement are contained in standard MSZ ETS 300 224.

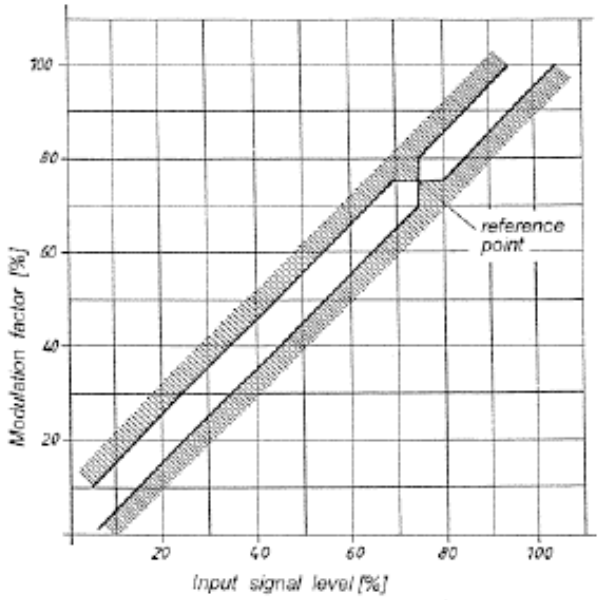
Annex 6 to the National Table of Frequency Allocations

Frequency management requirements for medium and high power, medium frequency, sound broadcasting transmitters

(see footnote H15)

1. Carrier power:	1...1 000 kW
2. Operating frequency range:	526.5...1 606.5 kHz
3. Nominal carrier frequency:	531 + 9 N kHz
	(N = 0, 1, ..., 119)
4. Frequency error:	±10.0 Hz
5. Class of emission:	A3E
6. Occupied bandwidth:	9.0 or 18.0 kHz
7. Spurious emissions:	≤ 50 mW
8. Frequency band limitation of the modulating signal after the modulation input of the transmitter:	50...9 000 Hz
	and optionally switchable
	50...4 500 Hz

9. Modulation factor/input signal level characteristic



10. Carrier amplitude variation: ≤ 5.0 %

Annex 7 to the National Table of Frequency Allocations

Frequency management requirements for low power, medium frequency, sound broadcasting transmitters

(see footnote H15)

1. Carrier power:	≤ 1 kW
2. Operating frequency range:	526.5...1 606.5 kHz
3. Nominal carrier frequency:	531 + 9 N kHz (N = 0, 1, ..., 119)
4. Frequency error:	±10.0 Hz
5. Class of emission:	A3E
6. Spurious emissions:	max. –40 dB relative to the unmodulated carrier power of the transmitter but ≤ 50 mW
7. Carrier amplitude variation:	≤ 10 %

Annex 8 to the National Table of Frequency Allocations

Frequency management requirements for short range devices (SRDs) operating in the frequency range 25-1 000 MHz

(see footnotes H31, H35, H37, H37A, H37B, H70, H86A, H112A, H114, H115 and H116)

1 Limits for transmitter parameters

1.1 *Frequency error*

<table>
<tr><td rowspan="2">Channel separation (kHz)</td><td colspan="5">Frequency error limit (kHz)</td></tr>
<tr><td>f < 47 MHz</td><td>47 ≤ f ≤ 137 MHz</td><td>137 < f ≤ 300 MHz</td><td>300 < f ≤ 500 MHz</td><td>500 < f ≤ 1 000 MHz</td></tr>
<tr><td rowspan="2">10/12.5</td><td rowspan="2">±0.60</td><td rowspan="2">±1</td><td colspan="2">±1 (b); ±1.50 (m);</td><td rowspan="2">No value specified</td></tr>
<tr><td>±2 (p)</td><td>±2.5 (p)</td></tr>
<tr><td>20/25</td><td>±0.60</td><td>±1.35</td><td>±2</td><td>±2 (mb)
±2.50 (p)</td><td>±2.50 (mb)
±3 (p)</td></tr>
</table>

Table 1

Note:

f carrier frequency in MHz

b fixed station

m mobile station

p portable station

1.2 *Carrier power (conducted)*

The carrier power (conducted) shall not exceed 100 mW.

Power class	Power level
7a	5 mW
8	10 mW
9	25 mW
11	100 mW

Table 2

1.3 *Effective radiated power (radiated)*

The effective radiated power shall not exceed 100 mW.

Power class	Power level
7a	5 mW
8	10 mW
9	25 mW
11	100 mW

Table 3

1.4 *Response of the transmitter to modulation frequencies (for narrowband analogue signal transmission)*

1.4.1 Frequency deviation

1.4.1.1 Analogue signals within the audio bandwidth

Channel separation	Maximum permissible frequency deviation
10 kHz	±2 kHz
12.5 kHz	±2.5 kHz
20 kHz	±4 kHz
25 kHz	±5 kHz

Table 4

1.4.1.2 Analogue signals above the audio bandwidth

The frequency deviation at modulation frequencies below 6 kHz shall not exceed the frequency deviation at a modulation frequency of 3 kHz/2.55 kHz. At 6 kHz the deviation shall be not more than 30.0 % of the maximum permissible frequency deviation (see Table 4). The frequency deviation at modulation frequencies between 6 kHz and a frequency equal to the channel separation for which the equipment is intended shall not exceed that given by a linear representation of the frequency deviation (dB) relative to the modulation frequency, starting at 6 kHz and having a slope of –14 dB per octave. The limit values are illustrated in Figure 1.

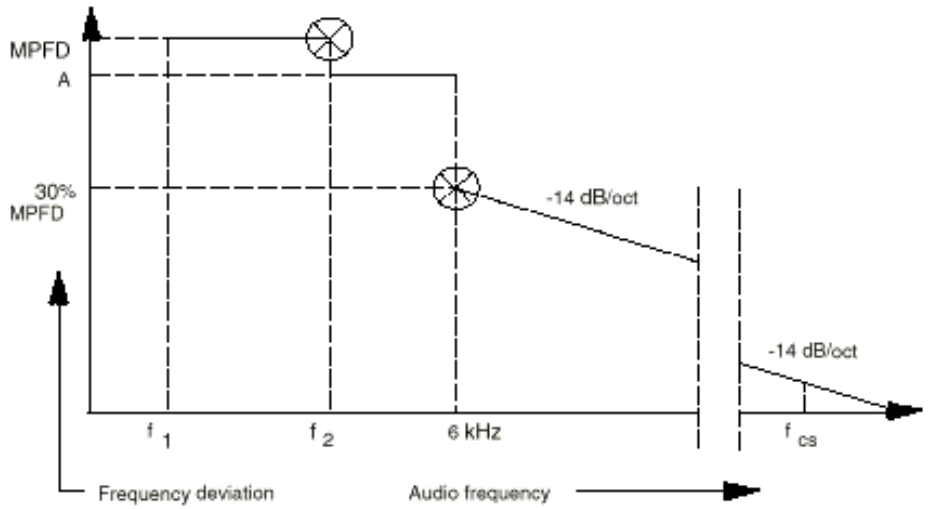


Figure 1

Abbreviations:

f_1	300 Hz
f_2	3.0 kHz (for 20 kHz or 25 kHz channel separation) or 2.55 kHz (for 10 kHz or 12.5 kHz channel separation)
MPFD	maximum permissible frequency deviation as given in section 1.4.1.1
A	frequency deviation measured at frequency f_2
f_{cs}	frequency equal to channel separation

1.4.2 Modulation depth

1.4.2.1 Analogue signals within the audio bandwidth

The maximum modulation depth shall be 100 % for frequencies within the audio bandwidth.

1.4.2.2 Analogue signals above the audio bandwidth

The modulation depth at modulation frequencies between the audio bandwidth and 6 kHz shall not exceed the modulation depth measured at the audio bandwidth. At 6 kHz the modulation depth shall be not more than 30 %. The modulation depth at modulation frequencies between 6 kHz and a frequency equal to the channel separation for which the equipment is intended to operate shall not exceed that given by a linear representation of the modulation depth (dB) relative to the modulation frequency, starting at 6 kHz and having a slope of –14 dB per octave. The limit values are illustrated in Figure 2.

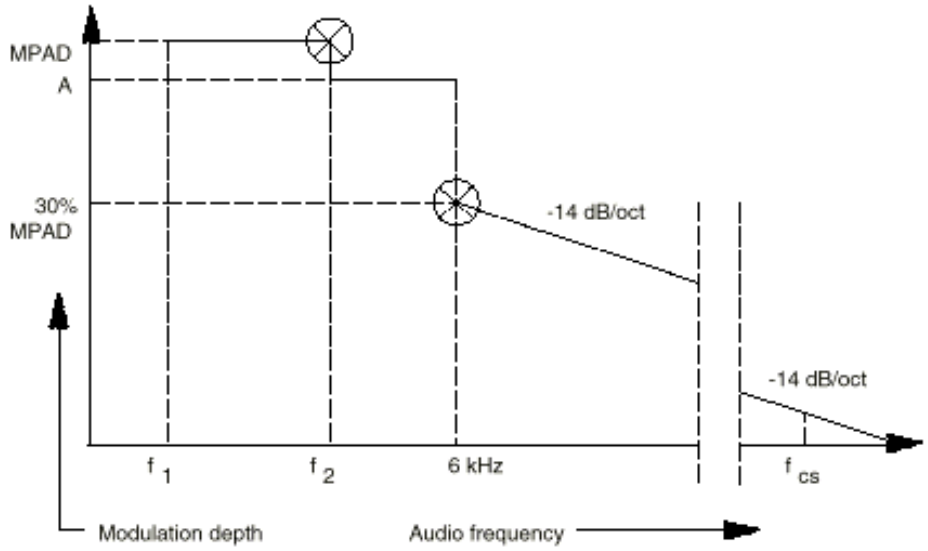


Figure 2

Abbreviations:

f_1	300 Hz
f_2	3.0 kHz (for 20 kHz or 25 kHz channel separation) or 2.55 kHz (for 10 kHz or 12.5 kHz channel separation)
MPAD	maximum permissible amplitude modulation depth as given in section 1.4.2.1
A	modulation depth measured at frequency f_2
f_{cs}	frequency equal to channel separation

1.5 *Adjacent channel power (for narrowband analogue signal transmission)*

	Channel separation <20 kHz	Channel separation ≥20 kHz
Under normal test conditions	≤10 μW	≤200 nW
Under extreme test conditions	≤32 μW	≤640 nW

Table 5

1.6 *Range of modulation bandwidth for wideband (>25 kHz) devices*

The permitted range of modulation bandwidth shall be within the limits of the assigned frequency band. The frequency error shall not be greater than 10 % of the assigned band or wideband channel.

Where an assigned frequency band has been subdivided into channels with bandwidths greater than 25 kHz, the 250 nW limit shall apply to the channel edge frequencies.

1.7 *Spurious emissions*

Conducted and radiated

Transmitter	47…74 MHz 87.5…118 MHz 174…230 MHz 470…862 MHz	Other frequencies below 1 000 MHz	Frequencies above 1 000 MHz
Operating	4 nW	250 nW	1 μW
Stand-by	2 nW	2 nW	20 nW

Table 6

1.8 *Frequency stability under low voltage conditions (for battery operated devices)*

a) The frequency error of the device shall either remain within the limits given in Table 1 whilst the radiated or conducted power is greater than the spurious emission limits; or

b) the device shall not operate below the manufacturers declared operating voltage.

1.9 *Duty cycle*

Class	Duty cycle
1	<0.1 %
2	<1.0 %
3	<10 %
4	up to 100 %

Table 7

2 Limits for receiver parameters

2.1 *Spurious radiations*

The power of any spurious radiation shall not exceed 2 nW on frequencies below 1 000 MHz and shall not exceed 20 nW on frequencies above 1 000 MHz.

Definitions, test conditions and methods of measurement are contained in standard MSZ EN 300 220-1.

Annex 9 to the National Table of Frequency Allocations

Frequency management requirements for short range devices (SRDs) operating in the frequency range 1-25 GHz

(see footnotes H31, H151 and H152)

1 Limits for transmitter parameters

1.1 *Equivalent isotropically radiated power (e.i.r.p.)*

Class	e.i.r.p. (conducted or radiated)
8	10 mW
9	25 mW
11	100 mW
12	500 mW
13	1 W
14	2 W
15	8 W

Table 1

The power classes in Table 1 are in accordance with Recommendation CEPT/ERC/REC 70-03.

1.2 *Permitted range of operating frequencies*

The spectrum mask of devices shall be within the allocated band.

1.3 *Spurious emissions*

Transmitter	Frequency		
	47…74 MHz 87.5…118 MHz 174…230 MHz 470…862 MHz	Other frequencies below 1 000 MHz	Frequencies above 1 000 MHz
Operating	4 nW	250 nW	1 μW
Stand-by	2 nW	2 nW	20 nW

Table 2

2 Limits for receiver parameters

2.1 *Spurious emissions*

The power of any spurious emission shall not exceed 2 nW in the range 25 MHz to 1 GHz and shall not exceed 20 nW above 1 GHz.

Definitions, test conditions and methods of measurement are contained in interim standard MSZ I-ETS 300 440.

Annex 10 to the National Table of Frequency Allocations

Frequency management requirements for wireless microphones using analogue or digital angle modulation

(see footnotes H40, H65, H79A and H112A)

1 Limits for transmitter parameters

1.1 *Frequency error*

Operating frequency (MHz)	Normal test conditions		Extreme test conditions	
	Channel bandwidths of 100, 150 and 200 kHz	Channel bandwidths of 50 and 75 kHz	Channel bandwidths of 100, 150 and 200 kHz	Channel bandwidths of 50 and 75 kHz
$25 \leq f \leq 88$	3 kHz	2 kHz	5 kHz	3 kHz
$88 < f \leq 300$	7 kHz	3 kHz	10 kHz	5 kHz
$300 < f \leq 1\,000$	10 kHz	6 kHz	15 kHz	7 kHz
$1\,000 < f \leq 3\,000$	17 kHz	8 kHz	25 kHz	12 kHz

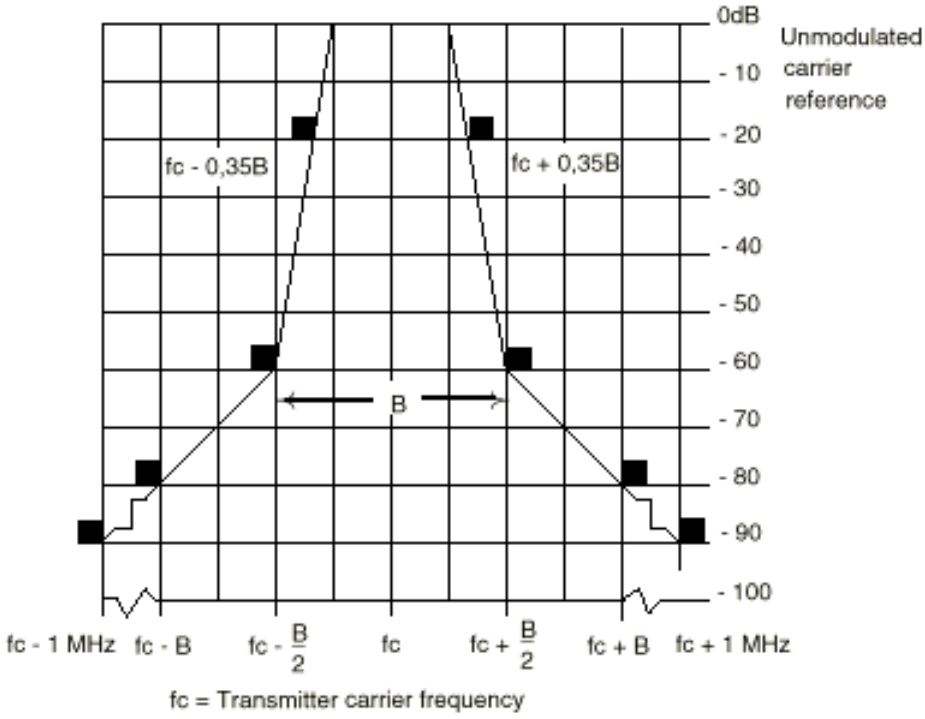
1.2 *Carrier power*

The carrier power (effective radiated or conducted) under normal and extreme test conditions shall not exceed 50 mW.

1.3 *Channel bandwidth*

Declared channel bandwidth (B)	Designation
50 kHz	L
75 kHz	M
100 kHz	P
150 kHz	Q
200 kHz	R

The transmitter output spectrum shall be within the mask defined in the following figure where B is the declared channel bandwidth.



1.4 *Spurious emissions*

Transmitter	Frequency		
	47...74 MHz 87.5...118 MHz 174...230 MHz 470...862 MHz	Other frequencies below 1 000 MHz	Frequencies above 1 000 MHz
Operating	4 nW	250 nW	1 μW
Stand-by	2 nW	2 nW	20 nW

1.5 *Transient frequency behaviour of the transmitter*

The transmitter output power shall not exceed a value of 30 dB below its nominal value until the carrier frequency is within the channel bandwidth increased by 10-10 kHz. Measurement cycle starts when transmitter output power exceeds 250 nW. The time at which the output power is less than –30 dB relative to its nominal value shall be limited to 5 seconds.

2 Limits for receiver parameters

2.1 *Spurious emissions*

	25...1 000 MHz	Frequencies above 1 000 MHz
Effective radiated or conducted	2 nW	20 nW

Definitions, test conditions and methods of measurement are contained in interim standard MSZ I-ETS 300 422.

Annex 11 to the National Table of Frequency Allocations

Frequency management requirements for television transposers

(see footnotes H44 and H105)

1 Frequency bands

The input and output channels of transposers shall be tunable to any television channel in one of the following frequency bands:

Band I	48.5...66 MHz
Band III	174...230 MHz
Band IV/V	470...790 MHz

The input channel shall be transposable to any channel of a different frequency, except the lower and upper adjacent channels.

2 Drift of the output frequency

The output vision carrier frequency shall not differ by more than ±350 Hz from the nominal value within a 6 month period when the input frequency equals the nominal input frequency.

3 Gain control

The nominal value of the input voltage equals the reference input level of 2 mV.

The impact of a change, of the order –20...+14 dB relative to the nominal input voltage, occurring in the input voltage range 0.2...10 mV shall be compensated by an automatic gain control.

The change occurring in the output power shall be less than ±1 dB.

4 Transmitting equipment

4.1 The technical characteristics of transmitting equipment shall practically conform to standard MSZ-17-302-4.

4.2 In the case of transmission without an input signal (in the absence of a source transmitter signal):

– the output power for transposers with a power not higher than 10 W shall be at least 20 dB lower than the rated power;

– the power amplifier stages shall switch off automatically in the case of transposers with a power higher than 10 W.

Annex 12 to the National Table of Frequency Allocations

Frequency management requirements for Very High Frequency (VHF), frequency modulated, sound broadcasting transmitters in the band 66-73 MHz

(see footnote H48)

1 Carrier power

The rated value of the carrier power will be approved by the communications authority on the basis of the frequency plan of the appropriate regional conference or the result of the international coordination.

The carrier power under normal operating conditions shall be within ±1 dB of the rated value. The carrier power under extreme operating conditions shall be within +2 dB and –3 dB of the rated value.

2 Frequency deviation

The maximum frequency deviation under normal operating conditions shall not exceed ± 50 kHz.

3 Frequency error

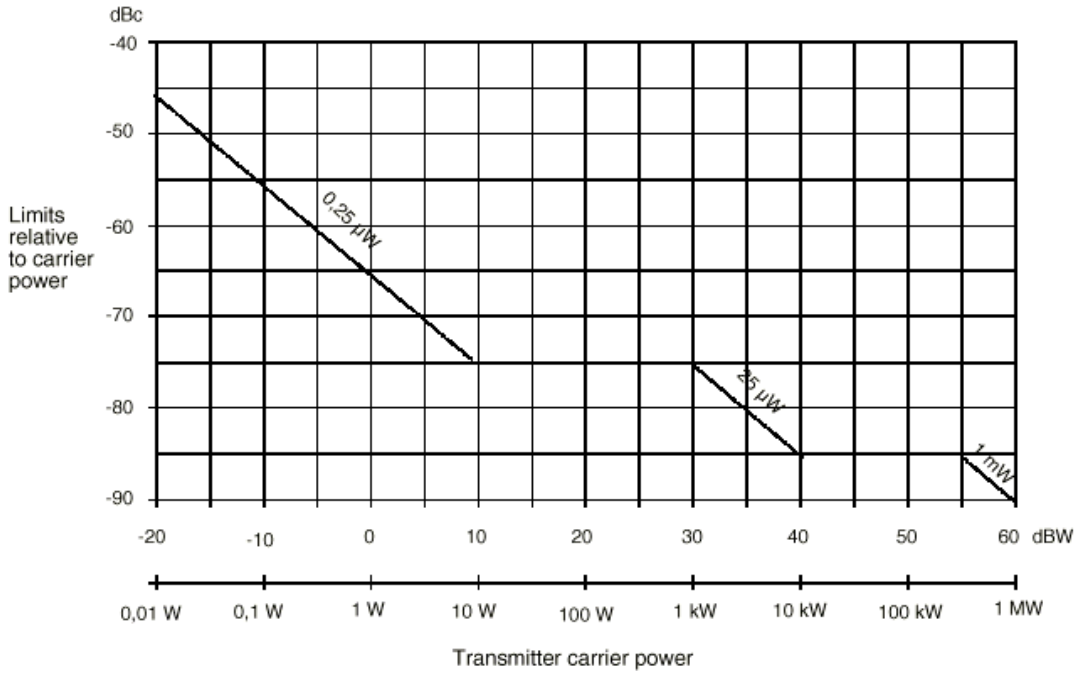
Under normal and extreme operating conditions, the carrier frequency shall be maintained within ±2 kHz of its nominal value.

4 Frequency stability

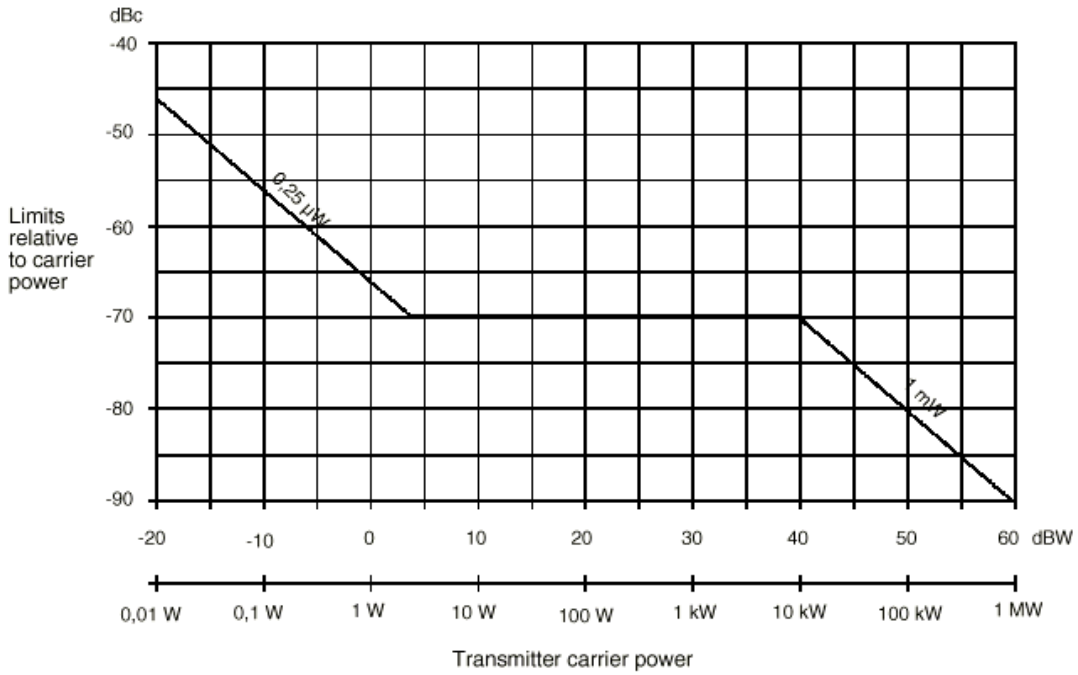
Under defined operating conditions, the stability of the carrier frequency shall be within ±300 Hz.

5 Spurious emissions

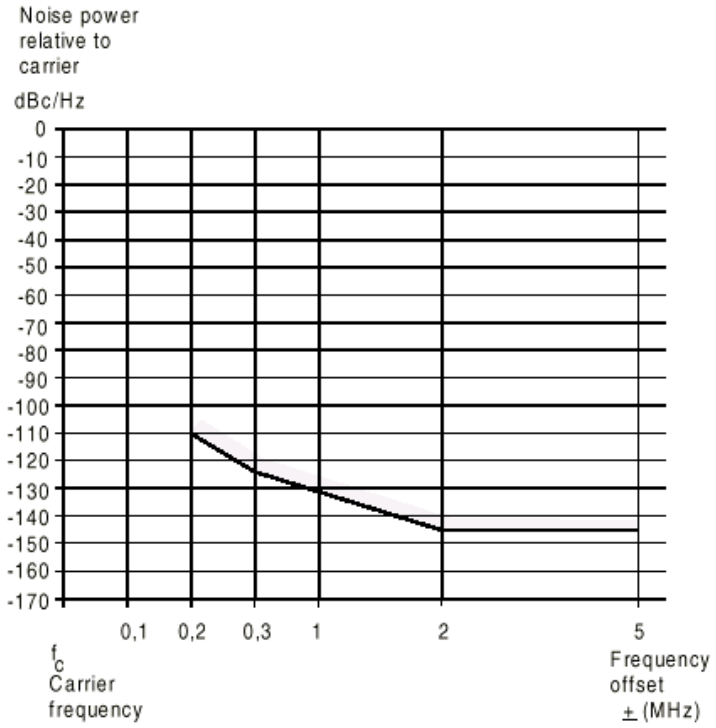
a) in the band 66 MHz to 137 MHz



b) in the bands 30 MHz to 66 MHz and 137 MHz to 1 GHz



6 Out-of-band emissions for stereophonic and monophonic operations



Definitions, operating and test conditions as well as methods of measurement are contained in standard MSZ ETS 300 750.

Annex 13 to the National Table of Frequency Allocations

I

Frequency management requirements for radio equipment in the land mobile service intended for the transmission of data (and speech) and having an antenna connector

(see footnote H51)

1 Limits for transmitter parameters

1.1 *Frequency error*

Channel separation (kHz)	Frequency error limit (kHz)				
	f < 47 MHz	47 ≤ f ≤ 137 MHz	137 < f ≤ 300 MHz	300 < f ≤ 500 MHz	500 < f ≤ 1 000 MHz
20 & 25	±0.60	±1.35	±2.00	±2.00 (a)	±2.50 (a)
12.5	±0.60	±1.00	±1.00 (B) ±1.50 (M)	±1.00 (B) ±1.50 (M) (a)	No value specified

Note:

f carrier frequency in MHz

(B) base station (equipment)

(M) mobile or handportable station (equipment)

(a) for handportable stations (equipment) having integral power supplies, the frequency error shall not be exceeded over a temperature range of 0 °C to +30 °C.

Under extreme temperature conditions, the frequency error shall not exceed:

– ±2.50 kHz between 300 MHz and 500 MHz,

– ±3.00 kHz for channel separations of 20 kHz and 25 kHz between 500 MHz and 1 000 MHz.

1.2 *Carrier power (conducted)*

The carrier power (conducted) under normal test conditions shall be within ±1.5 dB of the rated output power. The carrier power (conducted) under extreme test conditions shall be within +2.0 dB and –3.0 dB of the rated output power.

1.3 *Effective radiated power*

The maximum effective radiated power shall not exceed the maximum value specified by the communications authority.

The effective radiated power under normal test conditions shall be within d_f from the rated value.

The difference d_f shall be calculated as follows:

$$d_f^2 = d_m^2 + d_e^2$$

where

d_m is the actual measurement uncertainty,

d_e is the allowance for the radio equipment (1.5 dB).

1.4 *Adjacent channel power*

For channel separations of 20 kHz and 25 kHz, the adjacent channel power shall not exceed a value of 70 dB below the carrier power (conducted) of the transmitter without the need to be below 0.20 μW (–37 dBm). For a channel separation of 12.5 kHz, the adjacent channel power shall not exceed a value of 60 dB below the carrier power (conducted) of the transmitter without the need to be below 0.20 μW (–37 dBm).

1.5 *Spurious emissions*

Conducted

Frequency range	Tx operating	Tx stand-by
9 kHz ≤ f ≤ 1 GHz	0.25 μW (–36 dBm)	2.0 nW (–57 dBm)
1 GHz < f ≤ 4 GHz or 1 GHz < f ≤ 12.75 GHz	1.00 μW (–30 dBm)	20 nW (–47 dBm)

Hungary

Radiated

Frequency range	Tx operating	Tx stand-by
30 MHz ≤ f ≤ 1 GHz	0.25 µW (–36 dBm)	2.0 nW (–57 dBm)
1 GHz < f ≤ 4 GHz	1.00 µW (–30 dBm)	20 nW (–47 dBm)

Note:

If the operating frequency of the equipment is below 470 MHz, then the measurement of the conducted spurious emissions shall be made between 9 kHz and 4 GHz. If the operating frequency of the equipment is above 470 MHz, then the measurement of the conducted spurious emissions shall additionally be made between 4 GHz and 12.75 GHz.

1.6 *Intermodulation attenuation*

This requirement applies only to transmitters to be used in base stations.

For a single transmitter, the intermodulation attenuation ratio shall be at least 40 dB for any intermodulation component. At sites where more than one transmitter will be in service, the intermodulation attenuation ratio shall be at least 70 dB for any intermodulation component.

1.7 *Transmitter attack time*

The transmitter attack time shall not exceed 25 ms.

1.8 *Transmitter release time*

The transmitter release time shall not exceed 20 ms.

1.9 *Transient behaviour of the transmitter*

During switch-on and switch-off at any time when the actual carrier power is above the steady-state carrier power reduced by 30 dB, the carrier frequency shall remain within half a channel separation from the steady carrier frequency.

The time interval between the values of steady-state carrier power reduced by 30 dB and by 6 dB, respectively, shall be at least 0.20 ms, both in the case of switch-on and switch-off.

2 Limits for receiver parameters

2.1 *Maximum usable sensitivity (data, conducted)*

The maximum usable sensitivity shall not exceed an electromotive force of
+3 dBµV under normal test conditions, and an electromotive force of
+9 dBµV under extreme test conditions.

2.2 *Average usable sensitivity (data, field strength)*

Four categories of equipment are defined as follows:

category A: equipment having an integral antenna fully within the case,

category B: equipment having an extractable or fixed integral antenna, with an antenna length not exceeding 20 cm external to the case,

category C: equipment having an extractable or fixed integral antenna, with an antenna length exceeding 20 cm external to the case,

category D: equipment not covered by category A, B or C.

Sensitivity limits for category A and category D equipment

Frequency band (MHz)	Average usable sensitivity in dB relative to 1 μV/m
$30 \leq f \leq 400$	27.0
$400 < f \leq 750$	28.5
$750 < f \leq 1\,000$	30.0

Sensitivity limits for category B equipment

Frequency band (MHz)	Average usable sensitivity in dB relative to 1 μV/m
$30 \leq f \leq 130$	18.0
$130 < f \leq 300$	19.5
$300 < f \leq 440$	21.5
$440 < f \leq 600$	23.5
$600 < f \leq 800$	25.5
$800 < f \leq 1\,000$	28.0

where f is the carrier frequency in MHz.

For category C equipment the following sensitivity limits shall apply under normal conditions:

– at carrier frequencies greater than 375 MHz the limits shall be as specified for category B equipment,
– at carrier frequencies equal to or less than 375 MHz, a correction factor K shall be subtracted from the limit for category B equipment.

$$K = 20 \lg \frac{l + 20}{40}$$

where l is the length of the external part of the antenna in cm.

The factor K only applies if the antenna length external to the case is less than

$$\frac{15\,000}{\text{f}} - 20.$$

2.3 *Error behaviour at high input levels*

The bit error ratio shall not exceed 10^{-4}. The number of messages not correctly received (lost or corrupted) shall not exceed 1.

2.4 *Co-channel rejection*

The value of the co-channel rejection ratio shall be between:

– –8 dB and 0 dB for channel separations of 20 kHz and 25 kHz,

– –12 dB and 0 dB for a channel separation of 12.5 kHz.

2.5 *Adjacent channel selectivity*

	Channel separation	
	12.5 kHz	20 and 25 kHz
Normal test conditions	60.0 dB	70.0 dB
Extreme test conditions	50.0 dB	60.0 dB

2.6 *Spurious response rejection*

At any frequency separated from the nominal frequency of the receiver by two channels or more, the spurious response rejection ratio shall not be less than 70 dB.

2.7 *Intermodulation response rejection*

The intermodulation response rejection ratio shall not be less than 70 dB for base stations (equipment) and 65 dB for mobile and handportable stations (equipment).

2.8 *Blocking or desensitisation*

The blocking ratio for any frequency within the specified ranges shall not be less than 84.0 dB, except at frequencies on which spurious responses are found.

2.9 *Spurious radiations*

Conducted

Frequency range	Limit
9 kHz ≤ f ≤ 1 GHz	2.0 nW (–57 dBm)
1 GHz < f ≤ 4 GHz or 1 GHz < f ≤ 12.75 GHz	20 nW (–47 dBm)

Radiated

Frequency range	Limit
30 MHz ≤ f ≤ 1 GHz	2.0 nW (–57 dBm)
1 GHz < f ≤ 4 GHz	20 nW (–47 dBm)

Note:

If the operating frequency of the equipment is below 470 MHz, then the measurement of the conducted spurious radiations shall be made between
9 kHz and 4 GHz. If the operating frequency of the equipment is above
470 MHz, then the measurement of the conducted spurious radiations shall additionally be made between 4 GHz and 12.75 GHz.

3 Duplex operation – receiver limits

3.1 *Receiver desensitisation and maximum usable sensitivity (with simultaneous transmission and reception)*

The desensitisation shall not exceed 3.0 dB, and the maximum usable sensitivity under normal test conditions shall not exceed an electromotive force of +3 dBμV.

3.2 *Receiver spurious response rejection*

At any frequency separated from the nominal frequency of the receiver by two channels or more, the spurious response rejection ratio shall not be less than 67 dB.

Definitions, test conditions and methods of measurement are contained in standard MSZ ETS 300 113.

II

Frequency management requirements for radio equipment in the land mobile service transmitting signals to initiate a specific response in the receiver

(see footnote H51)

1 Limits for transmitter parameters

1.1 *Frequency error*

Channel separation (kHz)	Frequency error limit (kHz)				
	f < 47 MHz	47 ≤ f ≤ 137 MHz	137 < f ≤ 300 MHz	300 < f ≤ 500 MHz	500 < f ≤ 1 000 MHz
20 & 25	±0.60	±1.35	±2.00	±2.00	±2.50 (a)
12.5	±0.60	±1.00	±1.00 (B) ±1.50 (M)	±1.00 (B) ±1.50 (M) (a)	No value specified

Note:

f carrier frequency in MHz

(B) base station (equipment)

(M) mobile or handportable station (equipment)

(a) for handportable stations (equipment) having integral power supplies, the frequency error shall not be exceeded over a temperature range of 0 °C to +30 °C.

Under extreme temperature conditions, the frequency error shall not exceed:

– ±2.50 kHz for a channel separation of 12.5 kHz between 300 MHz and 500 MHz,

– ±3.00 kHz for channel separations of 20 kHz and 25 kHz between 500 MHz and 1 000 MHz.

1.2 *Carrier power (conducted)*

The carrier power (conducted) under normal test conditions shall be within ±1.5 dB of the rated output power. The carrier power (conducted) under extreme test conditions shall be within +2.0 dB and –3.0 dB of the rated output power.

The carrier power (conducted) shall not exceed the maximum value specified by the communications authority.

1.3 *Effective radiated power*

The effective radiated power under normal test conditions shall be within ±7.5 dB of the rated effective radiated power.

The effective radiated power shall not exceed the maximum value specified by the communications authority.

1.4 *Adjacent channel power*

For channel separations of 20 kHz and 25 kHz, the adjacent channel power shall not exceed a value of 70 dB below the carrier power (conducted) of the transmitter without the need to be below 0.20 μW (–37 dBm). For a channel separation of 12.5 kHz, the adjacent channel power shall not exceed a value of 60 dB below the carrier power (conducted) of the transmitter without the need to be below 0.20 μW (–37 dBm).

The requirements under extreme test conditions are less by 5 dB.

1.5 *Spurious emissions*

Conducted

Frequency range	Tx operating	Tx stand-by
9 kHz ≤ f ≤ 1 GHz	0.25 μW (–36 dBm)	2.0 nW (–57 dBm)
1 GHz < f ≤ 4 GHz or 1 GHz < f ≤ 12.75 GHz	1.00 μW (–30 dBm)	20 nW (–47 dBm)

Hungary

Radiated

Frequency range	Tx operating	Tx stand-by
30 MHz ≤ f ≤ 1 GHz	0.25 µW (–36 dBm)	2.0 nW (–57 dBm)
1 GHz < f ≤ 4 GHz	1.00 µW (–30 dBm)	20 nW (–47 dBm)

Note:

If the operating frequency of the equipment is below 470 MHz, then the measurement of the conducted spurious emissions shall be made between 9 kHz and 4 GHz. If the operating frequency of the equipment is above 470 MHz, then the measurement of the conducted spurious emissions shall additionally be made between 4 GHz and 12.75 GHz.

1.6 *Intermodulation attenuation*

This requirement applies only to transmitters to be used in base stations.

For a single transmitter, the intermodulation attenuation ratio shall be at least 40 dB for any intermodulation component. At sites where more than one transmitter will be in service, the intermodulation attenuation ratio shall be at least 70 dB for any intermodulation component.

1.7 *Transient frequency behaviour of the transmitter*

	30 ≤ f ≤ 300 MHz	300 < f ≤ 500 MHz	500 < f ≤ 1 000 MHz
t_1 (ms)	5.0	10.0	20.0
t_2 (ms)	20.0	25.0	50.0
t_3 (ms)	5.0	10.0	10.0

where

f is the carrier frequency in MHz;

t_1 is the period of time which starts at the switch-on instant of the transmitter and lasts during the time shown in the above table;

t_2 is the period of time which starts at the end of t_1 and lasts during the time shown in the above table;

t_3 is the period of time which finishes at the switch-off instant of the transmitter and starts the time shown in the above table before.

During the periods t_1 and t_3 the frequency difference shall not exceed the value of 1 channel separation.

During the period t_2 the frequency difference shall not exceed the value of half a channel separation.

2 Limits for receiver parameters

2.1 *Reference sensitivity*

The reference sensitivity for normal test conditions is a level of +6 dBμV electromotive force or a field strength 3 dB above the values of the maximum usable sensitivity (field strength) in section 2.3.

2.2 *Maximum usable sensitivity (conducted)*

The maximum usable sensitivity shall not exceed an electromotive force of
+3 dBμV under normal test conditions, and an electromotive force of
+9 dBμV under extreme test conditions.

2.3 *Maximum usable sensitivity (field strength)*

The maximum usable sensitivity under normal test conditions shall not exceed the following values:

Frequency band (MHz)	Field strength in dB relative to 1μV/m
$30 \leq f \leq 100$	11.0
$100 < f \leq 230$	17.0
$230 < f \leq 470$	23.0
$470 < f \leq 1\,000$	29.0

2.4 *Co-channel rejection*

The value of the co-channel rejection ratio shall be between:

- –8 dB and 0 dB for channel separations of 20 kHz and 25 kHz,
- –12 dB and 0 dB for a channel separation of 12.5 kHz.

2.5 *Adjacent channel selectivity*

	Channel separation	
	12.5 kHz	20 and 25 kHz
Normal test conditions	60.0 dB	70.0 dB
Extreme test conditions	50.0 dB	60.0 dB

2.6 *Spurious response rejection*

At any frequency separated from the nominal frequency of the receiver by more than one channel, the spurious response rejection ratio shall not be less than 70 dB.

2.7 *Intermodulation response rejection*

The intermodulation response rejection ratio shall not be less than 70 dB for base stations (equipment) and 65 dB for mobile and handportable stations (equipment).

2.8 *Blocking or desensitisation*

The blocking ratio for any frequency within the specified ranges shall not be less than 84.0 dB, except at frequencies on which spurious responses are found.

2.9 *Spurious radiations*

Conducted

Frequency range	Limit
9 kHz ≤ f ≤ 1 GHz	2.0 nW (–57 dBm)
1 GHz < f ≤ 4 GHz or 1 GHz < f ≤ 12.75 GHz	20 nW (–47 dBm)

Radiated

Frequency range	Limit
30 MHz ≤ f ≤ 1 GHz	2.0 nW (–57 dBm)
1 GHz < f ≤ 4 GHz	20 nW (–47 dBm)

Note:

If the operating frequency of the equipment is below 470 MHz, then the measurement of the conducted spurious radiations shall be made between 9 kHz and 4 GHz. If the operating frequency of the equipment is above 470 MHz, then the measurement of the conducted spurious radiations shall additionally be made between 4 GHz and 12.75 GHz.

3 Duplex operation – receiver limits

3.1 *Receiver desensitisation and maximum usable sensitivity (with simultaneous transmission and reception)*

The desensitisation shall not exceed 3.0 dB, and the maximum usable sensitivity under normal test conditions shall not exceed an electromotive force of +3 dBμV.

3.2 *Receiver spurious response rejection*

At any frequency separated from the nominal frequency of the receiver by two channels or more, the spurious response rejection ratio shall not be less than 67 dB.

Definitions, test conditions and methods of measurement are contained in interim standard MSZ I-ETS 300 219.

III

Frequency management requirements for radio equipment in the land mobile service using an integral antenna intended primarily for analogue speech

(see footnotes H51 and H97)

1 Limits for transmitter parameters

1.1 *Frequency error*

Channel separation (kHz)	Frequency error limit (kHz)				
	f < 47 MHz	47 ≤ f ≤ 137 MHz	137 < f ≤ 300 MHz	300 < f ≤ 500 MHz	500 < f ≤ 1 000 MHz
20 & 25	±0.60	±1.35	±2.00	±2.00	±2.50 (a)
12.5	±0.60	±1.00	±1.50	±1.50 (a)	No value specified

Note:

f carrier frequency in MHz

(a) for handportable stations (equipment) having integral power supplies, the frequency error shall not be exceeded over a temperature range of 0 °C to +30 °C.

Under extreme temperature conditions, the frequency error shall not exceed:

– ±2.50 kHz for a channel separation of 12.5 kHz between 300 MHz and 500 MHz,

– ±3.00 kHz for channel separations of 20 kHz and 25 kHz between 500 MHz and 1 000 MHz.

1.2 *Effective radiated power*

The maximum effective radiated power shall not exceed the maximum value specified by the communications authority.

The maximum effective radiated power under normal test conditions shall be within d_f from the rated maximum value. The average effective radiated power under normal test conditions shall be within d_f from the rated average value.

The difference d_f shall be calculated as follows:

$$d_f^2 = d_m^2 + d_e^2$$

where

d_m is the actual measurement uncertainty,

d_e is the allowance for the radio equipment (1.5 dB).

The variation of effective radiated power under extreme test conditions shall not exceed +2 dB or –3 dB.

1.3 *Frequency deviation*

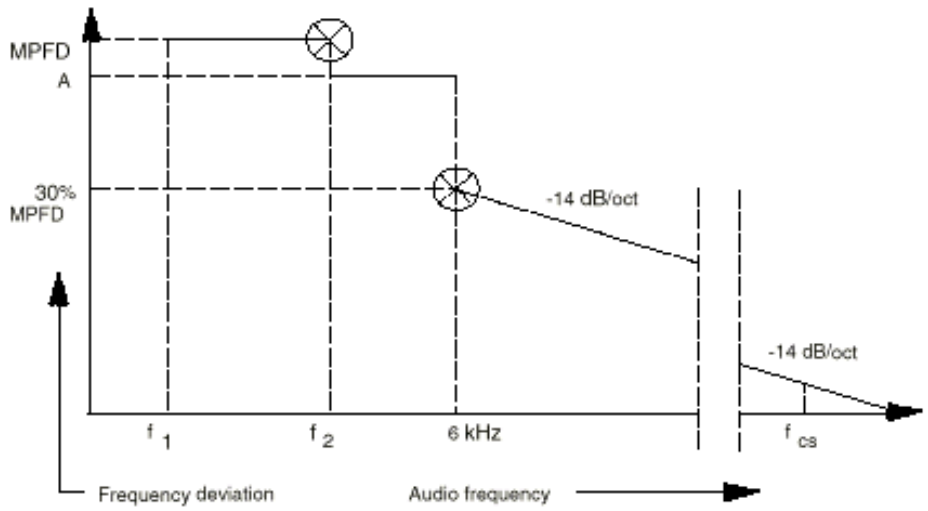
1.3.1 Maximum permissible frequency deviation

The maximum permissible frequency deviation for modulation frequencies from lowest frequency transmitted (f_1) by the equipment (as declared by the manufacturer) up to (f_2) shall be as given below:

Channel separation (kHz)	Maximum permissible frequency deviation (kHz)
12.5	±2.5
20	±4.0
25	±5.0

1.3.2 Response of the transmitter to modulation frequencies above 3 kHz

The frequency deviation at modulation frequencies between 3.0 kHz (for equipment operating with 20 kHz or 25 kHz channel separations) and 2.55 kHz (for equipment operating with 12.5 kHz channel separation) and 6.0 kHz shall not exceed the frequency deviation at a modulation frequency of 3.0 kHz/2.55 kHz. At 6 kHz the deviation shall be not more than 30 % of the maximum permissible frequency deviation. The frequency deviation at modulation frequencies between 6 kHz and a frequency equal to the channel separation for which the equipment is intended shall not exceed that given by a linear representation of the frequency deviation (dB) relative to the modulation frequency, starting at the 6 kHz limit and having a slope of –14 dB per octave. These limits are illustrated in the figure.



Abbreviations:

f_1 lowest modulation frequency

f_2 3.0 kHz (for 20 kHz or 25 kHz channel separation), or
2.55 kHz (for 12.5 kHz channel separation)

MPFD maximum permissible frequency deviation, section 1.3.1

A measured frequency deviation at f_2

f_{cs} frequency equal to channel separation

1.4 *Adjacent channel power*

For channel separations of 20 kHz and 25 kHz, the adjacent channel power shall not exceed a value of 70 dB below the carrier power (conducted) of the transmitter without the need to be below 0.20 µW (–37 dBm). For a channel separation of 12.5 kHz, the adjacent channel power shall not exceed a value of 60 dB below the carrier power (conducted) of the transmitter without the need to be below 0.20 µW (–37 dBm).

1.5 *Spurious emissions*

Radiated

Frequency range	Tx operating	Tx stand-by
30 MHz ≤ f ≤ 1 GHz	0.25 µW (–36 dBm)	2.0 nW (–57 dBm)
1 GHz < f ≤ 12.75 GHz	1.00 µW (–30 dBm)	20 nW (–47 dBm)

1.6 *Transient frequency behaviour of the transmitter*

	30 ≤ f ≤ 300 MHz	300 < f ≤ 500 MHz	500 < f ≤ 1 000 MHz
t_1 (ms)	5.0	10.0	20.0
t_2 (ms)	20.0	25.0	50.0
t_3 (ms)	5.0	10.0	10.0

where

f is the carrier frequency in MHz;

t_1 is the period of time which starts at the switch-on instant of the transmitter and lasts during the time shown in the above table;

t_2 is the period of time which starts at the end of t_1 and lasts during the time shown in the above table;

t_3 is the period of time which finishes at the switch-off instant of the transmitter and starts the time shown in the above table before.

During the periods t_1 and t_3 the frequency difference shall not exceed the value of 1 channel separation.

During the period t_2 the frequency difference shall not exceed the value of half a channel separation.

2 Limits for receiver parameters

2.1 *Average usable sensitivity (field strength, speech)*

Four categories of equipment are defined as follows:

category A: equipment having an integral antenna fully within the case,

category B: equipment having an extractable or fixed integral antenna, with an antenna length not exceeding 20 cm external to the case,

category C: equipment having an extractable or fixed integral antenna, with an antenna length exceeding 20 cm external to the case,

category D: equipment not covered by category A, B or C.

Hungary

Sensitivity limits for category A and category D equipment

Frequency band (MHz)	Average usable sensitivity in dB relative to 1 μV/m
30 ≤ f ≤ 400	30.0
400 < f ≤ 750	31.5
750 < f ≤ 1 000	33.0

Sensitivity limits for category B equipment

Frequency band (MHz)	Average usable sensitivity in dB relative to 1 μV/m
30 ≤ f ≤ 130	21.0
130 < f ≤ 300	22.5
300 < f ≤ 440	24.5
440 < f ≤ 600	26.5
600 < f ≤ 800	28.5
800 < f ≤ 1 000	31.0

where f is the carrier frequency in MHz.

For category C equipment the following sensitivity limits shall apply under normal conditions:

– at carrier frequencies greater than 375 MHz the limits shall be as specified for category B equipment,

– at carrier frequencies equal to or less than 375 MHz, a correction factor K shall be subtracted from the limit for category B equipment.

$$K = 20 \lg \frac{l + 20}{40}$$

where l is the length of the external part of the antenna in cm.

The factor K only applies if the antenna length external to the case is less than

$$\frac{15\,000}{\text{f}} - 20.$$

2.2 *Amplitude characteristic*

Within the specified change in radio frequency input signal level, the change of audio output level shall not exceed 3.0 dB.

2.3 *Co-channel rejection*

The value of the co-channel rejection ratio shall be between:

– –8 dB and 0 dB for channel separations of 20 kHz and 25 kHz,

– –12 dB and 0 dB for a channel separation of 12.5 kHz.

2.4 *Adjacent channel selectivity*

Channel separation (kHz)	Adjacent channel selectivity limit (dBμV/m)			
	Unwanted frequencies ≤ 68 MHz		Unwanted frequencies > 68 MHz	
	Normal test conditions	Extreme test conditions	Normal test conditions	Extreme test conditions
20 & 25	75	65	20 lg f + 38.3	20 lg f + 28.3
12.5	65	55	20 lg f + 28.3	20 lg f + 18.3

where f is the carrier frequency in MHz.

2.5 *Spurious response rejection*

For unwanted signal frequencies less than or equal to 68 MHz the spurious response rejection shall not exceed 75 dBμV/m. For unwanted signal frequencies greater than 68 MHz the spurious response rejection shall not exceed the value

(20 lg f + 38.3) dBμV/m

where f is the carrier frequency in MHz.

2.6 *Intermodulation response rejection*

For unwanted signal frequencies less than or equal to 68 MHz the intermodulation response rejection shall not exceed 70 dBμV/m. For unwanted signal frequencies greater than 68 MHz the intermodulation response rejection shall not exceed the value

$$(20 \lg f + 33.3)\ \text{dB}\mu\text{V/m}$$

where f is the carrier frequency in MHz.

2.7 *Blocking or desensitisation*

For unwanted signal frequencies less than or equal to 68 MHz the blocking level shall be at least 89 dBμV/m. For unwanted signal frequencies greater than 68 MHz the blocking level shall be at least

$$(20 \lg f + 52.3)\ \text{dB}\mu\text{V/m}$$

where f is the carrier frequency in MHz.

2.8 *Spurious radiations*

Radiated

Frequency range	Limit
30 MHz ≤ f ≤ 1 GHz	2.0 nW (–57 dBm)
1 GHz < f ≤ 12.75 GHz	20 nW (–47 dBm)

Definitions, test conditions and methods of measurement are contained in standard MSZ ETS 300 296.

IV

Frequency management requirements for radio equipment in the land mobile service using an integral antenna transmitting signals to initiate a specific response in the receiver

(see footnote H51)

1 Limits for transmitter parameters

1.1 *Frequency error*

Channel separation (kHz)	Frequency error limit (kHz)				
	f < 47 MHz	47 ≤ f ≤ 137 MHz	137 < f ≤ 300 MHz	300 < f ≤ 500 MHz	500 < f ≤ 1 000 MHz
20 & 25	±0.60	±1.35	±2.00	±2.00	±2.50 (a)
12.5	±0.60	±1.00	±1.50	±1.50 (a)	No value specified

Note:

f carrier frequency in MHz

(a) for handportable stations (equipment) having integral power supplies, the frequency error shall not be exceeded over a temperature range of 0 °C to +30 °C.

Under extreme temperature conditions, the frequency error shall not exceed:

– ±2.50 kHz for a channel separation of 12.5 kHz between 300 MHz and 500 MHz,

– ±3.00 kHz for channel separations of 20 kHz and 25 kHz between 500 MHz and 1 000 MHz.

1.2 *Effective radiated power*

The maximum effective radiated power shall not exceed the maximum value specified by the communications authority.

The maximum effective radiated power under normal test conditions shall be within d_f from the rated maximum value. The average effective radiated power under normal test conditions shall be within d_f from the rated average value.

The difference d_f shall be calculated as follows:

$$d_f^2 = d_m^2 + d_e^2$$

where

d_m is the actual measurement uncertainty,

d_e is the allowance for the radio equipment (1.5 dB).

The variation of effective radiated power under extreme test conditions shall not exceed +2 dB or –3 dB.

1.3 *Adjacent channel power*

For channel separations of 20 kHz and 25 kHz, the adjacent channel power shall not exceed a value of 70 dB below the carrier power (conducted) of the transmitter without the need to be below 0.20 µW (–37 dBm). For a channel separation of 12.5 kHz, the adjacent channel power shall not exceed a value of 60 dB below the carrier power (conducted) of the transmitter without the need to be below 0.20 µW (–37 dBm).

The requirements under extreme test conditions are less by 5 dB.

1.4 *Spurious emissions*

Radiated

Frequency range	Tx operating	Tx stand-by
30 MHz ≤ f ≤ 1 GHz	0.25 µW (–36 dBm)	2.0 nW (–57 dBm)
1 GHz < f ≤ 12.75 GHz	1.00 µW (–30 dBm)	20 nW (–47 dBm)

1.5 *Transient behaviour of the transmitter*

	30 ≤ f ≤ 300 MHz	300 < f ≤ 500 MHz	500 < f ≤ 1 000 MHz
t_1 (ms)	5.0	10.0	20.0
t_2 (ms)	20.0	25.0	50.0
t_3 (ms)	5.0	10.0	10.0

where

f is the carrier frequency in MHz;

t_1 is the period of time which starts at the switch-on instant of the transmitter and lasts during the time shown in the above table;

t_2 is the period of time which starts at the end of t_1 and lasts during the time shown in the above table;

t_3 is the period of time which finishes at the switch-off instant of the transmitter and starts the time shown in the above table before.

During the periods t_1 and t_3 the frequency difference shall not exceed the value of 1 channel separation.

During the period t_2 the frequency difference shall not exceed the value of half a channel separation.

2. Limits for receiver parameters

2.1 *Average usable sensitivity (field strength)*

Four categories of equipment are defined as follows:

category A: equipment having an integral antenna fully within the case,

category B: equipment having an extractable or fixed integral antenna, with an antenna length not exceeding 20 cm external to the case,

category C: equipment having an extractable or fixed integral antenna, with an antenna length exceeding 20 cm external to the case,

category D: equipment not covered by category A, B or C.

Hungary

Sensitivity limits for category A and category D equipment

Frequency band (MHz)	Average usable sensitivity in dB relative to 1 μV/m
30 ≤ f ≤ 400	27.0
400 < f ≤ 750	28.5
750 < f ≤ 1 000	30.0

Sensitivity limits for category B equipment

Frequency band (MHz)	Average usable sensitivity in dB relative to 1 μV/m
30 ≤ f ≤ 130	18.0
130 < f ≤ 300	19.5
300 < f ≤ 440	21.5
440 < f ≤ 600	23.5
600 < f ≤ 800	25.5
800 < f ≤ 1 000	28.0

where f is the carrier frequency in MHz.

For category C equipment the following sensitivity limits shall apply under normal conditions:

- at carrier frequencies greater than 375 MHz the limits shall be as specified for category B equipment,
- at carrier frequencies equal to or less than 375 MHz, a correction factor K shall be subtracted from the limit for category B equipment.

$$K = 20 \lg \frac{l + 20}{40}$$

where l is the length of the external part of the antenna in cm.

The factor K only applies if the antenna length external to the case is less than

$$\frac{15\,000}{\text{f}} - 20.$$

2.2 *Co-channel rejection*

The value of the co-channel rejection ratio shall be between:

– –8 dB and 0 dB for channel separations of 20 kHz and 25 kHz,

– –12 dB and 0 dB for a channel separation of 12.5 kHz.

2.3 *Adjacent channel selectivity*

Channel separation (kHz)	Adjacent channel selectivity limit (dBμV/m)			
	Unwanted frequencies ≤ 68 MHz		Unwanted frequencies > 68 MHz	
	Normal test conditions	Extreme test conditions	Normal test conditions	Extreme test conditions
20 & 25	75	65	20 lg f + 38.3	20 lg f + 28.3
12.5	65	55	20 lg f + 28.3	20 lg f + 18.3

where f is the carrier frequency in MHz.

2.4 *Spurious response rejection*

For unwanted signal frequencies less than or equal to 68 MHz the spurious response rejection shall not exceed 75 dBμV/m. For unwanted signal frequencies greater than 68 MHz the spurious response rejection shall not exceed the value

(20 lg f + 38.3) dBμV/m

where f is the carrier frequency in MHz.

2.5 *Intermodulation response rejection*

For unwanted signal frequencies less than or equal to 68 MHz the intermodulation response rejection shall not exceed 70 dBμV/m. For unwanted signal frequencies greater than 68 MHz the intermodulation response rejection shall not exceed the value

(20 lg f + 33.3) dBμV/m

where f is the carrier frequency in MHz.

2.6 *Blocking or desensitisation*

For unwanted signal frequencies less than or equal to 68 MHz the blocking level shall be at least 89 dBμV/m. For unwanted signal frequencies greater than 68 MHz the blocking level shall be at least

$$(20 \lg f + 52.3)\ \text{dB}\mu\text{V/m}$$

where f is the carrier frequency in MHz.

2.7 *Spurious radiations*

Radiated

Frequency range	Limit
30 MHz ≤ f ≤ 1 GHz	2.0 nW (–57 dBm)
1 GHz < f ≤ 12.75 GHz	20 nW (–47 dBm)

Definitions, test conditions and methods of measurement are contained in standard MSZ ETS 300 341.

V

Frequency management requirements for radio equipment in the land mobile service intended for the transmission of data (and speech) and using an integral antenna

(see footnote H51)

1 Limits for transmitter parameters

1.1 *Frequency error*

Channel separation (kHz)	Frequency error limit (kHz)				
	f < 47 MHz	47 ≤ f ≤ 137 MHz	137 < f ≤ 300 MHz	300 < f ≤ 500 MHz	500 < f ≤ 1 000 MHz
20 & 25	±0.60	±1.35	±2.00	±2.00	±2.50 (a)
12.5	±0.60	±1.00	±1.50	±1.50 (a)	No value specified

Note:

f carrier frequency in MHz

(a) for handportable stations (equipment) having integral power supplies, the frequency error shall not be exceeded over a temperature range of 0 °C to +30 °C.

Under extreme temperature conditions, the frequency error shall not exceed:

– ±2.50 kHz for a channel separation of 12.5 kHz between 300 MHz and 500 MHz,

– ±3.00 kHz for channel separations of 20 kHz and 25 kHz between 500 MHz and 1 000 MHz.

1.2 *Effective radiated power*

The maximum effective radiated power shall not exceed the maximum value specified by the communications authority.

The maximum effective radiated power under normal test conditions shall be within d_f from the rated maximum value. The average effective radiated power under normal test conditions shall be within d_f from the rated average value.

The difference d_f shall be calculated as follows:

$$d_f^2 = d_m^2 + d_e^2$$

where

d_m is the actual measurement uncertainty,

d_e is the allowance for the radio equipment (1.5 dB).

The variation of effective radiated power under extreme test conditions shall not exceed +2 dB or –3 dB.

1.3 *Adjacent channel power*

For channel separations of 20 kHz and 25 kHz, the adjacent channel power shall not exceed a value of 70 dB below the carrier power (conducted) of the transmitter without the need to be below 0.20 µW (–37 dBm). For a channel separation of 12.5 kHz, the adjacent channel power shall not exceed a value of 60 dB below the carrier power (conducted) of the transmitter without the need to be below 0.20 µW (–37 dBm).

The requirements under extreme test conditions are less by 5 dB.

1.4 *Spurious emissions*

Radiated

Frequency range	Tx operating	Tx stand-by
30 MHz ≤ f ≤ 1 GHz	0.25 µW (–36 dBm)	2.0 nW (–57 dBm)
1 GHz < f ≤ 12.75 GHz	1.00 µW (–30 dBm)	20 nW (–47 dBm)

1.5 *Transmitter attack time*

The transmitter attack time shall not exceed 25 ms.

1.6 *Transmitter release time*

The transmitter release time shall not exceed 20 ms.

1.7 *Transient behaviour of the transmitter*

During switch-on and switch-off at any time when the actual carrier power is above the steady-state carrier power reduced by 30 dB, the carrier frequency shall remain within half a channel separation from the steady carrier frequency.

The time interval between the values of steady-state carrier power reduced by 30 dB and by 6 dB, respectively, shall be at least 0.20 ms, both in the case of switch-on and switch-off.

2 Limits for receiver parameters

2.1 *Average usable sensitivity (field strength, data)*

Four categories of equipment are defined as follows:

category A: equipment having an integral antenna fully within the case,

category B: equipment having an extractable or fixed integral antenna, with an antenna length not exceeding 20 cm external to the case,

category C: equipment having an extractable or fixed integral antenna, with an antenna length exceeding 20 cm external to the case,

category D: equipment not covered by category A, B or C.

Sensitivity limits for category A and category D equipment

Frequency band (MHz)	Average usable sensitivity in dB relative to 1 μV/m
$30 \leq f \leq 400$	27.0
$400 < f \leq 750$	28.5
$750 < f \leq 1\,000$	30.0

Hungary

Sensitivity limits for category B equipment

Frequency band (MHz)	Average usable sensitivity in dB relative to 1 μV/m
$30 \leq f \leq 130$	18.0
$130 < f \leq 300$	19.5
$300 < f \leq 440$	21.5
$440 < f \leq 600$	23.5
$600 < f \leq 800$	25.5
$800 < f \leq 1\ 000$	28.0

where f is the carrier frequency in MHz.

For category C equipment the following sensitivity limits shall apply under normal conditions:

- at carrier frequencies greater than 375 MHz the limits shall be as specified for category B equipment,
- at carrier frequencies equal to or less than 375 MHz, a correction factor K shall be subtracted from the limit for category B equipment.

$$K = 20 \lg \frac{l + 20}{40}$$

where l is the length of the external part of the antenna in cm.

The factor K only applies if the antenna length external to the case is less than

$$\frac{15\ 000}{f} - 20.$$

2.2 *Error behaviour at high input levels*

The bit error ratio shall not exceed 10^{-4}. The number of messages not correctly received (lost or corrupted) shall not exceed 1.

2.3 *Co-channel rejection*

The value of the co-channel rejection ratio shall be between:

- –8 dB and 0 dB for channel separations of 20 kHz and 25 kHz,
- –12 dB and 0 dB for a channel separation of 12.5 kHz.

2.4 *Adjacent channel selectivity*

Channel separation (kHz)	Adjacent channel selectivity limit (dBμV/m)			
	Unwanted frequencies ≤ 68 MHz		Unwanted frequencies > 68 MHz	
	Normal test conditions	Extreme test conditions	Normal test conditions	Extreme test conditions
20 & 25	75	65	20 lg f + 38.3	20 lg f + 28.3
12.5	65	55	20 lg f + 28.3	20 lg f + 18.3

where f is the carrier frequency in MHz.

2.5 *Spurious response rejection*

For unwanted signal frequencies less than or equal to 68 MHz the spurious response rejection shall not exceed 75 dBμV/m. For unwanted signal frequencies greater than 68 MHz the spurious response rejection shall not exceed the value

(20 lg f + 38.3) dBμV/m

where f is the carrier frequency in MHz.

2.6 *Intermodulation response rejection*

For unwanted signal frequencies less than or equal to 68 MHz the intermodulation response rejection shall not exceed 70 dBμV/m. For unwanted signal frequencies greater than 68 MHz the intermodulation response rejection shall not exceed the value

(20 lg f + 33.3) dBμV/m

where f is the carrier frequency in MHz.

2.7 *Blocking or desensitisation*

For unwanted signal frequencies less than or equal to 68 MHz the blocking level shall be at least 89 dBμV/m. For unwanted signal frequencies greater than 68 MHz the blocking level shall be at least

(20 lg f + 52.3) dBμV/m

where f is the carrier frequency in MHz.

2.8 *Spurious radiations*

Radiated

Frequency range	Limit
30 MHz ≤ f ≤ 1 GHz	2.0 nW (–57 dBm)
1 GHz < f ≤ 12.75 GHz	20 nW (–47 dBm)

Definitions, test conditions and methods of measurement are contained in standard MSZ ETS 300 390.

Annex 14 to the National Table of Frequency Allocations

Frequency management requirements for Very High Frequency (VHF), frequency modulated, sound broadcasting transmitters in the band 87.5-108 MHz

(see footnote H57)

1 Carrier power

The rated value of the carrier power will be approved by the communications authority on the basis of the frequency plan of the appropriate regional administrative conference or the result of the international coordination.

The carrier power under normal operating conditions shall be within ±1 dB of the rated value. The carrier power under extreme operating conditions shall be within +2 dB and –3 dB of the rated value.

2 Frequency deviation

The maximum frequency deviation under normal operating conditions shall not exceed ±75 kHz.

3 Frequency error

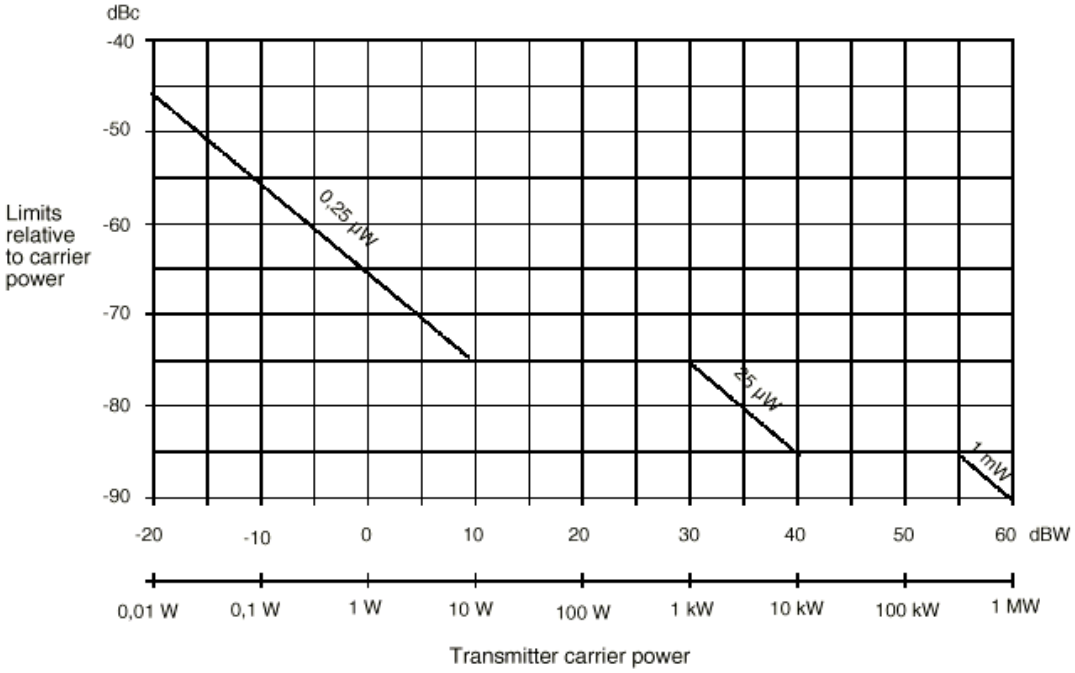
Under normal and extreme operating conditions, the carrier frequency shall be maintained within ±2 kHz of its nominal value.

4 Frequency stability

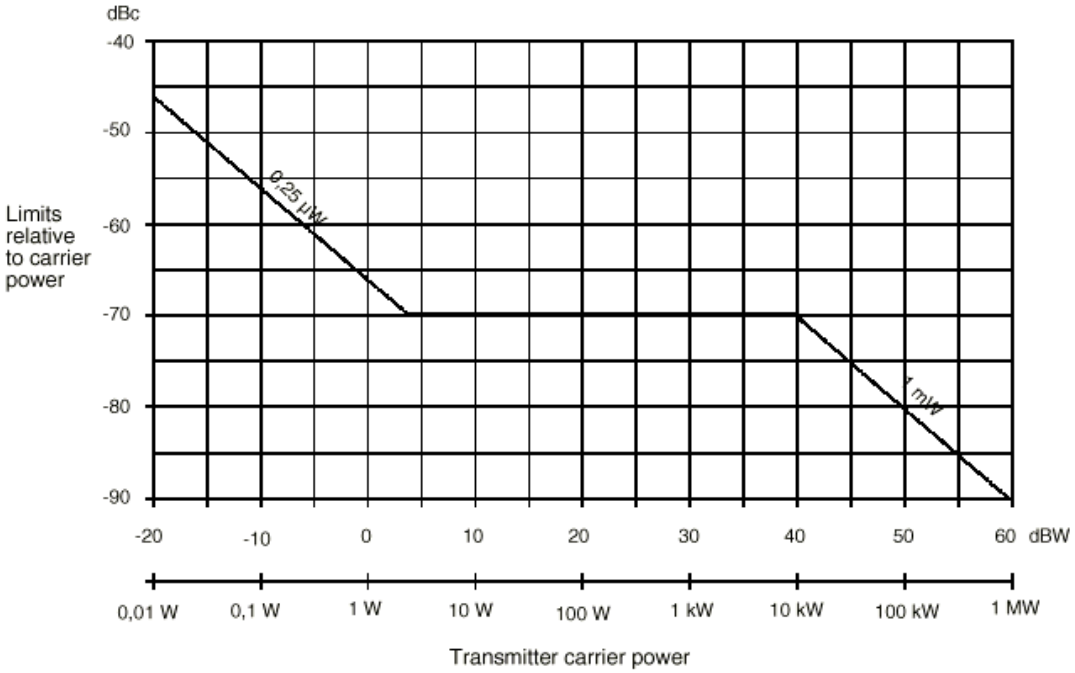
Under defined operating conditions, the stability of the carrier frequency shall be within ±300 Hz.

5 Spurious emissions

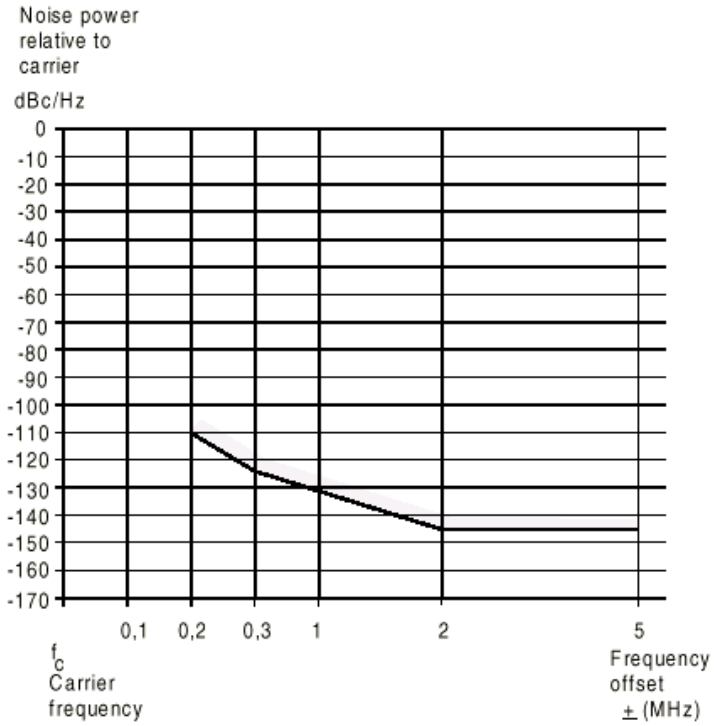
a) in the band 87.5 MHz to 137 MHz



b) in the bands 30 MHz to 87.5 MHz and 137 MHz to 1 GHz



6 Out-of-band emissions for stereophonic and monophonic operations



Definitions, operating and test conditions as well as methods of measurement are contained in standard MSZ ETS 300 384.

Annex 15 to the National Table of Frequency Allocations

Frequency management requirements for radio transmitters and receivers at aeronautical stations operating in the band 117.975-137 MHz using amplitude modulation and 8.33 kHz channel spacing

(see footnote H61)

1 Limits for transmitter parameters

1.1 *Frequency error*

The frequency error shall be within ±1 ppm under normal test conditions and under test conditions with extended temperature range from 0°C to +40°C.

The frequency error shall be within ±1.5 ppm under extreme test conditions.

1.2 *Carrier power*

With the output power adjusted to maximum, the carrier power shall be under normal test conditions within ±1.5 dB and under extreme test conditions within +2.0 dB…–3.0 dB of the rated maximum output power.

1.3 *Modulation depth*

The modulation depth shall be at least 85 %.

1.4 *Modulation compression*

The modulation compression shall be linear up to at least 85 %. The maximum usable modulation depth shall not exceed 95 %.

1.5 *Amplitude modulation distortion*

The amplitude modulation distortion shall be less than 10 %.

1.6 *Unwanted frequency modulation*

The unwanted frequency modulation shall not exceed ±1 000 Hz.

1.7 *Adjacent channel power*

The adjacent channel power shall not exceed a value of 50 dB below the carrier power.

1.8 *Spurious emissions (conducted)*

Frequency range	Tx operating	Tx stand-by
9 kHz ≤ f ≤ 1 GHz	0.25 µW (–36 dBm)	2 nW (–57 dBm)
1 GHz < f ≤ 4 GHz	1 µW (–30 dBm)	20 nW (–47 dBm)

1.9 *Cabinet radiation*

Frequency range	Spurious emissions (radiated)
30 MHz ≤ f ≤ 1 GHz	0.25 µW (–36 dBm)
1 GHz < f ≤ 4 GHz	1 µW (–30 dBm)

1.10 *Intermodulation attenuation*

The intermodulation attenuation shall be at least 40 dB.

1.11 *RF power attack time (t_{al}) and release time (t_{rl})*

t_{al}: 300 µs…20 ms

t_{rl}: 300 µs…10 ms

1.12 *Transient behaviour of the transmitter*

See Figure 1.

t_1: 5.0 ms

t_2: 20.0 ms

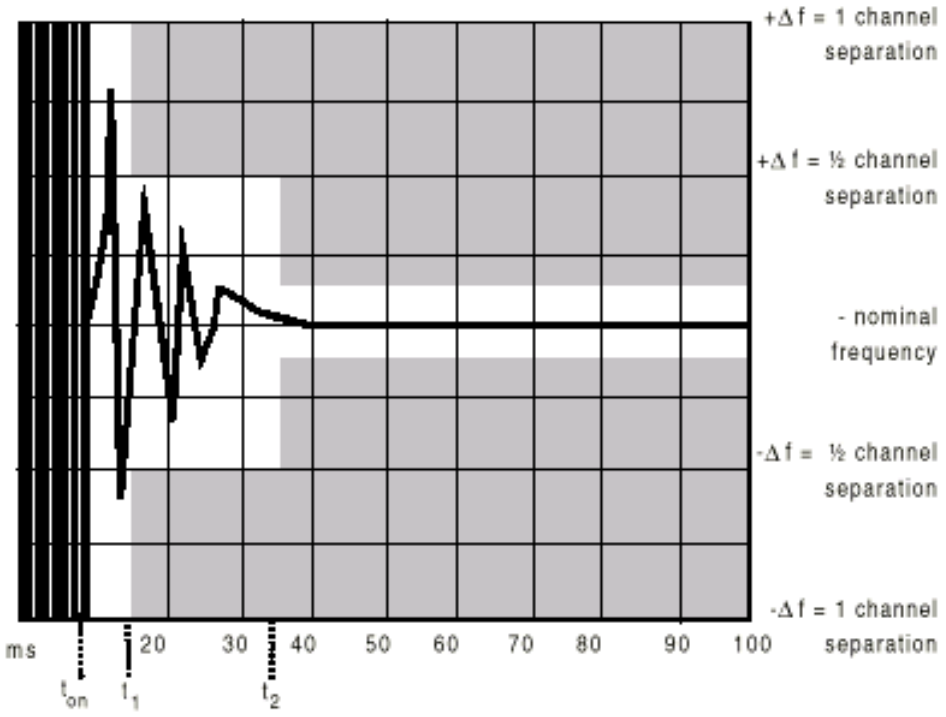
t_3: 5.0 ms

Notes:

During the periods t_1 and t_3 the frequency difference shall not exceed the value of one channel separation.

During the period t_2 the frequency difference shall not exceed the value of half a channel separation.

Switch on condition t_{on}, t_1 and t_2



Switch off condition t_{off}, t_3 and t_{off}

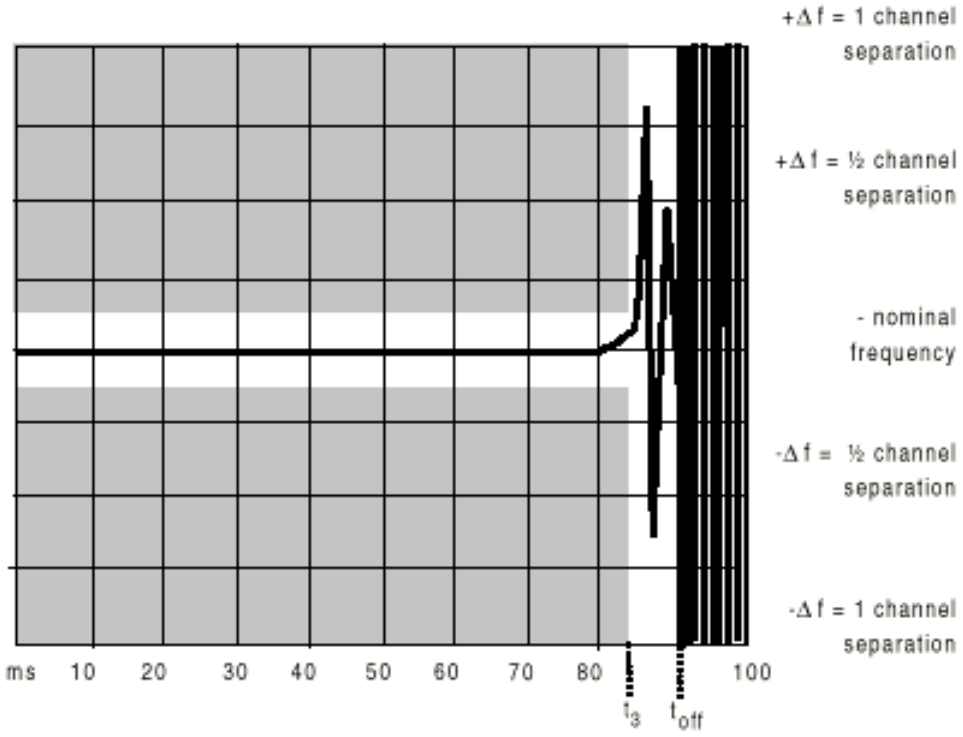


Figure 1

2 Limits for receiver parameters

2.1 *Maximum usable sensitivity*

The maximum usable sensitivity shall not exceed +20 dBμV emf under normal test conditions and +26 dBμV emf under extreme test conditions.

2.2 *Adjacent channel selectivity*

The adjacent channel selectivity shall be not less than 50 dB under normal test conditions and not less than 40 dB under extreme test conditions.

2.3 *Spurious response rejection*

At any frequency separated from the nominal frequency of the receiver by more than two channels, the spurious response rejection ratio shall be not less than 60 dB.

2.4 *Intermodulation response rejection*

The intermodulation response rejection ratio shall be greater than 60 dB.

2.5 *Blocking or desensitisation*

The blocking ratio, for any frequency within the specified ranges, shall not be less than 80 dB, except at frequencies on which spurious responses are found.

2.6 *Spurious emissions*

Conducted

Frequency range	Limit
9 kHz ≤ f ≤ 1 GHz	2 nW (–57 dBm)
1 GHz < f ≤ 4 GHz	20 nW (–47 dBm)

Hungary

Radiated

Frequency range	Limit
30 MHz ≤ f ≤ 1 GHz	2 nW (–57 dBm)
1 GHz < f ≤ 4 GHz	20 nW (–47 dBm)

2.7 *Squelch operation*

The squelch attenuation shall be at least 40 dB.

2.8 *Cross modulation rejection*

The cross modulation rejection ratio shall be at least 80 dB.

Definitions, test conditions and methods of measurement are contained in standard MSZ ETS 300 676.

Annex 16 to the National Table of Frequency Allocations

Frequency management requirements for shipborne radiotelephone transmitters and receivers for the maritime mobile service operating in VHF bands (156.0125-157.4375 MHz, 160.6125-160.9625 MHz and 161.4875-162.0375 MHz)

(see footnote H71A)

1 Limits for transmitter parameters

1.1 *Frequency error*

The frequency error shall be within ±1.5 kHz.

1.2 *Carrier power*

If the output power switch is set at maximum, the carrier power shall be between 6 W and 25 W, and shall be under normal test conditions within ±1.5 dB, under extreme test conditions within +2 dB…–3 dB of the rated output power. If the output power switch is set at minimum, the carrier power shall be between 0.1 W and 1 W. The carrier power on the RR Appendix S18 channels will be specified by the frequency management authority channel by channel.

1.3 *Adjacent channel power*

The adjacent channel power shall not exceed a value of 70 dB below the carrier power of the transmitter without the need to be below
0.2 μW.

1.4 *Frequency deviation*

The frequency deviation shall be less than or equal to ±5 kHz.

1.5 *Spurious emissions*

The power of any conducted spurious emission shall not exceed 0.25 µW in the frequency range 9 kHz to 2 GHz.

The cabinet radiation and spurious emissions shall not exceed 2 nW in the frequency range 30 MHz to 2 GHz when the transmitter is in stand-by and shall not exceed 0.25 µW when the transmitter is in operation.

1.6 *Transient behaviour of the transmitter*

See Figure 1.

t_1 (ms)	5.0
t_2 (ms)	20.0
t_3 (ms)	5.0

Table 1

Note: During the periods t_1 and t_3 the frequency difference shall not exceed 25 kHz. During the period t_2 the frequency difference shall not exceed 12.5 kHz.

2 Limits for receiver parameters

2.1 *Co-channel rejection*

The co-channel rejection ratio shall be between –10 dB and 0 dB.

2.2 *Adjacent channel selectivity*

The adjacent channel selectivity shall be not less than 70 dB under normal test conditions and not less than 60 dB under extreme test conditions.

2.3 *Spurious response rejection*

At any frequency separated from the nominal frequency of the receiver by more than 25 kHz, the spurious response rejection ratio shall be not less than 70 dB.

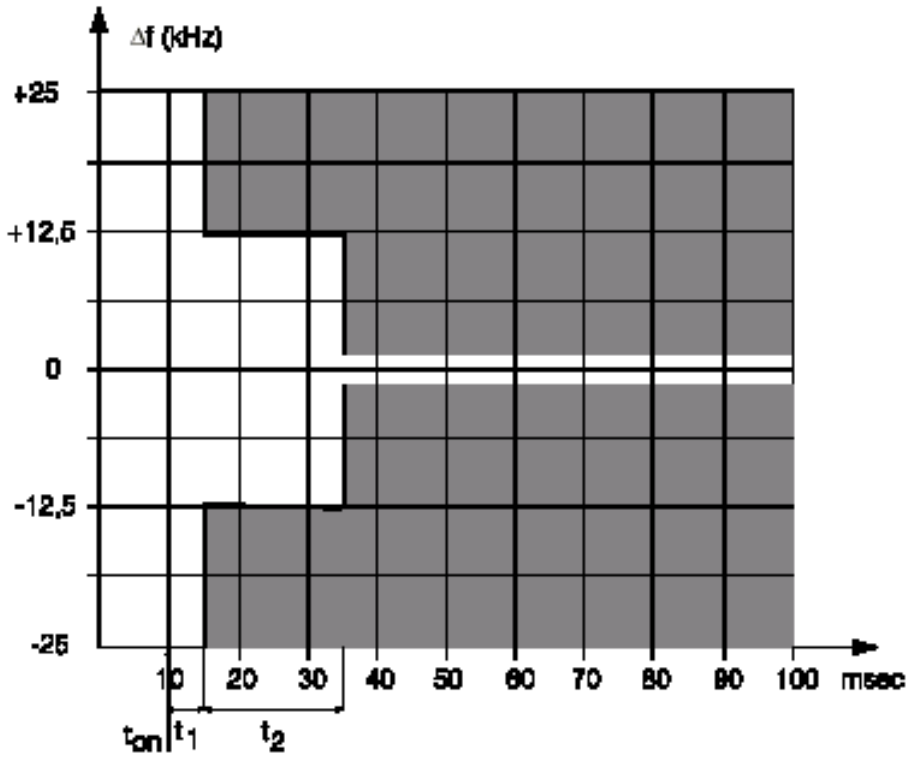
2.4 *Intermodulation response rejection*

The intermodulation response rejection ratio shall not be less than 68 dB.

2.5 *Maximum usable sensitivity*

The maximum usable sensitivity shall not exceed +6 dBµV (emf) under normal test conditions and +12 dBµV (emf) under extreme test conditions.

Switch on condition



Switch off condition

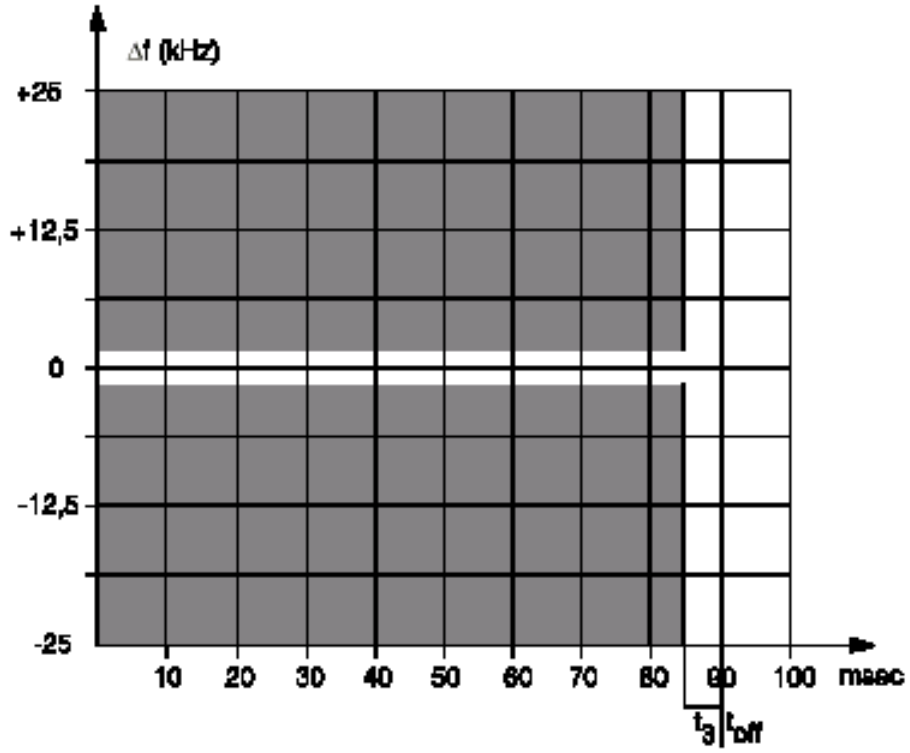


Figure 1

2.6 *Blocking or desensitisation*

The blocking level for any frequency within the specified ranges shall be not less than 90 dBµV (emf), except at frequencies on which spurious responses are found.

2.7 *Spurious emissions*

The power of any conducted spurious emission shall not exceed 2 nW at any frequency in the range between 9 kHz and 2 GHz.

The power of any radiated spurious emission shall not exceed 2 nW at any frequency in the range between 30 MHz and 2 GHz.

2.8 *Desensitisation (duplex operation)*

The desensitisation shall not exceed 3 dB. The maximum usable sensitivity under conditions of simultaneous transmission and reception shall not exceed the limits given in section 2.5.

2.9 *Spurious response rejection (duplex operation)*

The spurious response rejection ratio shall be not less than 70 dB.

Definitions, test conditions and methods of measurement are contained in standard MSZ ETS 300 162.

Annex 17 to the National Table of Frequency Allocations

Frequency management requirements for shipborne radiotelephone transmitters and receivers and associated equipment for Class "D" Digital Selective Calling (DSC) used in the maritime (and inland waterway) mobile service in VHF bands (156.0125-157.4375 MHz, 160.6125-160.9625 MHz and 161.4875-162.0375 MHz)

(see footnotes H71A and H73)

1 Limits for transmitter parameters

1.1 *Frequency error*

The frequency error shall be within ±1.5 kHz.

1.2 *Carrier power*

If the output power switch is set at maximum, the carrier power shall be between 6 W and 25 W, and shall be under normal test conditions within ±1.5 dB, under extreme test conditions within +2 dB…–3 dB of the rated output power. The carrier power shall never however exceed 25 W. If the output power switch is set at minimum, the carrier power shall be between 0.1 W and 1 W. The carrier power on the RR Appendix S18 channels will be specified by the frequency management authority channel by channel.

1.3 *Adjacent channel power*

The adjacent channel power shall not exceed a value of 70 dB below the carrier power of the transmitter without the need to be below 0.2 μW.

1.4 *Frequency deviation*

The frequency deviation shall be less than or equal to ±5 kHz.

1.5 *Spurious emissions*

The power of any conducted spurious emission shall not exceed 0.25 µW in the frequency range 9 kHz to 2 GHz.

The cabinet radiation and spurious emissions shall not exceed 2 nW in the frequency range 30 MHz to 2 GHz when the transmitter is in stand-by and shall not exceed 0.25 µW when the transmitter is in operation.

1.6 *Transient behaviour of the transmitter*

See Figure 1.

t_1 (ms)	5.0
t_2 (ms)	20.0
t_3 (ms)	5.0

Table 1

Note: During the periods t_1 and t_3 the frequency difference shall not exceed ±25 kHz. During the period t_2 the frequency difference shall not exceed ±12.5 kHz.

2 Limits for receiver parameters

2.1 *Co-channel rejection*

The co-channel rejection ratio shall be between –10 dB and 0 dB.

2.2 *Adjacent channel selectivity*

The adjacent channel selectivity shall be not less than 70 dB under normal test conditions and not less than 60 dB under extreme test conditions.

2.3 *Spurious response rejection*

At any frequency separated from the nominal frequency of the receiver by more than 25 kHz, the spurious response rejection ratio shall be not less than 70 dB.

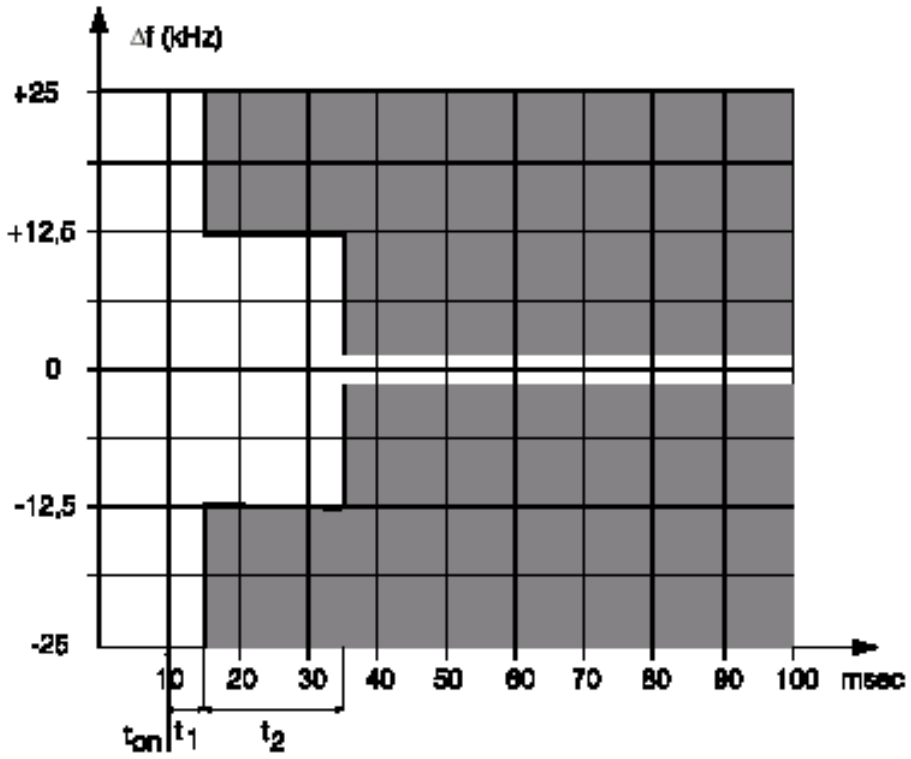
2.4 *Intermodulation response rejection*

The intermodulation response rejection ratio shall be greater than 68 dB.

2.5 *Maximum usable sensitivity*

The maximum usable sensitivity shall not exceed +6 dBµV (emf) under normal test conditions and +12 dBµV (emf) under extreme test conditions.

Switch on condition



Switch off condition

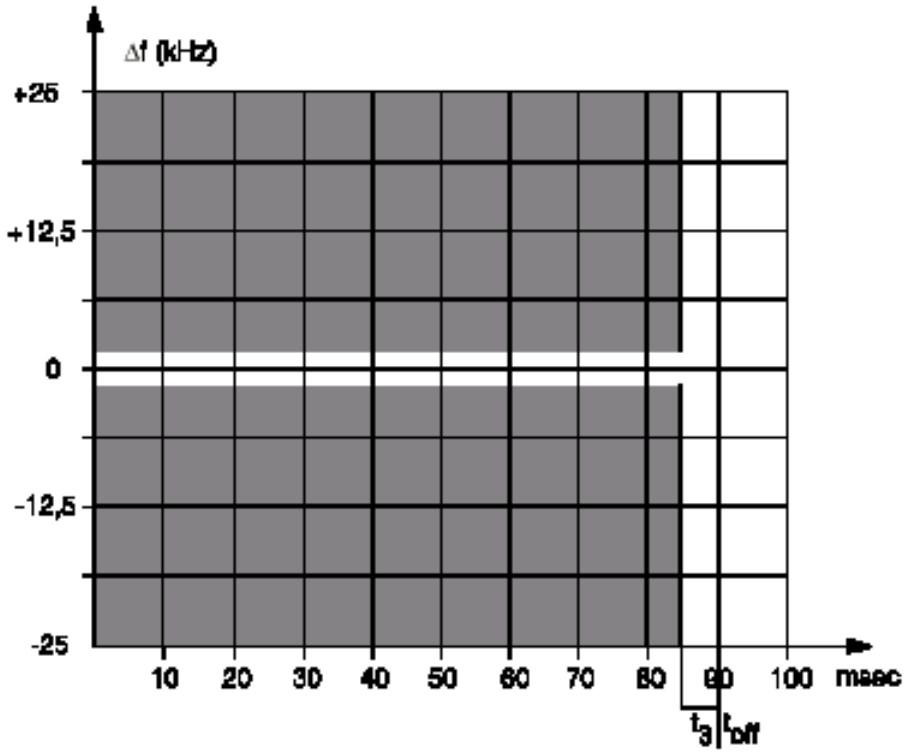


Figure 1

2.6 *Blocking or desensitisation*

The blocking level for any frequency within the specified ranges shall be not less than 90 dBµV (emf), except at frequencies on which spurious responses are found.

2.7 *Spurious emissions*

The power of any conducted spurious emission shall not exceed 2 nW at any frequency in the range between 9 kHz and 2 GHz.

The power of any radiated spurious emission shall not exceed 2 nW at any frequency in the range between 30 MHz and 2 GHz.

3 Limits for receiver parameters of the DSC decoder

3.1 *Spurious response rejection and blocking*

The bit error ratio shall not exceed 10^{-2} for an unwanted input signal level of 73 dBµV (for the spurious response rejection test) and for an unwanted input signal level of 93 dBµV (for the blocking test).

3.2 *Spurious emissions*

The power of any conducted spurious emission shall not exceed 2 nW at any frequency in the range between 9 kHz and 2 GHz.

The power of any radiated spurious emission shall not exceed 2 nW at any frequency in the range between 30 MHz and 2 GHz.

Definitions, test conditions and methods of measurement are contained in standard MSZ EN 301 025.

Annex 18 to the National Table of Frequency Allocations

Frequency management requirements for narrow-band (channel separation less than 10 kHz) radio equipment operating in the sub-band 159.6-160.6/164.2-165.2 MHz intended for analogue and/or digital communication (speech and/or data) and having an antenna connector

(see footnote H75)

1 Limits for transmitter parameters

1.1 *Spurious emissions*

Conducted

Frequency range	Tx operating	Tx stand-by
9 kHz ≤ f ≤ 1 GHz	0.25 μW (–36 dBm)	2.0 nW (–57 dBm)
1 GHz < f ≤ 4 GHz	1.0 μW (–30 dBm)	20.0 nW (–47 dBm)

Radiated

Frequency range	Tx operating	Tx stand-by
30 MHz ≤ f ≤ 1 GHz	0.25 μW (–36 dBm)	2.0 nW (–57 dBm)
1 GHz < f ≤ 4 GHz	1.0 μW (–30 dBm)	20.0 nW (–47 dBm)

2 Limits for receiver parameters

2.1 *Spurious response rejection*

At any frequency separated from the nominal frequency of the receiver by two channels or more, the spurious response rejection shall be such that the degradation of received quality shall not exceed a specified value at the output of the receiver for levels of the unwanted input signal up to 76.0 dBμV.

2.2 *Blocking or desensitisation*

The blocking level for any frequency within the specified ranges shall not be less than 90.0 dBµV, except at frequencies on which spurious responses are found.

2.3 *Spurious radiations*

Conducted

Frequency range	Limit
9 kHz ≤ f ≤ 1 GHz	2.0 nW (–57 dBm)
1 GHz < f ≤ 4 GHz	20.0 nW (–47 dBm)

Radiated

Frequency range	Limit
30 MHz ≤ f ≤ 1 GHz	2.0 nW (–57 dBm)
1 GHz < f ≤ 4 GHz	20.0 nW (–47 dBm)

Definitions, test conditions and methods of measurement are contained in European Standard EN 301 166.

Annex 19 to the National Table of Frequency Allocations

Frequency management requirements for GSM 900 and DCS 1800 (Phase 2) Base Station System (BSS) equipment

(see footnotes H121, H135 and H137A)

1 Limits for transmitter parameters

1.1 *Phase error and mean frequency error*

Phase error: 5 degrees mean,

20 degrees peak.

Frequency error: the mean frequency error of the transmitter across the burst shall not exceed 0.05 ppm.

1.2 *Mean transmitted RF carrier power*

For GSM 900 BTS

Transmitter power class	Maximum output power
1	320-(<640) W
2	160-(<320) W
3	80-(<160) W
4	40-(<80) W
5	20-(<40) W
6	10-(<20) W
7	5-(<10) W
8	2.5-(<5) W

Table 1

For DCS 1800 BTS

Transmitter power class	Maximum output power
1	20-(<40) W
2	10-(<20) W
3	5-(<10) W
4	2.5-(<5) W

Table 2

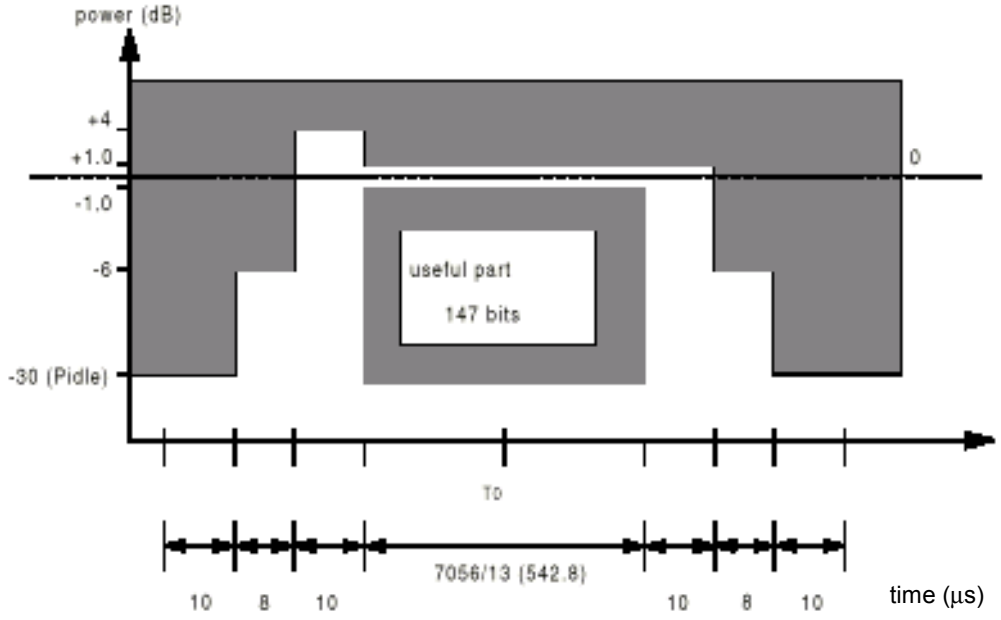
For micro-BTS

Transmitter power class	GSM 900 micro-BTS maximum output power	DCS 1800 micro-BTS maximum output power
M1	(>19)-24 dBm ((>0.08)-0.25 W)	(>27)-32 dBm ((>0.5)-1.6 W)
M2	(>14)-19 dBm ((>0.03)-0.08 W)	(>22)-27 dBm ((>0.16)-0.5 W)
M3	(>9)-14 dBm ((>0.01)-0.03 W)	(>17)-22 dBm ((>0.05)-0.16 W)

Table 3

1.3 *Transmitted RF carrier power versus time*

See Figure 1.



147 bits = 542.8 μs = 7 056/13 μs

1 timeslot = 576.9 μs = 156.25 bit

Note: The 0 dB reference is equal to power Pmax or Pmin.

Figure 1

1.4 *Adjacent channel power*

1.4.1 Spectrum due to modulation and wideband noise

For normal BTS

For each static power step, the power measured in steps *d)* to *g)* of the test cases shall not exceed the limits shown in Table 4 for the power level measured in step *b)*, except where one or more of the following exceptions and minimum measurement levels applies:

1. For a GSM 900 BTS, if the limit according to Table 4 is below –65 dBm, a value of –65 dBm shall be used instead.

2. For a DCS 1800 BTS, if the limit according to Table 4 is below –57 dBm, a value of –57 dBm shall be used instead.

3. In the combined range 600 kHz to 6 MHz above and below the carrier frequency, in up to three bands of 200 kHz width centred on a frequency which is an integer multiple of 200 kHz, exceptions at up to –36 dBm are allowed.

4. Above 6 MHz offset from the carrier frequency, in up to 12 bands of 200 kHz width centred on a frequency which is an integer multiple of 200 kHz, exceptions at up to –36 dBm are allowed.

Power level (dBm) as measured in step *b)*	Maximum relative level (dB) at specified carrier offsets (kHz), using specified measurement (filter) bandwidths (kHz)							
	100	200	250	400	600… <1 200	1 200… <1 800	1 800… <6 000	>6 000
	Measurement (filter) bandwidth 30 kHz						Measurement (filter) bandwidth 100 kHz	
≥43	+0.5	–30	–33	–60	–70	–73	–75	–80
41	+0.5	–30	–33	–60	–68	–71	–73	–80
39	+0.5	–30	–33	–60	–66	–69	–71	–80
37	+0.5	–30	–33	–60	–64	–67	–69	–80
35	+0.5	–30	–33	–60	–62	–65	–67	–80
≤33	+0.5	–30	–33	–60	–60	–63	–65	–80

Table 4

The limit values in Table 4, at the listed offsets from carrier frequency (kHz), are the ratio of the measured power to the measured power in step *c)* for the same static power step.

Table 4 provides requirements at discrete power levels. For powers between those specified, linear interpolation should be applied.

For micro-BTS

For each static power step, the power measured in steps *d)* and *e)* of the test case shall not exceed the limits shown in Table 4 for the power level measured in step *b)*, except where one or more of the micro-BTS exceptions and minimum measurement levels applies.

For each static power step, the ratio of the power measured in steps *f)* and *g)* of the test case to the power measured in step *c)* for the same static power step shall not exceed –70 dB for all GSM 900 micro-BTS classes and –76 dB for all DCS 1800 micro-BTS classes, except where one or more of the micro-BTS exceptions and minimum measurement levels applies.

The following exceptions and minimum measurement levels shall apply for the micro-BTS:

1. In the combined range 600 kHz to 6 MHz above and below the carrier frequency, in up to three bands of 200 kHz width centred on a frequency which is an integer multiple of 200 kHz, exceptions at up to –36 dBm are allowed.

2. Above 6 MHz offset from the carrier frequency, in up to 12 bands of 200 kHz width centred on a frequency which is an integer multiple of 200 kHz, exceptions at up to –36 dBm are allowed.

3. If the limit as specified above is below the values in Table 5, then the values in the table shall be used instead.

Microcell BTS power class	Maximum spectrum due to modulation and noise in 100 kHz	
	GSM 900 (dBm)	DCS 1800 (dBm)
M1	–59	–57
M2	–64	–62
M3	–69	–67

Table 5

1.4.2 Switching transients spectrum

The power measured shall not exceed the limits shown in Table 6, or –36 dBm, whichever value is highest.

Offset (kHz)	Power (dBc) GSM 900	Power (dBc) DCS 1800
400	–57	–50
600	–67	–58
1 200	–74	–66
1 800	–74	–66

Table 6

1.5 *Conducted spurious emissions from the transmitter antenna connector*

Inside the BTS transmit band, the maximum value of the measured power shall not exceed –36 dBm.

Outside the BTS transmit band, the maximum value of the measured power

– at step *c)* shall not exceed –47 dBm for a GSM 900 BTS and shall not exceed –57 dBm for a DCS 1800 BTS;

– at step *e)* shall not exceed

–36 dBm for frequencies up to 1 GHz,

–30 dBm for frequencies above 1 GHz.

1.6 *Intermodulation attenuation*

At frequencies offset from the wanted signal carrier frequency by more than 6 MHz and up to the edge of the relevant transmit band, the intermodulation components measured shall not exceed –70 dBc or –36 dBm, whichever is the higher. 1 in 100 time slot periods may fail the requirement by up to 10 dB.

At frequencies offset from the wanted signal carrier frequency of less than 6 MHz, the requirements are that specified in section 1.4.1, continuous modulation spectrum. The exceptions given in section 1.4.1 also apply.

1.7 *Intra Base Station System intermodulation attenuation*

In the relevant transmit band, at offsets greater than 0.6 MHz and up to 6 MHz, the requirements are that specified in section 1.4.1, continuous modulation spectrum. The exceptions given in section 1.4.1 also apply.

At frequencies offset from the wanted signal carrier frequency by more than 6 MHz and up to the edge of the relevant transmit band, the intermodulation components measured shall not exceed –70 dBc or –36 dBm, whichever is the higher. 1 in 100 time slot periods may fail the requirement by up to 10 dB.

2 Limits for receiver parameters

2.1 *Conducted spurious emissions from the receiver antenna connector*

The measured power shall not exceed

–57 dBm for all frequencies up to 1 GHz,

–47 dBm for all frequencies above 1 GHz.

3 Radiated spurious emissions

a) The power measured at steps *c)* and *d)* shall not exceed –36 dBm.

b) The power measured at step *e)* shall not exceed

–36 dBm for frequencies up to 1 GHz,

–30 dBm for frequencies above 1 GHz.

Definitions, test conditions and methods of measurement are contained in interim standard MSZ I-ETS 300 609-1.

Annex 20 to the National Table of Frequency Allocations

Frequency management requirements for radio equipment of spread spectrum Radio Local Area Networks (RLANs) operating in the frequency range 2.4-2.4835 GHz

(see footnote H149)

1 Limits for transmitter parameters

1.1 *Operating frequency range*

The operating frequency range shall be within the band 2.4-2.4835 GHz.

1.2 *Effective radiated power*

The effective radiated power shall not exceed –10 dBW (100 mW) e.i.r.p.

1.3 *Peak power density*

For equipment using FHSS modulation, the peak power density shall be limited to –10 dBW (100 mW) per 100 kHz e.i.r.p.

For equipment using other types of modulation, the peak power density shall be limited to –20 dBW (10 mW) per 1 MHz e.i.r.p.

1.4 *Spurious emissions*

Narrowband emissions

Frequency range	Operating	Stand-by
30 MHz ≤ f ≤ 1 GHz	–36 dBm (250 nW)	–57 dBm (2 nW)
1 GHz < f ≤ 12.75 GHz	–30 dBm (1 μW)	–47 dBm (20 nW)
1.8 GHz ≤ f ≤ 1.9 GHz 5.15 GHz ≤ f ≤ 5.3 GHz	–47 dBm (20 nW)	–47 dBm (20 nW)

Hungary

Wideband emissions

Frequency range	Operating	Stand-by
30 MHz ≤ f ≤ 1 GHz	–86 dBm/Hz	–107 dBm/Hz
1 GHz < f ≤ 12.75 GHz	–80 dBm/Hz	–97 dBm/Hz
1.8 GHz ≤ f ≤ 1.9 GHz 5.15 GHz ≤ f ≤ 5.3 GHz	–97 dBm/Hz	–97 dBm/Hz

2 Limits for receiver parameters

2.1 *Spurious emissions*

Narrowband emissions

Frequency range	Limit
30 MHz ≤ f ≤ 1 GHz	–57 dBm (2 nW)
1 GHz < f ≤ 12.75 GHz	–47 dBm (20 nW)

Wideband emissions

Frequency range	Limit
30 MHz ≤ f ≤ 1 GHz	–107 dBm/Hz
1 GHz < f ≤ 12.75 GHz	–97 dBm/Hz

Definitions, test conditions and methods of measurement are contained in standard MSZ ETS 300 328.

Annex 21 to the National Table of Frequency Allocations

Frequency management requirements for Automatic container and Vehicle Identification (AVI) systems for railways operating in the 2.45 GHz ISM band (2 446-2 454 MHz)

(see footnote H153)

1 Limits for interrogator transmitter parameters

1.1 *Equivalent isotropically radiated power (e.i.r.p.)*

The equivalent isotropically radiated power (e.i.r.p.) shall not exceed 500 mW (+27 dBm).

1.2 *Frequency error*

The frequency error shall not exceed ±20 parts per million (ppm).

1.3 *Transmitter spectrum mask (e.i.r.p.)*

Frequency	Unmodulated	Modulated
f_0	+27 dBm	
$f_0 \pm 1.0$ MHz	–50 dBm	–30 dBm
$f_0 \pm 1.5$ MHz	–50 dBm	–40 dBm
Other frequencies within the assigned frequency band	–50 dBm	–30 dBm
Outside the assigned frequency band	see section 1.6	

where f_0 is the operating frequency.

1.4 *Modulation index*

The modulation index shall be greater than or equal to 0.9.

1.5 *Eye pattern*

The pulse amplitude shall not be below 90 %.

The pulse width shall not be below 90 %.

1.6 *Radiated spurious emissions*

Transmitter	Frequency		
	47...74 MHz 87.5...118 MHz 174...230 MHz 470...862 MHz	Other frequencies below 1 000 MHz	Frequencies above 1 000 MHz outside the assigned frequency band
Operating	4 nW	250 nW	1 μW
Stand-by	2 nW	2 nW	20 nW

2 Limits for interrogator receiver parameters

2.1 *Maximum usable sensitivity*

The maximum usable sensitivity shall not be greater than –84 dBm.

2.2 *Error behaviour at high wanted input signals*

For bit error measurements	for input signal level +6 dB above the declared sensitivity	$< 10^{-2}$
	for input signal level –25 dBm	$< 10^{-6}$
For measurements using messages	for input signal level +6 dB above the declared sensitivity the successful message ratio	> 80 %
	for input signal level –25 dBm the number of lost messages	less than 2

2.3 *Co-channel rejection*

The co-channel rejection shall be less than 12 dB.

2.4 *Adjacent channel selectivity*

The adjacent channel selectivity shall be greater than –30 dBm.

2.5 *Spurious response rejection and desensitisation*

The spurious response rejection and desensitisation shall not be less than the values indicated in the following table.

Frequency	Limit
25 MHz … f_0 – 50 MHz	–10 dBm
f_0 – 50 MHz … f_0 – 5 MHz	–30 dBm
f_0 + 5 MHz … f_0 + 50 MHz	–30 dBm
f_0 + 50 MHz … 20 GHz	–10 dBm

where f_0 is the operating frequency.

2.6 *Intermodulation response rejection*

The intermodulation response rejection shall be greater than or equal to –30 dBm.

2.7 *Spurious emissions*

The power of any spurious emission, outside the assigned frequency band, shall not exceed 2 nW in the range 25 MHz to 1 GHz and shall not exceed 20 nW on frequencies above 1 GHz.

3 Limits for transponder parameters

3.1 *Transponder sensitivity*

Transponder orientation	Under normal test conditions	Under extreme test conditions
≤ ±22.5°	–35 dBm	–33 dBm
≤ ±60°	–35 dBm	N/A

3.2 *Transponder wake-up protection*

The transponder shall not respond to the interference field strength levels indicated in the following table.

Frequency	Interference
100 MHz	10 V/m
250 MHz	10 V/m
900 MHz	10 V/m
1.8 GHz	10 V/m
5.8 GHz	15 V/m
7.5 GHz	1.5 V/m
12 GHz	1.5 V/m

3.3 *Transponder conversion gain*

The conversion gain of the transponder shall be higher than the values given in the following table.

Transponder orientation	Under normal test conditions	Under extreme test conditions
In boresight	+5 dB	+2 dB

3.4 *Transponder spurious radiation*

Transmitter	25 MHz…1 GHz	Allocated band	Other frequencies between 1 GHz and 20 GHz, except the allocated band
Operating	–36 dBm	N/A	–30 dBm
Stand-by	–57 dBm	–47 dBm	–47 dBm

Definitions, test conditions and methods of measurement are contained in standard MSZ EN 300 761.