

(Important note : Only the Turkish text is authentic.)

USAGE CERTIFICATE OF FREQUENCY BANDS IN SATELLITE COMMUNICATIONS SERVICES

Purpose

ARTICLE 1- The purpose of this regulation is to regulate the procedures and principles on usage of frequency bands in the electronic communication services via satellite.

Scope

ARTICLE 2- This regulation contains the procedures and principles on usage of frequency bands in the electronic communication services via satellite.

Legal Basis

ARTICLE 3 – (1) This Regulation has been prepared on the basis of first paragraph of the Articles 36 of “Act of Electronic Communication” No.5809 dated November 5, 2008 and Articles 2,6,7 and 8 of “By-Law on Spectrum Management” No: 27276 dated July 2,2009 and eighth paragraph of Article 8 of “By-Law on Authorization for Electronic Communications Sector” No: 27241 dated May 28,2009.

Abbreviations

ARTICLE 4 – (1) Abbreviations used in this regulation have the following meanings:

- a)** AES: Earth Stations on Aircraft,
- b)** CEPT: The European Conference of Postal and Telecommunications Administrations,
- c)** ECC: Electronic Communications Committee,
- d)** ERC: European Radiocommunications Committee,
- e)** ETSI: European Telecommunication Standards Institute,
- f)** ESV: Earth Stations on Vessels
- g)** GMPCS: Global Mobile Personal Communications by Satellite,
- h)** HUB: The main satellite station
- i)** ITU: International Telecommunication Union,
- j)** ITU-R: ITU’s Radiocommunication Sector,
- k)** SCS: Satellite Communication Service

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1) VSAT: Very Small Aperture Terminal,

Satellite Communication in National Frequency Plan

ARTICLE 5- (1) It must be used frequencies planned for satellite communications in National Frequency Plan and completed frequency coordination process by the ITU and then made frequency allocation belonging to national and international communications satellite.

(2) In accordance with ITU rules; a satellite network of which frequency coordination should be done with TURKSAT satellite networks, but not done yet, cannot be used.

(3)A satellite network which is frequency coordination completed can not be used except in reported and reached agreement on the coordination of technical features in the eyes of ITU.

(4) Frequency bands planned for satellite communications systems are take place in Table 1.

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Table-1 Table of Frequency Band for Satellite Communications

Band	Satellite Communications Frequency Band in National Plan		Satellite Communication Plan In National Frequency Plan
	Downlink Frequency	Uplink Frequency	
VHF	137.0-138.0 MHz	148.0-150.05 MHz	Mobile Satellite Service
VHF/UHF	144-146 MHz	432.0-438.0 MHz	Amateur Satellite Service
L	1518-1559 MHz	1610.0-1626.5 MHz 1626.5 - 1660.5 MHz 1668 - 1675 MHz	Mobile Satellite Service
L/S	2483.5-2550 MHz	1610-1626.45 MHz	Mobile Satellite Service
S	2170-2200 MHz	1980-2010 MHz	Mobile Satellite Service
S	2025-2110 MHz	2200-2290 MHz	Earth Exploration Satellite Service
C	Feeder Links 5091-5250 MHz	Feeder Links: 6875-7055 MHz 6875-7055 MHz Rx GLOBALSTAR Feeder Links	Mobile Satellite Service
C	3400-4800 MHz	5850-7075 MHz	Fixed Satellite Service
X	7250-7750 MHz	7900-8400 MHz	Fixed Satellite Service
X		8025-8400MHz	Earth Exploration Satellite Service
Ku	10.700-11.700 GHz 12.500-12.750 GHz	12.75-14.50 GHz	Fixed Satellite Service
Ku	11.700-12.500 GHz		Broadcast Satellite Service
Ka		17.30-18.10 GHz BSS Feeder Links	Fixed Satellite Service
Ka	17.700-20.200 GHz	27.50-31.0 GHz	Fixed Satellite Service
Ka	21.400-22.000 GHz		Broadcast Satellite Service
Ka		24.75-25.25 GHz BSS Feeder Links	Fixed Satellite Service

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The Usage of Frequency Band for Satellite Communications

ARTICLE 6 – (1) Operator is obliged to comply with the conditions of use specified frequency bands in Table 2,3,4,5 and 6 in the services offered.

Table-2 Ku Frequency Band Usage Table

Frequency Band Downlink	Frequency Band Uplink	Satellite Service	Authorization Type	User status in our country	Related International Regulations
10.70-12.75 GHz	12.75-13.25 GHz 13.75-14.50 GHz	Fixed Satellite Service	Satellite Communication Service ((SCS)	Satellite Earth Station (Gateway, Hub.)	ERC/DEC/(00)08 ITU-R S.731-1 ITU-R S.732-1 ITU-R S.733-1 EN 301 428 EN 301 489-12
10.70-11.70 GHz 12.50-12.75 GHz	12.75 – 13.25 GHz 13.75-14.50 GHz	Fixed Satellite Service	SCS	Satellite Terminal (Uplink, SNG, flyaway)	EN 301 430 ERC/REC 13-03 ERC/DEC/(00)08 ITU-R SNG.770-2 ITU-R SNG.722 ITU 5.502
10.70-12.75 GHz	12.75-13.25 GHz 13.75-14.50 GHz	Fixed Satellite Service	SCS	Satellite Terminal (VSAT)	EN 301 428 EN 301 489-12 ERC/REC 13-03 / ERC/DEC(00)08 ECC.DEC/(03)04 ECC/DEC/(06)02 ECC/DEC/(06)03 ERC/REC/01-07 ECC Report 66 ITU R S.726-1 ITU-R S.727-1 ITU-R S.728-1 ITU-R S.729
10.7-11.7 GHz 12.5-12.75 GHz	14.0-14.5 GHz	(Air) Mobile Satellite Service	SCS	Satellite Terminal (AES)*	ECC/DEC/(05)11 EN 302 186 EN 301 427 ITU-R M.1643 ITU-R S.728-1
10.7-11.7 GHz 12.5-12.75 GHz	14.0-14.5 GHz	Fixed Satellite Service	SCS	Satellite Terminal (ESV)*	ECC/DEC/(05)10 EN 302 340
10,70-11,70 GHz 12,50-12,75 GHz	14-14.50 GHz	Fixed Satellite Service	SCS	Satellite Terminal (Euteltracs)	ETS 300 255 ERC/DEC/(98)15 ERC/REC/01-07
10,7-12,75 GHz	14-14,50 GHz	Fixed Satellite Service	SCS	Satellite Terminal (Data Satellite Receiver)	ERC/DEC/(99)26 ERC/REC/01-07

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*When using AES and ESV systems, it does not affect existing systems in the frequency bands identified in the table and can not claim protection from existing systems.

Table-3 Ka Frequency Band Usage Table

Frequency Band Downlink	Frequency Band Uplink	Satellite Service	Authorization Type	User status in our country	Related International Regulations
17.7-19.7 GHz	27.5-29.5 GHz	Fixed Satellite Service	SCS	Fixed Satellite Earth Station (Gateway)	ECC/DEC/(00)07 ECC/DEC/(05)08 ECC/DEC/(05)01 ITU-R S.524-9 EN 301 360 ITU-R Rec, 580-6 ECC Report 152
19.7-20.2GHz	29.5-30.0 GHz	Fixed Satellite Service	SCS	Satellite Terminal	EN 301 459 EN 301 489-12 ECC/DEC/(05)08 ECC/DEC/(06)02 ECC/DEC/(06)03 ERC/REC/01-07 ECC Report 66 ECC Report 152 ITU-R S.524-9
19.7-20.2GHz	29.5-30.0 GHz	Fixed Satellite Service	SCS	Satellite Terminal (Earth Station on Mobile Platforms-ESOMP)	EN 303 978 EN 301 489-12 ECC/DEC/(13)01 ECC Report 184 ECC Report 66 ITU-R S.2223 ITU-R S.2357 ITU-R S.524-9

Table-4 C Frequency Band Usage Table

Frequency Band Downlink	Frequency Band Uplink	Satellite Service	Authorization Type	User status in our country	International Regulations
5091-5250 MHz	6875-7055 MHz	Mobile Satellite Service	SCS	Fixed Satellite Earth Station (Gateway)	
3400-4200 MHz	5850-6700 MHz 7025-7075 MHz	Fixed Satellite Service	SCS	Fixed Satellite Earth Station	EN 301 443 / EN 301 489-12
3400-4200 MHz	5850-6700 MHz 7025-7075 MHz	Fixed Satellite Service	SCS	Satellite Terminal (VSAT)	EN 301 443 EN 301 489-12
3700-4200 MHz	5925-6425 MHz	Fixed Satellite Service	SCS	Satellite Terminal (ESV)*	ECC/DEC/(05)09

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*When using ESV systems, it does not affect existing systems in the frequency bands identified in the table and can not claim protection from existing systems.

Table-5 L Frequency Band Usage Table

Frequency Band Downlink	Frequency Band Uplink	Satellite Service	Authorization Type	User status in our country	Related International Regulations
1525-1559 MHz 2483.5-2500 MHz	1610.0-1626.5 MHz 1626.5 -1660.5MHz	Mobile Satellite Service	GMPCS	Satellite Terminal	ECC/DEC/(04)09 ECC/DEC/(09)04 ECC/DEC/(12)01 ECC REPORT 95

Table-6 S Frequency Band Usage Table

Frequency Band Downlink	Frequency Band Uplink	Satellite Service	User status in our country	Related International Regulations
2170-2200 MHz	1980-2010 MHz	Mobile Satellite Service	Complementary Ground Component (CGC)	ECC/DEC/(06)09