FOCAL POINT REGARDING CORRESPONDENCE ON THIS QUESTIONNAIRE (PARTS I AND II)

1. Mr./Ms <u>GUDBJORGSRUD</u> <u>STEIN</u> Family Name First Name

2. Country <u>NORWAY</u>

3. Name of the Administration/Organization NORWEGIAN POST AND

TELECOMMUNICATION AUTHORITY

4. Title <u>HEAD OF FREQUENCY PLANNING</u>

5. Address P.O.BOX 447 SENTRUM

 $\frac{\text{N-0104 OSLO}}{\text{NORWAY}}$

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To be returned no later than 31 January 2000 to:
ITU-D Study Groups Secretariat
Telecommunication Development Bureau
Fax: +41 22 730 54 84
E-Mail: devsg2@itu.int

QUESTIONNAIRE-PART II

(To be completed by Administrations only)

General Questions on National Spectrum Management

Describe succinctly the problems that your administration is currently experiencing in national spectrum management (for example subject areas in national spectrum management).

Cour	ntry	NORWAY			
Foca	l point	STEIN GUDBJORGSRUD			
funct Spec	tional requ trum Mana	general questions on national spectrum management are based irements of spectrum management described in the handbook agement." If you need additional space to answer the question heet of paper.	on "I	Vati	onal
1.	Do you h	ave a national law governing spectrum management?	YES_	X	NO_
	-Last date	e this law was changed or modified?		<u> 199</u>	<u> 8</u>
	-Are any	actions planned to change this law?	YES_	X	NO_
	Have any in solving	problems been identified? and if so, do you need any assistant them?	nce fro	om 1	the ITU
	NO SPEC	CIFIC PROBLEMS			
2. (e.g.	radio serv	published regulations and procedures for national spectrum rices, license requirements etc.)? problems been identified? and if so, do you need any assistant ITU in solving them?	YES		ent NO
	<u>NO</u>				
3.	•	ave a national radio frequency spectrum allocation table? problems been identified? and if so, do you need any assistant them?			NO the ITU
	TIME CO	ONSUMING. LIMITED ADMINISTRATIVE RESOURCES			
4.	Do you h	ave technical specifications for national spectrum use?	YES	<u>X</u>	NO_
	Have any in solving	problems been identified? and if so, do you need any assistant them?	nce fro	om 1	the ITU

<u>NO</u>

YES X NO_

Do you have a need for any spectrum redeployment*?

5.

asses limit	e term "redeployment" is used here to refer to a process of national sement is conducted 1) to determine if portions of spectrum can be it ed use; and 2) to determine if such spectrum segments can be realled tering radiocommunication services that have expanding spectrum respectively.	dentified that are in ocated for use in
	o, do you have a strategy for achieving this redeployment in respecti for given radiocommunication services?	ve frequency bands YES X NO
	use define the established strategy and describe the nature of the contract users regarding the potential costs resulting from the planned rede	
	STRATEGIES VARIES. USUALLY RE-FARMING OR OUT-PI EQUIPMENT. ALL LICENSES ARE TIME LIMITED!	HASING OF
6. Gove	What is the total cost of national spectrum management functions ernment (expressed in Swiss francs)?	performed by your
	-What is the source of the funding required to accomplish these sp functions?	oectrum management
	FEES.	
7.	Do you have a method for establishing spectrum users' fees?	YES X NO_
	-If so, please give a brief description of the method used in establish	shing those fees.
	COST ORIENTATION MAINLY.	
	SOME BANDWITH CONSIDERATIONS.	
8.	Do you maintain centralized databases for spectrum management?	YES X NO_
	-What is the approximate size of your database (expressed in number of records)?	<u>25.000</u>
	-Do you have a computerized data base management system (DBMS)?	YES X NO_
	-What DBMS system do you use	SELF-DEVELOPED
	-Are these frequency assignment records available to public?	YES NO X
	Have any problems been identified? and if so, do you need any ass in solving them?	sistance from the ITU

Do you notify frequency assignments to the ITU?

YES X NO_

9.

	Have any problems been identified? and if so, do you need any assist in solving them?	tance from the ITU
	LARGE AMMOUNT OF DATA NECESSARY.	
	VERY TIME CONSUMING.	
10.	Do you have a policy and planning function for national spectrum ma (i.e. a national strategy for future use of the spectrum)?	nagement YES NO X
	Have any problems been identified? and if so, do you need any assist in solving them?	tance from the ITU
	<u>NO</u>	
11.	Do you perform technical analyses of frequency assignment requests	? YES NO <u>X</u>
	Have any problems been identified? and if so, do you need any assist in solving them?	tance from the ITU
12.	Do you perform radio monitoring?	YES NO <u>X</u>
	-number of fixed monitoring stations -facilities available at fixed monitoring stationsmonitoring up to 30 MHzdirection finding up toMHz	<u>1</u>
	-number of mobile monitoring stations -facilities available at mobile monitoring stationsmonitoring up to 2000 MHzdirection finding up to 2000 MHz	<u>15</u>
	Have any problems been identified? and if so, do you need any assist in solving them?	tance from the ITU
13.	Do you perform technical analyses of radio frequency interference complaints?	YES NO <u>X</u>
	-Do you have an established consultation process, involving Government and non-government organization, for resolving these complaints?	YES NO <u>X</u>
	Have any problems been identified? and if so, do you need any assist in solving them?	tance from the ITU

INTERFERENCE COMPLAINTS ARE ALWAYS DIFFICULT TO SOLVE.

14. What computers and operating systems are in use for national spectrum management?

Type of computers <u>PC/SUN</u>

Operating system(s)

WINDOWS/ORACLE

Have any problems been identified? and if so, do you need any assistance from the ITU in solving them?

15. Number of technical/professional staff in national spectrum management?

16. Number of support staff in national spectrum management?

3

40

- 17. Describe your country's spectrum management structure (Please enclose a copy of organization chart).
- 18. Do you use the ITU-R Handbooks and Reports on:
 - a) National Spectrum Management, version 1995?

YES

- b) Spectrum Monitoring¹, version 1995?
- c) Computer-aided Techniques for Spectrum Management, version 1999?
- d) HF Broadcasting System Design, version 1999?
- e) Report SM.2012, Economic Aspects of Spectrum Management, version1997²?

YES

f) Windows Basic Automated Spectrum Management System (WinBASMS) Software Version 1997, Manual Version 1997

What additional information/handbooks do you need from the ITU?

SATTELLITE REGULATION

¹ The Spectrum Monitoring Handbook is currently being updated, therefore, you are urged to contact Mr Jan Verduijn (NL), the designated Rapporteur from ITU-R Study Group 1, Working Party 1C if you have any comments that you wish included in a future version of this Handbook.

² This Report SM.2012 was updated during the ITU-R Study Group 1 meeting in August 1999. This new version is expected to be available in the three working languages by January 2000

To be returned no later than 31 January 2000 to:

ITU-D Study Groups Secretariat

Telecommunication Development Bureau

Fax: +41 22 730 54 84

E-Mail: devsg1@itu.int

THANK YOU FOR YOUR COOPERATION

National Frequency Plan

NORWAY

Frequency band	RR Region 1 allocation and relevant footnotes	European Common Allocation	Major Utilisation	Notes	Norwegian Allocation	Norwegian Utilisation
Below 9 kHz	Not allocated				Not allocated	
	S5.53 S5.54				S5.53 S5.54	
9-14 kHz	RADIONAVIGATION				RADIONAVIGATION	
14-19.95 kHz	FIXED				FIXED	
	MARITIME MOBILE S5.57				MARITIME MOBILE S5.57	
	S5.55 S5.56				S5.55 S5.56	
19.95-20.05 kHz	STANDARD FREQUENCY AND TIME SIGNAL				STANDARD FREQUENCY AND TIME SIGNAL	
	(20 kHz)				(20 kHz)	
20.05-70 kHz	FIXED				FIXED	
	MARITIME MOBILE S5.57				MARITIME MOBILE S5.57	
	S5.56 S5.58				S5.56 S5.58	
70-72 kHz	RADIONAVIGATION S5.60				RADIONAVIGATION S5.60	

Frequency band	RR Region 1 allocation and relevant footnotes	European Common Allocation	Major Utilisation	Notes	Norwegian Allocation	Norwegian Utilisation
72-84 kHz	FIXED				FIXED	
	MARITIME MOBILE S5.57				MARITIME MOBILE S5.57	
	RADIONAVIGATION S5.60				RADIONAVIGATION S5.60	
	S5.56				S5.56	
84-86 kHz	RADIONAVIGATION S5.60				RADIONAVIGATION S5.60	
86-90 kHz	FIXED				FIXED	
	MARITIME MOBILE S5.57				MARITIME MOBILE S5.57	
	S5.56				S5.56	
	RADIONAVIGATION				RADIONAVIGATION	
90-110 kHz	RADIONAVIGATION S5.62				RADIONAVIGATION S5.62	
	Fixed				Fixed	
	S5.63 S5.64				S5.64	

Frequency band	RR Region 1 allocation and relevant footnotes	European Common Allocation	Major Utilisation	Notes	Norwegian Allocation	Norwegian Utilisation
110-112 kHz	FIXED				FIXED	
	MARITIME MOBILE				MARITIME MOBILE	
	RADIONAVIGATION				RADIONAVIGATION	
	S5.64				S5.64	
112-115 kHz	RADIONAVIGATION S5.60				RADIONAVIGATION S5.60	
115-117.6 kHz	RADIONAVIGATION S5.60				RADIONAVIGATION S5.60	
	Fixed				Fixed	
	Maritime mobile				Maritime mobile	
	S5.64 S5.66				S5.64 S5.66	
117.6-126 kHz	FIXED				FIXED	
	MARITIME MOBILE				MARITIME MOBILE	
	RADIONAVIGATION				RADIONAVIGATION	
	S5.60				S5.60	
	S5.64				S5.64	
126-129 kHz	RADIONAVIGATION				RADIONAVIGATION	
	S5.60				S5.60	

Frequency band	RR Region 1 allocation and relevant footnotes	European Common Allocation	Major Utilisation	Notes	Norwegian Allocation	Norwegian Utilisation
129-130 kHz	FIXED				FIXED	
	MARITIME MOBILE				MARITIME MOBILE	
	RADIONAVIGATION S5.60				RADIONAVIGATION S5.60	
	S5.64				S5.64	
130-148.5 kHz	FIXED			ERC REC 62-01	FIXED	1 125 7 127 0
	MARITIME MOBILE				MARITIME MOBILE	Amateur radio: 135,7-137,8 KHz, secondary service
	S5.64 S5.67				Amateur radio	,
					S5.64 S5.67	
148.5-255 kHz	BROADCASTING				BROADCASTING	
	S5.68 S5.69 S5.70				S5.68 S5.69 S5.70	
255-283.5 kHz	BROADCASTING				BROADCASTING	
	AERONAUTICAL RADIONAVIGATION				AERONAUTICAL RADIONAVIGATION	
	S5.70 S5.71					
283.5-315 kHz	AERONAUTICAL RADIONAVIGATION				AERONAUTICAL RADIONAVIGATION	
	MARITIME RADIONAVIGATION (RADIOBEACON) S5.73				MARITIME RADIONAVIGATION (RADIOBEACON) S5.73	
	S5.72 S5.74				S5.72 S5.74	

Frequency band	RR Region 1 allocation and relevant footnotes	European Common Allocation	Major Utilisation	Notes	Norwegian Allocation	Norwegian Utilisation
315-325 kHz	AERONAUTICAL RADIONAVIGATION				AERONAUTICAL RADIONAVIGATION	
	Maritime Radionavigation (RADIOBEACON) S5.73				Maritime Radionavigation (RADIOBEACON) S5.73	
	S5.72 S5.75				S5.72	
325 –405 kHz	AERONAUTICAL RADIONAVIGATION				AERONAUTICAL RADIONAVIGATION	
	S5.72				S5.72	
405-415 kHz	RADIONAVIGATION S5.76				RADIONAVIGATION S5.76	
	S5.72				S5.72	
415-435 kHz	MARITIME MOBILE S5.79				MARITIME MOBILE S5.79	
	AERONAUTICAL RADIONAVIGATION				AERONAUTICAL RADIONAVIGATION	
	S5.72				S5.72	

Frequency band	RR Region 1 allocation and relevant footnotes	European Common Allocation	Major Utilisation	Notes	Norwegian Allocation	Norwegian Utilisation
435-495 kHz	MARITIME MOBILE S5.79				MARITIME MOBILE S5.79	
	Aeronautical Radionavigation				Aeronautical Radionavigation	
	S5.72 S5.81 S5.82				S5.72 S5.81 S5.82	
495-505 kHz	MOBILE (distress and calling)				MOBILE (distress and calling)	
	S5.83				S5.83	
505-526.5 kHz	MARITIME MOBILE S5.79				MARITIME MOBILE S5.79	
	AERONAUTICAL RADIONAVIGATION				AERONAUTICAL RADIONAVIGATION	
	S5.72 S5.81 S5.84				S5.72 S5.81 S5.84	
526.5-1606.5 kHz	BROADCASTING				BROADCASTING	BROADCASTING
	S5.87					
1606.5-1625 kHz	FIXED				FIXED	
	MARITIME MOBILE S5.90				MARITIME MOBILE S5.90	
	LAND MOBILE				LAND MOBILE	
	S5.92				S5.92	

Frequency band	RR Region 1 allocation and relevant footnotes	European Common Allocation	Major Utilisation	Notes	Norwegian Allocation	Norwegian Utilisation
1625-1635 kHz	RADIOLOCATION				RADIOLOCATION	
	S5.93				S5.93	
1635-1800 kHz	FIXED				FIXED	
	MARITIME MOBILE S5.90				MARITIME MOBILE S5.90	
	LAND MOBILE				LAND MOBILE	
	S5.92 S5.96				S5.92 S5.96	
1800-1810 kHz	RADIOLOCATION				RADIOLOCATION	
	S5.93					
1810-1850 kHz	AMATEUR				AMATEUR	
	S5.98 S5.99 S5.100 S5.101				S5.100	
1850-2000 kHz	FIXED				FIXED	A TENT DD C
	MOBILE except aeronautical mobile				MOBILE except aeronautical mobile	Amateur: see ITU RR footnote S5.96
					Amateur	
	S5. 92 S5.96 S5.103				S5. 92 S5.96 S5.103	
2000-2025 kHz	FIXED				FIXED	
	MOBILE except aeronautical mobile(R)				MOBILE except aeronautical mobile(R)	
	S5.92 S5.103				S5.92 S5.103	

Frequency band	RR Region 1 allocation and relevant footnotes	European Common Allocation	Major Utilisation	Notes	Norwegian Allocation	Norwegian Utilisation
2025-2045 kHz	FIXED				FIXED	
	MOBILE except aeronautical mobile(R)				MOBILE except aeronautical mobile(R)	
	Meteorological Aids S5.104				Meteorological Aids S5.104	
	S5.92 S5.103				S5.92 S5.103	
2045-2160 kHz	FIXED				FIXED	
	MARITIME MOBILE				MARITIME MOBILE	
	LAND MOBILE				LAND MOBILE	
	S5.92				S5.92	
2160-2170 kHz	RADIOLOCATION S5.93 S5.107				RADIOLOCATION	
2170-2173.5 kHz	MARITIME MOBILE				MARITIME MOBILE	
2173.5-2190.5 kHz	MOBILE(distress and calling)				MOBILE(distress and calling)	
	S5.108 S5.109 S5.110 S5.111				S5.108 S5.109 S5.110 S5.111	
2190.5-2194 kHz	MARITIME MOBILE				MARITIME MOBILE	

Frequency band	RR Region 1 allocation and relevant footnotes	European Common Allocation	Major Utilisation	Notes	Norwegian Allocation	Norwegian Utilisation
2194-2300 kHz	FIXED				FIXED	
	MOBILE except aeronautical mobile(R)				MOBILE except aeronautical mobile(R)	
	S5.92 S5.103 S5.112				S5.92 S5.103 S5.112	
2300-2498 kHz	FIXED				FIXED	
	MOBILE except aeronautical mobile(R)				MOBILE except aeronautical mobile(R)	
	BROADCASTING S5.113				S5.103	
	S5.103					
2498-2501 kHz	STANDARD FREQUENCY AND TIME SIGNAL				STANDARD FREQUENCY AND TIME SIGNAL	
	(2500 kHz)				(2500 kHz)	
2501-2502 kHz	STANDARD FREQUENCY AND TIME SIGNAL				STANDARD FREQUENCY AND TIME SIGNAL	
	Space Research				Space Research	
2502-2625 kHz	FIXED				FIXED	
	MOBILE except aeronautical mobile(R)				MOBILE except aeronautical mobile(R)	
	S5.92 S5.103 S5.114				S5.92 S5.103 S5.114	

Frequency band	RR Region 1 allocation and relevant footnotes	European Common Allocation	Major Utilisation	Notes	Norwegian Allocation	Norwegian Utilisation
2625-2650 kHz	MARITIME MOBILE				MARITIME MOBILE	
	MARITIME RADIONAVIGATION				MARITIME RADIONAVIGATION	
	S5.92				S5.92	
2650-2850 kHz	FIXED				FIXED	
	MOBILE except aeronautical mobile(R)				MOBILE except aeronautical mobile(R)	
	S5.92 S5.103				S5.92 S5.103	
2850-3025 kHz	AERONAUTICAL MOBILE(R)				AERONAUTICAL MOBILE(R)	See ITU RR Appendix 27
	S5.111 S5.115				S5.111 S5.115	
3025-3155 kHz	AERONAUTICAL MOBILE(OR)				AERONAUTICAL MOBILE(OR)	See ITU RR Appendix 26
3155-3200 kHz	FIXED				FIXED	
	MOBILE except aeronautical mobile(R)				MOBILE except aeronautical mobile(R)	
	S5.116 S5.117				S5.116 S5.117	
3200-3230 kHz	FIXED				FIXED	
	MOBILE except aeronautical mobile(R)				MOBILE except aeronautical mobile(R)	
	BROADCASTING S5.113				S5.116	
	S5.116					

Frequency band	RR Region 1 allocation and relevant footnotes	European Common Allocation	Major Utilisation	Notes	Norwegian Allocation	Norwegian Utilisation
3230-3400 kHz	FIXED				FIXED	
	MOBILE except aeronautical mobile				MOBILE except aeronautical mobile	
	BROADCASTING S5.113				S5.116 S5.118	
	S5.116 S5.118					
3400-3500 kHz	AERONAUTICAL MOBILE(R)				AERONAUTICAL MOBILE(R)	See ITU RR Appendix 27
3500-3800 kHz	AMATEUR S5.120				AMATEUR S5.120	
	FIXED				FIXED	
	MOBILE except aeronautical mobile				MOBILE except aeronautical mobile	
2000 2000 111	S5.92				ENTER	
3800-3900 kHz	FIXED				FIXED	See ITU RR Appendix 26
	AERONAUTICAL MOBILE(OR)				AERONAUTICAL MOBILE(OR)	
	LAND MOBILE				LAND MOBILE	
3900-3950 kHz	AERONAUTICAL MOBILE(OR)				AERONAUTICAL MOBILE(OR)	See ITU RR Appendix 26
	S5.123				MODILL(OK)	
3950-4000 kHz	FIXED				FIXED	
	BROADCASTING				BROADCASTING	

Frequency band	RR Region 1 allocation and relevant footnotes	European Common Allocation	Major Utilisation	Notes	Norwegian Allocation	Norwegian Utilisation
4000-4063 kHz	FIXED MARITIME MOBILE S5.127 S5.126				FIXED MARITIME MOBILE S5.127	See ITU RR Appendix 25
4063-4438 kHz	MARITIME MOBILES S5.109 S5110 S5.130 S5.131 S5.132 S5.128 S5.129				MARITIME MOBILES S5.109 S5110 S5.130 S5.131 S5.132 S5.128 S5.129	See ITU RR Appendix 25
4438-4650 kHz	FIXED MOBILE except aeronautical mobile(R)				FIXED MOBILE except aeronautical mobile(R)	
4650-4700 kHz	AERONAUTICAL MOBILE(R)				AERONAUTICAL MOBILE(R)	See ITU RR Appendix 27
4700-4750 kHz	AERONAUTICAL MOBILE(OR)				AERONAUTICAL MOBILE(OR)	See ITU RR Appendix 26
4750-4850 kHz	FIXED AERONAUTICAL MOBILE(OR) LANDMOBILE BROADCASTING S5.113				FIXED AERONAUTICAL MOBILE(OR) LANDMOBILE	See ITU RR Appendix 26

Frequency band	RR Region 1 allocation and relevant footnotes	European Common Allocation	Major Utilisation	Notes	Norwegian Allocation	Norwegian Utilisation
4850-4995 kHz	FIXED				FIXED	
	LAND MOBILE				LAND MOBILE	
	BROADCASTING S5.113					
4995-5003 kHz	STANDARD FREQUENCY AND TIME (5000 kHz)				STANDARD FREQUENCY AND TIME (5000 kHz)	
5003-5005 kHz	STANDARD FREQUENCY AND TIME				STANDARD FREQUENCY AND TIME	
	Space Research				Space Research	
5005-5060 kHz	FIXED BROADCASTING S5.113				FIXED	
5060-5250 kHz	FIXED Mobile except aeronautical mobile S5.133				FIXED Mobile except aeronautical mobile S5.133	
5250-5450 kHz	FIXED Mobile except aeronautical mobile				FIXED Mobile except aeronautical mobile	

Frequency band	RR Region 1 allocation and relevant footnotes	European Common Allocation	Major Utilisation	Notes	Norwegian Allocation	Norwegian Utilisation
5450-5480 kHz	FIXED				FIXED	C ITH DD 4 1' 26
	AERONAUTICAL MOBILE(OR)				AERONAUTICAL MOBILE(OR)	See ITU RR Appendix 26
	LAND MOBILE				LAND MOBILE	
5480-5680 kHz	AERONAUTICAL MOBILE(R)				AERONAUTICAL MOBILE(R)	See ITU RR Appendix 27
	S5.111 S5.115				S5.111 S5.115	
5680-5730 kHz	AERONAUTICAL MOBILE(OR)				AERONAUTICAL MOBILE(OR)	See ITU RR Appendix 26
	S5.111 S5.115				S5.111 S5.115	
5730-5900 kHz	FIXED				FIXED	
	LAND MOBILE				LAND MOBILE	
5900-5950 kHz	BROADCASTING S5.134 S5.135				BROADCASTING S5.134 S5.135	
	S5.136				S5.136	
5950-6200 kHz	BROADCASTING				BROADCASTING	
6200-6525 kHz	MARITIME MOBILE S5.109 S5.110 S5.130 S5.132				MARITIME MOBILE S5.109 S5.110 S5.130 S5.132	See ITU RR Appendix 25
(525 ((05 LH-	S5.137				S5.137	
6525-6685 kHz	AERONAUTICAL MOBILE(R)				AERONAUTICAL MOBILE(R)	See ITU RR Appendix 27

Frequency band	RR Region 1 allocation and relevant footnotes	European Common Allocation	Major Utilisation	Notes	Norwegian Allocation	Norwegian Utilisation
6685-6765 kHz	AERONAUTICAL MOBILE(OR)				AERONAUTICAL MOBILE(OR)	See ITU RR Appendix 26
6765-7000 kHz	FIXED Land Mobile S5.139 S5.138				FIXED Land Mobile S5.138	ISM band, secondary, 6765-6795 kHz, center frequency 6780 kHz
7000-7100 kHz	AMATEUR S5.120 AMATEUR- SATELLITE S5140 S5.141				AMATEUR S5.120 AMATEUR- SATELLITE	Exclusive Amateur band
7100-7300 kHz	BROADCASTING				BROADCASTING	
7300-7350 kHz	BROADCASTING S5.134 S5.135 S5.143				BROADCASTING S5.134 S5.135 S5.143	
7350-8100 kHz	FIXED Land Mobile S5.144				FIXED Land Mobile	
8100-8195 kHz	FIXED MARITIME MOBILE				FIXED MARITIME MOBILE	See ITU RR Appendix 16 and 25

Frequency band	RR Region 1 allocation and relevant footnotes	European Common Allocation	Major Utilisation	Notes	Norwegian Allocation	Norwegian Utilisation
8195-8815 kHz	MARITIME MOBILE S5.109 S5.110 S5.132 S5.145				MARITIME MOBILE S5.109 S5.110 S5.132 S5.145	See ITU RR Appendix 16 and 25
	S5.111				S5.111	
8815-8965 kHz	AERONAUTICAL MOBILE(R)				AERONAUTICAL MOBILE(R)	See ITU RR Appendix 27
8965-9040 kHz	AERONAUTICAL MOBILE(OR)				AERONAUTICAL MOBILE(OR)	See ITU RR Appendix 26
9040-9400 kHz	FIXED				FIXED	
9400-9500 kHz	BROADCASTING S5.134 S5.135 S5.146				BROADCASTING S5.134 S5.135 S5.146	
9500-9900 kHz	BROADCASTING S5.147 S5.148				BROADCASTING S5.147 S5.148	
9900-9995 kHz	FIXED				FIXED	
9995-10 003 kHz	STANDARD FREQUENCY AND TIME SIGNAL (10 000 kHz)				STANDARD FREQUENCY AND TIME SIGNAL (10 000 kHz)	
	SS5.111				SS5.111	

Frequency band	RR Region 1 allocation and relevant footnotes	European Common Allocation	Major Utilisation	Notes	Norwegian Allocation	Norwegian Utilisation
10 003-10 005 kHz	STANDARD FREQUENCY AND TIME SIGNAL				STANDARD FREQUENCY AND TIME SIGNAL	
	Space Research				Space Research	
	S5.111				S5.111	
10 005-10 100 kHz	AERONAUTICAL MOBILE(R)				AERONAUTICAL MOBILE(R)	See ITU RR Appendix 27
	S5.111				S5.111	
10 100-10 150 kHz	FIXED				FIXED	
	Amateur S5.120				AMATEUR S5.120	
10 150-11 175 kHz	FIXED				FIXED	
	Mobile except aeronautical mobile(R)				Mobile except aeronautical mobile(R)	
11 175-11 275 kHz	AERONAUTICAL MOBILE(OR)				AERONAUTICAL MOBILE(OR)	See ITU RR Appendix 26
11 275-11 400 kHz	AERONAUTICAL MOBILE(R)				AERONAUTICAL MOBILE(R)	See ITU RR Appendix 27
11 400-11 600 kHz	FIXED				FIXED	
11 600-11 650 kHz	BROADCASTING S5.134 S5.135				BROADCASTING S5.134 S5.135	
	S5.146				S5.146	

Frequency band	RR Region 1 allocation and relevant footnotes	European Common Allocation	Major Utilisation	Notes	Norwegian Allocation	Norwegian Utilisation
11 650-12 050 kHz	BROADCASTING S5.147 S5.148				BROADCASTING S5.147 S5.148	
12 050-12 100 kHz	BROADCASTING S5.134 S5.135				BROADCASTING S5.134 S5.135	
	S5.146				S5.146	
12 100-12 230 kHz	FIXED				FIXED	
12 230-13 200 kHz	MARITIME MOBILE S5.109 S5.110 S5.132 S5.145				MARITIME MOBILE S5.109 S5.110 S5.132 S5.145	See ITU RR Appendix 16 and 25
13 200-13 260 kHz	AERONAUTICAL MOBILE(OR)				AERONAUTICAL MOBILE(OR)	See ITU RR Appendix 26
13 260-13 360 kHz	AERONAUTICAL MOBILE(R)				AERONAUTICAL MOBILE(R)	See ITU RR Appendix 27
13 360-13 410 kHz	FIXED RADIO ASTRONOMY S5.149				FIXED RADIO ASTRONOMY S5.149	

Frequency band	RR Region 1 allocation and relevant footnotes	European Common Allocation	Major Utilisation	Notes	Norwegian Allocation	Norwegian Utilisation
13 410-13 570 kHz	FIXED				FIXED	
	Mobile except aeronautical mobile(R)				Mobile except aeronautical mobile(R)	
	S5.150				S5.150	
13 570-13 600 kHz	BROADCASTING S5.134 S5.135				BROADCASTING S5.134 S5.135	
	S5.151				S5.151	
13 600-13 800 kHz	BROADCASTING S5.148				BROADCASTING S5.148	
13 800-13 870 kHz	BROADCASTING S5.134 S5.135				BROADCASTING S5.134 S5.135	
	S5.151				S5.151	
13 870-14 000 kHz	FIXED				FIXED	
	Mobile except aeronautical mobile(R)				Mobile except aeronautical mobile(R)	
14 000-14 250 kHz	AMATEUR S5.120				AMATEUR S5.120	Exclusive Amateur/Amateur satellite band
	AMATEUR- SATELLITE				AMATEUR- SATELLITE	
14 250-14 350 kHz	AMATEUR S5.120				AMATEUR S5.120	Exclusive Amateur band
	S5.152					

Frequency band	RR Region 1 allocation and relevant footnotes	European Common Allocation	Major Utilisation	Notes	Norwegian Allocation	Norwegian Utilisation
14 350-14 990 kHz	FIXED				FIXED	
	Mobile except aeronautical mobile(R)				Mobile except aeronautical mobile(R)	
14 990-15 005 kHz	STANDARD FREQUENCY AND TIME SIGNAL				STANDARD FREQUENCY AND TIME SIGNAL	
	(15 000 kHz)				(15 000 kHz)	
	S5.111				S5.111	
15 005-15 100 kHz	STANDARD FREQUENCY AND TIME SIGNAL				STANDARD FREQUENCY AND TIME SIGNAL	
	Spaace Research				Spaace Research	
15 010-15 100 kHz	AERONAUTICAL MOBILE(R)				AERONAUTICAL MOBILE(R)	See ITU RR Appendix 27
15 100-15 600 kHz	BROADCASTING S5.148				BROADCASTING S5.148	
15 600-15 800 kHz	BROADCASTING S5.134 S5.135 S5.146				BROADCASTING S5.134 S5.135 S5.146	
15 800-16 360 kHz	FIXED S5.153				FIXED S5.153	

Frequency band	RR Region 1 allocation and relevant footnotes	European Common Allocation	Major Utilisation	Notes	Norwegian Allocation	Norwegian Utilisation
16 360-17 410 kHz	MARITIME MOBILE S5.109 S5.110 S5.132 S5.145				MARITIME MOBILE S5.109 S5.110 S5.132 S5.145	See ITU RR Appendix 16 and 25
17 410-17 480 kHz	FIXED				FIXED	
17 480-17 550 kHz	BROADCASTING S5.134 S5.135 S5.146				BROADCASTING S5.134 S5.135 S5.146	
17 550-17 900 kHz	BROADCASTING S5.148				BROADCASTING S5.148	
17 900-17 970 kHz	AERONAUTICAL MOBILE(R)				AERONAUTICAL MOBILE(R)	See ITU RR Appendix 27
17 970-18 030 kHz	AERONAUTICAL MOBILE(OR)				AERONAUTICAL MOBILE(OR)	See ITU RR Appendix 26
18 030-18 052 kHz	FIXED				FIXED	
18 952-18 068 kHz	FIXED Space Research				FIXED Space Research	
18 068-18 168 kHz	AMATEUR S5.120 AMATEUR- SATELLITE				AMATEUR S5.120 AMATEUR- SATELLITE	Exclusive Amateur/ Amateur Satellite band

Frequency band	RR Region 1 allocation and relevant footnotes	European Common Allocation	Major Utilisation	Notes	Norwegian Allocation	Norwegian Utilisation
	S5.154					

Frequency band	RR Region 1 allocation and relevant footnotes	European Common Allocation	Major Utilisation	Notes	Norwegian Allocation	Norwegian Utilisation
18 168-18 780 kHz	FIXED				FIXED	
	Mobile except aeronautical mobile				Mobile except aeronautical mobile	
18 780-18 900 kHz	MARITIME MOBILE				MARITIME MOBILE	See ITU RR Appendix 16 and 25
18 900-19 020 kHz	BROADCASTING S5.134 S5.135				BROADCASTING S5.134 S5.135	
	S5.146				S5.146	
19 020-19 680 kHz	FIXED				FIXED	
19 680-19 800 kHz	MARITIME MOBILE S5.132				MARITIME MOBILE S5.132	See ITU RR Appendix 16 and 25
19 800-19 990 kHz	FIXED				FIXED	
19 990-19 995 kHz	STANDARD FREQUENCY AND TIME SIGNAL				STANDARD FREQUENCY AND TIME SIGNAL	
	Spaace Research				Spaace Research	
	S5.111				S5.111	
19 995-20 010 kHz	STANDARD FREQUENCY AND TIME SIGNAL				STANDARD FREQUENCY AND TIME SIGNAL	
	(20 000 kHz)				(20 000 kHz)	
	S5.111				S5.111	

Frequency band	RR Region 1 allocation and relevant footnotes	European Common Allocation	Major Utilisation	Notes	Norwegian Allocation	Norwegian Utilisation
20 010-21 000 kHz	FIXED				FIXED	
	Mobile				Mobile	
21 000-21 450 kHz	AMATEUR S5.120				AMATEUR S5.120	
	AMATEUR- SATELLITE				AMATEUR- SATELLITE	Exclusive Amateur/ Amateur Satellite band
21 450-21 850 kHz	BROADCASTING S5.148				BROADCASTING S5.148	
21 850-21 870 kHz	FIXED S5.155A S5.155				FIXED S5.155A S5.155	
21 870-21 924 kHz	FIXED S5.155B				FIXED S5.155B	
21 924-22 000 kHz	AERONAUTICAL MOBILE(R)				AERONAUTICAL MOBILE(R)	See ITU RR Appendix 27
22 000-22 855 kHz	MARITIME MOBILE S5.132				MARITIME MOBILE S5.132	
	S5.156					
22 855-23 000 kHz	FIXED				FIXED	
	S5.156					
23 000-23 200 kHz	FIXED				FIXED	
	Mobile except aeronautical mobile(R)				Mobile except aeronautical mobile(R)	
	S5.156					
23 200-23 350 kHz	FIXED S5.156A				FIXED	Cas ITH DD Assessed 20
	AERONAUTICAL MOBILE(OR)				AERONAUTICAL MOBILE(OR)	See ITU RR Appendix 26

Frequency band	RR Region 1 allocation and relevant footnotes	European Common Allocation	Major Utilisation	Notes	Norwegian Allocation	Norwegian Utilisation
23 350-24 000 kHz	FIXED				FIXED	
	Mobile except aeronautical mobile S5.157				Mobile except aeronautical mobile S5.157	
24 000-24 890 kHz	FIXED				FIXED	
	LAND MOBILE				LAND MOBILE	
24 890-24 990 kHz	AMATEUR S5.120				AMATEUR S5.120	Exclusive Amateur/ Amateur Satellite band
	AMATEUR- SATELLITE				AMATEUR- SATELLITE	
24 990-25 005 kHz	STANDARD FREQUENCY AND TIME SIGNAL				STANDARD FREQUENCY AND TIME SIGNAL	
	(25 000 kHz)				(25 000 kHz)	
25 005-25 010 kHz	STANDARD FREQUENCY AND TIME SIGNAL				STANDARD FREQUENCY AND TIME SIGNAL	
	Space Research				Space Research	
25 010-25 070 kHz	FIXED				FIXED	C. ITH DD A I 16
	Mobile except aeronautical mobile				Mobile except aeronautical mobile	See ITU RR Appendix 16
25 070-25 210 kHz	MARITIME MOBILE				MARITIME MOBILE	See ITU RR Appendix 16 and 25

Frequency band	RR Region 1 allocation and relevant footnotes	European Common Allocation	Major Utilisation	Notes	Norwegian Allocation	Norwegian Utilisation
25 210 –25 550 kHz	FIXED				FIXED	C ITHIND A 11 17
	Mobile except aeronautical mobile				Mobile except aeronautical mobile	See ITU RR Appendix 16 and 25
25 550-25 670 kHz	RADIO ASTRONOMY S5.149				RADIO ASTRONOMY S5.149	
25 670-26 100 kHz	BROADCASTING				BROADCASTING	
26 100-26 175 kHz	MARITIME MOBILE S5.132				MARITIME MOBILE S5.132	See ITU RR Appendix 16 and 25
26 175-27 500 kHz	FIXED				FIXED	DD 27 CD 1 1
	Mobile except aeronautical mobile			ERC REC T/R20-09	Mobile except aeronautical mobile	PR-27 CB band 26 965-27 405 KHz
	S5.150				S5.150	See ERC REC T/R20-09
27.500-28.000 MHz	METEOROLOGICAL AIDS				METEOROLOGICAL AIDS	Paging systems
	FIXED				FIXED	
	MOBILE				MOBILE	
28.000-29.700 MHz	AMATEUR				AMATEUR	Exclusive Amateur/ Amateur Satellite band
	AMATEUR SATELLITE				AMATEUR SATELLITE	

Frequency band	RR Region 1 allocation and relevant footnotes	European Common Allocation	Major Utilisation	Notes	Norwegian Allocation	Norwegian Utilisation
29.700-30.005 MHz	FIXED MOBILE	MOBILE	Defence systems Radio microphones, under study	EU1 EU2	MOBILE	No assignments until further notice.
30.005-30.010 MHz	SPACE OPERATION (satellite identification) FIXED MOBILE SPACE RESEARCH	MOBILE	Defence systems Radio microphones, under study	EU1 EU2	MOBILE	
30.01-37.50 MHz	FIXED MOBILE	MOBILE	PMR Defence systems Radio microphones 30.01-34.90 MHz Model control 34.995- 35.225 MHz (exclusive allocation)	EU1 EU2 EU27 ERC Recommendation CEPT/ERC/REC 70- 03.	MOBILE	Radio controll, model cars 34,8-34,9 MHz Radio controll, model planes 35.0-35.2 MHz Radio control, model boats 35.3-35.4 MHz
				The bands 30.3-30.5 MHz and 32.15-32.45 MHz are harmonised military bands.		Governmental users.

Frequency band	RR Region 1 allocation and relevant footnotes	European Common Allocation	Major Utilisation	Notes	Norwegian Allocation	Norwegian Utilisation
37.50-38.25 MHz	FIXED MOBILE Radio Astronomy S5.149	MOBILE except Aeronautical Mobile Radio Astronomy S5.149	PMR Defence systems	EU1 EU2 RA continuum measurements	MOBILE except Aeronautical Mobile Radio Astronomy S5.149	
38.250-39.986 MHz	FIXED MOBILE	MOBILE	PMR Defence systems	EU1 EU2 39.0-39.2 MHz is under study as a harmonised band for meteor-scatter applications	MOBILE	
39.986-40.020 MHz	FIXED MOBILE Space Research	MOBILE Space Research	PMR Defence systems	EU1 EU2	MOBILE Space Research	
40.02-40.66 MHz	FIXED MOBILE S5.150	MOBILE	PMR Defence systems	EU1 EU2	MOBILE	Wireless mike for hearing aids 40,050-40,550 MHz

Frequency band	RR Region 1 allocation and relevant footnotes	European Common Allocation	Major Utilisation	Notes	Norwegian Allocation	Norwegian Utilisation
40.660-40.700 MHz	FIXED MOBILE S5.150	MOBILE S5.150	Defence systems ISM General SRD	EU1 EU2 ERC Recommendation CEPT/ERC/REC 70- 03.	MOBILE S5.150	Radio control 40.665-40.695 MHz Radio control, model cars and boats 40.705-40.795 MHz
40.70-40.98 MHz		MOBILE	PMR Defence systems	EU1 EU2	MOBILE	
40.980-41.015 MHz	FIXED MOBILE Space Research S5.160 S5.161	MOBILE Space Research	PMR Defence systems	EU1 EU2	MOBILE Space Research	
41.015- 44.000 MHz	FIXED MOBILE S5.160 S5.161	MOBILE	PMR Defence systems	EU1 EU27 This is a harmonised military band	MOBILE	Governmental users

Frequency band	RR Region 1 allocation and relevant footnotes	European Common Allocation	Major Utilisation	Notes	Norwegian Allocation	Norwegian Utilisation
44.0-46.4 MHz	FIXED	MOBILE	PMR	EU1 EU27	MOBILE	Governmental users
	MOBILE	S5.162A	Defence systems	EOT EOZ/	S5.162A	Governmental users
	S5.162					
	S5.162A			This is a harmonised military band.		
				Geographical sharing with wind profiler radars in the range 46-68 MHz.		
46.4-47.0 MHz		MOBILE except Aeronautical Mobile	PMR	EU1 EU27	MOBILE except Aeronautical Mobile	Governmental users
		S5.162A	Defence systems		S5.162A	
				This is a harmonised military band.		
				Geographical sharing with wind profiler radars in the range 46-68 MHz.		
47-48 MHz	BROADCASTING S5.162A S5.163 <u>S5.164</u>	LAND MOBILE	PMR	EU1 EU2 EU3	LAND MOBILE	TV ch2, 47-54 MHz ,expected termination when DVB-T becomes operational or when
	S5.165 S5.169 S5.171	S5.162A S5.164	On-site paging in the band 47.00-47.25 MHz		S5.162A S5.164	equipment is to be changed at TV TX stations
			Defence systems	Geographical sharing with wind profiler radars in the range 46-68 MHz.		

Frequency band	RR Region 1 allocation and relevant footnotes	European Common Allocation	Major Utilisation	Notes	Norwegian Allocation	Norwegian Utilisation
48.0-48.5 MHz	BROADCASTING	LAND MOBILE	DI (D		LAND MOBILE	TV ch2, 47-54 MHz ,expected
	S5.162A S5.163 <u>S5.164</u>	S5.162A S5.164	PMR I	EU1 EU2 EU3	S5.162A S5.164	termination when DVB-T becomes operational or when
	S5.165 S5.169 S5.171		SAB	Geographical sharing with wind profiler		equipment is to be changed at TV TX stations.
			Defence systems	radars in the range 46-68 MHz.		1 v 12 sations.
48.5-50.0 MHz	BROADCASTING	LAND MOBILE	D) (D	ELIA ELIA ELIA	LAND MOBILE	TV ch2, 47-54 MHz ,expected
	S5.162A S5.163 <u>S5.164</u>	S5.162A S5.164	PMR	EU1 EU2 EU3	S5.162A S5.164	termination when DVB-T becomes operational or when
	S5.165 S5.169 S5.171	50.00 MHz			equipment is to be changed at TV TX stations.	
			Defence systems	Geographical sharing with wind profiler radars in the range 46-68 MHz –		
50-51 MHz	BROADCASTING	LAND MOBILE			LAND MOBILE	TV ch2, 47-54 MHz ,expected
	S5.162A S5.163 <u>S5.164</u>	Amateur	PMR	EU1 EU2 EU3	AMATEUR	termination when DVB-T becomes operational or when
	S5.165 S5.169 S5.171	S5.162A S5.164	Defence systems		S5.162A S5.164	equipment is to be changed at TV TX stations.
				Geographical sharing with wind profiler		Protect Broadcasting services.
				radars in the range 46.0-68.0 MHz.		
51-52 MHz	BROADCASTING	LAND MOBILE	DIAD	ELII ELIA ELIA	LAND MOBILE	TV ch2, 47-54 MHz ,expected
	S5.162A S5.163 <u>S5.164</u> Amateur PMR EU1 EU2 EU3	EUI EUZ EU3	AMATEUR	termination when DVB-T becomes operational or when		
	S5.165 S5.169 S5.171	S5.162A S5.164	Defence systems		S5.162A S5.164	equipment is to be changed at TV TX stations.
				Geographical sharing with wind profiler		Protect Broadcasting services

Frequency band	RR Region 1 allocation and relevant footnotes	European Common Allocation	Major Utilisation	Notes	Norwegian Allocation	Norwegian Utilisation
				radars in the range 46-68 MHz.		
52-54 MHz	BROADCASTING S5.162A S5.163 <u>S5.164</u> S5.165 S5.169 S5.171	LAND MOBILE S5.162A S5.164	PMR SAB Defence systems	Geographical sharing with wind profiler radars in the range 46-68 MHz.	LAND MOBILE Amateur S5.162A S5.164	TV ch2, 47-54 MHz ,expected termination when DVB-T becomes operational or when equipment is to be changed at TV TX stations Protect Broadcasting services
54-61 MHz	BROADCASTING \$5.162A \$5.163 \$5.164 \$5.165 \$5.169 \$5.171	LAND MOBILE S5.162A S5.164	PMR SAB Defence systems	EU1 EU2 EU3 ERC Recommendation T/R 25-08, Annex 2b, ML paired with 61-68 MHz. Geographical sharing with wind profiler radars in the range 46- 68 MHz.	LAND MOBILE Amateur S5.162A S5.164	TV ch3, 54-61 MHz ,expected termination when DVB-T becomes operational or when equipment is to be changed at TV TX stations. Protect Broadcasting services

Frequency band	RR Region 1 allocation and relevant footnotes	European Common Allocation	Major Utilisation	Notes	Norwegian Allocation	Norwegian Utilisation
61-68 MHz	BROADCASTING S5.163 S5.162 <u>S5.164</u> S5.165 S5.169 S5.171	LAND MOBILE S5.162A S5.164	PMR Defence systems	EU1 EU2 EU3 ERC Recommendation T/R 25-08, Annex 2b, FB paired with 54-61 MHz. Geographical sharing with wind profiler radars in the range 45- 68 MHz	LAND MOBILE S5.162A S5.164	TV ch3, 61-68 MHz ,expected termination when DVB-T becomes operational or when equipment is to be changed at TV TX stations.
68.00-70.45 MHz	FIXED MOBILE except Aeronautical Mobile S5.149 S5.174 S5.175 S5.177 S5.179	MOBILE	PMR Defence systems	EU1 EU2 EU4 ERC Recommendation T/R 25-08, Annex 2b, ML paired with 77.80- 80.25 MHz.	MOBILE	PMR, Norwegian channel plan applied.

Frequency band	RR Region 1 allocation and relevant footnotes	European Common Allocation	Major Utilisation	Notes	Norwegian Allocation	Norwegian Utilisation
70.45-74.80 MHz		MOBILE except Aeronautical Mobile Radio Astronomy S5.149	PMR Defence systems	EU1 EU2 EU4 EU27 ERC Recommendation T/R 25-08, Annex 2b, ML paired with 80.25- 84.60 MHz. 73.3-74.1 MHz is a harmonised military band. RA continuum measurements. RA: 73.0-74.6 MHz for solar wind monitoring.	MOBILE except Aeronautical Mobile Radio Astronomy S5.149	PMR, Norwegian channel plan applied.
74.8-75.2 MHz	AERONAUTICAL RADIONAVIGATION S5.180 <u>S5.181</u>	AERONAUTICAL RADIONAVIGATION S5.181	Marker beacons	EU1	AERONAUTICAL RADIONAVIGATION S5.181	Maker beacon (75.000MHz +/-200 kHz)
75.2-77.7 MHz	FIXED MOBILE except aeronautical mobile S5.175 S5.179 S5.184 S5.187	MOBILE	PMR Defence systems	EU1 EU2 ERC Recommendation T/R 25-08, Annex 2b, ML paired with 85.00- 87.50 MHz.	MOBILE	PMR, Norwegian channel plan applied.

Frequency band	RR Region 1 allocation and relevant footnotes	European Common Allocation	Major Utilisation	Notes	Norwegian Allocation	Norwegian Utilisation
77.7-77.8 MHz		MOBILE	PMR Defence systems	EU1 EU2 ERC Recommendation T/R 25-08, Annex 2b, Single frequency.	MOBILE	PMR, Norwegian channel plan applied.
77.8-84.6 MHz		MOBILE	PMR Defence systems	EU1 EU2 EU27 ERC Recommendation T/R 25-08, Annex 2b, FB paired with 68.00- 74.80 MHz. Harmonised military band 79.0-79.7 MHz.	MOBILE	PMR, Norwegian channel plan applied. Governmental users
84.6-85.0 MHz		MOBILE	PMR Defence systems	EU1 EU2 ERC Recommendation T/R 25-08, Annex 2b, Single frequency.	MOBILE	PMR
85.0-87.5 MHz		MOBILE	PMR Defence systems	EU1 EU2 ERC Recommendation T/R 25-08, Annex 2b, FB paired with 75.20- 77.70 MHz	MOBILE	PMR

Frequency band	RR Region 1 allocation and relevant footnotes	European Common Allocation	Major Utilisation	Notes	Norwegian Allocation	Norwegian Utilisation
87.5-100.0 MHz	BROADCASTING S5.190	BROADCASTING	FM sound broadcasting Geneva Agreement 1984		BROADCASTING	Geneva 84 Plan.
100-108 MHz	BROADCASTING S5.192 S5.194	BROADCASTING	FM sound broadcasting Geneva Agreement 1984		BROADCASTING	Geneva 84 Plan.
108.000-117.975 MHz	AERONAUTICAL RADIONAVIGATION S5.197	AERONAUTICAL RADIONAVIGATION S5.197	ILS/Localiser 108- 112 MHz VOR 108.000- 117.975 MHz		AERONAUTICAL RADIONAVIGATION S5.197	AERONAUTICAL RADIONAVIGATION
117.975-121.450 MHz	AERONAUTICAL MOBILE (R) S5.111 S5.198 S5.199 S5.200 S5.201	AERONAUTICAL MOBILE (R) S5.200	Aeronautical mobile communications for safety and regularity of flight		AERONAUTICAL MOBILE (R) S5.200	AERONAUTICAL MOBILE (R)
121.45-121.55 MHz	AERONAUTICAL MOBILE (R) S5.111 S5.198 S5.199 S5.200 S5.201	MOBILE-SATELLITE (Earth-space) AERONAUTICAL MOBILE S5.199, S5.200	EPIRB	Band only available for distress and safety purposes	MOBILE-SATELLITE (Earth-space) AERONAUTICAL MOBILE S5.199, S5.200	AERONAUTICAL MOBILE

Frequency band	RR Region 1 allocation and relevant footnotes	European Common Allocation	Major Utilisation	Notes	Norwegian Allocation	Norwegian Utilisation
121.55-136.00 MHz	AERONAUTICAL MOBILE (R) S5.111 S5.198 S5.199 S5.200 S5.201	AERONAUTICAL MOBILE (R) S5.200, S5.201, S5.202	Aeronautical mobile communications for safety, regularity of flight, airline business and airport mobile communications	EU5	AERONAUTICAL MOBILE (R) S5.200	AERONAUTICAL MOBILE (R)
136-137 MHz	AERONAUTICAL MOBILE (R) S5.202 S5.203 S5.203A S5.203B	AERONAUTICAL MOBILE (R) S5.200, S5.201, S5.202			AERONAUTICAL MOBILE (R) S5.200	AERONAUTICAL MOBILE (R)
137.000-137.025 MHz	SPACE OPERATION (space-Earth) METEOROLOGICAL- SATELLITE (space- Earth) SPACE RESEARCH (space-Earth) MOBILE-SATELLITE (space-Earth) S5.208A S5.209 Fixed Mobile except Aeronautical mobile ® S5.204 S5.205 S5.206 S5.207 S5.208	METEOROLOGICAL-SAT (SPACE-Earth) MOBILE MOBILE-SATELLITE (space-Earth) S5.208A S5.209 Space Operation (space-Earth) Space Research (space-Earth) S5.206 S5.208	Meteorological Satellite Low earth orbiting satellites	EU6 Mobile restricted to Aeronautical Mobile (OR), including air sport	METEOROLOGICAL-SAT (SPACE-Earth) MOBILE MOBILE-SATELLITE (space-Earth) S5.208A S5.209 Space Operation (space-Earth) Space Research (space-Earth) S5.208	METEOSAT MOBILE-SATELLITE

Frequency band	RR Region 1 allocation and relevant footnotes	European Common Allocation	Major Utilisation	Notes	Norwegian Allocation	Norwegian Utilisation
137.025-137.175 MHz	SPACE OPERATION (space-Earth) METEOROLOGICAL-SATELLITE (space-Earth) SPACE RESEARCH (space-Earth) Mobile-Satellite (space-Earth) S5.208A S5.209 Fixed Mobile except aeronautical mobile (R) S5.204 S5.205 S5.206 S5.207 S5.208	METEOROLOGICAL SATELLITE (space- Earth) MOBILE Mobile-Satellite (space- Earth) S5.208A S5.209 Space Operation (space- Earth) Space Research (space- Earth) S5.206 S5.208	Meteorological Satellite Low earth orbiting satellites	EU6 Mobile restricted to Aeronautical Mobile (OR), including air sport	METEOROLOGICAL SATELLITE (space- Earth) MOBILE Mobile-Satellite (space- Earth) S5.208A S5.209 Space Operation (space- Earth) Space Research (space- Earth) S5.208	METEOSAT MOBILE-SATELLITE
137.175-137.825 MHz	SPACE OPERATION (space-Earth) METEOROLOGICAL-SATELLITE (space-Earth) SPACE RESEARCH (space-Earth) MOBILE-SATELLITE (space-Earth) S5.208A S5.209 Fixed Mobile except aeronautical mobile (R) S5.204 S5.205 S5.206 S5.207 S5.208	METEOROLOGICAL-SAT (space-Earth) MOBILE MOBILE-SATELLITE (space-Earth) S5.208A S5.209 Space Operation (space-Earth) Space Research (space-Earth) S5.206 S5.208	Meteorological Satellite Low earth orbiting satellites	EU6 Mobile restricted to Aeronautical Mobile (OR), including air sport	METEOROLOGICAL-SAT (space-Earth) MOBILE MOBILE-SATELLITE (space-Earth) S5.208A S5.209 Space Operation (space-Earth) Space Research (space-Earth) S5.208	METEOROLOGICAL SATELLITE MOBILE-SATELLITE

Frequency band	RR Region 1 allocation and relevant footnotes	European Common Allocation	Major Utilisation	Notes	Norwegian Allocation	Norwegian Utilisation
137.825-138.000 MHz	SPACE OPERATION (space-Earth) METEOROLOGICAL-SATELLITE (space-Earth) SPACE RESEARCH (space-Earth) Mobile-Satellite (space-Earth) S5.208A S5.209 Fixed Mobile except aeronautical mobile (R) S5.204 S5.205 S5.206 S5.207 S5.208	METEOROLOGICAL-SAT (space-Earth) MOBILE Mobile-Satellite (space-Earth) S5.208A S5.209 Space Operation (space-Earth) Space Research (space-Earth) S5.206 S5.208	Meteorological Satellite Low earth orbiting satellites	Mobile restricted to Aeronautical Mobile (OR), including air sport	METEOROLOGICAL-SAT (space-Earth) MOBILE Mobile-Satellite (space-Earth) S5.208A S5.209 Space Operation (space-Earth) Space Research (space-Earth) S5.208	METEOROLOGICAL SATELLITE MOBILE-SATELLITE
138.0-143.6 MHz	AERONAUTICAL MOBILE (OR) S5.210 S5.211 S5.212 S5.214	AERONAUTICAL MOBILE (OR) LAND MOBILE Space Research (space- Earth) S5.210 S5.211	Air operation control Various mobile applications SRD	EU2 EU5 EU27 This is a harmonised military band. SRDs in the band 138.20-138.45 MHz. ERC Recommendation CEPT/ERC/REC 70-03	AERONAUTICAL MOBILE (OR) LAND MOBILE Space Research (space- Earth) S5.210 S5.211	SRD 135,2-138,45 MHz and 142-142,5 MHz PMR, Norwegian channel plan applied.

Frequency band	RR Region 1 allocation and relevant footnotes	European Common Allocation	Major Utilisation	Notes	Norwegian Allocation	Norwegian Utilisation
143.60-143.65 MHz	AERONAUTICAL MOBILE (OR)	AERONAUTICAL MOBILE (OR)	Air operation control	EU2 EU5 EU27	AERONAUTICAL MOBILE (OR)	PMR, Norwegian channel plan
	SPACE RESEARCH LAND MOBILE Various mobile	Various mobile		LAND MOBILE	applied.	
	(space-Earth) <u>S5.211</u> S5.212 S5.214	SPACE RESEARCH (space-Earth)	applications	This is a harmonised	SPACE RESEARCH (space-Earth)	
		S5.211			S5.211	
143.65-144.00 MHz	AERONAUTICAL MOBILE (OR)	AERONAUTICAL MOBILE (OR)	Air operation control	EU2 EU5 EU27	AERONAUTICAL MOBILE (OR)	PMR, Norwegian channel plan
	<u>S5.210</u> <u>S5.211</u> S5.212	0 S5.211 S5.212 LAND MOBILE Various mobile		LAND MOBILE	applied.	
	S5.214	S5.210 S5.211	applications		S5.210 S5.211	
				This is a harmonised military band.		
144-146 MHz	AMATEUR S5.120	AMATEUR S5.120			AMATEUR S5.120	Exclusive Amateur / Amateur satellite band
	AMATEUR- SATELLITE	AMATEUR- SATELLITE			AMATEUR- SATELLITE	saterine band
	S5.216					
146.0-146.8 MHz	FIXED	MOBILE	D) (D)	FUZ	MOBILE	Radio Link, to be terminated.
	MOBILE except aeronautical mobile (R)		PMR	EU7		PMR, Norwegian channel plan applied.
				ERC Recommendation		
				T/R 25-08, Annex 2b, Single frequency.		

Frequency band	RR Region 1 allocation and relevant footnotes	European Common Allocation	Major Utilisation	Notes	Norwegian Allocation	Norwegian Utilisation
146.8-148.0 MHz		MOBILE	PMR	EU7	MOBILE	Radio Link, to be terminated.
				ERC Recommendation		PMR, Norwegian channel plan applied.
				T/R 25-08, Annex 2b, ML paired with 151.4-		Governmental users
				152.6 MHz.		D 140.050
148.0-148.4 MHz	FIXED	MOBILE-SATELLITE (Earth-space) S5.209	Low earth orbiting	EU6 EU7	MOBILE-SATELLITE (Earth-space) S5.209	Pager systems, 148.050, 148.100 MHz
	MOBILE except	MOBILE	satellites		MOBILE	Governmental users.
	aeronautical mobile (R)		DMD			Mobile-Satellite tests in
	MOBILE-SATELLITE (Earth-space) S5.209	S5.221	PMR	ERC Recommendation	S5.221	progress.
				T/R 25-08, Annex 2b, ML paired with 152.6-		
				153.0 MHz.		
148.4-149.9 MHz	S5.218 S5.219 <u>S5.221</u>	MOBILE-SATELLITE (Earth-space) S5.209	Low earth orbiting satellites	EU6 EU7	MOBILE-SATELLITE (Earth-space) S5.209	Governmental users. Mobile-Satellite tests in
		MOBILE			MOBILE	progress.
		S5.221	PMR	ERC Recommendation	S5.221	
				T/R 25-08, Annex 2b, ML paired with 153.0-		
				154.5 MHz.		

Frequency band	RR Region 1 allocation and relevant footnotes	European Common Allocation	Major Utilisation	Notes	Norwegian Allocation	Norwegian Utilisation
149.90-150.05 MHz	RADIONAVIGATION -SATELLITE S5.224B MOBILE-SATELLITE (Earth-space) S5.209 S5.224A S5.220 S5.222 S5.223	RADIONAVIGATION -SATELLITE S5.224B MOBILE-SATELLITE (Earth-space) S5.209 S5.224A MOBILE S5.220 S5.222 S5.223	Low earth orbiting satellites PMR	ERC Recommendation	RADIONAVIGATION -SATELLITE S5.224B MOBILE-SATELLITE (Earth-space) S5.209 S5.224A MOBILE S5.220 S5.222 S5.223	PMR, see Annex I for channeling arrangements
150.05-151.40 MHz	FIXED MOBILE except aeronautical mobile RADIO ASTRONOMY S5.149	MOBILE except Aeronautical Mobile RADIO ASTRONOMY S5.149	PMR Radio astronomy applications	EU7 ERC Recommendation T/R 25-08, Annex 2b, ML paired with 154.65-156.00 MHz. RA continuum measurement and pulsar/solar observation.	MOBILE except Aeronautical Mobile RADIO ASTRONOMY S5.149	Radio Link, to be terminated. PMR, see Annex I for channeling arrangements

Frequency band	RR Region 1 allocation and relevant footnotes	European Common Allocation	Major Utilisation	Notes	Norwegian Allocation	Norwegian Utilisation
151.4-153.0 MHz		MOBILE except Aeronautical Mobile	PMR	EU7	MOBILE except Aeronautical Mobile	Radio Link, to be terminated.
		RADIO ASTRONOMY S5.149	Radio astronomy applications	ERC Recommendation T/R 25-08, Annex 2b, FB paired with 146.8- 148.4 MHz.	RADIO ASTRONOMY S5.149	Governmental users
				RA continuum measurement and pulsar/solar observation.		
153-154 MHz	FIXED	MOBILE except Aeronautical Mobile	PMR	EU7	MOBILE except	PMR, Norwegian channel plan applied. See Annex I.
	MOBILE except aeronautical mobile (R)		I IVIIC	LOT	Aeronautical Mobile	Governmental users
	Meteorological Aids			ERC Recommendation T/R 25-08, Annex 2b, FB paired with 148.4- 149.9 MHz.		
154.0-154.5 MHz	FIXED					PMR, Norwegian channel plan
	MOBILE except aeronautical mobile (R)					applied. See Annex I.
	S5.226 S5.227					
154.50-154.65 MHz		MOBILE except Aeronautical Mobile	PMR	EU7	MOBILE except Aeronautical Mobile	PMR, Norwegian channel plan applied. See Annex I.
				ERC Recommendation T/R 25-08, Annex 2b,		

Frequency band	RR Region 1 allocation and relevant footnotes	European Common Allocation	Major Utilisation	Notes	Norwegian Allocation	Norwegian Utilisation
				Single frequency.		

Frequency band	RR Region 1 allocation and relevant footnotes	European Common Allocation	Major Utilisation	Notes	Norwegian Allocation	Norwegian Utilisation
154.65-156.00 MHz		MOBILE except Aeronautical Mobile	PMR	EU7	MOBILE except Aeronautical Mobile	PMR up to 155 MHz, Norwegian channel plan applied. See Annex I.
				ERC Recommendation T/R 25-08, Annex 2b, FB paired with 150.05- 151.40 MHz		
156.0000-156.5125 MHz	FIXED MOBILE except aeronautical mobile (R) S5.226 S5.227	MOBILE except Aeronautical Mobile S5.226	RR Appendix 18	Ship station, paired with 160.600- 160.950 MHz / single frequency 156.375- 156.5125 MHz.	MOBILE except Aeronautical Mobile S5.226	Maritime mobile channels. See ITU RR Appendix 18.
156.5125-156.5375 MHz	FIXED MOBILE except aeronautical mobile (R) S5.226 S5.227	MARITIME MOBILE S5.227	156.525 MHz digital selective call for distress, safety and calling		MARITIME MOBILE S5.227	Maritime mobile channels. See ITU RR Appendix 18.
156.5375-156.7625 MHz		MOBILE except Aeronautical Mobile S5.226	RR Appendix 18	EU7 EU8 Single frequency	MOBILE except Aeronautical Mobile S5.226	Maritime mobile channels. See ITU RR Appendix 18.

Frequency band	RR Region 1 allocation and relevant footnotes	European Common Allocation	Major Utilisation	Notes	Norwegian Allocation	Norwegian Utilisation
156.7625- 156.8375 MHz	MARITIME MOBILE (distress and calling) S5.211 S5.226	MARITIME MOBILE	International distress, safety and call frequency + guard bands		MARITIME MOBILE	Maritime mobile channels. See ITU RR Appendix 18.
156.8375- 157.4500 MHz	FIXED MOBILE except Aeronautical mobile S5.226 S5.229	MOBILE except Aeronautical Mobile S5.226	RR Appendix 18 156.8375- 156.8750 MHz single frequency maritime	EU7 EU8 Ship station, paired with 161.500-162.050 MHz / single frequency 156.850 MHz	MOBILE except Aeronautical Mobile S5.226	Maritime mobile channels. See ITU RR Appendix 18.
157.45-160.60 MHz		MOBILE except Aeronautical Mobile	PMR	EU7 ERC Recommendation T/R 25-08, Annex 2b, ML paired with 162.050-165.200 MHz.	MOBILE except Aeronautical Mobile	Maritime mobile channels. See ITU RR Appendix 18.

Frequency band	RR Region 1 allocation and relevant footnotes	European Common Allocation	Major Utilisation	Notes	Norwegian Allocation	Norwegian Utilisation
160.600-160.975 MHz		MOBILE except Aeronautical Mobile S5.226	RR Appendix 18	EU7 EU8 Coast station, paired with 156.000- 156.375 MHz.	MOBILE except Aeronautical Mobile S5.226	Maritime mobile channels. See ITU RR Appendix 18.
160.975-161.475 MHz		MOBILE except Aeronautical Mobile	PMR	EU7 ERC Recommendation T/R 25-08, Annex 2b, Single frequency.	MOBILE except Aeronautical Mobile	Maritime mobile channels. See ITU RR Appendix 18.
161.475-162.050 MHz		MOBILE except Aeronautical Mobile S5.226	RR Appendix 18	EU7 EU8 Coast station, paired with 156.875-157.450 MHz.	MOBILE except Aeronautical Mobile S5.226	Maritime mobile channels. See ITU RR Appendix 18.
162.05-165.20 MHz	FIXED MOBILE except Aeronautical mobile S5.226 S5.229	MOBILE except Aeronautical Mobile	PMR	EU7 ERC Recommendation T/R 25-08, Annex 2b, FB paired with 157.450-160.600 MHz.	MOBILE except Aeronautical Mobile	PMR, Norwegian channel arrangements. See Annex I.

Frequency band	RR Region 1 allocation and relevant footnotes	European Common Allocation	Major Utilisation	Notes	Norwegian Allocation	Norwegian Utilisation
165.200-165.225 MHz		MOBILE except Aeronautical Mobile	PMR		MOBILE except Aeronautical Mobile	PMR, Norwegian channel arrangements. See Annex I.
165.225-169.400 MHz		MOBILE except Aeronautical Mobile	PMR	EU7 ERC Recommendation T/R 25-08, Annex 2b, ML paired with 169.825-174.000	MOBILE except Aeronautical Mobile	PMR, Norwegian channel arrangements. See Annex I.
169.400-169.825 MHz	FIXED MOBILE except Aeronautical mobile S5.226 S5.229	MOBILE except Aeronautical Mobile	169.4125-169.8125 MHz ERMES PMR	EU7 ERC Decision CEPT/ERC/DEC/(94)0 2 ERMES in the band 169.4125-169.8125 MHz. ERC Recommendation T/R 25-08, Annex 2b, Single frequency.	MOBILE except Aeronautical Mobile	PMR, Norwegian channel arrangements. See Annex I. Paging system

Frequency band	RR Region 1 allocation and relevant footnotes	European Common Allocation	Major Utilisation	Notes	Norwegian Allocation	Norwegian Utilisation
169.825-174.000 MHz		MOBILE except Aeronautical Mobile	PMR	EU7 ERC Recommendation T/R 25-08, Annex 2b,	MOBILE except Aeronautical Mobile	PMR, Norwegian channel arrangements. See Annex I.
				FB paired with 165.225-169.400 MHz.		
174-216 MHz	BROADCASTING <u>\$5.235</u> \$5.237 \$5.243 \$5.244	BROADCASTING LAND MOBILE S5.235	TV Stockholm Agreement 1961 T-DAB Wiesbaden Special Arrangement 1995. Radio microphones on a tuning range basis, under study.	EU9 ERC Recommendation T/R 25-05. ERC Recommendation T/R 52-02.	BROADCASTING LAND MOBILE S5.235	TV ch5-ch10, 7 MHz PAL PMR, Norwegian channel arrangements. See Annex I.
216-223 MHz	BROADCASTING <u>\$5.235</u> \$5.237 \$5.243 \$5.244	BROADCASTING S5.235	T-DAB Wiesbaden Special Arrangement 1995	ERC Recommendation T/R 52-02. Existing TV transmitters according to Stockholm Agreement 1961.	BROADCASTING S5.235	TV ch11, 7 MHz PAL T-DAB

Frequency band	RR Region 1 allocation and relevant footnotes	European Common Allocation	Major Utilisation	Notes	Norwegian Allocation	Norwegian Utilisation
223-225 MHz	BROADCASTING FIXED MOBILE S5.236 S5.243 S5.244 S5.247 S5.248	BROADCASTING	T-DAB Wiesbaden Special Arrangement 1995	ERC Recommendation T/R 52-02.	BROADCASTING	TV ch12, 7 MHz PAL T-DAB Bloch 12B,Vest-Norge 224.880 –226.416 MHz EISCAT Radar, Tromsø 224 MHz, 2 x 1.5 MW
225-230 MHz		BROADCASTING Land Mobile	T-DAB Wiesbaden Special Arrangement 1995	EU10	BROADCASTING Land Mobile	TV ch12, 7 MHz PAL
				ERC Recommendation T/R 52-02. T-DAB sharing with defence on national		T-DAB Bloch 12C, Midt- Norge 226.592-228.128 MHz
				basis. This band is within the military tuning range 225-400 MHz.		T-DAB Bloch 12D, landsdekning 228.304-229.840 MHz

Frequency band	RR Region 1 allocation and relevant footnotes	European Common Allocation	Major Utilisation	Notes	Norwegian Allocation	Norwegian Utilisation
230-235 MHz	FIXED MOBILE	MOBILE	T-DAB	EU10 EU27	MOBILE	Governmental users. T-DAB
	S5.247 S5.248 S5.251		Defence systems	ERC Recommendation T/R 52-02.		
				This is a harmonised military band.		
				T-DAB allotments in this band according to Wiesbaden Special Arrangement 1995.		
				T-DAB sharing with defence on a national basis.		
235-240 MHz	FIXED MOBILE	MOBILE S5.254	T-DAB	EU10 EU27	MOBILE S5.254	T-DAB Bloch 13E, Northern Norway and south-east Norway
	S5.111 S5.199 S5.248 S5.254 S5.256		Defence systems	ERC Recommendation T/R 52-02.	BROADCASTING	236.720-238.256 MHz
				This is a harmonised military band.		T-DAB Bloch 13F, southern
				T-DAB allotments in this band according to Wiesbaden Special Arrangement 1995.		Norway. 238.432-239.968 MHz
				T-DAB sharing with defence on a national basis.		

Frequency band	RR Region 1 allocation and relevant footnotes	European Common Allocation	Major Utilisation	Notes	Norwegian Allocation	Norwegian Utilisation
240.00-242.95 MHz		MOBILE S5.254	Defence systems	EU10 EU27	MOBILE S5.254	Governmental users
				Air Traffic Control.		
				This is a harmonised military band.		
242.95-243.05 MHz	MOBILE SATELLITE (Earth-space) AERONAUTICAL MOBILE MOBILE SATELLITE (Earth-space) Band only available for distress and safety purposes.	Band only available for	MOBILE SATELLITE (Earth-space)	Governmental users		
		AERONAUTICAL MOBILE				
		S5.254			S5.254	
243.05-267.00 MHz		MOBILE S5.254	Defence systems	EU10 EU27	MOBILE S5.254	Governmental users
				Air Traffic Control.		
				This is a harmonised military band.		
267-272 MHz	FIXED MOBILE	MOBILE S5.254	Defence systems	EU10 EU27	MOBILE S5.254	Governmental users
	Space Operation (space- Earth)			Air Traffic Control.		
	S5.254 S5.257			This is a harmonised military band.		

Frequency band	RR Region 1 allocation and relevant footnotes	European Common Allocation	Major Utilisation	Notes	Norwegian Allocation	Norwegian Utilisation
272-273 MHz	SPACE OPERATION (space-Earth) FIXED	MOBILE S5.254	Defence systems	EU10 EU27	MOBILE S5.254	Governmental users
	MOBILE S5.254			Air Traffic Control (ATC)		
				This is a harmonised military band,		
273-312 MHz	FIXED MOBILE S5.254	MOBILE S5.254	Defence systems	EU10 EU27	MOBILE S5.254	Governmental users
				Air Traffic Control.		
				This is a harmonised military band.		
312-315 MHz	FIXED MOBILE	MOBILE S5.254	Defence systems	EU10 EU27	MOBILE S5.254	Governmental users
	Mobile-Satellite (Earthspace) S5.254 S5.255			Air Traffic Control.		
				This is a harmonised military band.		

Frequency band	RR Region 1 allocation and relevant footnotes	European Common Allocation	Major Utilisation	Notes	Norwegian Allocation	Norwegian Utilisation
315-322 MHz	FIXED MOBILE S5.254	MOBILE S5.254	Defence systems	EU10 EU27 Air Traffic Control.	MOBILE S5.254	Governmental users
322.0-328.6 MHz	FIXED	MOBILE		This is a harmonised military band. EU10 EU27	MOBILE	
322.0-328.0 WIIIZ	MOBILE RADIO ASTRONOMY S5.149	RADIO ASTRONOMY S5.149	Defence systems Radio astronomy applications	This is a harmonised military band. RA continuum measurements, also VLBI.	RADIO ASTRONOMY	Governmental users
328.6-335.4 MHz	AERONAUTICAL RADIONAVIGATION S5.258 <u>S5.259</u>	AERONAUTICAL RADIONAVIGATION S5.259	ILS/Glide path	EU2	AERONAUTICAL RADIONAVIGATION S5.259	
335.4-380.0 MHz	FIXED MOBILE S5.254	MOBILE S5.254	Defence systems	EU7 EU10 EU27	MOBILE S5.254	Governmental users
				Air Traffic Control. This is a harmonised military band.		

Frequency band	RR Region 1 allocation and relevant footnotes	European Common Allocation	Major Utilisation	Notes	Norwegian Allocation	Norwegian Utilisation
385-387 MHz		MOBILE S5.254	Digital land mobile-TETRA Defence systems	EU2 EU10 EU27 ERC Decision ERC/DEC(96)04. ERC Recommendation T/R 22-05, ML paired with 395.00-399.90 MHz. This is a harmonised military band.	MOBILE S5.254	TETRA, emergency services planned.
387-390 MHz	FIXED MOBILE Mobile-Satellite (space- Earth) S5.208A S5.254 S5.255					TETRA, emergency services planned.

Frequency band	RR Region 1 allocation and relevant footnotes	European Common Allocation	Major Utilisation	Notes	Norwegian Allocation	Norwegian Utilisation
390-395 MHz	FIXED	MOBILE	Emergency services	EU2 EU10 EU27	MOBILE	TETRA, emergency services planned.
	MOBILE	S5.254		LOZ LOTO LOZ7	S5.254	pramitu.
	S5.254		Defence systems	ERC Decision ERC/DEC/(96)01.		
				ERC Recommendation		
				T/R 02-02.		
				ERC Recommendation		
				T/R 22-05, FB paired with 380-385 MHz.		
				This is a harmonised military band.		
				Emergency services sharing with defence applications.		
395.0-399.9 MHz		MOBILE S5.254	Digital land mobile- TETRA	EU2 EU10 EU27	MOBILE S5.254	
			Defence systems	ERC Decision ERC/DEC(96)04.		
				ERC Recommendation		
				T/R 22-05 FB paired with 385-389.9 MHz.		
				This is a harmonised military band.		

Frequency band	RR Region 1 allocation and relevant footnotes	European Common Allocation	Major Utilisation	Notes	Norwegian Allocation	Norwegian Utilisation
399.90-400.05 MHz	RADIONAVIGATION -SATELLITE S5.222 S5.224B	RADIONAVIGATION -SATELLITE S5.222 S5.224B			RADIONAVIGATION -SATELLITE S5.222 S5.224B	
	MOBILE-SATELLITE (Earth-space) S5.209 S5.224A	MOBILE SATELLITE (Earth-space) S5.209 S5.224A			MOBILE SATELLITE (Earth-space) S5.209 S5.224A	
	S5.220 S5.260	S5.220 S5.260			S5.220 S5.260	
400.0500-400.150 MHz	STANDARD FREQUENCY AND TIME SIGNAL SATELLITE (400.1 MHz)	MOBILE			MOBILE S5.261	
	S5.261 S5.262					
400.15-401.00 MHz	METEOROLOGICAL AIDS	METEOROLOGICAL AIDS	Low earth orbiting satellites		METEOROLOGICAL AIDS	METEOROLOGICAL AIDS METEOROLOGICAL-
	METEOROLOGICAL- SATELLITE (space- Earth)	METEOROLOGICAL- SATELLITE (space- Earth)	Meteorological radio sondes		METEOROLOGICAL- SATELLITE (space- Earth)	SATELLITE (space-Earth)
	SPACE RESEARCH (space-Earth) S5.263	SPACE RESEARCH (space-Earth) S5.263			SPACE RESEARCH (space-Earth) S5.263	Governmental users
	MOBILE-SATELLITE (space-Earth) S5.208A S5.209	MOBILE-SATELLITE (space-Earth) S5.208A S5.209			MOBILE-SATELLITE (space-Earth) S5.208A S5.209	
	Space Operation (space- Earth)	S5.264			S5.264	
	S5.262 S5.264					

Frequency band	RR Region 1 allocation and relevant footnotes	European Common Allocation	Major Utilisation	Notes	Norwegian Allocation	Norwegian Utilisation
401-402 MHz	EARTH EXPLORATION-SAT (Earth-space) METEOROLOGICAL AIDS METEOROLOGICAL SATELLITE (Earth-space) SPACE OPERATION (space-Earth) Fixed Mobile except aeronautical mobile	EARTH EXPLORATION-SAT (Earth-space) METEOROLOGICAL AIDS METEOROLOGICAL SATELLITE (Earth-space)	Meteorological radio sondes Meteorological satellites, data collection platform	EU2 EU11 ERC Recommendation CEPT/ERC/REC 70- 03, ultra low power medical implants (3MHz within the band 401-406 MHz under study)	EARTH EXPLORATION-SAT (Earth-space) METEOROLOGICAL AIDS METEOROLOGICAL SATELLITE (Earth-space)	METEOROLOGICAL AIDS METEOROLOGICAL SATELLITE (Earth-space)
402-403 MHz	EARTH EXPLORATION-SAT (Earth-space) METEOROLOGICAL AIDS METEOROLOGICAL SATELLITE (Earth-space) Fixed Mobile except aeronautical mobile	METEOROLOGICAL AIDS EARTH EXPLORATION-SAT (Earth-space) METEOROLOGICAL SATELLITE (Earth- space)	Meteorological radio sondes Meteorological satellites, data collection platform	EU2 EU11 ERC Recommendation CEPT/ERC/REC 70- 03, ultra low power medical implants (3MHz within the band 401-406 MHz under study).	METEOROLOGICAL AIDS EARTH EXPLORATION-SAT (Earth-space) METEOROLOGICAL SATELLITE (Earth-space)	METEOROLOGICAL AIDS METEOROLOGICAL SATELLITE (Earth-space)

Frequency band	RR Region 1 allocation and relevant footnotes	European Common Allocation	Major Utilisation	Notes	Norwegian Allocation	Norwegian Utilisation
403-406 MHz	METEOROLOGICAL AIDS Fixed Mobile except aeronautical mobile	METEOROLOGICAL AIDS	Meteorological radio sondes	EU2 EU11 ERC Recommendation CEPT/ERC/REC 70- 03, ultra low power medical implants (3MHz within the band 401-406 MHz under	METEOROLOGICAL AIDS	
406.0-406.1 MHz	MOBILE-SATELLITE (Earth-space) S5.266 S5.267	MOBILE-SATELLITE (Earth-space) S5.266 S5.267	EPIRB	Band only available for distress and safety purposes.	MOBILE-SATELLITE (Earth-space) S5.266 S5.267	COSPAS-SARSAT
406.1-410.0 MHz	FIXED MOBILE except aeronautical mobile RADIO ASTRONOMY S5.149	LAND MOBILE RADIO ASTRONOMY S5.149	Analogue and digital land mobile Radio astronomy applications	Single frequency operation. RA continuum measurement and pulsar observation.	LAND MOBILE RADIO ASTRONOMY S5.149	Radio Link, to be terminated.

Frequency band	RR Region 1 allocation and relevant footnotes	European Common Allocation	Major Utilisation	Notes	Norwegian Allocation	Norwegian Utilisation
410-420 MHz	FIXED MOBILE except aeronautical mobile	MOBILE except Aeronautical Mobile	Analogue and digital PMR TETRA	EU7	MOBILE except Aeronautical Mobile	Radio Link, to be terminated.
	SPACE RESEARCH (space-space) S5.268			ERC Decision ERC/DEC/(96)04.		SYLEDIS(North Sea)
				ERC Recommendation T/R 22-05. ERC Recommendation T/R 25-08, Annex 2b,		Mobitex, PAMR
400, 400, 191	DWED	L CODY E		ML paired with 420-430 MHz.	MODINE.	
420-430 MHz	FIXED MOBILE except aeronautical mobile	MOBILE except Aeronautical Mobile Radiolocation	Analogue and digital PMR	EU7	MOBILE except Aeronautical Mobile	Radio Link, to be terminated.
	Radiolocation S5.270 S5.271		TETRA	ERC Decision ERC/DEC/(96)04. ERC Recommendation		Broadcasting auxilliary, Norwegian channel arrangements. See Annex I.
				T/R 22-05. ERC Recommendation T/R 25-08, Annex 2b, FB paired with 410 – 420MHz.		Mobitex, PAMR

Frequency band	RR Region 1 allocation and relevant footnotes	European Common Allocation	Major Utilisation	Notes	Norwegian Allocation	Norwegian Utilisation
430.00-433.05 MHz	AMATEUR RADIOLOCATION S5.138 S5.271 S5.272	AMATEUR RADIOLOCATION		EU2 EU12	AMATEUR Radiolocation	Radio Link, to be terminated. 430-432 MHz. AMATEUR, 432-438 MHz. Broadcasting Auxilliary, 430-
433.05-434.79 MHz	S5.273 S5.274 S5.275 S5.276 S5.277 <u>S5.280</u> S5.281 S5.282 <u>S5.283</u>	AMATEUR RADIOLOCATION Land Mobile S5.138 S5.280	ISM General SRD	EU2 EU12 ERC Recommendation CEPT/ERC/REC 70- 03	AMATEUR Radiolocation Land Mobile S5.138 S5.280	432 MHz AMATEUR 432-438 MHz. ISM 433.05-434.79 MHz, secondary, no protection given.
434.79-438.00 MHz		AMATEUR AMATEUR- SATELLITE RADIOLOCATION		EU2 EU12 Amateur Satellite Service restricted to 435-438 MHz.	AMATEUR AMATEUR- SATELLITE RADIOLOCATION	Exclusive Amateur /Amateur satellite band
438-440 MHz		AMATEUR RADIOLOCATION S5.283		EU2 EU12	FIXED S5.283	Radio Link. PMR, Norwegian channel arrangements. See Annex I.

Frequency band	RR Region 1 allocation and relevant footnotes	European Common Allocation	Major Utilisation	Notes	Norwegian Allocation	Norwegian Utilisation
440-450 MHz	FIXED MOBILE except aeronautical mobile Radiolocation S5.270 S5.271 S5.284 S5.285 S5.286	MOBILE except aeronautical mobile Radiolocation	Analogue and digital PMR Short Range Business Radio in the band 446.0-446.1 MHz	EU7 On-site paging (callout & answer-back) SRBR	MOBILE except aeronautical mobile	SRD, 440-442 MHz PMR, Norwegian channel arrangements. See Annex I. SRBR, Norwegian channel arrangements. See Annex I. Radio Link, 445-445.8 MHz, Norwegian channel
450-455 MHz	FIXED MOBILE \$5.286A \$5.286B \$5.286C \$5.286D \$5.286E \$5.271 \$5.286	MOBILE	Analogue and digital PMR TETRA Existing public cellular networks	EU7 ERC Decision ERC/DEC/(96)04. ERC Recommendation T/R 22-05. ERC Recommendation T/R 25-08, Annex 2b, ML paired with 460- 465 MHz. On-site paging (call- out & answer-back).	MOBILE	PMR, 450-453 MHz, Norwegian channel arrangements. See Annex I. NMT 450 453 –457.5 MHz

Frequency band	RR Region 1 allocation and relevant footnotes	European Common Allocation	Major Utilisation	Notes	Norwegian Allocation	Norwegian Utilisation
455 456 NOT	FIXED	MOBILE		DUG	MOBILE	NMT 450
455-456 MHz	MOBILE		Analogue and digital E PMR	EU7		453 –457.5 MHz
	S5.286A		TETED A			
	S5.271		TETRA	ERC Decision		
	S5.286B		Existing public cellular			
	S5.286C S5.286E		networks	ERC Recommendations T/R 22-01 and T/R 22-05. ERC Recommendation T/R 25-08, Annex 2b, ML paired with 465-466 MHz. On-site paging (call-		
				out & answer-back).		
456-459 MHz	FIXED	MOBILE	Analogue and digital	EU7	MOBILE	NMT 450
TJU-TJJ IVITIZ	MOBILE	S5.287	PMR On board	EU/	S5.287	453 –457.5 MHz
	S5.271		communications			
	S5.287		457.525-457.575 MHz (maritime)	ERC Decision		
	S5.288		TETRA	ERC/DEC/(96)04. ERC Recommendations		PMR, 457.5-463 MHz, Norwegian channel arrangements. See Annex I.

Frequency band	RR Region 1 allocation and relevant footnotes	European Common Allocation	Major Utilisation	Notes	Norwegian Allocation	Norwegian Utilisation
			Existing public cellular networks	T/R 22-05 and T/R 32-02. ERC Recommendation T/R 25-08, Annex 2b, ML, paired with 466-469 MHz. On-site paging (callout & answer-back).		UIC
459-460 MHz	FIXED MOBILE S5.268A S5.271 S5.286B	MOBILE	Analogue and digital PMR TETRA Existing public cellular networks	EU7	MOBILE	PMR, 457.5-463 MHz, Norwegian channel arrangements. See Annex I.

Frequency band	RR Region 1 allocation and relevant footnotes	European Common Allocation	Major Utilisation	Notes	Norwegian Allocation	Norwegian Utilisation
460-470 MHz	FIXED MOBILE Meteorological-Satellite (space-Earth) S5.287 S5.288 S5.289 S5.290	MOBILE S5.287 S5.289	Analogue and digital PMR TETRA On board communications 467.525-467.575 MHz (maritime) Existing public cellular networks	EU7 ERC Decision ERC/DEC/(96)04. ERC Recommendations T/R 22-01, T/R 22-05 and T/R 32-02. ERC Recommendation T/R 25-08, Annex 2b, FB paired with 450- 460 MHz. On-site paging (callout & answer-back).	MOBILE S5.287 S5.289	NMT 450 463 –467.5 MHz PMR 457.5-463 MHz 467.5-470 MHz Norwegian channel arrangements. See Annex I.
470-608 MHz	BROADCASTING S5.149 <u>S5.291A</u> S5.294 <u>S5.296</u> S5.300 S5.302 S5.304	BROADCASTING Mobile S5.291A S5.296	Stockholm Agreement 1961 complemented by the Chester 1997 Agreement SAB Radio microphones on a tuning range basis, under study.	Mobile restricted to	BROADCASTING Mobile Radiolocation S5.291A S5.296	TV Ch21 –39, 8 MHz PAL, not used. Wind profiler(WRC97) planned, 470-495 MHz. ENG/OB 470-478 MHz EISCAT radar, Svalbard 500MHz, 1 MW

Frequency band	RR Region 1 allocation and relevant footnotes	European Common Allocation	Major Utilisation	Notes	Norwegian Allocation	Norwegian Utilisation
608-614 MHz	S5.306 S5.311 <u>S5.312</u>	BROADCASTING Radio Astronomy Mobile S5.149 S5.296	Stockholm Agreement 1961complemented by the Chester 1997 Agreement SAB Radio microphones on a tuning range basis, under study.	Mobile restricted to SAB Band 470-862 MHz; to be reviewed for possible future applications after the introduction of DVB-T. RA continuum measurements and VLBI.	BROADCASTING Radio Astronomy Mobile S5.149 S5.296	TV ch39, 8 MHz PAL.
614-790 MHz		BROADCASTING Mobile S5.296 S5.312	Stockholm Agreement 1961 complemented by the Chester 1997 Agreement SAB Radio microphones on a tuning range basis, under study.	EU13 Mobile restricted to SAB Band 470-862 MHz to be reviewed for possible future applications after the introduction of DVB-T	BROADCASTING Mobile S5.296	TV ch40-60, 8 MHz PAL
790 –838 MHz	FIXED BROADCASTING S5.312 S5.313 S5.314 S5.315 S5.316 S5.319 S5.321	BROADCASTING Mobile S5.312 S5.314	Stockholm Agreement 1961 complemented by the Chester Agreement 1997 SAB Radio microphones on a tuning range basis, under study. Defence systems	EU2 EU13 Mobile restricted to SAB and tactical radio relay. Band 470-862 MHz to be reviewed for possible future applications after the introduction of DVB-T.	BROADCASTING Mobile	TV ch61-66, 8 MHz PAL, not used in Norway DVB-T planned. Radio Link, 790-862 MHz, Norwegian channel plan applied. See Annex I. Wireless microphones, 800-820 MHz

Frequency band	RR Region 1 allocation and relevant footnotes	European Common Allocation	Major Utilisation	Notes	Norwegian Allocation	Norwegian Utilisation
838-862 MHz		BROADCASTING MOBILE S5.312 S5.314	Stockholm Agreement 1961 complemented by the Chester 1997 Agreement SAB Radio microphones on a tuning range basis, under study. Defence systems	EU2 EU13 MOBILE primary restricted to tactical radio relay. SAB, mobile on a secondary basis. Band 470-862 MHz to be reviewed for possible future applications after the introduction of DVB-T.	BROADCASTING MOBILE Fixed	TV ch67-69, 8 MHz PAL, not used in Norway DVB-T planned. Road trafic systems, (Køfri) 852-860 MHz Radio Link, 790-862 MHz, Norwegian channel plan applied. See Annex I.
862-870 MHz	FIXED MOBILE except Aeronautical Mobile BROADCASTING S5.322 S5.319 S5.323	MOBILE S5.323	Single frequency applications Cordless Telephones Defence systems SRD in 868-870 MHz Social alarms in 869.2- 869.25 MHz Wireless audio in 863- 865 MHz.	EU2 EU13 ERC Decision ERC/DEC/(97)06. ERC Recommendation CEPT/ERC/REC 70- 03.	MOBILE	PMR, 862-868 MHz, Norwegian channel plan applied. See Annex I. SRD 868-870 MHz

Frequency band	RR Region 1 allocation and relevant footnotes	European Common Allocation	Major Utilisation	Notes	Norwegian Allocation	Norwegian Utilisation
870-876 MHz		MOBILE S5.323	Digital land mobile TETRA	EU2 EU13	MOBILE	PMR, Norwegian channel plan applied. See Annex I.
			Defence systems	ERC Decision ERC/DEC/(96)04.		
				ERC Recommendation		
				T/R 22-05, ML paired with 915-921 MHz.		
876-880 MHz		MOBILE S5.323	Digital land mobile	EU2 EU13	MOBILE	UIC
			UIC railway systems			
			Defence systems	ERC Recommendation		
				T/R 25-09, ML paired with 921-925 MHz.		
880-890 MHz		MOBILE S5.323	EGSM	EU2 EU13	MOBILE	E-GSM
			Defence systems			
				ERC Decision ERC/DEC/(97)02, ML paired with 925-935 MHz		

Frequency band	RR Region 1 allocation and relevant footnotes	European Common Allocation	Major Utilisation	Notes	Norwegian Allocation	Norwegian Utilisation
890-915 MHz	FIXED MOBILE except aeronautical mobile BROADCASTING S5.322 Radiolocation S5.323	MOBILE Radiolocation S5.323	GSM Existing cellular networks	EU13 EU14 ERC Decision ERC/DEC/(94)01, ML paired with 935-960 MHz.	MOBILE	NMT, (from Oct. 1998) 900, 890-894.5 MHz GSM, (from Oct. 1998) 894.5-914 MHz CT1, cordless telephone 914-915 MHz
915-921 MHz	55.525	MOBILE Radiolocation S5.323	Digital land mobile TETRA Defence systems	EU2 EU13 EU14 ERC Decision ERC/DEC/(96)04. ERC Recommendation	MOBILE Radiolocation	PMR, Norwegian channel plan applied. See Annex I.
		NODE D		T/R 22-05, FB paired with 870-876 MHz.	MODILE	UIC
921-925 MHz	FIXED MOBILE except aeronautical mobile	MOBILE Radiolocation S5.323	Digital land mobile UIC railway systems	EU2 EU13 EU14	MOBILE Radiolocation	OIC
	BROADCASTING S5.322 Radiolocation S5.323		Defence systems	ERC Recommendation T/R 25-09, FB paired with 876-880 MHz.		

Frequency band	RR Region 1 allocation and relevant footnotes	European Common Allocation	Major Utilisation	Notes	Norwegian Allocation	Norwegian Utilisation
925-935 MHz		MOBILE Radiolocation S5.323	EGSM Defence systems	EU2 EU13 EU14 ERC Decision ERC/DEC/(97)02, FB paired with 880-890 MHz.	MOBILE Radiolocation	E-GSM EISCAT Radar, Ramfjorden on 930.5 MHz BW=8MHz. Pulse peak power= 1.7 MW
935-942 MHz		MOBILE Radiolocation S5.323	GSM Existing cellular networks	EU13 EU14 ERC Decision ERC/DEC/(97)02, FB paired with 890-897 MHz.	MOBILE Radiolocation	NMT 900 (from Oct. 1998) 935-939,5 MHz GSM, (from Oct. 1998) 939,5-959,0 MHz
942-960 MHz	FIXED MOBILE except aeronautical mobile BROADCASTING S5.322 S5.323	MOBILE S5.323	GSM Existing cellular networks	EU13 ERC Decision ERC/DEC/(94)01, FB paired with 897-915 MHz.	MOBILE	GSM, (from Sep. 1998) 939,5-959,0 MHz CT1, cordless telephone 959 –960 MHz

Frequency band	RR Region 1 allocation and relevant footnotes	European Common Allocation	Major Utilisation	Notes	Norwegian Allocation	Norwegian Utilisation
960-1215 MHz	AERONAUTICAL RADIONAVIGATION S5.328	AERONAUTICAL RADIONAVIGATION S5.328	Flight, Safety, Navigation and Information Distribution Systems (for example, DME, TACAN, SSR, MIDS)		AERONAUTICAL RADIONAVIGATION S5.328	Distance Measuring Equipment(DME).
1215-1240 MHz	RADIOLOCATION RADIONAVIGATION -SATELLITE (space-Earth) S5.329 EARTH EXPLORATION SATELLITE (active) SPACE RESEARCH (active) S5.330 S5.331 S5.332	RADIOLOCATION RADIONAVIGATION -SATELLITE (space-Earth) S5.329 EARTH EXPLORATION SATELLITE (active) SPACE RESEARCH (active) RADIONAVIGATION S5.331 S5.332	Radar and Navigation Systems and Active Sensors; GNSS		RADIOLOCATION RADIONAVIGATION -SATELLITE (space-Earth) S5.329 EARTH EXPLORATION SATELLITE (active) SPACE RESEARCH (active) RADIONAVIGATION S5.331 S5.332	GPS, 1227,6 MHz +/-14 MHz
1240-1260 MHz	RADIOLOCATION RADIONAVIGATION -SATELLITE(space-Earth) S5.329 EARTH EXPLORATION SATELLITE (active) SPACE RESEARCH (active) Amateur S5.331 S5.332	RADIOLOCATION RADIONAVIGATION SATELLITE(space- Earth) S5.329 EARTH EXPLORATION SATELLITE (active) SPACE RESEARCH (active) RADIONAVIGATION Amateur S5.331 S5.332	Radar and Navigation Systems and Active Sensors; GNSS		RADIOLOCATION RADIONAVIGATION SATELLITE(space- Earth) S5.329 EARTH EXPLORATION SATELLITE (active) SPACE RESEARCH (active) RADIONAVIGATION Amateur S5.331 S5.332	

Frequency band	RR Region 1 allocation and relevant footnotes	European Common Allocation	Major Utilisation	Notes	Norwegian Allocation	Norwegian Utilisation
1260-1270 MHz	RADIOLOCATION	RADIOLOCATION	Radar and Navigation		RADIOLOCATION	
	EARTH EXPLORATION SATELLITE (active)	EARTH EXPLORATION SATELLITE (active)	Systems and Active Sensors		EARTH EXPLORATION SATELLITE (active)	
	SPACE RESEARCH (active)	SPACE RESEARCH (active)			SPACE RESEARCH (active)	
	Amateur	RADIONAVIGATION			RADIONAVIGATION	
	S5.282 <u>S5.331</u> S5.332	Amateur			Amateur	
		Amateur-Satellite			Amateur-Satellite	
		S5.282 S5.331 S5.332			S5.282 S5.331 S5.332	
1270-1300 MHz	RADIOLOCATION	RADIOLOCATION	Radar and Navigation Systems and Active Sensors	Wind profiler radars	RADIOLOCATION	
	EARTH EXPLORATION SATELLITE (active)	EARTH EXPLORATION SATELLITE (active)		between 1270 MHz and 1295 MHz	EARTH EXPLORATION SATELLITE (active)	
	SPACE RESEARCH (active)	SPACE RESEARCH (active)			SPACE RESEARCH (active)	
	Amateur	RADIONAVIGATION			RADIONAVIGATION	
	<u>S5.331</u> S5.332	Amateur			Amateur	
		S5.331 S5.332			S5.331 S5.332	
1300-1350 MHz	AERONAUTICAL RADIONAVIGATION S5.337	AERONAUTICAL RADIONAVIGATION S5.337	Radar and Navigation Systems	1 100 3 111	AERONAUTICAL RADIONAVIGATION S5.337	Radar,
	Radiolocation	RADIOLOCATION			RADIOLOCATION	
	S5.149	S5.149			S5.149	

Frequency band	RR Region 1 allocation and relevant footnotes	European Common Allocation	Major Utilisation	Notes	Norwegian Allocation	Norwegian Utilisation
1350-1400 MHz	FIXED MOBILE RADIOLOCATION S5.149 S5.338 S5.339	FIXED RADIOLOCATION MOBILE S5.149 S5.339	Defence systems. Low capacity fixed links	EU2 EU15A EU15 Channel plan for the fixed service in ERC Recommendation T/R 13-01, Annex A. RA spectral line observations 1330- 1400 MHz.	FIXED S5.149 S5.339	Radio Link, T/R13-01, Annex A 1350-1375/1492-1517 MHz T/R13-01, Annex B
						1375-1400/1427-1452 MHz not opened yet.
1400-1427 MHz	EARTH EXPLORATION SATELLITE (passive)	EARTH EXPLORATION SATELLITE (passive)	Passive applications		EARTH EXPLORATION SATELLITE (passive)	Silent band
	RADIO ASTRONOMY	RADIO ASTRONOMY			RADIO ASTRONOMY	
	SPACE RESEARCH (passive)	SPACE RESEARCH (passive)			SPACE RESEARCH (passive)	
	S5.340 S5.341	S5.340 S5.341			S5.340 S5.341	
1427-1429 MHz	SPACE OPERATION (Earth-space)	SPACE OPERATION (Earth-space)	Defence systems	Channel Dian for the	SPACE OPERATION (Earth-space)	Radio Link, 1427-1472/1517-1525 MHz.
	FIXED	FIXED	Low capacity fixed	fixed service in ERC	FIXED	1427-1472/1317-1323 WIFIZ.
	MOBILE except aeronautical mobile	MOBILE except aeronautical mobile	links	ERC Recommendation T/R 13-01, Annex B.	MOBILE except aeronautical mobile	Channel plan to be changed to:
	S5.341	S5.341			S5.341	1350-1375/1492-1517 MHz
						1375-1400/1427-1452 MHz

Frequency band	RR Region 1 allocation and relevant footnotes	European Common Allocation	Major Utilisation	Notes	Norwegian Allocation	Norwegian Utilisation
1429-1452 MHz	FIXED	FIXED			FIXED	Radio Link,
	MOBILE except aeronautical mobile	MOBILE except aeronautical mobile			MOBILE except aeronautical mobile	1427-1472/1517-1525 MHz.
	S5.341 S5.342	S5.341			S5.341	Channel plan to be changed to:
						1350-1375/1492-1517 MHz
						1375-1400/1427-1452 MHz
1452-1492 MHz	FIXED	BROADCASTING	Digital Audio	EU15	BROADCASTING	T-DAB channels
	MOBILE except	S5.345 S5.347	Broadcasting	ERC Recommendation	S5.345	Radio Link,
	aeronautical mobile	BROADCASTING- SATELLITE S5.345	T-DAB	T/R 52-02.	BROADCASTING- SATELLITE S5.345	
	BROADCASTING S5.345 S5.347	S5.347	Wiesbaden Special		Fixed	1427-1472/1517-1525 MHz.
	BROADCASTING-	Fixed	Arrangement 1995		Mobile except	Channel plan to be changed to:
	SATELLITE S5.345	Mobile except			Aeronautical Mobile	1350-1375/1492-1517 MHz
	\$5.347 \$5.341 <u>\$5.342</u>	Aeronautical Mobile S5.341 S5.342			S5.341	1375-1400/1427-1452 MHz
1492-1517 MHz	53.341 <u>53.342</u> FIXED	FIXED			FIXED	
1492-131 / WILL	MOBILE except	MOBILE except		EU2 EU X EU15 Channel plan for the		Radio Link, transfer from 800 MHz band.
	aeronautical mobile	aeronautical mobile	Defence systems			Time owner.
	S5.341 <u>S5.342</u>	S5.341 S5.342	Low capacity fixed	Recommendation T/R 13-01, Annex A.	S5.341 S5.342	T/R13-01 Annex A
			links	1/K 13-01, Annex A.		1492-1517/1350-1375 MHz
1517-1525 MHz		FIXED	Unidirectional fixed		FIXED	Radio Link, to be terminated.
		MOBILE except	links	EU2 EU X EU15	MOBILE except	
		aeronautical mobile	Defence systems		aeronautical mobile	
		S5.341 S5.342			S5.341 S5.342	

Frequency band	RR Region 1 allocation and relevant footnotes	European Common Allocation	Major Utilisation	Notes	Norwegian Allocation	Norwegian Utilisation
1525-1530 MHz	SPACE OPERATION (space-Earth) FIXED MOBILE SATELLITE (space-Earth) Earth Exploration Satellite Mobile except aeronautical mobile S5.341 S5.342 S5.349 S5.351 S5.352A S5.353A S5.354 S5.350	SPACE OPERATION (space-Earth) FIXED MOBILE-SATELLITE (space-Earth) S5.341 S5.342 S5.351 S5.353A S5.354	Unidirectional fixed links Mobile satellite systems	EU15	SPACE OPERATION (space-Earth) FIXED MOBILE-SATELLITE (space-Earth) S5.341 S5.342 S5.351 S5.353A S5.354	MOBILE-SATELLITE (space-Earth), 1525-1545 MHz Radio Link, to be terminated.
1530-1533 MHz	SPACE OPERATION (space-Earth) MOBILE SATELLITE (space-Earth) S5.353A Earth exploration-satellite Fixed Mobile except aeronautical mobile S5.341 S5.342 S5.351 S5.353A S5.354	SPACE OPERATION (space-Earth) MOBILE SATELLITE (space-Earth) Earth exploration- satellite Fixed Mobile except aeronautical mobile S5.341 S5.342S5.351 S5.353A S5.354	Mobile satellite systems	EU15	SPACE OPERATION (space-Earth) MOBILE SATELLITE (space-Earth) Earth exploration- satellite Fixed Mobile except aeronautical mobile S5.341 S5.342S5.351 S5.353A S5.354	MOBILE-SATELLITE (space-Earth), 1525-1545 MHz

Frequency band	RR Region 1 allocation and relevant footnotes	European Common Allocation	Major Utilisation	Notes	Norwegian Allocation	Norwegian Utilisation
1533-1535 MHz	SPACE OPERATION (space-Earth) MOBILE SATELLITE (space-Earth) S5.353A Earth exploration satellite Fixed Mobile except aeronautical mobile S5.341 S5.342 S5.351 S5.353A S5.354	SPACE OPERATION (space-Earth) MOBILE SATELLITE (space-Earth) Earth exploration satellite Mobile except aeronautical mobile S5.341 S5.342 S5.351 S5.353A S5.354	Mobile satellite systems	EU15	SPACE OPERATION (space-Earth) MOBILE SATELLITE (space-Earth) Earth exploration satellite Mobile except aeronautical mobile S5.341 S5.342 S5.351 S5.353A S5.354	MOBILE-SATELLITE (space-Earth), 1525-1545 MHz Radio Link, to be terminated.
1535-1544 MHz	MOBILE SATELLITE (space-Earth) S5.341 S5.351 S5.353A S5.354 S5.355	MOBILE SATELLITE (space-Earth) S5.341 S5.351 S5.353A S5.354	Mobile satellite systems	EU15	MOBILE SATELLITE (space-Earth) S5.341 S5.351 S5.353A S5.354	MOBILE-SATELLITE (space-Earth), 1525-1545 MHz
1544-1545 MHz	MOBILE SATELLITE (space-Earth) S5.341 S5.354 S5.355 S5.356	MOBILE SATELLITE (space-Earth) S5.354 S5.356	Search and rescue satellite systems including GMDSS Mobile satellite systems	EU15	MOBILE SATELLITE (space-Earth) S5.354 S5.356	MOBILE-SATELLITE (space- Earth), 1525-1545 MHz
1545-1555 MHz	MOBILE SATELLITE (space-Earth) S5.341 S5.351 S5.354 S5.357 <u>S5.359 S5.362A</u>	MOBILE SATELLITE (space-Earth) S5.341 S5.351 S5.354 S5.357 S5.359 S5.362A		EU15 + EU15A	MOBILE SATELLITE (space-Earth) S5.341 S5.351 S5.354 S5.357 S5.362A	MOBILE SATELLITE (space-Earth)

Frequency band	RR Region 1 allocation and relevant footnotes	European Common Allocation	Major Utilisation	Notes	Norwegian Allocation	Norwegian Utilisation
1555-1559 MHz	MOBILE SATELLITE (space-Earth) S5.341 S5.351 S5.354 S5.359 S5.362B	MOBILE SATELLITE (space-Earth) S5.341 S5.351 S5.354 S5.359	Mobile satellite systems	EU15	MOBILE SATELLITE (space-Earth) S5.341 S5.351 S5.354	MOBILE SATELLITE (space-Earth)
1559-1610 MHz	AERONAUTICAL RADIONAVIGATION RADIONAVIGATION SATELLITE (space- Earth) S5.341 S5.359 S5.363	AERONAUTICAL RADIONAVIGATION RADIONAVIGATION SATELLITE (space- Earth) S5.341 S5.359	GNSS	EU15	AERONAUTICAL RADIONAVIGATION RADIONAVIGATION SATELLITE (space- Earth) S5.341	GPS 1575,42 MHz +/-14 MHz
1610-1610.6 MHz	AERONAUTICAL RADIONAVIGATION MOBILE SATELLITE (Earth-space) S5.341 S5.355 S5.359 S5.363 S5.364 S5.366 S5.367 S5.368 S5.369 S5.372	AERONAUTICAL RADIONAVIGATION MOBILE SATELLITE (Earth-space) S5.341 S5.355 S5.359 S5.364 S5.367 S5.368 S5.372	Satellite personal communications systems	EU15 ERC Decision ERC/DEC/(97)03	AERONAUTICAL RADIONAVIGATION MOBILE SATELLITE (Earth-space) S5.341 S5.364 S5.367 S5.368 S5.372	
1610.6-1613.8 MHz	AERONAUTICAL RADIONAVIGATION MOBILE SATELLITE (Earth-space) RADIO ASTRONOMY S5.149 S5.341 S5.355 S5.359 S5.363 S5.364 S5.366 S5.367 S5.368 S5.369 S5.371 S5.372	AERONAUTICAL RADIONAVIGATION MOBILE SATELLITE (Earth-space) RADIO ASTRONOMY S5.149 S5.341 S5.359 S5.364 S5.366 S5.367 S5.368 S5.372	Satellite personal communications systems Radio astronomy applications	ERC/DEC/(97)03 Important band for radio astronomy	AERONAUTICAL RADIONAVIGATION MOBILE SATELLITE (Earth-space) RADIO ASTRONOMY S5.149 S5.341 S5.364 S5.366 S5.367 S5.368 S5.372	

Frequency band	RR Region 1 allocation and relevant footnotes	European Common Allocation	Major Utilisation	Notes	Norwegian Allocation	Norwegian Utilisation
1613.8-1626.5 MHz	MOBILE-SATELLITE (Earth-space)	AERONAUTICAL RADIONAVIGATION	Satellite personal communications		AERONAUTICAL RADIONAVIGATION	Big LEO mobile satellite systems:
	AERONAUTICAL RADIONAVIGATION	MOBILE SATELLITE (Earth-space)	systems	ERC Decision ERC/DEC/(97)03 M.	MOBILE SATELLITE (Earth-space)	1621.35-1626.5 MHz
	Mobile-Satellite (space- Earth)	Mobile satellite (space- Earth)			Mobile satellite (space- Earth)	
	S5.341 S5.355 <u>S5.359</u>	S5.341 S5.359 S5.364			S5.341 S5.364	
	S5.363 S5.364 S5.365	S5.365 S5.367 S5.368			S5.365 S5.367 S5.368	
	S5.366 S5.367 S5.368	S5.372 S5.373			S5.372	
	S5.369 S5.371 S5.372					
1626.5-1631.5 MHz	MOBILE-SATELLITE (Earth-space) S5.341 S5.351 S5.354 S5.355 <u>S5.359</u> S5.353A	(Earth-space) S5.341 S5.351 S5.353A	Mobile satellite systems		MOBILE-SATELLITE (Earth-space) S5.341 S5.351 S5.353A S5.354 S5.359	MOBILE-SATELLITE (Earth-space)1626.5 –1646.5 MHz
1631.5-1636.5 MHz	MOBILE-SATELLITE (Earth-space) S5.341 S5.351 S5.354 S5.355 <u>S5.359</u> S5.374 S5.353A	MOBILE-SATELLITE (Earth-space) S5.341 S5.351 S5.353A S5.354 S5.359 S5.374	Mobile satellite systems	EUIS	MOBILE-SATELLITE (Earth-space) S5.341 S5.351 S5.353A S5.354 S5.359 S5.374	MOBILE-SATELLITE (Earth-space)1626.5 –1646.5 MHz

Frequency band	RR Region 1 allocation and relevant footnotes	European Common Allocation	Major Utilisation	Notes	Norwegian Allocation	Norwegian Utilisation
1636.5-1645.5 MHz	MOBILE-SATELLITE (Earth-space)	MOBILE-SATELLITE (Earth-space)	Mobile satellite systems	EU15	MOBILE-SATELLITE (Earth-space)	MOBILE-SATELLITE (Earth-space)1626.5 –1646.5 MHz
	S5.341 S5.351 S5.353A				S5.341 S5.351 S5.353A	
	S5.354 S5.355 <u>S5.359</u>	S5.354 S5.359			S5.354 S5.359	
1645.5-1646.5 MHz	MOBILE-SATELLITE (Earth-space)	MOBILE-SATELLITE (Earth-space)	Search and rescue satellite system	EU15	MOBILE-SATELLITE (Earth-space)	MOBILE-SATELLITE (Earth-space)1626.5 –1646.5 MHz
	S5.341 S5.354 S5.375	S5.341	including GMDSS		S5.341	space)1020.3 –1040.3 MHZ
		S5.354			S5.354	
		S5.375			S5.375	
1646.5-1656.5 MHz	MOBILE-SATELLITE (Earth-space)	MOBILE-SATELLITE (Earth-space)		EU15	MOBILE-SATELLITE (Earth-space)	
	S5.341 S5.351 S5.354	S5.341 S5.351 S5.354	Mobile satellite		S5.341 S5.351 S5.354	
	S5.355 <u>S5.359</u> S5.376 S5.362B	S5.359 S5.362B S5.376	systems		S5.376	
1656.5-1660 MHz	MOBILE-SATELLITE (Earth-space)	MOBILE-SATELLITE (Earth-space)		EU15	MOBILE-SATELLITE (Earth-space)	
	S5.341 S5.351 S5.354	S5.341 S5.351 S5.354	Mobile satellite		S5.341 S5.351 S5.354	
	\$5.355 <u>\$5.359</u> \$5.374	S5.359 S5.360 S5.362B	systems		S5.360	
	S5.362B	S5.374			S5.374	

Frequency band	RR Region 1 allocation and relevant footnotes	European Common Allocation	Major Utilisation	Notes	Norwegian Allocation	Norwegian Utilisation
1660-1660.5 MHz	MOBILE-SATELLITE (Earth-space) RADIO ASTRONOMY S5.149 S5.341 S5.351 S5.354 S5.376A S5.362B	MOBILE-SATELLITE (Earth-space) RADIO ASTRONOMY S5.149 S5.341 S5.351 S5.354 S5.376A S5.362B	In accordance with ECARadio astronomy applications Mobile satellite systems	EU15 Important band for radio astronomy. VLBI	MOBILE-SATELLITE (Earth-space) RADIO ASTRONOMY S5.149 S5.341 S5.351 S5.354 S5.376A S5.362B	
1660.5-1668.4 MHz	RADIO ASTRONOMY SPACE RESEARCH (passive) Fixed Mobile except Aeronautical Mobile S5.149 S5.341 S5.379 S5.379A	RADIO ASTRONOMY SPACE RESEARCH (passive) Fixed Mobile except aeronautical mobile S5.149 S5.341	Radioastronomy applications Mobile systems	radio astronomy: Continuum line and VLBI measurements.	RADIO ASTRONOMY SPACE RESEARCH (passive) Fixed Mobile except aeronautical mobile S5.149 S5.341	
1668.4-1670 MHz	METEOROLOGICAL AIDS FIXED MOBILE except Aeronautical Mobile RADIO ASTRONOMY S5.149 S5.341	METEOROLOGICAL AIDS FIXED RADIO ASTRONOMY Mobile except aeronautical mobile S5.149	Radio astronomy applications Mobile systems Meteorological applications	EU2 EU15A EU15 Important band for radio astronomy.	METEOROLOGICAL AIDS RADIO ASTRONOMY Mobile except aeronautical mobile S5.149 S5.341	

Frequency band	RR Region 1 allocation and relevant footnotes	European Common Allocation	Major Utilisation	Notes	Norwegian Allocation	Norwegian Utilisation
		S5.341				

Frequency band	RR Region 1 allocation and relevant footnotes	European Common Allocation	Major Utilisation	Notes	Norwegian Allocation	Norwegian Utilisation
1670-1675 MHz	METEOROLOGICAL AIDS FIXED METEOROLOGICAL- SATELLITE (space- Earth) MOBILE S5.380 S5.341	METEOROLOGICAL AIDS METEOROLOGICAL SATELLITE (space- Earth) MOBILE S5.380 Fixed S5.341	TFTS (ground to air) Meteorological applications	ERC Decision ERC/DEC/(92) 01. ERC Recommendation T/R 42-01.	METEOROLOGICAL AIDS METEOROLOGICAL SATELLITE (space- Earth) MOBILE S5.380	TFTS 1670-1675/1800-1805 MHz
1675-1690 MHz	METEOROLOGICAL AIDS FIXED METEOROLOGICAL- SATELLITE (space- Earth) MOBILE except Aeronautical Mobile S5.341	METEOROLOGICAL AIDS FIXED METEOROLOGICAL SATELLITE (space-Earth) MOBILE except Aeronautical Mobile S5.341	Mobile systems Meteorological applications	EU2 EU15A EU15	METEOROLOGICAL AIDS METEOROLOGICAL SATELLITE (space- Earth) MOBILE except Aeronautical Mobile S5.341	Governmental users
1690-1700 MHz	METEOROLOGICAL AIDS METEOROLOGICAL- SATELLITE (space- Earth) Fixed Mobile except Aeronautical Mobile S5.289 S5.341 S5.382	METEOROLOGICAL AIDS METEOROLOGICAL SATELLITE (space- Earth) Fixed Mobile except Aeronautical Mobile S5.341 S5.382	Meteorological applications	EU2 EU15A EU15	METEOROLOGICAL AIDS METEOROLOGICAL SATELLITE (space- Earth) Mobile except Aeronautical Mobile S5.341	

Frequency band	RR Region 1 allocation and relevant footnotes	European Common Allocation	Major Utilisation	Notes	Norwegian Allocation	Norwegian Utilisation
1700-1710 MHz	FIXED METEOROLOGICAL- SATELLITE (space- Earth) MOBILE except Aeronautical Mobile S5.289 S5.341	FIXED METEOROLOGICAL SATELLITE (space- Earth) [Mobile except Aeronautical Mobile]	Meteorological applications	EU2 EU15A EU15	METEOROLOGICAL SATELLITE (space- Earth) [Mobile except Aeronautical Mobile] S5.341	
1710-1785 MHz	FIXED MOBILE S5.380 S5.149 S5.341 S5.385 S5.386 S5.387 S5.388	FIXED MOBILE S5.149 S5.341 S5.385	DCS 1800	EU15 ERC Decision ERC/DEC/(95)03 ERC Recommendation T/R 22-07	MOBILE S5.149 S5.341 S5.385	DCS1800 1710-1785/1805-1880 MHz
1785-1800 MHz		FIXED MOBILE	Mobile systems	EU2 EU15 Radio microphones (under study)	MOBILE	Governmental users Civil wireless microphones
1800-1805 MHz		MOBILE S5.380 Fixed	TFTS (air to ground)	EU15 ERC Decision ERC/DEC/(92) 01 ERC Recommendation T/R 42-01	MOBILE S5.380	TFTS 1800-1805/1670-1675 MHz

Frequency band	RR Region 1 allocation and relevant footnotes	European Common Allocation	Major Utilisation	Notes	Norwegian Allocation	Norwegian Utilisation
1805-1880 MHz		FIXED MOBILE	DCS 1800	EU15	MOBILE	DSC1800 1805-1880/1710-1785 MHz
				ERC Decision ERC/DEC/(95)03		
				ERC Recommendation T/R 22-07		
1880-1885 MHz		MOBILE Fixed	DECT	EU15	MOBILE	DECT
				ERC Decision ERC/DEC/(94) 03		
1885-1900 MHz		MOBILE Fixed S5.388	DECT	EU15 ERC Decision ERC/DEC/(94) 03	MOBILE S5.388	DECT
1900-1930 MHz		FIXED MOBILE S5.388	IMT-2000	EU16 EU15 ERC Decision ERC/DEC/(97)07	MOBILE S5.388	UMTS planned 1900-1980 MHz

Frequency band	RR Region 1 allocation and relevant footnotes	European Common Allocation	Major Utilisation	Notes	Norwegian Allocation	Norwegian Utilisation
1930-1970 MHz 1970-1980 MHz	FIXED MOBILE S5.388 FIXED MOBILE	FIXED MOBILE S5.388	IMT-2000	EU16 EU15 ERC Decision ERC/DEC/(97)07	MOBILE S5.388	UMTS planned 1900-1980 MHz UMTS planned
1980-2010 MHz	S5.388 FIXED MOBILE	FIXED MOBILE MOBILE-SATELLITE (Earth-space) S5.388 S5.389	IMT-2000 Satellite personal communications systems	EU16 EU15 ERC Decisions ERC/DEC/(97)03, ERC/DEC/(97)04 and ERC/DEC/(97)07	MOBILE MOBILE-SATELLITE (Earth-space) S5.388 S5.389	UMTS satellite component planned 1980-2010 MHz
2010-2025 MHz	FIXED MOBILE S5.388	FIXED MOBILE S5.388	IMT-2000	EU16 EU15 ERC Decision ERC/DEC/(97)07	MOBILE S5.388	UMTS planned 2010-2025 MHz

Frequency band	RR Region 1 allocation and relevant footnotes	European Common Allocation	Major Utilisation	Notes	Norwegian Allocation	Norwegian Utilisation
2025-2110 MHz	SPACE OPERATION (Earth-space) (space- Earth) EARTH EXPLORATION- SATELLITE (Earth- space) (space-space) FIXED MOBILE S5.391 SPACE RESEARCH (Earth-space) (space- space) S5.392	FIXED MOBILE S5.391 SPACE RESEARCH (Earth-space) (Space-Space) SPACE OPERATION (Earth-space) (Space-Space) EARTH EXPLORATION SATELLITE (Earth-space) (Space-Space) S5.392	Fixed links Space science services Mobile systems	Channel plan for the fixed service in ERC Recommendation T/R 13-01, Annex C.	FIXED MOBILE S5.391 SPACE RESEARCH (Earth-space) (Space-Space) SPACE OPERATION (Earth-space) (Space-Space) EARTH EXPLORATION SATELLITE (Earth-space) (Space-Space) S5.392	Radio Link, P-MP planned T/R13-01 Annex C 2025-2110/2200-2290 MHz Space operation (Earth-space) (Space-Space) Earth exploration satellite (Earth-space) (Space-Space) Governmental users
2110-2120 MHz 2120-2170 MHz	FIXED MOBILE SPACE RESEARCH (deep space)(Earth-space) S5.388 FIXED MOBILE S5.388	FIXED MOBILE SPACE RESEARCH (Earth-space, deep space) S5.388 FIXED MOBILE S5.388	IMT-2000 IMT-2000	EU16 EU15 ERC Decision ERC/DEC/(97)07 EU16 EU15 ERC Decision ERC/DEC/(97)07	MOBILE SPACE RESEARCH (Earth-space, deep space) S5.388 MOBILE S5.388	UMTS planned 2110-2170 MHz UMTS planned 2110-2170 MHz

Frequency band	RR Region 1 allocation and relevant footnotes	European Common Allocation	Major Utilisation	Notes	Norwegian Allocation	Norwegian Utilisation
2170-2200 MHz	FIXED MOBILE MOBILE-SATELLITE (space-Earth) S5.388 S5.389A S5.389F S5.392A	FIXED MOBILE MOBILE-SATELLITE (space-Earth) S5.388 S5.389A S5.392A	IMT-2000 Satellite personal communications systems		MOBILE MOBILE-SATELLITE (space-Earth) S5.388 S5.389A S5.392A	UMTS satellite component considered 2170-2200 MHz
2200-2290 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-Earth) (space-space) S5.392	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	Fixed links Space science services Mobile systems	Channel plan for the fixed service in ERC Recommendation T/R 13-01, Annex C.	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	Radio Link, P-MP planned T/R13-01 Annex C 2200-2290/2025-2110 MHz
2290-2300 MHz	FIXED MOBILE except Aeronautical Mobile SPACE RESEARCH (deep space)(space- Earth)	FIXED MOBILE except aeronautical mobile SPACE RESEARCH (deep space) (space-Earth)	Mobile systems	EU2 RA VLBI	FIXED MOBILE except aeronautical mobile SPACE RESEARCH (deep space) (space-Earth)	FIXED & MOBILE, not open for new users.

Frequency band	RR Region 1 allocation and relevant footnotes	European Common Allocation	Major Utilisation	Notes	Norwegian Allocation	Norwegian Utilisation
2300-2400 MHz	FIXED MOBILE Amateur Radiolocation S5.150 S5.282 S5.395	FIXED MOBILE Amateur Radiolocation S5.150 S5.395	Mobile systems	EU2 ERC Recommendation CEPT/ERC/REC 62- 02. Parts of the band are used for aeronautical telemetry on a national basis.	MOBILE Amateur S5.150 S5.395	Amateur, secondary. Pay attention on 2300-2330 MHz, protect 2320 +/-3 MHz.
2400-2450 MHz		FIXED MOBILE Amateur Amateur satellite S5.282 S5.150	ISM, SRD, WBDTS, R-Tags	EU2 ERC Recommendation CEPT/ERC/REC 70- 03	FIXED MOBILE Amateur Amateur satellite S5.282 S5.150	ISM(2400-2500MHz), secondary services.
2450-2483.5 MHz	FIXED MOBILE Radiolocation S5.150 S5.397	FIXED MOBILE S5.150 S5.397	ISM, SRD, WBDTS, R-Tags	ERC Recommendation	FIXED MOBILE S5.150	ISM(2400-2500MHz), secondary services.

Frequency band	RR Region 1 allocation and relevant footnotes	European Common Allocation	Major Utilisation	Notes	Norwegian Allocation	Norwegian Utilisation
2483.5-2500 MHz	FIXED MOBILE MOBILE-SATELLITE (space-Earth) Radiolocation S5.150 S5.371 S5.397 S5.398 S5.399 S5.400 S5.402	FIXED MOBILE MOBILE-SATELLITE (space-Earth) S5.150 S5.397	ECA	EU15 ERC Decision ERC/DEC/(97)03)	FIXED MOBILE MOBILE-SATELLITE (space-Earth) S5.150	ISM(2400-2500MHz), secondary services.
2500-2520 MHz	FIXED S5.409 S5.410 S5.411 MOBILE except Aeronautical Mobile MOBILE-SATELLITE (space-Earth) S5.403 S5.405 S5.407 S5.408 S5.412 S5.414	MOBILE-SATELLITE (space-Earth) Fixed Mobile except aeronautical mobile S5.403 S5.414	Mobile satellite systems	EU15	MOBILE-SATELLITE (space-Earth) Fixed Mobile except aeronautical mobile S5.403 S5.414	
2520-2655 MHz	FIXED S5.409 S5.410 S5.411 MOBILE except Aeronautical Mobile BROADCASTING- SATELLITE S5.412 S5.413 S5.339 S5.403 S5.405 S5.408 S5.416 S5.417 S5.418	FIXED MOBILE except aeronautical mobile S5.339 S5.403	Fixed links Defence systems		FIXED MOBILE except aeronautical mobile S5.339 S5.403	Radio access planned, T/R13-01 Annex D Governmental users

Frequency band	RR Region 1 allocation and relevant footnotes	European Common Allocation	Major Utilisation	Notes	Norwegian Allocation	Norwegian Utilisation
2655-2670 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	FIXED MOBILE except aeronautical mobile Earth exploration satellite (passive) Radio astronomy Space research (passive) S5.149 S5.420	Fixed links Mobile systems	EU2 EU15 Channel plan for the fixed service in ERC Recommendation T/R 13-01, Annex D. RA continuum measurements.	FIXED MOBILE except aeronautical mobile Earth exploration satellite (passive) Radio astronomy Space research (passive) S5.149 S5.420	Radio access planned, T/R13-01 Annex D
2670-2690 MHz	FIXED S5.409 S5.410 S5.411 MOBILE except Aeronautical Mobile MOBILE-SATELLITE (Earth-space) Earth Exploration- Satellite (passive) Radio Astronomy Space Research (passive) S5.149 S5.409 S5.410 S5.411 S5.419 S5.420	MOBILE-SATELLITE (Earth-space) Fixed Mobile except aeronautical mobile Radioastronomy S5.149 S5.419 S5.420	Mobile satellite systems	measurements.	MOBILE-SATELLITE (Earth-space) Fixed Mobile except aeronautical mobile Radioastronomy S5.149 S5.419 S5.420	MOBILE-SATELLITE (Earth-space) not open for use by Radio Link.

Frequency band	RR Region 1 allocation and relevant footnotes	European Common Allocation	Major Utilisation	Notes	Norwegian Allocation	Norwegian Utilisation
2690-2700 MHz	EARTH EXPLORATION- SATELLITE (passive)	EARTH EXPLORATION- SATELLITE (passive)	Passive applications		EARTH EXPLORATION- SATELLITE (passive)	
	RADIO ASTRONOMY	RADIO ASTRONOMY			RADIO ASTRONOMY	
	SPACE RESEARCH (passive)	SPACE RESEARCH (passive)			SPACE RESEARCH (passive)	
	S5.340 <u>S5.421</u> <u>S5.422</u>	S5.340 S5.421 S5.422			S5.340	
2700-2900 MHz	AERONAUTICAL RADIONAVIGATION S5.337	AERONAUTICAL RADIONAVIGATION S5.337	Radars and Navigation Systems		AERONAUTICAL RADIONAVIGATION S5.337	Governmental users.
	Radiolocation	Radiolocation	Meteorological radars		Radiolocation	
	S5.423 S5.424	S5.423			S5.423 S5.424	
2900-3100 MHz	RADIONAVIGATION S5.426 Radiolocation	RADIONAVIGATION S5.426	Radars		RADIONAVIGATION S5.426 Radiolocation	Governmental users.
	S5.425 S5.427	Radiolocation			S5.425 S5.427	
		S5.425				
		S5.427				Radar
3100-3300 MHz	RADIOLOCATION	RADIOLOCATION			RADIOLOCATION	Governmental users.
E	Earth Exploration- Satellite (active)	Earth Exploration- Satellite (active)	Radars and Active Sensors		Earth Exploration- Satellite (active)	
	Space Research (active)	Space Research (active)			Space Research (active)	
	S5.149 <u>S5.428</u>	S5.149 S5.428			S5.149 <u>S5.428</u>	

Frequency band	RR Region 1 allocation and relevant footnotes	European Common Allocation	Major Utilisation	Notes	Norwegian Allocation	Norwegian Utilisation
3300-3400 MHz	RADIOLOCATION S5.149 S5.429 S5.430	RADIOLOCATION	Radars		RADIOLOCATION S5.149 S5.429 S5.430	Governmental users.
3400-3500 MHz	FIXED FIXED-SATELLITE (space-Earth) Mobile Radiolocation S5.431	FIXED FIXED-SATELLITE (space-Earth) MOBILE Amateur Radiolocation S5.431	Fixed links. Wireless fixed access systems.	Fixed includes point to multipoint. Mobile for coordinated	Amateur	FIXED, Spread spectrum systems. Amateur, secondary, 3400-3410 MHz. MOBILE limited to ENG/OB.
3500-3600 MHz		FIXED FIXED-SATELLITE (space-Earth) MOBILE	Fixed links. Wireless fixed access systems.	ERC Recommendation CEPT/ERC/REC 14- 03 Fixed includes point to multipoint. Coordinated ENG/OB links for occasional use.	FIXED FIXED-SATELLITE (space-Earth) MOBILE	FIXED, Spread spectrum systems. MOBILE limited to ENG/OB.

Frequency band	RR Region 1 allocation and relevant footnotes	European Common Allocation	Major Utilisation	Notes	Norwegian Allocation	Norwegian Utilisation
3600-4200 MHz	FIXED FIXED-SATELLITE (space-Earth) Mobile	FIXED FIXED-SATELLITE (space-Earth)	Medium/High capacity fixed links, plan to be developed Telecommunications satellites to coordinated Earth stations. Priority for civil networks		FIXED FIXED-SATELLITE (space-Earth)	Radio Link, ITU-R F.382(Mod), 3600-3800 MHz Radio Link, prog.distribution, ITU-R F.382, 3800-4200 MHz FIXED-SATELLITE (space-Earth) 3600-3623 MHz
4200-4400 MHz	AERONAUTICAL RADIONAVIGATION S5.438 S5.437 S5.439 S5.440	AERONAUTICAL RADIONAVIGATION S5.438 S5.437	Radio altimeters	EU18 Earth exploration satellite use for sea surface temperature measurements.	S5.438	Radio altimeters
4400-4500 MHz	FIXED MOBILE	FIXED MOBILE	Transhorizon links. Defence systems.	EU2 EU20 EU27 This is a harmonised military band for fixed and mobile systems. Coordinated ENG/OB links for occasional use.		Governmental users.

Frequency band	RR Region 1 allocation and relevant footnotes	European Common Allocation	Major Utilisation	Notes	Norwegian Allocation	Norwegian Utilisation
4500-4800 MHz	FIXED FIXED-SATELLITE (space-Earth) S5.441 MOBILE	FIXED FIXED-SATELLITE (space-Earth) S5.441 MOBILE	Defence systems.	EU20 EU27 Coordinated ENG/OB links for occasional use. Transhorizon links. Telecommunications satellites to coordinated Earth stations. Fixed Satellite frequency plan in 4500-4800 MHz Fixed Satellite Service not to be implemented in NATO Europe. This is a harmonised military band for fixed and mobile systems.	(space-Earth) S5.441 MOBILE	ITU RR AP30B art.10, downlink. Governmental users.
4800-4990 MHz	FIXED MOBILE S5.442 Radio Astronomy S5.149 S5.339 S5.443	FIXED MOBILE except Aeronautical Mobile Radio Astronomy S5.149 S5.339	Defence systems.	EU20 EU27 Coordinated ENG/OB	Aeronautical Mobile Radio Astronomy S5.149 S5.339	Governmental users.

Frequency band	RR Region 1 allocation and relevant footnotes	European Common Allocation	Major Utilisation	Notes	Norwegian Allocation	Norwegian Utilisation
4990-5000 MHz	FIXED MOBILE except Aeronautical Mobile RADIO ASTRONOMY Space Research (passive) S5.149	FIXED MOBILE except Aeronautical Mobile RADIO ASTRONOMY S5.149	RA continuum measurements and VLBI	EU20 EU27 Coordinated ENG/OB links for occasional use. This is a harmonised military band for fixed and mobile systems.	105 140	Governmental users.
5000-5030 MHz		AERONAUTICAL RADIONAVIGATION Radio Astronomy Space Research (passive) S5.367 S5.444 S5.444A		Aeronautical Radionavigation and Fixed Satellite Service envisaged in some countries. RA VLBI observations.	AERONAUTICAL RADIONAVIGATION Radio Astronomy Space Research (passive) S5.367 S5.444 S5.444A	MLS under consideration 5000-5100 MHz
5030-5150 MHz		AERONAUTICAL RADIONAVIGATION S5.367 S5.444 S5.444A	MLS	EU18 Aeronautical Radionavigation envisaged in some countries. Fixed Satellite Service in use in some countries.	AERONAUTICAL RADIONAVIGATION S5.367 S5.444 S5.444A	MLS under consideration 5000-5100 MHz

Frequency band	RR Region 1 allocation and relevant footnotes	European Common Allocation	Major Utilisation	Notes	Norwegian Allocation	Norwegian Utilisation
5150-5250 MHz	AERONAUTICAL RADIONAVIGATION FIXED-SATELLITE (Earth-space) S5.447A S5.446 S5.447 S5.447B S5.447C	MOBILE FIXED-SATELLITE (Earth-space) S5.447A S5.446 S5.447 S5.447B S5.447C	HIPERLANs Feeder links for the Mobile-Satellite service	ERC Decision ERC/DEC/(96)03 ERC Recommendation CEPT/ERC/REC 70-03. Aeronautical Radionavigation and Fixed Satellite Service envisaged in some countries.	MOBILE FIXED-SATELLITE (Earth-space) S5.447A S5.446 S5.447 S5.447B S5.447C	HIPERLAN considered, ERC REC T/R22-06
5250-5255 MHz	EARTH EXPLORATION- SATELLITE (active) RADIOLOCATION SPACE RESEARCH S5.447D S5.448 S5.448A	EARTH EXPLORATION- SATELLITE (active) RADIOLOCATION SPACE RESEARCH Mobile S5.447D S5.448 S5.448A	Weapon system radars Shipborne and VTS Radar Ground based and airborne weather radar Tactical Radar Position Fixing Active Sensors	EU22 ERC Recommendation CEPT/ERC/REC 70-	EARTH EXPLORATION- SATELLITE (active) RADIOLOCATION SPACE RESEARCH Mobile S5.447D S5.448A	HIPERLAN extension considered, 5250-5300 MHz ERC REC T/R22-06
5255-5350 MHz	EARTH EXPLORATION- SATELLITE (active) RADIOLOCATION SPACE RESEARCH (active) S5.448 S5.448A	EARTH EXPLORATION- SATELLITE (active) RADIOLOCATION SPACE RESEARCH (active) Mobile S5.448 S5.448A	: Weapon system radars Shipborne and VTS Radar Ground based and airborne weather radar Tactical Radar Position Fixing Active Sensors	HIPERLANs extension band 5250-5300 MHz	RADIOLOCATION SPACE RESEARCH (active)	HIPERLAN extension considered, 5250-5300 MHz ERC REC T/R22-06

Frequency band	RR Region 1 allocation and relevant footnotes	European Common Allocation	Major Utilisation	Notes	Norwegian Allocation	Norwegian Utilisation
5350-5450 MHz	AERONAUTICAL RADIONAVIGATION S5.449 EARTH EXPLORATION- SATELLITE (active) Radiolocation S5.448B	AERONAUTICAL RADIONAVIGATION S5.449 EARTH EXPLORATION- SATELLITE (active) Fixed Radiolocation S5.448B	Weapon system radars Shipborne and VTS Radar Ground based and airborne weather radar Tactical Radar Position Fixing Active Sensors	EU22	AERONAUTICAL RADIONAVIGATION S5.449 EARTH EXPLORATION- SATELLITE (active) Fixed Radiolocation S5.448B	
5450-5460 MHz		AERONAUTICAL RADIONAVIGATION S5.449 EARTH EXPLORATION- SATELLITE (active)Radiolocation S5.448B	Weapon system radars Shipborne and VTS Radar Ground based and airborne weather radar Tactical Radar Position Fixing Active sensors	EU22	AERONAUTICAL RADIONAVIGATION S5.449 EARTH EXPLORATION- SATELLITE (active)Radiolocation S5.448B	
5460-5470 MHz	RADIONAVIGATION S5.449 Radiolocation	RADIONAVIGATION S5.449 Radiolocation	Weapon system radars Shipborne and VTS Radar Ground based and airborne weather radar Tactical Radar Position Fixing	EU22	RADIONAVIGATION S5.449 Radiolocation	

Frequency band	RR Region 1 allocation and relevant footnotes	European Common Allocation	Major Utilisation	Notes	Norwegian Allocation	Norwegian Utilisation
5470-5650 MHz	MARITIME RADIONAVIGATION Radiolocation S5.450 S5.451 S5.452	MARITIME RADIONAVIGATION Radiolocation S5.450 S5.451 S5.452	Weapon system radars Shipborne and VTS Radar Ground based and airborne weather radar Tactical Radar Position Fixing	EU22	MARITIME RADIONAVIGATION Radiolocation S5.452	
5650-5725 MHz	RADIOLOCATION Amateur Space Research (deep space) S5.282 S5.451 S5.453 S5.454 S5.455	RADIOLOCATION Amateur S5.282 S5.451 S5.454 S5.455	Weapon system radars Shipborne and VTS Radar Ground based and airborne weather radar Tactical Radar Position Fixing	Service (Earth to space), 5650-5670	S5.282	

Frequency band	RR Region 1 allocation and relevant footnotes	European Common Allocation	Major Utilisation	Notes	Norwegian Allocation	Norwegian Utilisation
5725-5830 MHz	FIXED-SATELLITE (Earth-space) RADIOLOCATION Amateur S5.150 S5.451 S5.453 S5.455 S5.456	FIXED-SATELLITE (Earth-space) RADIOLOCATION Amateur Mobile S5.451 S5.455	Non civil radiolocation. Ground based and airborne weather radar. ISM 5725-5875 MHz. 5795-5805 MHz Road Transport and Traffic Telematic Systems (RTTT). SRDs in 5725-5875 MHz.	ERC Recommendation CEPT/ERC/REC 70-03. Amateur Satellite	FIXED-SATELLITE (Earth-space) RADIOLOCATION Amateur S5.150	Road Transport Information systems, T/R22-04 5795 –5850 MHz ISM, secondary services, T/R01-04 5725-5875 MHz Amateur Satellite(s-E) 5830-5850 MHz
5830-5850 MHz	FIXED-SATELLITE (Earth-space) RADIOLOCATION Amateur Amateur-Satellite (space-Earth) S5.150 S5.451 S5.453 S5.455 S5.456				FIXED-SATELLITE (Earth-space) RADIOLOCATION Amateur Amateur-Satellite (space-Earth) S5.150	Amateur Satellite(s-E) 5830-5850 MHz ISM, secondary services, T/R01-04 5725-5875 MHz

Frequency band	RR Region 1 allocation and relevant footnotes	European Common Allocation	Major Utilisation	Notes	Norwegian Allocation	Norwegian Utilisation
5850-5925 MHz	FIXED FIXED-SATELLITE (Earth-space) MOBILE S5.150	FIXED FIXED-SATELLITE (Earth-space) MOBILE S5.150	ISM 5725-5875 MHz Telecommunications satellites from coordinated Earth stations. Priority for civil networks	03.	FIXED FIXED-SATELLITE (Earth-space) MOBILE S5.150	ISM, secondary services, T/R01-04 5725-5875 MHz
5925-6425 MHz	FIXED FIXED-SATELLITE (Earth-space) MOBILE S5.149 S5.440 S5.458	FIXED FIXED-SATELLITE (Earth-space) S5.149	Medium/High capacity fixed links. Telecommunications satellites from coordinated Earth stations. Priority for civil networks.		FIXED FIXED-SATELLITE (Earth-space) S5.149	Radio Link , transport link, ITU-R F.383 5925-6425 MHz
6425-6700 MHz		FIXED FIXED-SATELLITE (Earth-space) S5.441 Earth Exploration- Satellite (passive) S5.149 S5.440 S5.458 S5.458A S5.458B S5.458C	Medium/High capacity fixed links. Telecommunications satellites from coordinated Earth stations. Priority for civil networks. Fixed Satellite Plan 6725-7025 MHz. Feeder links for the MSS in 6925-7075 MHz.	CEPT/ERC/REC 14-02.	FIXED FIXED-SATELLITE (Earth-space) S5.441 Earth Exploration- Satellite (passive) S5.149 S5.440 S5.458 S5.458A S5.458B S5.458C	Radio Link, ITU-R F.384 6425-7100 MHz Fixed-satellite, uplink

Frequency band	RR Region 1 allocation and relevant footnotes	European Common Allocation	Major Utilisation	Notes	Norwegian Allocation	Norwegian Utilisation
6700-7075 MHz	FIXED	FIXED			FIXED	Radio Link, ITU-R F.384
	FIXED-SATELLITE (Earth-space) (space-	FIXED-SATELLITE (Earth-space) S5.441			FIXED-SATELLITE (Earth-space) S5.441	6425-7100 MHz
	Earth) S5.441 MOBILE	Earth Exploration- Satellite (passive)			Earth Exploration- Satellite (passive)	
	S5.458 S5.458A S5.458B	S5.149 S5.440 S5.458 S5.458A S5.458B			S5.149 S5.440 S5.458 S5.458A S5.458B	ITU RR AP30B art.10 6725-7025 MHz
S5.458C	S5.458C	S5.458C			S5.458C	0/23-/023 WIFIZ
7075-7125 MHz	FIXED	FIXED	Medium/High capacity	ERC Recommendation	FIXED	Radio Link, ITU-R F.384
	MOBILE S5.458 S5.459 S5.460	Earth Exploration- Satellite (passive)	fixed links	CEPT/ERC/REC 14-	Earth Exploration- Satellite (passive)	6425-7100 MHz
		S5.458		EESS sea surface temperature measurements.	S5.458	
7125-7250 MHz		FIXED	Fixed links based on		FIXED	Radio Link, ITU-R F.385
		MOBILE	Recommendation ITU-	EESS sea surface temperature	MOBILE	7125-7425 MHz
		Earth Exploration- Satellite (Earth-space)	R F. 385	measurements.	Earth Exploration- Satellite (Earth-space)	
		Space Research (Earth-space)			Space Research (Earth-space)	
		Space Operation (Earthspace)			Space Operation (Earth-space)	
		S5.458			S5.458	
		S5.460			S5.460	

Frequency band	RR Region 1 allocation and relevant footnotes	European Common Allocation	Major Utilisation	Notes	Norwegian Allocation	Norwegian Utilisation
7250-7300 MHz	FIXED FIXED-SATELLITE (space-Earth) MOBILE S5.461	FIXED FIXED-SATELLITE (space-Earth) MOBILE S5.461	Fixed links based on Recommendation ITU- R F. 385 Mobile satellite 7250- 7375 MHz Defence systems	EU2 EU27 This is a harmonised military band for satellite operation. FIXED and MOBILE services not to be implemented in most NATO countries.	FIXED FIXED-SATELLITE (space-Earth) MOBILE S5.461	Radio Link, ITU-R F.385 7125-7425 MHz
7300-7450 MHz	FIXED FIXED-SATELLITE (space-Earth) MOBILE except Aeronautical Mobile S5.461	FIXED FIXED-SATELLITE (space-Earth) MOBILE except Aeronautical Mobile S5.461	Fixed links based on Recommendation ITU- R F. 385 Mobile satellite 7250- 7375 MHz Defence systems	11:	FIXED FIXED-SATELLITE (space-Earth) MOBILE except Aeronautical Mobile S5.461	Radio Link, ITU-R F.385 7125-7425 MHz 7425-7725 MHz
7450-7550 MHz	FIXED FIXED-SATELLITE (space-Earth) METEOROLOGICAL- SATELLITE (space-Earth) MOBILE except Aeronautical Mobile S5.461A	FIXED FIXED-SATELLITE (space-Earth) METEOROLOGICAL- SATELLITE (space-Earth) MOBILE except Aeronautical Mobile S5.461A	Fixed links based on Recommendation ITU- R F. 385 Defence systems	This is a harmonised military band for	METEOROLOGICAL- SATELLITE (space- Earth)	Radio Link, ITU-R F.385 7425-7725 MHz

Frequency band	RR Region 1 allocation and relevant footnotes	European Common Allocation	Major Utilisation	Notes	Norwegian Allocation	Norwegian Utilisation
7550-7750 MHz	FIXED FIXED-SATELLITE (space-Earth)	FIXED FIXED-SATELLITE (space-Earth)	Fixed links based on Recommendation ITU- R F. 385	This is a harmonised military band for	FIXED FIXED-SATELLITE (space-Earth) MOBILE except	Radio Link, ITU-R F.385 7425-7725 MHz
	MOBILE except Aeronautical Mobile MOBILE except Aeronautical Mobile Defence systems satellite operation.	satellite operation.	Aeronautical Mobile	Radio Link, ITU-R F.386 (MOD) 7725-7925 MHz		
7750-7850 MHz	FIXED MOBILE except Aeronautical Mobile METEOROLOGICAL SATELLITE (space-to- Earth) S5.461B	FIXED MOBILE except Aeronautical Mobile METEOROLOGICAL SATELLITE (space-to-Earth) S5.461B	Fixed links based on Recommendation ITU-R F.386. Defence systems.	EU2 Meteorological satellites limited to non-geostationary systems Military use in some countries.	FIXED MOBILE except Aeronautical Mobile METEOROLOGICAL SATELLITE (space-to-Earth) S5.461B	Radio Link, ITU-RF.386(MOD) 7725-7925 MHz
7850-7900 MHz	FIXED MOBILE except Aeronautical Mobile	FIXED MOBILE except Aeronautical Mobile	Fixed links based on Recommendation ITU-R F.386. Defence systems.		FIXED MOBILE except Aeronautical Mobile	Radio Link, ITU-R F.386(MOD) 7725-7925 MHz
7900-8025 MHz	FIXED FIXED-SATELLITE (Earth-space) MOBILE	FIXED FIXED-SATELLITE (Earth-space) MOBILE	Fixed links based on Recommendation ITU-R F.386. Mobile satellite 7900-	This is a harmonised military band for satellite operation.	FIXED FIXED-SATELLITE (Earth-space) MOBILE	Radio Link ITU-R F.386(MOD) 7725-7925 MHz
	S5.461	S5.461	8025 MHz. Defence systems.	FIXED and MOBILE services not to be implemented above 7975 MHz in NATO countries.	S5.461	ITU RR AR14/S9 no.S9.12

Frequency band	RR Region 1 allocation and relevant footnotes	European Common Allocation	Major Utilisation	Notes	Norwegian Allocation	Norwegian Utilisation
8025-8175 MHz	EARTH EXPLORATION- SATELLITE (space- Earth) FIXED FIXED-SATELLITE (Earth-space) MOBILE S5.462A S5.463	EARTH EXPLORATION- SATELLITE (space- Earth) FIXED FIXED-SATELLITE (Earth-space) MOBILE S5.462A S5.463	Fixed links based on Recommendation ITU-R F.386 Mobile 8025-8200 MHz Defence systems Earth exploration satellite systems	This is a harmonised military band for satellite operation.	EARTH EXPLORATION- SATELLITE (space- Earth) FIXED FIXED-SATELLITE (Earth-space) MOBILE S5.462A S5.463	
8175-8215 MHz	EARTH EXPLORATION- SATELLITE (space- Earth) FIXED FIXED-SATELLITE (Earth-space) METEOROLOGICAL- SATELLITE (Earth- space) MOBILE S5.462A S5.463	EARTH EXPLORATION- SATELLITE (space- Earth) FIXED FIXED-SATELLITE (Earth-space) METEOROLOGICAL- SATELLITE (Earth- space) MOBILE S5.462A S5.463	Fixed links based on Recommendation ITU-R F.386 Mobile 8025-8200 MHz Defence systems Earth exploration satellite systems	This is a harmonised military band for satellite operation.	EARTH EXPLORATION- SATELLITE (space- Earth) FIXED FIXED-SATELLITE (Earth-space) METEOROLOGICAL- SATELLITE (Earth- space) MOBILE S5.462A S5.463	

Frequency band	RR Region 1 allocation and relevant footnotes	European Common Allocation	Major Utilisation	Notes	Norwegian Allocation	Norwegian Utilisation
8215-8400 MHz	FIXED FIXED-SATELLITE (Earth-space) MOBILE EARTH EXPLORATION- SATELLITE (space-Earth) S5.462 S5.462A S5.463 S5.464	FIXED FIXED-SATELLITE (Earth-space) EARTH EXPLORATION- SATELLITE (space- Earth) S5.462 S5.462A S5.463 S5.464	Fixed links based on Recommendation ITU- R F.386 Defence systems Earth exploration satellite systems	Earth Exploration Satellite service will be considered in WRC-97.	FIXED FIXED-SATELLITE (Earth-space) EARTH EXPLORATION- SATELLITE (space- Earth) S5.462 S5.462A S5.463	Radio Link, ITU-R F.386 8200-8349/8360-8500 MHz
8400-8500 MHz	FIXED MOBILE except Aeronautical Mobile SPACE RESEARCH (space-Earth) S5.465 S5.466 S5.467	FIXED SPACE RESEARCH (space-Earth) S5.465, S5.466 Radiolocation	Fixed links based on Recommendation ITU- R F.386	observations.	FIXED SPACE RESEARCH (space-Earth) S5.465, Radiolocation	Radio Link, ITU-R F.386 8200-8349/8360-8500 MHz
8500-8550 MHz	RADIOLOCATION S5.468 S5.469	RADIOLOCATION S5.468 S5.469	Civil and non civil aeronautical radionavigation systems e.g. airfield approach Shipborne, land and airborne surveillance and weapon system radars.	EU2 EU24	RADIOLOCATION	

Frequency band	RR Region 1 allocation and relevant footnotes	European Common Allocation	Major Utilisation	Notes	Norwegian Allocation	Norwegian Utilisation
8550-8650 MHz		RADIOLOCATION SPACE RESEARCH (active) EARTH EXPLORATION SATELLITE (active) S5.463A S5.468 S5.469	Civil and non civil aeronautical radionavigation systems e.g. airfield approach Shipborne, land and airborne surveillance and weapon system radars. Space borne active sensors		RADIOLOCATION SPACE RESEARCH (active) EARTH EXPLORATION SATELLITE (active) S5.463A	
8650-8750	RADIOLOCATION S5.468 S5.469	RADIOLOCATION S5.468 S5.469	Civil and non civil aeronautical radionavigation systems e.g. airfield approach Shipborne, land and airborne surveillance and weapon system radars.		RADIOLOCATION	

Frequency band	RR Region 1 allocation and relevant footnotes	European Common Allocation	Major Utilisation	Notes	Norwegian Allocation	Norwegian Utilisation
8750-8850 MHz	RADIOLOCATION AERONAUTICAL RADIONAVIGATION S5.470 S5.471	RADIOLOCATION AERONAUTICAL RADIONAVIGATION S5.470 Space Research S5.471	Civil and non civil aeronautical radionavigation systems e.g. airfield approach Shipborne, land and airborne surveillance and weapon system radars.	EU2 EU24	RADIOLOCATION AERONAUTICAL RADIONAVIGATION S5.470 Space Research	
8850-9000 MHz	RADIOLOCATION MARITIME RADIONAVIGATION S5.472 S5.473	RADIOLOCATION MARITIME RADIONAVIGATION S5.472 Space Research S5.473		EU2 EU24	RADIOLOCATION MARITIME RADIONAVIGATION S5.472 Space Research	
9000-9200 MHz	AERONAUTICAL RADIONAVIGATION S5.337 Radiolocation S5.471	AERONAUTICAL RADIONAVIGATION S5.337 Radiolocation Space Research S5.471	Civil and non civil aeronautical radionavigation systems e.g. airfield approach Shipborne, land and airborne surveillance and weapon system radars.		AERONAUTICAL RADIONAVIGATION S5.337 Radiolocation Space Research	

Frequency band	RR Region 1 allocation and relevant footnotes	European Common Allocation	Major Utilisation	Notes	Norwegian Allocation	Norwegian Utilisation
9200-9300 MHz	S5.472	RADIOLOCATION MARITIME RADIONAVIGATION S5.472 Space Research S5.473 S5.474	Motion sensors Civil and non civil aeronautical radionavigation systems e.g. airfield approach. Shipborne, land and airborne surveillance	ERC Recommendation CEPT/ERC/REC 70- 03	RADIOLOCATION MARITIME RADIONAVIGATION S5.472 Space Research S5.474	
9300-9500 MHz	RADIONAVIGATION	RADIONAVIGATION	and weapon system radars. Motion sensors	EU2 EU24	RADIONAVIGATION	
	S5.476 Radiolocation S5.427 S5.474 S5.475	825A Radiolocation Space Research S5.427 S5.474 S5.475		ERC Recommendation CEPT/ERC/REC 70- 03	825A Radiolocation Space Research S5.427 S5.474 S5.475	
			Shipborne, land and airborne surveillance and weapon system radars.			

Frequency band	RR Region 1 allocation and relevant footnotes	European Common Allocation	Major Utilisation	Notes	Norwegian Allocation	Norwegian Utilisation
9500-9800 MHz	RADIOLOCATION RADIONAVIGATION EARTH EXPLORATION- SATELLITE (active) SPACE RESEARCH S5.476A	RADIOLOCATION EARTH EXPLORATION- SATELLITE (active) SPACE RESEARCH S5.476A	Motion sensors Civil and non civil aeronautical radionavigation systems e.g. airfield approach. Shipborne, land and airborne surveillance and weapon system radars. Space borne active sensors in bands 9500-9800 MHz	EU2 EU24 ERC Recommendation CEPT/ERC/REC 70- 03	RADIOLOCATION EARTH EXPLORATION- SATELLITE (active) SPACE RESEARCH S5.476A	
9800-10000 MHz	RADIOLOCATION Fixed S5.477 S5.478 S5.479	RADIOLOCATION Space Research S5.477 S5.478 S5.479	Motion sensors Civil and non civil aeronautical radionavigation systems e.g. airfield approach Shipborne, land and airborne surveillance and weapon system radars.	03	RADIOLOCATION Space Research S5.479	

Frequency band	RR Region 1 allocation and relevant footnotes	European Common Allocation	Major Utilisation	Notes	Norwegian Allocation	Norwegian Utilisation
10-10.15 GHz	FIXED MOBILE RADIOLOCATION Amateur S5.479	FIXED MOBILE RADIOLOCATION Amateur S5.479	Non civil radar ENG/OB is envisaged	EU2 EU17A	FIXED MOBILE RADIOLOCATION Amateur S5.479	ENG/OB 10-10.45 GHz Maritime Radiolocation systems, 10.0-10.2 GHz.
10.15-10.30 GHz		FIXED MOBILE RADIOLOCATION Amateur	ENG/OB is envisaged. Fixed includes point to multipoint. Wireless fixed access systems. Civil and non civil radar (low power) in certain sub bands	CEPT/ERC/REC 12- 05	FIXED MOBILE RADIOLOCATION Amateur	Radio Access planned, 10.15-10.30/10.50-10.65 GHz Maritime Radiolocation systems, 10.0-10.2 GHz.
10.30-10.45 GHz		FIXED RADIOLOCATION Amateur Mobile	ENG/OB is envisaged Civil and non civil radar (low power) in certain sub bands		FIXED RADIOLOCATION Amateur Mobile	

Frequency band	RR Region 1 allocation and relevant footnotes	European Common Allocation	Major Utilisation	Notes	Norwegian Allocation	Norwegian Utilisation
10.45-10.50 GHz	RADIOLOCATION Amateur Amateur-Satellite S5.481	FIXED RADIOLOCATION MOBILE Amateur Amateur-Satellite	Fixed includes point to multipoint. ENG/OB is envisaged Civil and non civil radar Motion sensors	EU2 EU17 EU23 EU17A ERC Recommendation CEPT/ERC/REC 70- 03	AMATEUR AMATEUR- SATELLITE	Exclusive Amateur band
10.50-10.55 GHz	FIXED MOBILE Radiolocation	FIXED MOBILE Radiolocation	Fixed includes point to multipoint. Wireless fixed access systems. ENG/OB is envisaged Motion sensors	ERC	FIXED MOBILE Radiolocation	Radio Access, planned 10,5-10,68 GHz ENG/OB 10,5-10,68 GHz SRD
10.55-10.60 GHz	FIXED MOBILE except Aeronautical Mobile Radiolocation	FIXED MOBILE except Aeronautical Mobile Radiolocation	Fixed includes point to multipoint ENG/OB is envisaged T/R 60-01: Motion sensors	ERC Recommendations CEPT/ERC/REC 12- 05 & CEPT/ERC/REC	FIXED MOBILE except Aeronautical Mobile Radiolocation	10,50-10,68 GHz Radio Access, planned, M-MP 10,5-10,68 GHz ENG/OB 10,5-10,68 GHz SRD 10,50-10,68 GHz

Frequency band	RR Region 1 allocation and relevant footnotes	European Common Allocation	Major Utilisation	Notes	Norwegian Allocation	Norwegian Utilisation
10.60-10.65 GHz	EARTH EXPLORATION- SATELLITE (passive) FIXED MOBILE except Aeronautical Mobile RADIO ASTRONOMY SPACE RESEARCH (passive) Radiolocation S5.149 S5.482	FIXED MOBILE except Aeronautical Mobile RADIO ASTRONOMY EARTH EXPLORATION- SATELLITE (passive) SPACE RESEARCH (passive) Radiolocation S5.149 S5.482	Fixed includes point to multipoint. Wireless fixed access systems. ENG/OB is envisaged Passive applications	ERC Recommendation	FIXED MOBILE except Aeronautical Mobile RADIO ASTRONOMY EARTH EXPLORATION- SATELLITE (passive) SPACE RESEARCH (passive) Radiolocation S5.149	Radio Access, planned, M-MP 10,5-10,68 GHz ENG/OB 10,5-10,68 GHz SRD 10,50-10,68 GHz
10.65-10.68 GHz		EARTH EXPLORATION- SATELLITE (passive) FIXED MOBILE except Aeronautical Mobile RADIO ASTRONOMY SPACE RESEARCH (passive) S5.149 S5.482	Fixed includes point to multipoint ENG/OB is envisaged Passive applications	EU17A ERC Recommendation CEPT/ERC/REC 12- 05 RA Continuum measurements and VLBI. Surface emissivity and precipitation.	EARTH EXPLORATION- SATELLITE (passive) FIXED MOBILE except Aeronautical Mobile RADIO ASTRONOMY SPACE RESEARCH (passive) S5.149	Radio Access, planned 10.5-10.68 GHz ENG/OB 10.5-10.68 GHz SRD 10,50-10,68 GHz

Frequency band	RR Region 1 allocation and relevant footnotes	European Common Allocation	Major Utilisation	Notes	Norwegian Allocation	Norwegian Utilisation
10.68-10.70 GHz	EARTH EXPLORATION- SATELLITE (passive) RADIO ASTRONOMY SPACE RESEARCH (passive) S5.340 S5.483	EARTH EXPLORATION- SATELLITE (passive) RADIO ASTRONOMY SPACE RESEARCH (passive) S5.340 S5.483	Passive applications	RA Continuum measurements and VLBI. Surface emissivity and precipitation.	EARTH EXPLORATION- SATELLITE (passive) RADIO ASTRONOMY SPACE RESEARCH (passive) S5.340	
10.70-11.70 GHz	FIXED S5.484 FIXED-SATELLITE (Earth-space) (space-Earth) S5.441 S5.441A MOBILE except Aeronautical Mobile	FIXED FIXED-SATELLITE (space-Earth) S5.441 Land Mobile-Satellite (space-Earth) Mobile except Aeronautical Mobile	Fixed links Euteltracs Fixed Satellite Plan 10.7-10.95 / 11.2- 11.45 GHz in accordance with App. 30B	ERC Recommendation CEPT/ERC/REC 12- 06	FIXED FIXED-SATELLITE (space-Earth) S5.441 Land Mobile-Satellite (space-Earth) Mobile except Aeronautical Mobile	Radio Link, ITU-R F.387 10.7-10.9 GHz 11.2-11.4 GHz FSS, ITU RR AP30B art.10 10.7-10.95 GHz 11.2-11.45 GHz VSAT downlink
11.70-12.50 GHz	FIXED BROADCASTING BROADCASTING- SATELLITE Mobile except Aeronautical Mobile S5.487 S5.487A S5.492 S5.441A	FIXED BROADCASTING- SATELLITE Mobile except Aeronautical Mobile S5.487 S5.487A S5.492	Satellite broadcasting in accordance with Appendix S30	Future use of this band for point to multipoint radio links for cable TV distribution depends on the replanning of RR Appendices S30 & S30A.		BSS, ITU RR AP30A 11.7-12.5 GHz

Frequency band	RR Region 1 allocation and relevant footnotes	European Common Allocation	Major Utilisation	Notes	Norwegian Allocation	Norwegian Utilisation
12.50-12.75 GHz	FIXED-SATELLITE (Earth-space) (space- Earth) S5.441A S5.494 S5.495 <u>S5.496</u>	FIXED-SATELLITE (space-Earth) S5.441A S5.495 S5.496	Fixed satellite applications		(space-Earth) S5.441A	
12.75-13.25 GHz	FIXED FIXED-SATELLITE (Earth-space) S5.441 MOBILE Space Research (deep space)(space-Earth)	FIXED FIXED-SATELLITE (Earth-space) S5.441	Fixed links based on Recommendation ITU-R F.497 Telecommunications satellites from coordinated Earth stations. Priority for civil networks Fixed satellite Plan	ERC Recommendation CEPT/ERC/REC 12- 02	FIXED FIXED-SATELLITE (Earth-space) S5.441	Radio Link, ITU-R F.497 12.75-13.25 GHz FSS, ITU RR AP30B art.10 12.75-13.25 GHz
13.25-13.40 GHz	AERONAUTICAL RADIONAVIGATION EARTH EXPLORATION- SATELLITE (active) SPACE RESEARCH (active) S5.497 S5.499 S5.498A	AERONAUTICAL RADIONAVIGATION S5.497 EARTH EXPLORATION- SATELLITE (active) SPACE RESEARCH (active) S5.498A	Doppler Navigation aids Ship berthing radars Earth exploration observations		AERONAUTICAL RADIONAVIGATION S5.497 EARTH EXPLORATION- SATELLITE (active) SPACE RESEARCH (active) S5.498A	

Frequency band	RR Region 1 allocation and relevant footnotes	European Common Allocation	Major Utilisation	Notes	Norwegian Allocation	Norwegian Utilisation
13.40-13.75 GHz	RADIOLOCATION EARTH EXPLORATION- SATELLITE (active) SPACE RESEARCH Standard Frequency and Time Signal-Satellite (Earth-space) S5.499 S5.500 S5.501 S5.501A S5.501B	EARTH EXPLORATION- SATELLITE (active) RADIOLOCATION SPACE RESEARCH S5.500 S5.501 S5.501A S5.501B	Doppler Navigation aids. Motion sensors in 13.4-14.0 GHz. Ship berthing radars. Military land, airborne and naval radars.	EU2 EU26 ERC Recommendation CEPT/ERC/REC 70- 03	EARTH EXPLORATION- SATELLITE (active) RADIOLOCATION SPACE RESEARCH S5.501A S5.501B	
13.75-14 GHz	FIXED-SATELLITE (Earth-space) S5.441A RADIOLOCATION Standard Frequency and Time Signal-Satellite (Earth-space) Space Research S5.499 S5.500 S5.501 S5.502 S5.503 S5.503A	RADIOLOCATION FIXED-SATELLITE (Earth-space) S5.441A Space Research S5.500 S5.501 S5.502 S5.503	Telecommunications satellites for fixed applications. Priority for civil networks. Motion sensors in 13.4-14.0 GHz. Ship berthing radar. Future VLBI observations. Military land, airborne and naval radars. Navigation radars.	EU2 EU26 ERC Recommendation CEPT/ERC/REC 70- 03	RADIOLOCATION FIXED-SATELLITE (Earth-space) S5.441A Space Research S5.502 S5.503	

Frequency band	RR Region 1 allocation and relevant footnotes	European Common Allocation	Major Utilisation	Notes	Norwegian Allocation	Norwegian Utilisation
14-14.25 GHz	FIXED-SATELLITE (Earth-space) S5.441A S5.506 RADIONAVIGATION S5.504 Mobile-Satellite (Earth-space) except aeronautical mobile- satellite Space Research S5.505	FIXED-SATELLITE (Earth-space) S5.441A Mobile-Satellite (Earth- space) except aeronautical mobile- satellite Space Research S5.504	Telecommunications satellites for fixed and mobile applications. Priority for civil networks. VSAT/SNG applications.	T 1		FSS, VSAT/SNG uplink
14.25-14.30 GHz	FIXED-SATELLITE (Earth-space) S5.441A S5.506 RADIONAVIGATION S5.504 Mobile-Satellite (Earth-space) except aeronautical mobile-satellite Space Research S5.505 S5.508 S5.509	FIXED-SATELLITE (Earth-space) S5.441A Mobile-Satellite (Earth- space) except aeronautical mobile- satellite Space Research S5.504	Telecommunications satellites for fixed and mobile applications. Priority for civil networks. VSAT/SNG applications.	ERC Recommendation CEPT/ERC/REC 13- 03 Fixed links to be coordinated with fixed satellite service on a national basis.	FIXED-SATELLITE (Earth-space) S5.441A Mobile-Satellite (Earth- space) except aeronautical mobile- satellite Space Research S5.504	FSS, VSAT/SNG uplink

Frequency band	RR Region 1 allocation and relevant footnotes	European Common Allocation	Major Utilisation	Notes	Norwegian Allocation	Norwegian Utilisation
14.30-14.40 GHz	FIXED FIXED-SATELLITE (Earth-space) S5.441A S5.506 MOBILE except Aeronautical Mobile Mobile-Satellite (Earth-space) except aeronautical mobile-satellite Radionavigation- Satellite	FIXED-SATELLITE (Earth-space) S5.441A Mobile-Satellite (Earth- space) except aeronautical mobile- satellite	Telecommunications satellites for fixed and mobile applications. Priority for civil networks VSAT/SNG applications	ERC Recommendation CEPT/ERC/REC 13- 03 Fixed links to be coordinated with fixed satellite service on a national basis.	FIXED-SATELLITE (Earth-space) S5.441A Mobile-Satellite (Earth- space) except aeronautical mobile- satellite	FSS, VSAT/SNG uplink
14.40-14.47 GHz	FIXED FIXED-SATELLITE (Earth-space) S5.441A S5.506 MOBILE except Aeronautical Mobile Mobile-Satellite (Earth-space) except aeronautical mobile-satellite Space Research (space-Earth) S5.441A	FIXED-SATELLITE (Earth-space) S5.441A Mobile-Satellite (Earth- space) except aeronautical mobile- satellite	Telecommunications satellites for fixed and mobile applications. Priority for civil networks VSAT/SNG applications	ERC Recommendation CEPT/ERC/REC 13- 03 Fixed links to be coordinated with fixed satellite service on a national basis.	FIXED-SATELLITE (Earth-space) S5.441A Mobile-Satellite (Earth- space) except aeronautical mobile- satellite	FSS, VSAT/SNG uplink

Frequency band	RR Region 1 allocation and relevant footnotes	European Common Allocation	Major Utilisation	Notes	Norwegian Allocation	Norwegian Utilisation
14.47-14.50 GHz	FIXED FIXED-SATELLITE (Earth-space) S5.441A S5.506 MOBILE except Aeronautical Mobile Mobile-Satellite (Earth-space) except aeronautical mobile-satellite Radio Astronomy S5.149	FIXED-SATELLITE (Earth-space) S5.441A Mobile-Satellite (Earth- space) except aeronautical mobile- satellite Radio Astronomy S5.149	Telecommunications satellites for fixed and mobile applications. Priority for civil networks. VSAT/SNG applications.	ERC Recommendation CEPT/ERC/REC 13- 03 Fixed links to be coordinated with fixed satellite service on a national basis. RA spectral line observations and future VLBI.	FIXED-SATELLITE (Earth-space) S5.441A Mobile-Satellite (Earth- space) except aeronautical mobile- satellite Radio Astronomy S5.149	FSS, VSAT/SNG uplink
14.50-14.80 GHz	FIXED FIXED-SATELLITE (Earth-space) S5.510 MOBILE Space Research	FIXED MOBILE Radio Astronomy	Defence systems Civil and non-civil fixed links.	EU20 EU27 ERC Recommendation CEPT/ERC/REC 12- 07 The band 14.62-15.23 GHz is a harmonised military band for fixed and mobile services. Future VLBI observations compatible with primary use.	FIXED MOBILE Radio Astronomy	Governmental users.

Frequency band	RR Region 1 allocation and relevant footnotes	European Common Allocation	Major Utilisation	Notes	Norwegian Allocation	Norwegian Utilisation
14.80-15.35 GHz	FIXED MOBILE Space Research S5.339	FIXED MOBILE Radio Astronomy S5.339	Defence systems Civil and non-civil fixed links based on Recommendation ITU-R F.636, to be reviewed.	EU20 EU27 ERC Recommendation CEPT/ERC/REC 12-07 The band 14.62-15.23 GHz is a harmonised military band for fixed and mobile services. Future VLBI observations compatible with primary use.	FIXED MOBILE Radio Astronomy S5.339	Governmental users.
15.35-15.40 GHz	EARTH EXPLORATION- SATELLITE (passive) RADIO ASTRONOMY SPACE RESEARCH (passive) S5.340 S5.511	EARTH EXPLORATION- SATELLITE (passive) RADIO ASTRONOMY SPACE RESEARCH (passive) S5.340 S5.511	Passive applications.	RA continuum measurements and future VLBI.	EARTH EXPLORATION- SATELLITE (passive) RADIO ASTRONOMY SPACE RESEARCH (passive) S5.340	
15.40-15.43 GHz	AERONAUTICAL RADIONAVIGATION S5.511D	AERONAUTICAL RADIONAVIGATION S5.366 S5.367 S5.445 S5.511D	Doppler radar low power sensing. Ground movement radars.		AERONAUTICAL RADIONAVIGATION S5.366 S5.367 S5.511D	

Frequency band	RR Region 1 allocation and relevant footnotes	European Common Allocation	Major Utilisation	Notes	Norwegian Allocation	Norwegian Utilisation
15.43-15.63 GHz	FIXED-SATELLITE (space to Earth)(Earth to space) S5.511A AERONAUTICAL RADIONAVIGATION S5.511C S5.511D	FIXED-SATELLITE (space to Earth)(Earth to space) S5.511A AERONAUTICAL RADIONAVIGATION S5.511C S5.511D	Fixed satellite applications for MSS feeder links. Doppler radar low power sensing. Ground movement radars.		FIXED-SATELLITE (space to Earth)(Earth to space) S5.511A AERONAUTICAL RADIONAVIGATION S5.511C S5.511D	
15.63-15.7 GHz	AERONAUTICAL RADIONAVIGATION S5.511D	AERONAUTICAL RADIONAVIGATION S5.511D	Doppler radar low power sensing. Ground movement radars.		AERONAUTICAL RADIONAVIGATION S5.511D	
15.70-16.60 GHz	RADIOLOCATION S5.512 S5.513	RADIOLOCATION S5.512	Defence systems	EU27 This is a harmonised military band for land, airborne and naval radars.	RADIOLOCATION	Governmental users
16.60-17.10 GHz	RADIOLOCATION Space Research (deep space)(Earth-space) S5.512 S5.513	RADIOLOCATION Space Research (Earthspace) S5.512	Defence systems	EU27 This is a harmonised military band for land, airborne and naval radars.	RADIOLOCATION Space Research (Earthspace)	Governmental users

Frequency band	RR Region 1 allocation and relevant footnotes	European Common Allocation	Major Utilisation	Notes	Norwegian Allocation	Norwegian Utilisation
17.10-17.20 GHz	RADIOLOCATION <u>S5.512</u> S5.513	RADIOLOCATION Mobile S5.512	Defence systems HIPERLAN	EU2 ERC Recommendation CEPT/ERC/REC 70- 03. Military radar applications.	RADIOLOCATION Mobile	Radiolocation systems.
17.20-17.30 GHz	RADIOLOCATION EARTH EXPLORATION- SATELLITE (active) SPACE RESEARCH (active) S5.512 S5.513 S5.513A	RADIOLOCATION EARTH EXPLORATION- SATELLITE (active) SPACE RESEARCH (active) MOBILE S5.512	Defence systems. Missile systems radars. Airborne terrain following radars.	EU2 Military radar applications Recommendation CEPT/ERC/REC 70-03.	RADIOLOCATION EARTH EXPLORATION- SATELLITE (active) SPACE RESEARCH (active) MOBILE	Radiolocation systems
			HIPERLAN	Mobile allocation for HIPERLANs which have priority over space services. HIPERLANs cannot claim protection from radiolocation service.		

Frequency band	RR Region 1 allocation and relevant footnotes	European Common Allocation	Major Utilisation	Notes	Norwegian Allocation	Norwegian Utilisation
17.30-17.70 GHz	FIXED-SATELLITE (Earth-space) S5.516 Radiolocation S5.514	FIXED-SATELLITE (Earth-space) S5.516 FIXED Radiolocation S5.514	Point to multipoint systems. Appendix S30A of Radio Regulations. Feeder link plan for 11.7-12.5 GHz	EU2 Missile systems radars.	FIXED-SATELLITE (Earth-space) S5.516 FIXED Radiolocation	BSS, Feeder Links ITU RR AP30A art.9A
17.70-18.10 GHz	FIXED FIXED-SATELLITE (Earth-space) (space-Earth) S5.441A S5.516 MOBILE	FIXED FIXED-SATELLITE (Earth-space) (space-Earth) S5.441A S5.516	Fixed links Telecommunications satellites to coordinated Earth stations. Priority for civil networks Feeder link plan 17.7- 18.1 GHz	ERC Recommendation CEPT/ERC/REC 12- 03	FIXED FIXED-SATELLITE (Earth-space) (space-Earth) S5.441A S5.516	Radio Link, ITU-R F.595. 17.7-19.7 GHz BSS, Feeder Links ITU RR AP30A art.9A
18.10-18.30 GHz	FIXED FIXED-SATELLITE (Earth-space) (space- Earth) S5.441A S5.520 MOBILE S5.519 S5.521	FIXED FIXED-SATELLITE (space-Earth) S5.441A S5.520 METEOROLOGICAL- SATELLITE (space-Earth) S5.519 S5.521	Fixed links Telecommunications satellites to coordinated Earth stations. Priority for civil networks. Feeder link band 18.1-18.4 GHz for BSS (WARC 92).	ERC Recommendation CEPT/ERC/REC 12- 03	FIXED FIXED-SATELLITE (space-Earth) S5.441A S5.520 METEOROLOGICAL- SATELLITE (space-Earth) S5.519 S5.521	Radio Link, ITU-R F.595. 17.7-19.7 GHz BSS, Feeder Links ITU RR AP30A art.9A

Frequency band	RR Region 1 allocation and relevant footnotes	European Common Allocation	Major Utilisation	Notes	Norwegian Allocation	Norwegian Utilisation
18.30-18.40 GHz		FIXED FIXED-SATELLITE (space-Earth) S5.520 S5.521	Fixed links. Telecommunications satellites to coordinated Earth stations. Priority for civil networks. Feeder link band 18.1-18.4 GHz for BSS (WARC 92).	ERC Recommendation CEPT/ERC/REC 12- 03.	FIXED FIXED-SATELLITE (space-Earth) S5.520 S5.521	Radio Link, ITU-R F.595. 17.7-19.7 GHz
18.40-18.60 GHz	FIXED FIXED-SATELLITE (space-Earth) S5.441A MOBILE	FIXED FIXED-SATELLITE (space-Earth) S5.441A	Fixed links Telecommunications satellites to coordinated Earth stations. Priority for civil networks.	ERC Recommendation CEPT/ERC/REC 12- 03	FIXED FIXED-SATELLITE (space-Earth) S5.441A	Radio Link, ITU-R F.595. 17.7-19.7 GHz
18.60-18.80 GHz	FIXED FIXED-SATELLITE (space-Earth) S5.523 MOBILE except Aeronautical Mobile Earth Exploration- Satellite (passive) Space Research (passive) S5.522	FIXED FIXED-SATELLITE (space-Earth) S5.523 Earth Exploration- Satellite (passive) S5.522	Fixed links. Telecommunications satellites to coordinated Earth stations. Priority for civil networks.	03 Earth Exploration	FIXED FIXED-SATELLITE (space-Earth) S5.523 Earth Exploration- Satellite (passive) S5.522	Radio Link, ITU-R F.595. 17.7-19.7 GHz

Frequency band	RR Region 1 allocation and relevant footnotes	European Common Allocation	Major Utilisation	Notes	Norwegian Allocation	Norwegian Utilisation
18.80-19.30 GHz	FIXED FIXED-SATELLITE (space-Earth) S5.523A MOBILE	FIXED FIXED-SATELLITE (space-Earth)	Fixed links Telecommunications satellites to coordinated Earth stations. Priority for civil networks.	ERC Recommendation CEPT/ERC/REC 12- 03	FIXED FIXED-SATELLITE (space-Earth)	Radio Link, ITU-R F.595. 17.7-19.7 GHz
19.30-19.70 GHz	FIXED FIXED-SATELLITE (Earth-space) (space- Earth) S5.523B S5.523C S5.523D S5.523E MOBILE	FIXED FIXED-SATELLITE (space-Earth) S5.523B S5.523C S5.523D S5.523E			FIXED FIXED-SATELLITE (space-Earth) S5.523B S5.523C S5.523D S5.523E	Radio Link, ITU-R F.595. 17.7-19.7 GHz
19.70-20.10 GHz	FIXED-SATELLITE (space-Earth) S5.441A Mobile-Satellite (space- Earth) S5.524	FIXED-SATELLITE (space-Earth) S5.441A Mobile-Satellite (space- Earth)	Fixed and mobile satellites to uncoordinated Earth stations		FIXED-SATELLITE (space-Earth) S5.441A Mobile-Satellite (space- Earth)	
20.10-20.20 GHz	FIXED-SATELLITE (space-Earth) S5.441A MOBILE-SATELLITE (space-Earth) S5.524 S5.525 S5.526 S5.527 S5.528	FIXED-SATELLITE (space-Earth) S5.441A MOBILE-SATELLITE (space-Earth) S5.525 S5.526 S5.527 S5.528	Fixed and mobile satellites to uncoordinated Earth stations.		FIXED-SATELLITE (space-Earth) S5.441A MOBILE-SATELLITE (space-Earth) S5.525 S5.526 S5.527 S5.528	

Frequency band	RR Region 1 allocation and relevant footnotes	European Common Allocation	Major Utilisation	Notes	Norwegian Allocation	Norwegian Utilisation
20.20-21.20 GHz	FIXED-SATELLITE (space-Earth)	FIXED-SATELLITE (space-Earth)	Fixed and mobile satellites to		FIXED-SATELLITE (space-Earth)	Governmental users.
	MOBILE-SATELLITE (space-Earth)	MOBILE-SATELLITE (space-Earth)	uncoordinated Earth stations.	The band 20.2-21.2 GHz is a harmonised military band for	MOBILE-SATELLITE (space-Earth)	
	Standard Frequency and Time Signal-Satellite (space-Earth)			satellite downlinks.		
	S5.524					
21.20-21.40 GHz	EARTH EXPLORATION- SATELLITE (passive)	EARTH EXPLORATION- SATELLITE (passive)	Unidirectional, temporary fixed or mobile links, including	Passive systems will be phased out by 2015.	EARTH EXPLORATION- SATELLITE (passive)	
	FIXED	FIXED	ENG/OB.		FIXED	
	MOBILE	MOBILE			MOBILE	
	SPACE RESEARCH (passive)	SPACE RESEARCH (passive)			SPACE RESEARCH (passive)	
21.40-22 GHz	FIXED MOBILE BROADCASTING- SATELLITE S5.530	BROADCASTING- SATELLITE S5.530	Wide band high definition television.	envisaged in some	BROADCASTING- SATELLITE S5.530	

Frequency band	RR Region 1 allocation and relevant footnotes	European Common Allocation	Major Utilisation	Notes	Norwegian Allocation	Norwegian Utilisation
22-22.21 GHz 22.21-22.50 GHz	FIXED MOBILE except Aeronautical Mobile S5.149 EARTH EXPLORATION- SATELLITE (passive) FIXED MOBILE except Aeronautical Mobile RADIO ASTRONOMY SPACE RESEARCH (passive) S5.149 S5.532	FIXED MOBILE except Aeronautical Mobile RADIO ASTRONOMY SPACE RESEARCH (passive) S5.149 FIXED MOBILE except Aeronautical Mobile RADIO ASTRONOMY SPACE RESEARCH (passive) Earth Exploration- Satellite (passive) S5.149 S5.532	Fixed links Passive applications. ENG/OB is envisaged. Fixed links RA applications. ENG/OB is envisaged.	EU17A ERC Recommendation T/R 13-02 RA spectral line observations (water line and redshifted water line under 22.5 GHz) EU17A ERC Recommendation T/R 13-02 Passive systems will be phased out by 2015. RA spectral line observations (water line and redshifted water line under 22.5 GHz) also VLBI.	FIXED MOBILE except Aeronautical Mobile RADIO ASTRONOMY SPACE RESEARCH (passive) S5.149 FIXED MOBILE except Aeronautical Mobile RADIO ASTRONOMY SPACE RESEARCH (passive) Earth Exploration- Satellite (passive) S5.149 S5.532	Radio Link, T/R-13-02 Annex A 22.0-22.6/23.0-23.6 GHz Radio Link, T/R-13-02 Annex A 22.0-22.6/23.0-23.6 GHz
22.50-22.55 GHz	FIXED MOBILE	FIXED MOBILE RADIO ASTRONOMY SPACE RESEARCH (passive)	Fixed links RA applications ENG/OB is envisaged.	EU17A ERC Recommendation T/R 13-02	FIXED MOBILE RADIO ASTRONOMY SPACE RESEARCH (passive)	Radio Link, T/R-13-02 Annex A 22.0-22.6/23.0-23.6 GHz

Frequency band	RR Region 1 allocation and relevant footnotes	European Common Allocation	Major Utilisation	Notes	Norwegian Allocation	Norwegian Utilisation
22.55-22.60 GHz	FIXED INTER-SATELLITE MOBILE S5.149	FIXED MOBILE RADIO ASTRONOMY SPACE RESEARCH (passive)	Fixed links RA applications ENG/OB is envisaged.	EU17A ERC Recommendation T/R 13-02	FIXED MOBILE RADIO ASTRONOMY SPACE RESEARCH (passive)	Radio Link, T/R-13-02 Annex A 22.0-22.6/23.0-23.6 GHz
22.60-23 GHz		S5.149 FIXED MOBILE RADIO ASTRONOMY SPACE RESEARCH (passive) S5.149	ENG/OB is envisaged. RA applications. Methyl Formate and Ammonia lines 22.81-22.86 GHz.	Tormate and Ammonia	S5.149 FIXED MOBILE RADIO ASTRONOMY SPACE RESEARCH (passive) S5.149	
23-23.55 GHz	FIXED INTER-SATELLITE MOBILE S5.149	FIXED INTER-SATELLITE MOBILE S5.149	Fixed links ENG/OB is envisaged	ERC Recommendation T/R 13-02. RA spectral line observations.	FIXED INTER-SATELLITE MOBILE S5.149	Radio Link, T/R-13-02 Annex A 23.0-23.6/22.0-22.6 GHz
23.55-23.60 GHz	FIXED MOBILE	FIXED INTER-SATELLITE MOBILE	Fixed links. ENG/OB is envisaged.	ERC Recommendation T/R 13-02.	FIXED INTER-SATELLITE MOBILE	Radio Link, T/R-13-02 Annex A 23.0-23.6/22.0-22.6 GHz

Frequency band	RR Region 1 allocation and relevant footnotes	European Common Allocation	Major Utilisation	Notes	Norwegian Allocation	Norwegian Utilisation
23.60-24 GHz	EARTH EXPLORATION- SATELLITE (passive) RADIO ASTRONOMY SPACE RESEARCH (passive) S5.340	EARTH EXPLORATION- SATELLITE (passive) RADIO ASTRONOMY SPACE RESEARCH (passive) S5.340	Passive applications.	Continuum observations. Ammonia line. Water vapour measurements.	EARTH EXPLORATION- SATELLITE (passive) RADIO ASTRONOMY SPACE RESEARCH (passive) S5.340	
24-24.05 GHz	AMATEUR AMATEUR- SATELLITE S5.150	AMATEUR AMATEUR- SATELLITE S5.150	ISM 24-24.25 GHz SRD ENG/OB is envisaged.	ERC Recommendation CEPT/ERC/REC 70- 03	AMATEUR AMATEUR- SATELLITE S5.150	ISM(24.00-24.25 GHz), secondary services.
24.05-24.25 GHz	RADIOLOCATION Amateur Earth Exploration- Satellite (active) S5.150	RADIOLOCATION Amateur Earth Exploration- Satellite (active) Fixed S5.150	Defence radars. Rain radar from satellites. ISM 24.05-24.25 GHz SRD Motion sensors. ENG/OB is envisaged.	EU2 ERC Recommendation CEPT/ERC/REC 70- 03	RADIOLOCATION Amateur Earth Exploration- Satellite (active) Fixed S5.150	ISM(24.00-24.25 GHz), secondary services.

Frequency band	RR Region 1 allocation and relevant footnotes	European Common Allocation	Major Utilisation	Notes	Norwegian Allocation	Norwegian Utilisation
24.25-24.45 GHz	FIXED	FIXED MOBILE	Unidirectional, temporary fixed links.	EU17A	FIXED MOBILE	
24.45-24.50 GHz	FIXED INTER-SATELLITE	FIXED MOBILE	Unidirectional, temporary fixed links. ENG/OB	EU17A	FIXED MOBILE	Radio Link,T/R13-02 Annex B 24.5-25.45/25.56-26.5 GHz
24.50-24.65 GHz		FIXED	Fixed links	ERC Recommendation T/R 13-02	FIXED	Radio Link,T/R13-02 Annex B 24.5-25.45/25.56-26.5 GHz
24.65-24.75 GHz	FIXED INTER-SATELLITE	FIXED	Fixed links	ERC Recommendation T/R 13-02	FIXED	Radio Link,T/R13-02 Annex B 24.5-25.45/25.56-26.5 GHz
24.75-25.25 GHz	FIXED	FIXED	Fixed links	ERC Recommendation T/R 13-02	FIXED	Radio Link,T/R13-02 Annex B 24.5-25.45/25.56-26.5 GHz
25.25-25.50 GHz	FIXED INTER-SATELLITE S5.536 MOBILE Standard Frequency and	FIXED MOBILE INTER SATELLITE S5.536	Fixed links	ERC Recommendation T/R 13-02	FIXED MOBILE INTER SATELLITE S5.536	Radio Link,T/R13-02 Annex B 24.5-25.45/25.56-26.5 GHz
	Time Signal- Satellite(Earth-space)					

Frequency band	RR Region 1 allocation and relevant footnotes	European Common Allocation	Major Utilisation	Notes	Norwegian Allocation	Norwegian Utilisation
25.50-26.50 GHz	EARTH EXPLORATION- SATELLITE (space- Earth) S5.536A S5.536B FIXED INTER-SATELLITE S5.536 MOBILE Standard Frequency and Time Signal-Satellite (Earth-space)	FIXED MOBILE INTER-SATELLITE S5.536 Earth Exploration- Satellite (space-Earth) S5.536A S5.536B	: Fixed links	ERC Recommendation T/R 13-02	FIXED MOBILE INTER-SATELLITE S5.536 Earth Exploration- Satellite (space-Earth) S5.536A S5.536B	Radio Link,T/R13-02 Annex B 25.56-26.5/24.5-25.45 GHz
26.50-27 GHz	(Earth Space)	FIXED MOBILE INTER-SATELLITE S5.536 Earth Exploration- Satellite (space-space) S5.536A S5.536B	Defence systems	EU27 This is a harmonised military band for fixed and mobile systems.	FIXED MOBILE INTER-SATELLITE S5.536 Earth Exploration- Satellite (space-space) S5.536A S5.536B	Governmental users.
27-27.50 GHz	FIXED INTER-SATELLITE MOBILE S5.536	FIXED MOBILE INTER-SATELLITE S5.536 Earth Exploration- Satellite (space-space)	Defence systems	EU27 This is a harmonised military band for fixed and mobile systems.	FIXED MOBILE INTER-SATELLITE S5.536 Earth Exploration- Satellite (space-space)	Governmental users.

Frequency band	RR Region 1 allocation and relevant footnotes	European Common Allocation	Major Utilisation	Notes	Norwegian Allocation	Norwegian Utilisation
27.50-28.50 GHz	FIXED FIXED-SATELLITE (Earth-space) S5.441A S5.539 MOBILE S5.538 S5.540	FIXED FIXED-SATELLITE (Earth-space) (space-Earth) S5.441A S5.539 S5.538 S5.540	Fixed links. Fixed Satellite Service (space to Earth) use limited to beacons for uplink power control 27.5-27.501 GHz. Feeder links to broadcasting satellites (HDTV) 27.5-29.5 GHz. Telecommunications satellites from coordinated Earth stations. Priority for civil networks.	ERC Recommendation T/R 13-02	FIXED FIXED-SATELLITE (Earth-space) (space-Earth) S5.441A S5.539 S5.538 S5.540	Radio Link, T/R13-02 Annex C 27.5-28.44/28.56-29.5 GHz
28.50-29.10 GHz	FIXED FIXED-SATELLITE (Earth-space) S5.441A S5.523A S5.539 MOBILE Earth Exploration- Satellite (Earth-space) S5.541 S5.540	FIXED FIXED-SATELLITE (Earth-space) S5.441A S5.539 Earth Exploration- Satellite (Earth-space) S5.541 S5.540	Fixed links. Feeder links to broadcasting satellites (HDTV) 27.5-29.5 GHz. Telecommunications satellites from coordinated Earth stations. Priority for civil networks	ERC Recommendation T/R 13-02	FIXED FIXED-SATELLITE (Earth-space) S5.441A S5.539 Earth Exploration- Satellite (Earth-space) S5.541 S5.540	Radio Link, T/R13-02 Annex C 28.56-29.5/27.5-28.44 GHz

Frequency band	RR Region 1 allocation and relevant footnotes	European Common Allocation	Major Utilisation	Notes	Norwegian Allocation	Norwegian Utilisation
29.1-29.50 GHz	FIXED	FIXED			FIXED	Radio Link, T/R13-02 Annex C
	FIXED-SATELLITE (Earth-space) S5.523C S5.535A S5.539 S5.541A S5.523E	FIXED-SATELLITE (Earth-space) S5.523C S5.535A S5.539 S5.541A S5.523E			FIXED-SATELLITE (Earth-space) S5.523C S5.535A S5.539 S5.541A S5.523E	28.56-29.5/27.5-28.44 GHz
	MOBILE	Earth Exploration-			Earth Exploration-	
	Earth Exploration- Satellite (Earth-space)	Satellite (Earth-space) S5.541			Satellite (Earth-space) S5.541	
	S5.541	S5.540			S5.540	
	S5.540					
29.50-29.90 GHz	FIXED-SATELLITE (Earth-space) S5.441A S5.539	FIXED-SATELLITE (Earth-space) S5.441A S5.539	Fixed and mobile satellites from uncoordinated Earth	ı	FIXED-SATELLITE (Earth-space) S5.441A S5.539	
	Earth Exploration- Satellite (Earth-space) S5.541	Earth Exploration- Satellite (Earth-space) S5.541	stations.		Earth Exploration- Satellite (Earth-space) S5.541	
	Mobile-Satellite (Earth-space)	Mobile-Satellite (Earth-space)			Mobile-Satellite (Earth-space)	
	S5.441A	S5.441A			S5.441A	
	S5.540	S5.540			S5.540	
	S5.542					

Frequency band	RR Region 1 allocation and relevant footnotes	European Common Allocation	Major Utilisation	Notes	Norwegian Allocation	Norwegian Utilisation
29.90-30 GHz	FIXED-SATELLITE (Earth-space) S5.539 MOBILE-SATELLITE (Earth-space) Earth Exploration- Satellite (Earth-space) S5.541 S5.441A S5.525 S5.526 S5.527 S5.538 S5.540 S5.542 S5.543	FIXED-SATELLITE (Earth-space) (space-Earth) S5.539 MOBILE-SATELLITE (Earth-space) Earth Exploration-Satellite (Earth-space) S5.541 S5.441A S5.540 S5.525 S5.526 S5.527 S5.538 S5.543	Fixed and mobile satellites from uncoordinated Earth stations. FSS Space to Earth use limited to beacons for uplink power control 29.999-30 GHz.		FIXED-SATELLITE (Earth-space) (space-Earth) S5.539 MOBILE-SATELLITE (Earth-space) Earth Exploration-Satellite (Earth-space) S5.541 S5.441 A S5.540 S5.525 S5.526 S5.527 S5.538 S5.543	
30-31 GHz	FIXED-SATELLITE (Earth-space) MOBILE-SATELLITE (Earth-space) Standard Frequency and Time Signal-Satellite (space-Earth) S5.542	FIXED-SATELLITE (Earth-space) (space- Earth) MOBILE-SATELLITE (Earth-space)	Fixed and mobile satellites from uncoordinated Earth stations.	military band for	FIXED-SATELLITE (Earth-space) (space- Earth) MOBILE-SATELLITE (Earth-space)	Governmental users.

Frequency band	RR Region 1 allocation and relevant footnotes	European Common Allocation	Major Utilisation	Notes	Norwegian Allocation	Norwegian Utilisation
31-31.30 GHz	FIXED MOBILE	FIXED MOBILE	Fixed links	Fixed includes point to multipoint.	FIXED MOBILE	
	Standard Frequency and Time Signal-Satellite (space-Earth)	S5.149		RA continuum measurements.	Standard Frequency and Time Signal-Satellite (space-Earth)	
	Space Research S5.544 S5.149 S5.545				Space Research S5.544 S5.149	
SATELLITE (passive) SATELLITE (passive) Surface te	Passive applications. Surface temperature	RA continuum	EARTH EXPLORATION- SATELLITE (passive)			
			atmospheric	measurements.	RADIO ASTRONOMY	
	SPACE RESEARCH (passive)	SPACE RESEARCH (passive)	ditendition.		SPACE RESEARCH (passive)	
	S5.340	S5.340			S5.340	
31.50-31.80 GHz	EARTH EXPLORATION- SATELLITE (passive)	EARTH EXPLORATION- SATELLITE (passive)	Passive applications. Surface temperature	Fixed includes point to multipoint.	EARTH EXPLORATION- SATELLITE (passive)	
	RADIO ASTRONOMY	RADIO ASTRONOMY	and emissivity, atmospheric attenuation.	RA continuum measurements	RADIO ASTRONOMY	
	SPACE RESEARCH (passive)	SPACE RESEARCH (passive)	attenuation.		SPACE RESEARCH (passive)	
	Fixed	Fixed			Fixed	
	Mobile except Aeronautical Mobile	Mobile except Aeronautical Mobile			Mobile except Aeronautical Mobile	
	S5.149 <u>S5.546</u>	S5.149 S5.546			S5.149	

Frequency band	RR Region 1 allocation and relevant footnotes	European Common Allocation	Ma	jor Utilisa	tion	Notes	Norwegian Allocation	Norwegian Utilisation
31.80-32 GHz	RADIONAVIGATION FIXED S5.547A SPACE RESEARCH (deep space)(space- Earth) S5.547 S5.547B S5.548	RADIONAVIGATION FIXED S5.547A SPACE RESEARCH (space-Earth) S5.547 S5.548	High links	density	fixed	FIXED to be reviewed at WRC-99. Space research (deep space) in some countries	RADIONAVIGATION FIXED S5.547A SPACE RESEARCH (space-Earth) S5.547 S5.548	
32-32.30 GHz	INTER-SATELLITE FIXED S5.547A RADIONAVIGATION SPACE RESEARCH (deep space)(space-Earth) S5.547 S5.547C S5.548	RADIONAVIGATION FIXED S5.547A SPACE RESEARCH (space-Earth) INTER-SATELLITE S5.547 S5.548	High links	density	fixed	FIXED to be reviewed at WRC-99. Space research (deep space) in some countries	RADIONAVIGATION FIXED S5.547A SPACE RESEARCH (space-Earth) INTER-SATELLITE S5.547 S5.548	
32.30-33 GHz	INTER-SATELLITE FIXED S5.547A RADIONAVIGATION S5.547 S5.547D S5.548	INTER-SATELLITE FIXED S5.547A RADIONAVIGATION S5.547 S5.548	High links	density	fixed	FIXED to be reviewed at WRC-99.	INTER-SATELLITE FIXED S5.547A RADIONAVIGATION S5.547 S5.548	
33-33.40 GHz	RADIONAVIGATION FIXED S5.547A S5.547 S5.547E	RADIONAVIGATION FIXED S5.547A INTER-SATELLITE	High links	density	fixed	FIXED to be reviewed at WRC-99.	RADIONAVIGATION FIXED S5.547A INTER-SATELLITE	

Frequency band	RR Region 1 allocation and relevant footnotes	European Common Allocation	Major Utilisation	Notes	Norwegian Allocation	Norwegian Utilisation
		S5.547			S5.547	

Frequency band	RR Region 1 allocation and relevant footnotes	European Common Allocation	Major Utilisation	Notes	Norwegian Allocation	Norwegian Utilisation
33.40-34.20 GHz	RADIOLOCATION S5.549	RADIOLOCATION S5.549	Motion sensors. Short range radar. Surveying and measurement. Defence systems.	EU2 EU27 This is a harmonised military band for radiolocation systems.	RADIOLOCATION S5.549	
34.20-34.70 GHz	RADIOLOCATION SPACE RESEARCH (deep space)(Earth- space) S5.549	RADIOLOCATION SPACE RESEARCH (Earth-space) S5.549	Motion sensors. Short range radar. Surveying and measurement. Defence systems.	EU2 EU27 This is a harmonised military band for radiolocation systems.	RADIOLOCATION SPACE RESEARCH (Earth-space)	
34.70-35.20 GHz	RADIOLOCATION Space Research S5.550 S5.549	RADIOLOCATION Space Research S5.550 S5.549	Surveying and measurement. Short range radar. Motion sensors. Defence systems.	EU2 EU27 This is a harmonised military band for radiolocation systems.	RADIOLOCATION Space Research	
35.20-35.5GHz	METEOROLOGICAL AIDS RADIOLOCATION S5.549	METEOROLOGICAL AIDS RADIOLOCATION S5.549	Short range radar. Defence systems.	EU2 EU27 This is a harmonised military band for radiolocation systems.	METEOROLOGICAL AIDS RADIOLOCATION	

Frequency band	RR Region 1 allocation and relevant footnotes	European Common Allocation	Major Utilisation	Notes	Norwegian Allocation	Norwegian Utilisation
35.5-36 GHz	EARTH EXPLORATION- SATELLITE (active) METEOROLOGICAL AIDS RADIOLOCATION SPACE RESEARCH (active) S5.549 S5.551A	EARTH EXPLORATION- SATELLITE (active) METEOROLOGICAL AIDS RADIOLOCATION SPACE RESEARCH (active) S5.549 S5.551A	Satellite rain radars Defence systems	EU2 EU27 This is a harmonised military band for radiolocation systems.	EARTH EXPLORATION- SATELLITE (active) METEOROLOGICAL AIDS RADIOLOCATION SPACE RESEARCH (active) S5.551A	
36-37 GHz	EARTH EXPLORATION- SATELLITE (passive) FIXED MOBILE SPACE RESEARCH (passive) S5.149	EARTH EXPLORATION- SATELLITE (passive) FIXED MOBILE SPACE RESEARCH (passive) Radio Astronomy S5.149	Snow, ice and precipitation measurements. Future non civil fixed and mobile systems. Defence systems.	EU27 This is a harmonised military band for fixed and mobile systems. Hydrogen cyanide and Hydroxil lines 36.43-36.5 GHz.	EARTH EXPLORATION- SATELLITE (passive) FIXED MOBILE SPACE RESEARCH	
37-37.50 GHz	FIXED MOBILE SPACE RESEARCH (space-Earth)	FIXED SPACE RESEARCH (space-Earth)	Low and medium capacity fixed links for civil and non civil applications. Sub bands 37-37.142 GHz paired with 38.26-38.402 GHz for unplanned, uncoordinated use, subject to national decisions.	ERC Recommendation T/R 12-01	FIXED SPACE RESEARCH (space-Earth)	Radio Link,T/R12-01 37-38.17/38.31-39.5 GHz

Frequency band	RR Region 1 allocation and relevant footnotes	European Common Allocation	Major Utilisation	Notes	Norwegian Allocation	Norwegian Utilisation
37.50-38 GHz	FIXED FIXED-SATELLITE (space-Earth) MOBILE SPACE RESEARCH (space-Earth) Earth Exploration- Satellite (space-Earth)	FIXED FIXED-SATELLITE (space-Earth) SPACE RESEARCH (space-Earth) Earth Exploration- Satellite (space-Earth)	Low and medium capacity fixed links for civil and non civil applications. Telecommunications satellites for fixed applications. Priority for civil networks.	ERC Recommendation T/R 12-01.	FIXED FIXED-SATELLITE (space-Earth) SPACE RESEARCH (space-Earth) Earth Exploration- Satellite (space-Earth)	Radio Link,T/R12-01 37-38.17/38.31-39.5 GHz
38-39.50 GHz	FIXED FIXED-SATELLITE (space-to-Earth) MOBILE Earth Exploration- Satellite (space-to-Earth)	FIXED FIXED-SATELLITE (space-to-Earth) Earth Exploration- Satellite (space-to- Earth)	Low and medium capacity fixed links for civil and non civil applications. Sub bands 37-37.142 GHz paired with 38.26-38.402 GHz for unplanned, uncoordinated use, subject to national decisions. Telecommunications satellites for fixed applications. Priority for civil networks.	ERC Recommendation T/R 12-01.	FIXED FIXED-SATELLITE (space-to-Earth) Earth Exploration- Satellite (space-to- Earth)	Radio Link,T/R12-01 37-38.17/38.31-39.5 GHz

Frequency band	RR Region 1 allocation and relevant footnotes	European Common Allocation	Major Utilisation	Notes	Norwegian Allocation	Norwegian Utilisation
39.50-40 GHz	FIXED FIXED-SATELLITE (space-to-Earth) MOBILE MOBILE-SATELLITE (space-to-Earth) Earth Exploration- Satellite (space-to-Earth)	FIXED FIXED-SATELLITE (space-to-Earth) MOBILE MOBILE-SATELLITE (space-to-Earth) Earth Exploration- Satellite (space-to-Earth)	Possible band for broadband mobile systems. Shared civil and non civil allocation for future satellite and terrestrial systems.	EU2	FIXED FIXED-SATELLITE (space-to-Earth) MOBILE MOBILE-SATELLITE (space-to-Earth) Earth Exploration- Satellite (space-to-Earth)	
40-40.50 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)	FIXED FIXED-SATELLITE (space-to-Earth) MOBILE MOBILE-SATELLITE ((space-to-Earth) SPACE RESEARCH (Earth-space) Earth Exploration- Satellite (space-to-Earth)	Possible band for broadband mobile systems. Shared civil and non civil allocation for future satellite and terrestrial systems.		FIXED FIXED-SATELLITE (space-to-Earth) MOBILE MOBILE-SATELLITE ((space-to-Earth) SPACE RESEARCH (Earth-space) Earth Exploration- Satellite (space-to-Earth)	

Frequency band	RR Region 1 allocation and relevant footnotes	European Common Allocation	Major Utilisation	Notes	Norwegian Allocation	Norwegian Utilisation
40.50-42.50 GHz	BROADCASTING BROADCASTING- SATELLITE FIXED Mobile S5.551B S5.551D	BROADCASTING BROADCASTING- SATELLITE FIXED S5.551B	Multipoint video distribution systems	ERC Decision ERC/DEC/(96)05 ERC Recommendation T/R 52-01	BROADCASTING BROADCASTING- SATELLITE FIXED S5.551B	MVDS=Multiple Video Distribution Systems. Test operation ongoing
42.50-43.50 GHz	FIXED FIXED-SATELLITE (Earth-to-space) S5.552 MOBILE except Aeronautical Mobile RADIO ASTRONOMY S5.149	FIXED FIXED-SATELLITE (Earth-to-space) S5.552 MOBILE except Aeronautical Mobile RADIO ASTRONOMY S5.149	Future civil fixed and mobile systems. Possible band for broadband mobile system. RA applications. Telecommunications satellites for fixed applications. Priority for civil networks.		FIXED FIXED-SATELLITE (Earth-to-space) S5.552 MOBILE except Aeronautical Mobile RADIO ASTRONOMY S5.149	
43.50-45.50 GHz	MOBILE S5.553 MOBILE-SATELLITE RADIONAVIGATION RADIONAVIGATION -SATELLITE S5.554	MOBILE S5.553 MOBILE-SATELLITE Fixed-Satellite S5.554	Defence systems		MOBILE S5.553 MOBILE-SATELLITE Fixed-Satellite S5.554	

Frequency band	RR Region 1 allocation and relevant footnotes	European Common Allocation	Major Utilisation	Notes	Norwegian Allocation	Norwegian Utilisation
45.50-47 GHz		MOBILE S5.553 MOBILE-SATELLITE RADIONAVIGATION RADIONAVIGATION -SATELLITE S5.554			MOBILE S5.553 MOBILE-SATELLITE RADIONAVIGATION RADIONAVIGATION -SATELLITE S5.554	
47-47.20 GHz	AMATEUR AMATEUR- SATELLITE	AMATEUR AMATEUR- SATELLITE			AMATEUR AMATEUR- SATELLITE	
47.20-48.50 GHz	FIXED FIXED-SATELLITE (Earth-to-space) S5.552 MOBILE S5.149 S5.340 S5.552A S5.555	FIXED FIXED-SATELLITE (Earth-to-space) S5.552 MOBILE Amateur S5.552A S5.555	Telecommunications satellites for fixed applications. Priority for civil networks. Feeder links for 40 GHz broadcasting satellites. ENG/OB is envisaged.	Stations in the Santas	FIXED FIXED-SATELLITE (Earth-to-space) S5.552 MOBILE Amateur S5.552A S5.555	
48.50-50.20 GHz		FIXED FIXED-SATELLITE (Earth-to-space) S5.552 MOBILE RADIO ASTRONOMY S5.340 S5.555 S5.149	Low and medium capacity fixed links. Telecommunications satellites for fixed applications. Priority for civil networks. Feeder links for broadcasting satellites 48.5-49.2 GHz. RA applications. ENG/OB is envisaged.	Carbon monosulphide	FIXED FIXED-SATELLITE (Earth-to-space) S5.552 MOBILE RADIO ASTRONOMY S5.340 S5.555 S5.149	

Frequency band	RR Region 1 allocation and relevant footnotes	European Common Allocation	Major Utilisation	Notes	Norwegian Allocation	Norwegian Utilisation
50.20-50.40 GHz	EARTH EXPLORATION- SATELLITE (passive)	EARTH EXPLORATION- SATELLITE (passive)	Passive applications		EARTH EXPLORATION- SATELLITE (passive)	
	SPACE RESEARCH (passive) S5.340 S5.555A	SPACE RESEARCH (passive) S5.340			SPACE RESEARCH (passive) S5.340	
50.40-51.40 GHz	FIXED FIXED-SATELLITE (Earth-to-space) MOBILE Mobile-Satellite (Earth-to-space)	FIXED FIXED-SATELLITE (Earth-to-space) Mobile-Satellite (Earth-to-space)	Shared civil and non civil allocation for future satellite and terrestrial systems.	EU2	FIXED FIXED-SATELLITE (Earth-to-space) Mobile-Satellite (Earth-to-space)	
51.40-52.6GHz	FIXED MOBILE S5.556 S5.547	FIXED MOBILE RADIO ASTRONOMY S5.556 S5.547	High density fixed links.		FIXED MOBILE RADIO ASTRONOMY S5.556 S5.547	
52.6-54.25 GHz	EARTH EXPLORATION- SATELLITE (passive) SPACE RESEARCH (passive) S5.340 S5.556	EARTH EXPLORATION- SATELLITE (passive) SPACE RESEARCH (passive) S5.340 S5.556	Passive applications.	Atmospheric temperature sounding	EARTH EXPLORATION- SATELLITE (passive) SPACE RESEARCH (passive) S5.340 S5.556	

Frequency band	RR Region 1 allocation and relevant footnotes	European Common Allocation	Major Utilisation	Notes	Norwegian Allocation	Norwegian Utilisation
54.25-55.78 GHz	EARTH EXPLORATION- SATELLITE (passive) INTER-SATELLITE S5.556A SPACE RESEARCH (passive)	EARTH EXPLORATION- SATELLITE (passive) SPACE RESEARCH (passive)	Passive applications.	Atmospheric temperature sounding.	EARTH EXPLORATION- SATELLITE (passive) SPACE RESEARCH (passive)	Radio Link planned. 55.20-58.20 GHz
55.78-56.9 GHz	EARTH EXPLORATION- SATELLITE (passive) FIXED INTER-SATELLITE S5.556A MOBILE S5.558 SPACE RESEARCH (passive) S5.547	EARTH EXPLORATION- SATELLITE (passive) FIXED INTER-SATELLITE S5.556A SPACE RESEARCH (passive) S5.547 S5.558	Passive applications. Low and medium capacity fixed links (1.47 GHz forward/return separation): intended for support infrastructure for large scale mobile networks.	~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~	EARTH EXPLORATION- SATELLITE (passive) FIXED INTER-SATELLITE S5.556A SPACE RESEARCH (passive) S5.547 S5.558	Radio Link planned. 55.20-58.20 GHz
56.9-57.0 GHz	EARTH EXPLORATION- SATELLITE (passive) FIXED INTER-SATELLITE S5.556A MOBILE S5.558 SPACE RESEARCH (passive) S5.547 S5.557	EARTH EXPLORATION- SATELLITE (passive) FIXED MOBILE S5.558 SPACE RESEARCH (passive) S5.547	Passive applications. Low power short range fixed and mobile systems (frequency planning not required).		EARTH EXPLORATION- SATELLITE (passive) FIXED MOBILE S5.558 SPACE RESEARCH (passive) S5.547	Radio Link planned. 55.20-58.20 GHz

Frequency band	RR Region 1 allocation and relevant footnotes	European Common Allocation	Major Utilisation	Notes	Norwegian Allocation	Norwegian Utilisation
57-58.2 GHz	EARTH EXPLORATION- SATELLITE (passive) FIXED INTER-SATELLITE S5.556A MOBILE S5.558 SPACE RESEARCH (passive) S5.557 S5.547	EARTH EXPLORATION- SATELLITE (passive) FIXED INTER-SATELLITE S5.556A MOBILE S5.558 SPACE RESEARCH (passive) S5.547	Passive applications	Atmospheric temperature sounding	EARTH EXPLORATION- SATELLITE (passive) FIXED INTER-SATELLITE S5.556A MOBILE S5.558 SPACE RESEARCH (passive) S5.547	Radio Link planned. 55.20-58.20 GHz
58.20-59 GHz	EARTH EXPLORATION- SATELLITE (passive) FIXED MOBILE SPACE RESEARCH (passive) S5.556 S5.547	EARTH EXPLORATION- SATELLITE (passive) FIXED RADIO ASTRONOMY SPACE RESEARCH (passive) S5.547	Passive applications. High density fixed links.	EU6 EU19 Atmospheric temperature sounding.	EARTH EXPLORATION- SATELLITE (passive) FIXED RADIO ASTRONOMY SPACE RESEARCH (passive) S5.547	

Frequency band	RR Region 1 allocation and relevant footnotes	European Common Allocation	Major Utilisation	Notes	Norwegian Allocation	Norwegian Utilisation
59-59.3 GHz	EARTH EXPLORATION- SATELLITE (passive) SPACE RESEARCH (passive) FIXED INTER-SATELLITE S5.556A MOBILE S5.558 RADIOLOCATION S5.559	EARTH EXPLORATION- SATELLITE (passive) SPACE RESEARCH (passive) FIXED INTER-SATELLITE S5.556A MOBILE S5.558 RADIOLOCATION S5.559	Passive applications. Defence systems.	EU2 EU27 Atmospheric temperature sounding. The band 59-61 GHz is a harmonised military band for fixed, mobile and radiolocation systems.	FIXED	
59.3-62 GHz	FIXED INTER-SATELLITE MOBILE S5.558 RADIOLOCATION S5.559 S5.138	FIXED INTER-SATELLITE RADIOLOCATION S5.558	Defence systems. Cordless local area networks. ISM 61-61.5 GHz. SRD Low and medium capacity fixed links (1.47 GHz forward/return separation based on plan for 54.25-57.2 GHz).	EU2 EU27 ERC Recommendations CEPT/ERC/REC 70- 03 & T/R 22-03. The band 59-61 GHz is a harmonised military band for fixed, mobile and radiolocation systems.	FIXED INTER-SATELLITE RADIOLOCATION S5.558	

Frequency band	RR Region 1 allocation and relevant footnotes	European Common Allocation	Major Utilisation	Notes	Norwegian Allocation	Norwegian Utilisation
62-63 GHz		INTER-SATELLITE MOBILE RADIOLOCATION S5.558	Short range non civil radiolocation. Broadband mobile systems for connection to IBCN paired with 65-66 GHz.	ERC Recommendation T/R 22-03	INTER-SATELLITE MOBILE RADIOLOCATION S5.558	
63-64 GHz		INTER-SATELLITE MOBILE RADIOLOCATION S5.558	(RTTT vehicle to	ERC/DEC/(92)02 ERC	INTER-SATELLITE MOBILE RADIOLOCATION S5.558	
64-65 GHz	FIXED INTER-SATELLITE MOBILE except aeronautical mobile S5.556 S5.547	FIXED INTER-SATELLITE MOBILE except aeronautical mobile S5.556 S5.547	High density fixed links.		FIXED INTER-SATELLITE MOBILE except aeronautical mobile S5.556 S5.547	

Frequency band	RR Region 1 allocation and relevant footnotes	European Common Allocation	Major Utilisation	Notes	Norwegian Allocation	Norwegian Utilisation
65-66 GHz	EARTH EXPLORATION- SATELLITE	EARTH EXPLORATION- SATELLITE	links.	ERC Recommendation T/R 22-03	EARTH EXPLORATION- SATELLITE	
	SPACE RESEARCH	SPACE RESEARCH	Broadband mobile systems for connection		SPACE RESEARCH	
	INTER-SATELLITE	INTER-SATELLITE	to IBCN paired with		INTER-SATELLITE	
	MOBILE except	FIXED	62-63 GHz.		FIXED	
	aeronautical mobile FIXED	MOBILE except aeronautical mobile			MOBILE except aeronautical mobile	
	S5.547	S5.547			S5.547	
66-71 GHz	MOBILE S5.553 S5.558	MOBILE S5.553 S5.558	Future civil systems.		MOBILE S5.553 S5.558	
	MOBILE-SATELLITE	MOBILE-SATELLITE			MOBILE-SATELLITE	
	RADIONAVIGATION	RADIONAVIGATION			RADIONAVIGATION	
	RADIONAVIGATION -SATELLITE	RADIONAVIGATION -SATELLITE			RADIONAVIGATION -SATELLITE	
	INTER-SATELLITE	INTER-SATELLITE			INTER-SATELLITE	
	S5.554	S5.554			S5.554	
71-74 GHz	FIXED	FIXED	Defence systems.	EU27	FIXED	
	FIXED-SATELLITE (Earth-to-space)	FIXED-SATELLITE (Earth-to-space)	·	This is a harmonised military band.		
	MOBILE	MOBILE	RA applications		MOBILE	
	MOBILE-SATELLITE (Earth-to-space)	MOBILE-SATELLITE (Earth-to-space)		Pairing of this band with 81-84 GHz is	MOBILE-SATELLITE (Earth-to-space)	
	S5.149 S5.556	RADIO		envisaged in military	RADIO	
	33.147 33.330	ASTRONOMY		Systems.	ASTRONOMY	
		S5.556		RA: Formaldehyde line 72.77-72.91 GHz.	S5.556	

Frequency band	RR Region 1 allocation and relevant footnotes	European Common Allocation	Major Utilisation	Notes	Norwegian Allocation	Norwegian Utilisation
74-75.50 GHz	FIXED FIXED-SATELLITE (Earth-to-space) MOBILE Space Research (space-	FIXED FIXED-SATELLITE (Earth-to-space) MOBILE Space Research (space-	Future civil systems.		FIXED FIXED-SATELLITE (Earth-to-space) MOBILE Space Research (space-	
75.50-76 GHz	space Research (space-to-Earth) AMATEUR AMATEUR- SATELLITE Space Research (space-to-Earth)	space Research (space-to-Earth) AMATEUR AMATEUR- SATELLITE Space Research (space-to-Earth)			to-Earth) AMATEUR AMATEUR- SATELLITE Space Research (space- to-Earth)	
76-78 GHz	RADIOLOCATION Amateur Amateur-Satellite Space Research (space-to-Earth) S5.560	RADIOLOCATION Amateur Amateur-Satellite Space Research (spaceto-Earth)	Civil radiolocation. 76-77 GHz RTTT (Radar).	EU2 Decision ERC/DEC/(92)02 ERC Recommendation CEPT/ERC/REC 70- 03	RADIOLOCATION Amateur Amateur-Satellite Space Research (spaceto-Earth)	
78-81 GHz		RADIOLOCATION Amateur Amateur-Satellite Earth Exploration- Satellite (active) Space Research (space- Earth) S5.560	Civil and non civil radiolocation.		RADIOLOCATION Amateur Amateur-Satellite Earth Exploration- Satellite (active) Space Research (space- Earth) S5.560	

Frequency band	RR Region 1 allocation and relevant footnotes	European Common Allocation	Major Utilisation	Notes	Norwegian Allocation	Norwegian Utilisation
81-84 GHz	FIXED FIXED-SATELLITE (space-Earth) MOBILE MOBILE-SATELLITE (space-Earth) Space Research (space-Earth)	FIXED FIXED-SATELLITE (space-Earth) MOBILE MOBILE-SATELLITE (space-Earth) Space Research (space-Earth)	Defence systems.	EU27 This is a harmonised military band. Pairing of this band with 71-74 GHz is envisaged in military systems.	MOBILE SATELLITE	
84-86 GHz	FIXED MOBILE BROADCASTING BROADCASTING- SATELLITE S5.561	FIXED MOBILE BROADCASTING BROADCASTING- SATELLITE S5.561			FIXED MOBILE BROADCASTING BROADCASTING- SATELLITE S5.561	
86-92 GHz	EARTH EXPLORATION- SATELLITE (passive) RADIO ASTRONOMY SPACE RESEARCH (passive) S5.340	EARTH EXPLORATION- SATELLITE (passive) RADIO ASTRONOMY SPACE RESEARCH (passive) S5.340	Passive applications.	RA: Continuum and spectral line measurements.	EARTH EXPLORATION- SATELLITE (passive) RADIO ASTRONOMY SPACE RESEARCH (passive) S5.340	

Frequency band	RR Region 1 allocation and relevant footnotes	European Common Allocation	Major Utilisation	Notes	Norwegian Allocation	Norwegian Utilisation
92-94 GHz	FIXED FIXED-SATELLITE (Earth-to-space) MOBILE RADIOLOCATION S5.149 S5.556	FIXED FIXED-SATELLITE (Earth-to-space) MOBILE RADIOLOCATION Radio Astronomy S5.149 S5.556	Short range radar.	EU2 Diazenylium line and numerous other spectral lines.	FIXED FIXED-SATELLITE (Earth-to-space) MOBILE RADIOLOCATION Radio Astronomy S5.149 S5.556	
94-94.1 GHz	RADIOLOCATION EARTH EXPLORATION- SATELLITE (active) SPACE RESEARCH (active) S5.562	RADIOLOCATION EARTH EXPLORATION- SATELLITE (active) SPACE RESEARCH (active) S5.562	Short range radar. Cloud profiler radar.	EU2	RADIOLOCATION EARTH EXPLORATION- SATELLITE (active) SPACE RESEARCH (active) S5.562	
94.1 –95 GHz	FIXED FIXED-SATELLITE (Earth-to-space) MOBILE RADIOLOCATION S5.556	FIXED FIXED-SATELLITE (Earth-to-space) MOBILE RADIOLOCATION S5.556	Short range radar.	EU2	FIXED FIXED-SATELLITE (Earth-to-space) MOBILE RADIOLOCATION S5.556	

Frequency band	RR Region 1 allocation and relevant footnotes	European Common Allocation	Major Utilisation	Notes	Norwegian Allocation	Norwegian Utilisation
95-100 GHz	MOBILE S5.553 MOBILE-SATELLITE RADIONAVIGATION RADIONAVIGATION -SATELLITE Radiolocation S5.149 S5.554 S5.555	MOBILE S5.553 MOBILE-SATELLITE RADIO ASTRONOMY RADIONAVIGATION RADIONAVIGATION -SATELLITE Radiolocation S5.149 S5.554 S5.555	RA applications.	EU2 Multiple line Observations. Continuum observations.	MOBILE S5.553 MOBILE-SATELLITE RADIO ASTRONOMY RADIONAVIGATION RADIONAVIGATION -SATELLITE Radiolocation S5.149 S5.554 S5.555	
100-102 GHz	EARTH EXPLORATION- SATELLITE (passive) FIXED MOBILE SPACE RESEARCH (passive) S5.341	EARTH EXPLORATION- SATELLITE (passive) FIXED MOBILE SPACE RESEARCH (passive) S5.341			EARTH EXPLORATION- SATELLITE (passive) FIXED MOBILE SPACE RESEARCH (passive) S5.341	
102-105 GHz	FIXED FIXED-SATELLITE (space-Earth) MOBILE S5.341	FIXED FIXED-SATELLITE (space-Earth) MOBILE S5.341			FIXED FIXED-SATELLITE (space-Earth) MOBILE S5.341	

Frequency band	RR Region 1 allocation and relevant footnotes	European Common Allocation	Major Utilisation	Notes	Norwegian Allocation	Norwegian Utilisation
105-116 GHz	EARTH EXPLORATION- SATELLITE(passive)				EARTH EXPLORATION- SATELLITE(passive)	
	RADIO ASTRONOMY				RADIO ASTRONOMY	
	SPACE RESEARCH(passive)				SPACE RESEARCH(passive)	
	S5.340 S5.341				S5.340 S5.341	
116-119.98 GHz	EARTH EXPLORATION- SATELLITE(passive)				EARTH EXPLORATION- SATELLITE(passive)	
	FIXED				FIXED	
	INTER-SATELLITE				INTER-SATELLITE	
	MOBILE S5.558				MOBILE S5.558	
	SPACE RESEARCH(passive)				SPACE RESEARCH(passive)	
	S5.138 S5.341				S5.138 S5.341	

Frequency band	RR Region 1 allocation and relevant footnotes	European Common Allocation	Major Utilisation	Notes	Norwegian Allocation	Norwegian Utilisation
119.98-120.02 GHz	EARTH EXPLORATION- SATELLITE(passive)				EARTH EXPLORATION- SATELLITE(passive)	
	FIXED				FIXED	
	INTER-SATELLITE				INTER-SATELLITE	
	MOBILE S5.558				MOBILE S5.558	
	SPACE RESEARCH(passive)				SPACE RESEARCH(passive)	
	Amateur				Amateur	
	S5.138 S5.341				S5.138 S5.341	
120.02-126 GHz	EARTH EXPLORATION- SATELLITE(passive)				EARTH EXPLORATION- SATELLITE(passive)	
	FIXED				FIXED	
	INTER-SATELLITE				INTER-SATELLITE	
	MOBILE S5.558				MOBILE S5.558	
	SPACE RESEARCH(passive)				SPACE RESEARCH(passive)	
	S5.138 S5.341				S5.138 S5.341	

Frequency band	RR Region 1 allocation and relevant footnotes	European Common Allocation	Major Utilisation	Notes	Norwegian Allocation	Norwegian Utilisation
126-134 GHz	FIXED				FIXED	
	INTER-SATELLITE				INTER-SATELLITE	
	MOBILE S5.558				MOBILE S5.558	
	RADIOLOCATION S5.559				RADIOLOCATION S5.559	
134-142 GHz	MOBILE S5.553				MOBILE S5.553	
134-142 GHZ	MOBILE- SATELLITE				MOBILE- SATELLITE	
	RADIO- NAVIGATION				RADIO- NAVIGATION	
	RADIO- NAVIGATION- SATELLITE				RADIO- NAVIGATION- SATELLITE	
	Radiolocation				Radiolocation	
	S5.149 S5.340 S5.554 S5.555				S5.149 S5.340 S5.554 S5.555	
142 –144 GHz	AMATEUR				AMATEUR	
	AMATEUR- SATELLITE				AMATEUR- SATELLITE	

Frequency band	RR Region 1 allocation and relevant footnotes	European Common Allocation	Major Utilisation	Notes	Norwegian Allocation	Norwegian Utilisation
	RADIOLOCATION				RADIOLOCATION	
144-149 GHz	Amateur				Amateur	
	Amateur-Satellite				Amateur-Satellite	
	S5.149 S5.555				S5.149 S5.555	
140 150 CH	FIXED				FIXED	
149-150 GHz	FIXED- SATELLITE(space-to- Earth)				FIXED- SATELLITE(space-to- Earth)	
	MOBILE				MOBILE	
150-151 GHz	EARTH EXPLORATION- SATELLITE(passive)				EARTH EXPLORATION- SATELLITE(passive)	
	FIXED				FIXED	
	FIXED- SATELLITE(space-to- Earth)				FIXED- SATELLITE(space-to- Earth)	
	MOBILE				MOBILE	
	SPACE RESEARCH(passive)				SPACE RESEARCH(passive)	
	S5.149 S5.385				S5.149 S5.385	

Frequency band	RR Region 1 allocation and relevant footnotes	European Common Allocation	Major Utilisation	Notes	Norwegian Allocation	Norwegian Utilisation
	FIXED				FIXED	
151-156 GHz	FIXED- SATELLITE(space-to- Earth)				FIXED- SATELLITE(space-to- Earth)	
	MOBILE				MOBILE	
156-158 GHz	EARTH EXPLORATION- SATELLITE(passive)				EARTH EXPLORATION- SATELLITE(passive)	
	FIXED				FIXED	
	FIXED- SATELLITE(space-to- Earth)				FIXED- SATELLITE(space-to- Earth)	
	MOBILE				MOBILE	
158-164 GHz	FIXED				FIXED	
100 104 0112	FIXED- SATELLITE(space-to- Earth)				FIXED- SATELLITE(space-to- Earth)	
	MOBILE				MOBILE	

Frequency band	RR Region 1 allocation and relevant footnotes	European Common Allocation	Major Utilisation	Notes	Norwegian Allocation	Norwegian Utilisation
164-168 GHz	EARTH EXPLORATION- SATELLITE(space-to- Earth)				EARTH EXPLORATION- SATELLITE(space-to- Earth)	
	RADIO ASTRONOMY				RADIO ASTRONOMY	
	SPACE RESEARCH (passive)				SPACE RESEARCH (passive)	
	FIXED				FIXED	
168-170 GHz	MOBILE				MOBILE	
170-174.5 GHz	FIXED				FIXED	
170-174.3 GHZ	INTER-SATELLITE				INTER-SATELLITE	
	MOBILE S5.558				MOBILE S5.558	
	S5.149 S5.385				S5.149 S5.385	

Frequency band	RR Region 1 allocation and relevant footnotes	European Common Allocation	Major Utilisation	Notes	Norwegian Allocation	Norwegian Utilisation
174.5 –176.5 GHz	EARTH EXPLORATION- SATELLITE(passive)				EARTH EXPLORATION- SATELLITE(passive)	
	FIXED				FIXED	
	INTER-SATELLITE				INTER-SATELLITE	
	MOBILE S5.558				MOBILE S5.558	
	SPACE RESEARCH(passive)				SPACE RESEARCH(passive)	
	S5.138 S5.341				S5.138 S5.341	
176 5 192 CH-	FIXED				FIXED	
176.5-182 GHz	INTER-SATELLITE				INTER-SATELLITE	
	MOBILE S5.558				MOBILE S5.558	
	S5.149 S5.385				S5.149 S5.385	
182-185 GHz	EARTH EXPLORATION- SATELLITE(passive)				EARTH EXPLORATION- SATELLITE(passive)	
	RADIO ASTRONOMY				RADIO ASTRONOMY	
	SPACE RESEARCH(passive)				SPACE RESEARCH(passive)	

Frequency band	RR Region 1 allocation and relevant footnotes	European Common Allocation	Major Utilisation	Notes	Norwegian Allocation	Norwegian Utilisation
	S5.340 S5.563				S5.340 S5.563	

Frequency band	RR Region 1 allocation and relevant footnotes	European Common Allocation	Major Utilisation	Notes	Norwegian Allocation	Norwegian Utilisation
	FIXED				FIXED	
185-190 GHz	INTER-SATELLITE				INTER-SATELLITE	
	MOBILE S5.558				MOBILE S5.558	
	S5.149 S5.385				S5.149 S5.385	
	MOBILE				MOBILE	
190-200 GHz	MOBILE- SATELLITE				MOBILE- SATELLITE	
	RADIO- NAVIGATION				RADIO- NAVIGATION	
	RADIO- NAVIGATION- SATELLITE				RADIO- NAVIGATION- SATELLITE	
	S5.341 S5.554				S5.341 S5.554	
200-202 GHz	EARTH EXPLORATION- SATELLITE(passive)				EARTH EXPLORATION- SATELLITE(passive)	
	FIXED				FIXED	
	MOBILE				MOBILE	
	SPACE RESEARCH(passive)				SPACE RESEARCH(passive)	

Frequency band	RR Region 1 allocation and relevant footnotes	European Common Allocation	Major Utilisation	Notes	Norwegian Allocation	Norwegian Utilisation
	S5.341				S5.341	

Frequency band	RR Region 1 allocation and relevant footnotes	European Common Allocation	Major Utilisation	Notes	Norwegian Allocation	Norwegian Utilisation
	FIXED				FIXED	
202-217 GHz	FIXED-SATELLITE (Earth-to-space)				FIXED-SATELLITE (Earth-to-space)	
	MOBILE				MOBILE	
	S5.341				S5.341	
217-231 GHz	EARTH EXPLORATION- SATELLITE(passive)				EARTH EXPLORATION- SATELLITE(passive)	
	RADIO ASTRONOMY				RADIO ASTRONOMY	
	SPACE RESEARCH(passive)				SPACE RESEARCH(passive)	
	S5.340 S5.341				S5.340 S5.341	
231-235 GHz	FIXED				FIXED	
	FIXED-SATELLITE (Earth-to-space)				FIXED-SATELLITE (Earth-to-space)	
	MOBILE				MOBILE	
	Radiolocation				Radiolocation	

Frequency band	RR Region 1 allocation and relevant footnotes	European Common Allocation	Major Utilisation	Notes	Norwegian Allocation	Norwegian Utilisation
235-238 GHz	EARTH EXPLORATION- SATELLITE(passive)				EARTH EXPLORATION- SATELLITE(passive)	
	FIXED				FIXED	
	FIXED-SATELLITE (Earth-to-space)				FIXED-SATELLITE (Earth-to-space)	
	MOBILE				MOBILE	
	SPACE RESEARCH(passive)				SPACE RESEARCH(passive)	
	FIXED				FIXED	
238 –241 GHz	FIXED-SATELLITE (Earth-to-space)				FIXED-SATELLITE (Earth-to-space)	
	MOBILE				MOBILE	
	Radiolocation				Radiolocation	

Frequency band	RR Region 1 allocation and relevant footnotes	European Common Allocation	Major Utilisation	Notes	Norwegian Allocation	Norwegian Utilisation
	RADIOLOCATION				RADIOLOCATION	
241-248 GHz	Amateur				Amateur	
	Amateur-Satellite				Amateur-Satellite	
	S5.138				S5.138	
	AMATEUR				AMATEUR	
248-250 GHz	AMATEUR- SATELLITE				AMATEUR- SATELLITE	
250-252 GHz	EARTH EXPLORATION- SATELLITE(passive)				EARTH EXPLORATION- SATELLITE(passive)	
	SPACE RESEARCH(passive)				SPACE RESEARCH(passive)	
	S5.149 S5.555				S5.149 S5.555	

Frequency band	RR Region 1 allocation and relevant footnotes	European Common Allocation	Major Utilisation	Notes	Norwegian Allocation	Norwegian Utilisation
	MOBILE S5.553				MOBILE S5.553	
252-265 GHz	MOBILE- SATELLITE				MOBILE- SATELLITE	
	RADIO- NAVIGATION				RADIO- NAVIGATION	
	RADIO- NAVIGATION- SATELLITE				RADIO- NAVIGATION- SATELLITE	
	S5.149 S5.385 S5.554 S5.555 S5.564				S5.149 S5.385 S5.554 S5.555 S5.564	
265 –275 GHz	FIXED FIXED-SATELLITE (Earth-to-space)				FIXED FIXED-SATELLITE (Earth-to-space)	
	MOBILE				MOBILE	
	RADIO ASTRONOMY				RADIO ASTRONOMY	
	S5.149				S5.149	
275 400 CH-	Not allocated				Not allocated	
275-400 GHz	S5.565				S5.565	