

NORTH ATLANTIC TREATY ORGANISATION
Consultation, Command and Control Board
Civil/Military Spectrum Capability Panel

**NATO JOINT CIVIL/MILITARY FREQUENCY
AGREEMENT
(NJFA)**
Extract for Public Disclosure
2021

NATO JOINT CIVIL/MILITARY FREQUENCY AGREEMENT (NJFA)

INTRODUCTION

1. The North Atlantic Treaty Organization (NATO) is a political and military Alliance with the essential purpose to safeguard the freedom and security of its members through political and military means. It promotes democratic values and encourages consultation and cooperation on defence and security issues to build trust and, in the long run, prevent conflict.
2. Alliance defence capabilities are critically dependent on access to the radio frequency (RF) spectrum, in environments, including hostile ones that require the use of a complex mix of military equipment to ensure the robustness of operations. Spectrum, however, is a finite natural resource and the demand for access to it from all users, military and civil, is growing.
3. In addition to the access to spectrum for NATO operations, RF spectrum is also essential for keeping high readiness and for the training of NATO and member nations' forces.
4. As the demand for access to spectrum for NATO military use often competes with that for civil spectrum users, efficient RF spectrum planning and use is essential. Insufficient access to the RF spectrum for operations or high readiness and training will jeopardize NATO military operations.

AIM OF THIS DOCUMENT

5. In order to satisfy the requirement for mobility and interoperability of forces, and to improve commonality in RF spectrum utilisation for military operations, this document identifies frequency bands that are in general military use by NATO Nations throughout NATO Europe. The NJFA NATO refers to such frequency bands as "harmonised"¹. In general, the harmonised military bands should provide a common military frequency resource in order to facilitate common exercises and operations throughout the territory of NATO Nations in ITU Region 1. These frequencies include the core frequency assets for day-to-day training, exercise, combat readiness, deployment and to support Electronic Warfare (EW)² training.
6. The military use of RF spectrum is based on the relevant provisions of the ITU Constitution the Radio Regulations and in accordance with national allocation tables of Nations. These provisions allow for mobility and flexible use of RF spectrum by NATO forces.

¹ "NATO harmonised" does not refer to the defined harmonised frameworks with the EU or CEPT. A "NATO harmonized band" is a frequency band identified by NATO where a permanent essential military requirement exists in NATO Europe or a band which fulfils an important military requirement. Such a frequency band forms a basis for military training use and planning. The band can be shared between civil and military users according to national requirements and legislation.

² The purpose of EW is to deny the opponent the advantage of, and ensure friendly unimpeded access to the electromagnetic spectrum. EW can be applied from air, sea, land and space, and target communication and radar systems. It involves the use of the electromagnetic energy to provide improved understanding of the operational environment as well as to achieve specific effects on the modern battlefield.

7. This document provides an extract releasable version of the joint agreement between the civil and military authorities of the NATO Nations on the current use of RF spectrum for military purposes required by NATO forces or in support of NATO.
8. Extended military requirements and the conditions of RF spectrum use during states of emergency and in times of crisis or war are not included in this document.

PROVISIONS

9. The use of RF spectrum for military purposes required by NATO forces or in support of NATO applies throughout the territory of NATO Nations in ITU Region 1. However, it should be taken into account that many military radio frequency requirements apply to all NATO Nations. For European NATO Nations, the Annex of this document identifies the collective RF spectrum requirements of NATO for military use in Europe. This will be supported by NATO Nations to the maximum extent possible through their national spectrum regulatory framework.
10. When specific military requirements cannot be met using the harmonised RF spectrum identified in this NATO document, military requirements may be satisfied nationally in RF allocations which are not listed in this document.
11. European NATO Nations agree to support in the Conference of European Postal and Telecommunications Administrations (CEPT) the appropriate incorporation of military spectrum utilisation as listed in the Annex into the European Table of Frequency Allocations and Applications (ECA).
12. This document provides information about the military utilisation to the civilian environment through national RF allocation tables and ERC Report 25 (ECA table) in accordance with existing spectrum supportability and coordination procedures within NATO.

INFORMATION PROVIDED IN ECA TABLE

13. According to the NJFA, NATO harmonised RF bands include bands where a permanent essential military requirement exists in NATO Europe or a band which fulfils an important military requirement.
14. Annex 1 contains those ECA table bands that are identified for operational effectiveness of NATO forces. Where usage of RF bands has been harmonised by NATO and NATO member nations for military use this does not exclude the utilisation for civil applications.
15. The table structure in the annex is as follows:
 - a. column (a) shows the frequency range based on the ECA table;
 - b. column (b) shows the military applications in accordance with the definitions of EFIS DB, wherever possible up to Layer 2 terminology;
 - c. column (c) shows additional military information which can be used to get a better understanding and/or as an input for the “notes” in the ECA table.

ADDITIONAL INFORMATION

16. This document also provides for information in Appendix 2 frequency bands where a NATO requirement is identified for a possible future harmonised military use.

NATO JOINT CIVIL/MILITARY FREQUENCY AGREEMENT (NJFA)

(a) Frequency Range	(b) Applications used by Military	(c) Additional information on Military Requirement
14 kHz - 19.95 kHz	Land military systems Maritime military systems	
20.05 kHz - 70 kHz	Land military systems Maritime military systems	
70 kHz - 72 kHz	Land military systems Maritime military systems	
72 kHz - 84 kHz	Land military systems Maritime military systems	
84 kHz - 86 kHz	Land military systems Maritime military systems	
86 kHz - 90 kHz	Land military systems Maritime military systems	
90 kHz - 110 kHz	Land military systems Maritime military systems	
110 kHz - 112 kHz	Land military systems Maritime military systems	
112 kHz - 115 kHz	Land military systems Maritime military systems	
115 kHz - 117.6 kHz	Land military systems Maritime military systems	
117.6 kHz - 126 kHz	Land military systems Maritime military systems	
126 kHz - 129 kHz	Land military systems Maritime military systems	
129 kHz - 130 kHz	Land military systems Maritime military systems	

130 kHz - 135.7 kHz	Land military systems Maritime military systems	
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(a) Frequency Range	(b) Applications used by Military	(c) Additional information on Military Requirement
135.7 kHz - 137.8 kHz	Land military systems Maritime military systems	
137.8 kHz - 148.5 kHz	Land military systems Maritime military systems	
255 kHz - 283.5 kHz	Aeronautical military systems Maritime military systems	
283.5 kHz - 315 kHz	Aeronautical military systems Maritime military systems	
315 kHz - 325 kHz	Aeronautical military systems Maritime military systems	
325 kHz - 405 kHz	Aeronautical military systems	
405 kHz - 415 kHz	Aeronautical military systems Maritime military systems	
415 kHz - 435 kHz	Aeronautical military systems Maritime military systems	
435 kHz - 472 kHz	Aeronautical military systems Maritime military systems	
472 kHz - 479 kHz	Aeronautical military systems Maritime military systems	
479 kHz - 495 kHz	Aeronautical military systems Maritime military systems	
495 kHz - 505 kHz	Maritime military systems	
505 kHz - 526.5 kHz	Aeronautical military systems Maritime military systems	

1606.5 kHz - 1625 kHz	Land military systems Maritime military systems	
1625 kHz - 1635 kHz	Radiolocation (military)	
1635 kHz - 1800 kHz	Land military systems Maritime military systems	
1800 kHz - 1810 kHz	Radiolocation (military)	

(a) Frequency Range	(b) Applications used by Military	(c) Additional information on Military Requirement
1850 kHz - 2000 kHz	Land military systems Maritime military systems	
2000 kHz - 2025 kHz	Land military systems Maritime military systems	
2025 kHz - 2045 kHz	Land military systems Maritime military systems	
2045 kHz - 2160 kHz	Land military systems Maritime military systems	
2160 kHz - 2170 kHz	Radiolocation (military)	
2170 kHz - 2173.5 kHz	Maritime military systems	
2190.5 kHz - 2194 kHz	Maritime military systems	
2194 kHz - 2300 kHz	Land military systems Maritime military systems	
2300 kHz - 2498 kHz	Land military systems Maritime military systems	
2502 kHz - 2625 kHz	Land military systems Maritime military systems	
2625 kHz - 2650 kHz	Maritime military systems	
2650 kHz - 2850 kHz	Land military systems Maritime military systems	

2850 kHz - 3025 kHz	Aeronautical military systems	
3025 kHz - 3155 kHz	Aeronautical military systems	
3155 kHz - 3200 kHz	Land military systems Maritime military systems	
3200 kHz - 3230 kHz	Land military systems Maritime military systems	
3230 kHz - 3400 kHz	Land military systems Maritime military systems	
3400 kHz - 3500 kHz	Aeronautical military systems	
3500 kHz - 3800 kHz	Land military systems Maritime military systems	

(a) Frequency Range	(b) Applications used by Military	(c) Additional information on Military Requirement
3800 kHz - 3900 kHz	Aeronautical military systems Land military systems	
3900 kHz - 3950 kHz	Aeronautical military systems	
3950 kHz - 4000 kHz	Land military systems	
4000 kHz - 4063 kHz	Land military systems Maritime military systems	
4063 kHz - 4438 kHz	Maritime military systems	
4438 kHz - 4488 kHz	Land military systems Maritime military systems Radiolocation (military)	
4488 kHz - 4650 kHz	Land military systems Maritime military systems	
4650 kHz - 4700 kHz	Aeronautical military systems	
4700 kHz - 4750 kHz	Aeronautical military systems	

4750 kHz - 4850 kHz	Aeronautical military systems Land military systems	
4850 kHz - 4995 kHz	Land military systems	
5005 kHz - 5060 kHz	Land military systems	
5060 kHz - 5250 kHz	Land military systems Maritime military systems	
5250 kHz - 5275 kHz	Land military systems Maritime military systems Radiolocation (military)	
5275 kHz - 5351.5 kHz	Land military systems Maritime military systems	
5351.5 kHz - 5366.5 kHz	Land military systems Maritime military systems	
5366.5 kHz - 5450 kHz	Land military systems Maritime military systems	
5450 kHz - 5480 kHz	Aeronautical military systems Land military systems	

(a) Frequency Range	(b) Applications used by Military	(c) Additional information on Military Requirement
5480 kHz - 5680 kHz	Aeronautical military systems	
5680 kHz - 5730 kHz	Aeronautical military systems	
5730 kHz - 5900 kHz	Land military systems	
6200 kHz - 6525 kHz	Maritime military systems	
6525 kHz - 6685 kHz	Aeronautical military systems	
6685 kHz - 6765 kHz	Aeronautical military systems	
6765 kHz - 7000 kHz	Land military systems Maritime military systems	

7450 kHz - 8100 kHz	Land military systems Maritime military systems	
8100 kHz - 8195 kHz	Land military systems Maritime military systems	
8195 kHz - 8815 kHz	Maritime military systems	
8815 kHz - 8965 kHz	Aeronautical military systems	
8965 kHz - 9040 kHz	Aeronautical military systems	
9040 kHz - 9305 kHz	Land military systems	
9305 kHz - 9355 kHz	Land military systems	
9355 kHz - 9400 kHz	Land military systems	
9900 kHz - 9995 kHz	Land military systems	
10005 kHz - 10100 kHz	Aeronautical military systems	
10100 kHz - 10150 kHz	Land military systems	
10150 kHz - 11175 kHz	Land military systems Maritime military systems	
11175 kHz - 11275 kHz	Aeronautical military systems	
11275 kHz - 11400 kHz	Aeronautical military systems	
11400 kHz - 11600 kHz	Land military systems	
12100 kHz - 12230 kHz	Land military systems	
12230 kHz - 13200 kHz	Maritime military systems	
13200 kHz - 13260 kHz	Aeronautical military systems	
13260 kHz - 13360 kHz	Aeronautical military systems	

(a) Frequency Range	(b) Applications used by Military	(c) Additional information on Military Requirement
13360 kHz - 13410 kHz	Land military systems	

13410 kHz - 13450 kHz	Land military systems Maritime military systems	
13450 kHz - 13550 kHz	Land military systems Maritime military systems	
13550 kHz - 13570 kHz	Land military systems Maritime military systems	
13870 kHz - 14000 kHz	Land military systems Maritime military systems	
14350 kHz - 14990 kHz	Land military systems Maritime military systems	
15010 kHz - 15100 kHz	Aeronautical military systems	
15800 kHz - 16100 kHz	Land military systems	
16100 kHz - 16200 kHz	Land military systems	
16200 kHz - 16360 kHz	Land military systems	
16360 kHz - 17410 kHz	Maritime military systems	
17410 kHz - 17480 kHz	Land military systems	
17900 kHz - 17970 kHz	Aeronautical military systems	
17970 kHz - 18030 kHz	Aeronautical military systems	
18030 kHz - 18052 kHz	Land military systems	
18052 kHz - 18068 kHz	Land military systems	
18168 kHz - 18780 kHz	Land military systems Maritime military systems	
18780 kHz - 18900 kHz	Maritime military systems	
19020 kHz - 19680 kHz	Land military systems	
19680 kHz - 19800 kHz	Maritime military systems	
19800 kHz - 19990 kHz	Land military systems	

20010 kHz - 21000 kHz	Aeronautical military systems Land military systems Maritime military systems	
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(a) Frequency Range	(b) Applications used by Military	(c) Additional information on Military Requirement
21850 kHz - 21870 kHz	Land military systems	
21870 kHz - 21924 kHz	Land military systems	
21924 kHz - 22000 kHz	Aeronautical military systems	
22000 kHz - 22855 kHz	Maritime military systems	
22855 kHz - 23000 kHz	Land military systems	
23000 kHz - 23200 kHz	Land military systems Maritime military systems	
23200 kHz - 23350 kHz	Aeronautical military systems Land military systems	
23350 kHz - 24000 kHz	Land military systems Maritime military systems	
24000 kHz - 24450 kHz	Land military systems	
24450 kHz - 24600 kHz	Land military systems	
24600 kHz - 24890 kHz	Land military systems	
25010 kHz - 25070 kHz	Land military systems Maritime military systems	
25070 kHz - 25210 kHz	Maritime military systems	
25210 kHz - 25550 kHz	Land military systems Maritime military systems	
26100 kHz - 26175 kHz	Maritime military systems	
26175 kHz - 26200 kHz	Land military systems Maritime military systems	

26200 kHz - 26350 kHz	Land military systems Maritime military systems	
26350 kHz - 27500 kHz	Land military systems Maritime military systems	
27500 kHz - 28 MHz	Aeronautical military systems Land military systems Maritime military systems	

(a) Frequency Range	(b) Applications used by Military	(c) Additional information on Military Requirement
29.7 MHz - 30.005 MHz	Aeronautical military systems Land military systems Maritime military systems	
30.005 MHz - 30.01 MHz	Aeronautical military systems Land military systems Maritime military systems	
30.01 MHz - 37.5 MHz	Aeronautical military systems Land military systems Maritime military systems	
37.5 MHz - 38.25 MHz	Aeronautical military systems Land military systems Maritime military systems	
38.25 MHz - 39 MHz	Aeronautical military systems Land military systems Maritime military systems	
39 MHz - 39.5 MHz	Aeronautical military systems Land military systems Maritime military systems	
39.5 MHz - 39.986 MHz	Aeronautical military systems Land military systems Maritime military systems	

39.986 MHz - 40.02 MHz	Aeronautical military systems Land military systems Maritime military systems	
40.02 MHz - 40.66 MHz	Aeronautical military systems Land military systems Maritime military systems	
40.66 MHz - 40.7 MHz	Aeronautical military systems Land military systems Maritime military systems	

(a) Frequency Range	(b) Applications used by Military	(c) Additional information on Military Requirement
40.7 MHz - 40.98 MHz	Aeronautical military systems Land military systems Maritime military systems	
40.98 MHz - 41.015 MHz	Aeronautical military systems Land military systems Maritime military systems	
41.015 MHz - 42 MHz	Aeronautical military systems Land military systems Maritime military systems	
42 MHz - 42.5 MHz	Aeronautical military systems Land military systems Maritime military systems	
42.5 MHz - 44 MHz	Aeronautical military systems Land military systems Maritime military systems	
44 MHz - 47 MHz	Aeronautical military systems Land military systems Maritime military systems	
47 MHz - 50 MHz	Land military systems	

50 MHz - 52 MHz	Land military systems	
52 MHz - 68 MHz	Land military systems	
68 MHz - 70.45 MHz	Land military systems Maritime military systems	
70.45 MHz - 74.8 MHz	Land military systems Maritime military systems	
75.2 MHz - 87.5 MHz	Land military systems Maritime military systems	
137 MHz - 137.025 MHz	Aeronautical military systems Land military systems Maritime military systems Satellite systems (military)	

(a) Frequency Range	(b) Applications used by Military	(c) Additional information on Military Requirement
137.025 MHz - 137.175 MHz	Aeronautical military systems Land military systems Maritime military systems Satellite systems (military)	
137.175 MHz - 137.825 MHz	Aeronautical military systems Land military systems Maritime military systems Satellite systems (military)	
137.825 MHz - 138 MHz	Aeronautical military systems Land military systems Maritime military systems Satellite systems (military)	
138 MHz - 143.6 MHz	Aeronautical military systems Land military systems Maritime military systems	

143.6 MHz - 143.65 MHz	Aeronautical military systems Land military systems Maritime military systems	
143.65 MHz - 144 MHz	Aeronautical military systems Land military systems Maritime military systems	
146 MHz - 148 MHz	Maritime military systems	
148 MHz – 149.9 MHz	Maritime military systems	
149.9 MHz – 150.05 MHz	Maritime military systems	
150.05 MHz – 153 MHz	Maritime military systems	
153 MHz – 154 MHz	Maritime military systems	
154 MHz – 156.4875 MHz	Maritime military systems	
156.4875 MHz – 156.5125 MHz	Maritime military systems	
156. 5125 MHz – 156.5375 MHz	Maritime military systems	
156. 5375 MHz – 156.5625 MHz	Maritime military systems	
156. 5625 MHz – 156.7625 MHz	Maritime military systems	

(a) Frequency Range	(b) Applications used by Military	(c) Additional information on Military Requirement
156. 7625 MHz – 156.7875 MHz	Maritime military systems	
156. 7875 MHz – 156.8125 MHz	Maritime military systems	
156. 8125 MHz – 156.8375 MHz	Maritime military systems	
156. 8375 MHz – 157.1875 MHz	Maritime military systems	
157.1875 MHz – 157.3375 MHz	Maritime military systems	
157.3375 MHz – 161.7875 MHz	Maritime military systems	
161.7875 MHz – 161.9375 MHz	Maritime military systems	
161.9375 MHz – 161.9625 MHz	Maritime military systems	

161.9625 MHz – 161.9875 MHz	Maritime military systems	
161.9875 MHz – 162.0125 MHz	Maritime military systems	
162.0125 MHz – 162.0375 MHz	Maritime military systems	
162.0375 MHz – 169.4 MHz	Maritime military systems	
169.4 MHz – 169.8125 MHz	Maritime military systems	
169.8125 MHz – 174 MHz	Maritime military systems	
225 MHz - 230 MHz	Defence Systems	The range 225-399.9 MHz is essential to NATO and is in military use for land mobile, mobile-satellite, Air/Ground/Air and specific maritime and terrestrial communications, including ITU Region 2. This NATO UHF band 225-400 MHz is the only harmonised and commonly available resource managed by NATO on a daily basis in and for NATO nations.
230 MHz - 235 MHz	Defence Systems	See 225-230 MHz
235 MHz - 240 MHz	Defence Systems	See 225-230 MHz
240 MHz - 242.95 MHz	Defence Systems	See 225-230 MHz
243.05 MHz - 267 MHz	Defence Systems	See 225-230 MHz
267 MHz - 272 MHz	Defence Systems	See 225-230 MHz
272 MHz - 273 MHz	Defence Systems	See 225-230 MHz
273 MHz - 312 MHz	Defence Systems	See 225-230 MHz
312 MHz - 315 MHz	Defence Systems	See 225-230 MHz
315 MHz - 322 MHz	Defence Systems	See 225-230 MHz
322 MHz - 328.6 MHz	Defence Systems	See 225-230 MHz
328.6 MHz - 335.4 MHz	Defence Systems	See 225-230 MHz

(a) Frequency Range	(b) Applications used by Military	(c) Additional information on Military Requirement
335.4 MHz - 380 MHz	Defence Systems	See 225-230 MHz
380 MHz - 385 MHz	Defence Systems	380-385 MHz and 390-395 MHz are currently shared with Emergency Services.
385 MHz - 387 MHz	Defence Systems	See 225-230 MHz

387 MHz - 390 MHz	Defence Systems	See 225-230 MHz
390 MHz - 395 MHz	Defence Systems	380-385 MHz and 390-395 MHz are currently shared with Emergency Services..
395 MHz - 399.9 MHz	Defence Systems	See 225-230 MHz
406.1 MHz - 410 MHz	Land military systems Maritime military systems	
410 MHz - 420 MHz	Land military systems Maritime military systems	
420 MHz - 430 MHz	Land military systems Maritime military systems Radiolocation (military)	
430 MHz - 432 MHz	Radiolocation (military)	
432 MHz - 433.05 MHz	Radiolocation (military)	
433.05 MHz - 434.79 MHz	Radiolocation (military)	
434.79 MHz - 438 MHz	Radiolocation (military)	
438 MHz - 440 MHz	Radiolocation (military)	
440 MHz - 450 MHz	Land military systems Maritime military systems Radiolocation (military)	
862 MHz - 870 MHz	Land military systems Maritime military systems	
870 MHz - 876 MHz	Land military systems Maritime military systems Telemetry/Telecommand (military)	The bands 870-876 MHz and 915-921 MHz are NATO harmonised and used for land and naval systems specifically for unmanned systems. In countries where these bands are or will be in civil use according to ERC/ECC Deliverables, Shared use of the bands should be considered on a national basis.
876 MHz - 880 MHz	Land military systems Maritime military systems	
880 MHz - 890 MHz	Land military systems Maritime military systems	

(a) Frequency Range	(b) Applications used by Military	(c) Additional information on Military Requirement
890 MHz - 915 MHz	Land military systems Maritime military systems	
915 MHz - 921 MHz	Land military systems Maritime military systems Telemetry/Telecommand (military)	The bands 870-876 MHz and 915-921 MHz are NATO harmonised and used for land and naval systems specifically for unmanned systems. In countries where these bands are or will be in civil use according to ERC/ECC Deliverables, Shared use of the bands should be considered on a national basis.
921 MHz - 925 MHz	Land military systems Maritime military systems	
925 MHz - 942 MHz	Land military systems Maritime military systems	
960 MHz - 1164 MHz	Aeronautical military systems	Military use includes JTIDS/MIDS
1164 MHz - 1215 MHz	Aeronautical military systems Satellite systems (military)	Military use includes JTIDS/MIDS
1215 MHz - 1240 MHz	Radiolocation (military) Satellite systems (military)	
1240 MHz - 1300 MHz	Radiolocation (military) Satellite systems (military)	
1300 MHz - 1350 MHz	Radiolocation (military) Satellite systems (military)	
1350 MHz - 1400 MHz	Aeronautical military systems Land military systems Maritime military systems Radiolocation (military)	
1427 MHz - 1429 MHz	Land military systems Maritime military systems Telemetry/Telecommand (military)	
1429 MHz - 1452 MHz	Land military systems Maritime military systems Telemetry/Telecommand (military)	

1492 MHz - 1518 MHz	Land military systems Maritime military systems Telemetry/Telecommand (military)	
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(a) Frequency Range	(b) Applications used by Military	(c) Additional information on Military Requirement
1518 MHz - 1525 MHz	Land military systems Maritime military systems Telemetry/Telecommand (military)	
1675 MHz - 1690 MHz	Land military systems Maritime military systems Meteorological aids (military)	
1690 MHz - 1700 MHz	Land military systems Maritime military systems Meteorological aids (military)	
1700 MHz - 1710 MHz	Land military systems Maritime military systems Meteorological aids (military)	
1785 MHz - 1800 MHz	Land military systems	
1800 MHz - 1805 MHz	Land military systems	
2025 MHz - 2110 MHz	Aeronautical military systems Land military systems Maritime military systems Telemetry/Telecommand (military)	
2200 MHz - 2290 MHz	Aeronautical military systems Land military systems Maritime military systems Telemetry/Telecommand (military)	

2300 MHz - 2400 MHz	Aeronautical military systems Land military systems Maritime military systems Telemetry/Telecommand (military)	
2700 MHz - 2900 MHz	Radiolocation (military)	
2900 MHz - 3100 MHz	Radiolocation (military)	
3100 MHz - 3300 MHz	Radiolocation (military)	
3300 MHz - 3400 MHz	Radiolocation (military)	
3400 MHz - 3600 MHz	Radiolocation (military)	Upper limit for airborne radars is 3410 MHz.

(a) Frequency Range	(b) Applications used by Military	(c) Additional information on Military Requirement
4200 MHz - 4400 MHz	Aeronautical military systems	
4400 MHz - 4500 MHz	Aeronautical military systems Land military systems Maritime military systems Telemetry/Telecommand (military)	
4500 MHz - 4800 MHz	Aeronautical military systems Land military systems Maritime military systems Telemetry/Telecommand (military)	
4800 MHz - 4990 MHz	Aeronautical military systems Land military systems Maritime military systems Telemetry/Telecommand (military)	
4990 MHz - 5000 MHz	Aeronautical military systems Land military systems Maritime military systems Telemetry/Telecommand (military)	
5250 MHz - 5255 MHz	Radiolocation (military)	

5255 MHz - 5350 MHz	Radiolocation (military)	
5350 MHz - 5450 MHz	Radiolocation (military)	
5450 MHz - 5460 MHz	Radiolocation (military)	
5460 MHz - 5470 MHz	Radiolocation (military)	
5470 MHz - 5570 MHz	Radiolocation (military)	
5570 MHz - 5650 MHz	Radiolocation (military)	
5650 MHz - 5725 MHz	Radiolocation (military)	
5725 MHz - 5830 MHz	Radiolocation (military)	
5830 MHz - 5850 MHz	Radiolocation (military)	
7250 MHz - 7300 MHz	Land military systems Maritime military systems Satellite systems (military)	

(a) Frequency Range	(b) Applications used by Military	(c) Additional information on Military Requirement
7300 MHz - 7375 MHz	Land military systems Maritime military systems Satellite systems (military)	
7375 MHz - 7450 MHz	Land military systems Maritime military systems Satellite systems (military)	
7450 MHz - 7550 MHz	Land military systems Maritime military systems Satellite systems (military)	
7550 MHz - 7750 MHz	Land military systems Maritime military systems Satellite systems (military)	

7900 MHz - 8025 MHz	Land military systems Satellite systems (military)	
8025 MHz - 8175 MHz	Land military systems Satellite systems (military)	
8175 MHz - 8215 MHz	Land military systems Satellite systems (military)	
8215 MHz - 8400 MHz	Land military systems Satellite systems (military)	
8500 MHz - 8550 MHz	Aeronautical military systems Radiolocation (military)	Ship-, Land- and Airborne surveillance.
8550 MHz - 8650 MHz	Aeronautical military systems Radiolocation (military)	Ship-, Land- and Airborne surveillance.
8650 MHz - 8750 MHz	Aeronautical military systems Radiolocation (military)	Ship-, Land- and Airborne surveillance.
8750 MHz - 8850 MHz	Aeronautical military systems Radiolocation (military)	Ship-, Land- and Airborne surveillance.
8850 MHz - 9000 MHz	Aeronautical military systems Radiolocation (military)	Ship-, Land- and Airborne surveillance.
9000 MHz - 9200 MHz	Aeronautical military systems Radiolocation (military)	Ship-, Land- and Airborne surveillance.

(a) Frequency Range	(b) Applications used by Military	(c) Additional information on Military Requirement
9200 MHz - 9300 MHz	Aeronautical military systems Radiolocation (military)	Ship-, Land- and Airborne surveillance.
9300 MHz - 9500 MHz	Aeronautical military systems Radiolocation (military) Satellite systems (military)	Ship-, Land- and Airborne surveillance.

9500 MHz - 9800 MHz	Aeronautical military systems Radiolocation (military) Satellite systems (military)	Ship-, Land- and Airborne surveillance.
9800 MHz - 9900 MHz	Aeronautical military systems Radiolocation (military) Satellite systems (military)	Ship-, Land- and Airborne surveillance.
9900 MHz - 10000 MHz	Aeronautical military systems Radiolocation (military) Satellite systems (military)	Ship-, Land- and Airborne surveillance.
10000 MHz - 10400 MHz	Aeronautical military systems Land military systems Maritime military systems Radiolocation (military)	
10400 MHz - 10450 MHz	Aeronautical military systems Land military systems Maritime military systems Radiolocation (military)	
10450 MHz - 10.5 GHz	Aeronautical military systems Land military systems Maritime military systems Radiolocation (military)	
13.4 GHz - 13.65 GHz	Radiolocation (military)	
13.65 GHz - 13.75 GHz	Radiolocation (military)	
13.75 GHz - 14 GHz	Radiolocation (military)	
14.5 GHz - 14.75 GHz	Aeronautical military systems Land military systems Maritime military systems	

(a) Frequency Range	(b) Applications used by Military	(c) Additional information on Military Requirement
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14.75 GHz - 14.8 GHz	Aeronautical military systems Land military systems Maritime military systems	
14.8 GHz - 15.35 GHz	Aeronautical military systems Land military systems Maritime military systems	
15.7 GHz - 16.6 GHz	Radiolocation (military)	
16.6 GHz - 17.1 GHz	Radiolocation (military)	
17.1 GHz - 17.2 GHz	Radiolocation (military)	
17.2 GHz - 17.3 GHz	Radiolocation (military)	
17.3 GHz - 17.7 GHz	Radiolocation (military)	
20.2 GHz - 21.2 GHz	Satellite systems (military)	
21.2 GHz - 21.4 GHz	Aeronautical military systems	
24.05 GHz - 24.25 GHz	Radiolocation (military)	
25.25 GHz - 25.5 GHz	Aeronautical military systems Land military systems Maritime military systems	
25.5 GHz - 26.5 GHz	Aeronautical military systems Land military systems Maritime military systems	
26.5 GHz - 27 GHz	Land military systems	
27 GHz - 27.5 GHz	Land military systems	
30 GHz - 31 GHz	Satellite systems (military)	
33.4 GHz - 34.2 GHz	Radiolocation (military)	
34.2 GHz - 34.7 GHz	Radiolocation (military)	
34.7 GHz - 35.2 GHz	Radiolocation (military)	
35.2 GHz - 35.5 GHz	Radiolocation (military)	
35.5 GHz - 36 GHz	Radiolocation (military)	

(a) Frequency Range	(b) Applications used by Military	(c) Additional information on Military Requirement
43.5 GHz - 45.5 GHz	Aeronautical military systems Land military systems Maritime military systems Satellite systems (military)	

(a) Frequency Range	(b) Applications used by Military	(c) Additional information on Military Requirement
450 MHz - 455 MHz	Defence Systems	Identified for a potential new military requirement if the evolution of the regulation in this frequency range facilitates it.
455 MHz - 456 MHz	Defence Systems	Identified for a potential new military requirement if the evolution of the regulation in this frequency range facilitates it.
456 MHz - 459 MHz	Defence Systems	Identified for a potential new military requirement if the evolution of the regulation in this frequency range facilitates it.
459 MHz - 460 MHz	Defence Systems	Identified for a potential new military requirement if the evolution of the regulation in this frequency range facilitates it.
460 MHz - 470 MHz	Defence Systems	Identified for a potential new military requirement if the evolution of the regulation in this frequency range facilitates it.
470 MHz - 694 MHz	Defence Systems	Identified for a potential new military requirement if the evolution of the regulation in this frequency range facilitates it.
694 MHz - 790 MHz	Defence Systems	Identified for a potential new military requirement if the evolution of the regulation in this frequency range facilitates it.
15.4 GHz - 15.43 GHz	Radiolocation (military)	The range 15.4-15.7 GHz is a future military requirement in the radiolocation service for the use of land, airborne and naval radars, as an extension of 15.7-17.3 GHz, in specific for imaging radars.
15.43 GHz - 15.63 GHz	Radiolocation (military)	The range 15.4-15.7 GHz is a future military requirement in the radiolocation service for the use of land, airborne and naval radars, as an extension of 15.7-17.3 GHz, in specific for imaging radars.
15.63 GHz - 15.7 GHz	Radiolocation (military)	The range 15.4-15.7 GHz is a future military requirement in the radiolocation service for the use of land, airborne and naval radars, as an extension of 15.7-17.3 GHz, in specific for imaging radars.
59 GHz - 59.3 GHz	Defence Systems	The range 59-63 GHz is a future military requirement for the military use by various applications of the fixed, mobile and radiolocation services.
59.3 GHz - 64 GHz	Defence Systems	The range 59-63 GHz is a future military requirement for the military use by various applications of the fixed, mobile and radiolocation services.

71 GHz - 74 GHz	Defence Systems	The band 71-74 GHz is a future military requirement for the military use by various applications of the fixed, mobile, fixed-satellite and mobile-satellite services, specifically for high-bandwidth access radio links in accordance with ECC Recommendation (05)07, paired with 81-84 GHz.
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APPENDIX 2

(a) Frequency Range	(b) Applications used by Military	(c) Additional information on Military Requirement
81 GHz - 84 GHz	Defence Systems	The band 81-84 GHz is a future military requirement for military use by various applications of the fixed, mobile, fixed-satellite and mobile-satellite services, specifically for high-bandwidth access radio links in accordance with ECC Recommendation (05)07, paired with 71-74 GHz.
92 GHz - 94 GHz	Defence Systems	The band 92-94 GHz is a future military requirement for military use by various applications of the fixed, mobile and radiolocation services, specifically for highbandwidth access radio links in accordance with ECC Recommendation (14)01, paired with 94.1-95 GHz.
94 GHz - 94.1 GHz	Defence Systems	The band 94-94.1 GHz is a future military requirement for military use by applications of the earth exploration-satellite and radiolocation services.
94.1 GHz - 95 GHz	Defence Systems	The band 94.1-95 GHz is a future military requirement for military use by various applications of the fixed, mobile and radiolocation services, specifically for highbandwidth access radio links in accordance with ECC Recommendation (14)01, paired with 92-94 GHz.
95 GHz - 100 GHz	Defence Systems	The band 95-100 GHz is a future military requirement for military use by various applications of the fixed, mobile, radiolocation, radionavigation and radionavigationsatellite services.

