

Sixteenth Schedule to Decision No. MCA/D-22-4662

Apparatus General Authorisation for Apparatus used for Radiodetermination **Applications**

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Revision History of the Sixteenth Schedule

Apparatus used for Radiodetermination Applications

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|------------|------------------------------|----|------------|--------------|----------|
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| 28/11/2025 | Implementation (EU) 2025/105 | of | Commission | Implementing | Decision |



This Schedule shall be read and construed as one with Part I and Part II of Decision No. MCA/D/22-4662

Adopted pursuant to Article 30A of the Electronic Communications (Regulation) Act (Cap. 399) establishing the radiocommunications apparatus general authorisation



Article 1 - Applicability

This apparatus general authorisation applies to any person installing or using apparatus intended to be used for radiodetermination applications or any apparatus intended to be used as a component part of that apparatus.

Article 2 – Interpretation

In this Schedule unless the context otherwise requires:

- (1) "radiodetermination applications" refers to applications used for determining the position, velocity and any other characteristics of an object, or for obtaining information relating to these parameters;
- (2) "enclosed Nuclear Magnetic Resonance sensors" or "enclosed NMR sensors" means enclosed devices where the material/object under investigation is put inside the enclosure of the NMR apparatus, using NMR techniques;
- (3) "NMR techniques" means techniques using nuclear magnetic resonance excitation and magnetic field strength response of a material/object under test to get information about material properties based on resonance frequency responses of isotopes of atoms, but exclude nuclear magnetic resonance imaging and magnetic resonance tomography systems;
- (4) "security scanners" refer to a specific type of radiodetermination applications which are used to detect objects carried by a person or on a person's body for security screening purposes without making any physical contact; and
- (5) "Tank Level Probing Radar" or "TLPR" means a specific type of radiodetermination application, which is used for tank level measurements and is installed in metallic or reinforced concrete tanks, or similar structures made of material with comparable attenuation characteristics. The purpose of the tank is to contain a substance.

Article 3 – Minimum technical parameters

The minimum technical parameters of apparatus used for radiodetermination applications shall be those specified in the Annex to this Schedule.



Annex to the Sixteenth Schedule Minimum Technical Parameters for Apparatus used for Radiodetermination Applications

| Frequency band | Transmit power limit/power density limit | Additional parameters | Other usage parameters | Frequency band reference (informative) |
|-----------------|--|-----------------------|---|--|
| 9-148 kHz | 46 dBµA/m at 10 m distance at a reference of 100 Hz, outside the NMR apparatus Magnetic field strength descending 10 dB/decade above 100 Hz | | This set of usage conditions is only available for enclosed NMR applications. | 90 |
| 148-5000 kHz | -15 dBµA/m at 10 m distance outside the NMR apparatus | | This set of usage conditions is only available for enclosed NMR applications. | 91 |
| 5000-30000 kHz | -5 dBµA/m at 10 m distance outside the NMR apparatus | | This set of usage conditions is only available for enclosed NMR applications. | 92 |
| 30-130 MHz | -36 dBm e.r.p. outside the NMR apparatus | | This set of usage conditions is only available for enclosed NMR applications. | 93 |
| 2400-2483.5 MHz | 25 mW e.i.r.p. | | | 57b |



| Frequency band | Transmit power limit/power density limit | Additional parameters | Other usage parameters | Frequency band reference (informative) |
|----------------|--|--|---|--|
| 4500-7000 MHz | 24 dBm e.i.r.p. ^[1] | Requirements on techniques to access spectrum and mitigate interference apply ^[2] . | This set of usage conditions is only available for TLPR. | 60 |
| 6000-8500 MHz | 7 dBm/50 MHz peak e.i.r.p. -33 dBm/MHz mean e.i.r.p. | Automatic power control and antenna requirements as well as requirements on techniques to access spectrum and mitigate interference apply ^[2] . | This set of usage conditions is only available for Level Probing Radar. | 63 |
| 8500-10600 MHz | 30 dBm e.i.r.p. | Requirements on techniques to access spectrum and mitigate interference apply ^[2] . | This set of usage conditions is only available for TLPR. | 64 |
| 13.4-14 GHz | 25 mW e.i.r.p. | | | k |
| 17.1-17.3 GHz | 26 dBm e.i.r.p. | Requirements on techniques to access spectrum and mitigate interference apply ^[2] . | This set of usage conditions is only available for ground-based Synthetic Aperture Radar (SAR) systems ^[3] . | 65 |
| 24.05-26.5 GHz | 26 dBm/50 MHz peak e.i.r.p. -14 dBm/MHz mean e.i.r.p. | Automatic power control and antenna requirements as well as requirements on techniques to access spectrum and mitigate interference apply ^[2] . | This set of usage conditions is only available for Level Probing Radar. | 67 |



| Frequency band | Transmit power limit/power density limit | Additional parameters | Other usage parameters | Frequency band reference (informative) |
|----------------|---|--|--|--|
| 24.05-27 GHz | 43 dBm e.i.r.p. ^[1] | Requirements on techniques to access spectrum and mitigate interference apply ^[2] . | This set of usage conditions is only available for TLPR. | 68 |
| 57-64 GHz | 43 dBm e.i.r.p. ^[1] | Requirements on techniques to access spectrum and mitigate interference apply ^[2] . | This set of usage conditions is only available for TLPR. | 74b |
| 57-64 GHz | 35 dBm/50 MHz peak e.i.r.p. -2 dBm/MHz mean e.i.r.p. | Automatic power control and antenna requirements as well as requirements on techniques to access spectrum and mitigate interference apply ^[2] . | This set of usage conditions is only available for Level Probing Radar. | 74c |
| 69.8-79.9 GHz | 7 dBm e.i.r.p. | | This set of usage conditions is only available for security scanners operated indoors. | 97 |
| 75-85 GHz | 34 dBm/50 MHz peak e.i.r.p. -3 dBm/MHz mean e.i.r.p. | Automatic power control and antenna requirements as well as requirements on techniques to access spectrum and mitigate interference apply ^[2] . | This set of usage conditions is only available for Level Probing Radar. | 78a |
| 75-85 GHz | 43 dBm e.i.r.p. ^[1] | Requirements on techniques to access spectrum and mitigate interference apply ^[2] . | This set of usage conditions is only available to TLPR. | 78b |



| Frequency band | Transmit power limit/power density limit | Additional parameters | Other usage parameters | Frequency band reference (informative) |
|----------------|---|--|--|--|
| 76-77 GHz | 48 dBm mean e.i.r.p. 18 dBm/MHz mean e.i.r.p. density | Requirements on techniques to access spectrum and mitigate interference apply ^[2] . | This set of usage conditions is only available for ground-based SAR systems ^[3] . | 98 |
| 76.5-80.5 GHz | 19 dBm peak e.i.r.p. | At least 23 dB out-of-band attenuation relative to the maximum allowed peak. e.i.r.p. is required. | This set of usage conditions is only available for security scanners operated indoors. | 99 |

Notes:

- The power limit applies inside a closed tank and corresponds to a spectral density of -41.3 dBm/MHz e.i.r.p. outside a 500 litre test tank.
- Techniques to access spectrum and mitigate interference that provide an appropriate level of performance to comply with the essential requirements of Directive 2014/53/EU shall be used. If relevant techniques are described in harmonised standards or parts thereof the references of which have been published in the *Official Journal of the European Union* under Directive 2014/53/EU, performance at least equivalent to these techniques shall be ensured.
- [3] Ground-based SAR systems are intended to for deformation monitoring of terrain and natural or man-made structures, performed by interferometry radar.