

Twenty-Second Schedule to Decision No. MCA/D-22-4662

Apparatus General Authorisation for Radio Frequency Identification Devices (RFID)

Publication Date 13 November 2023



Revision History of the Twenty-Second Schedule

Radio frequency identification devices

Date	Comments
13/11/2023	Publication



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 radio frequency identification devices 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) "radio frequency identification devices" or "RFID" means radiocommunications apparatus for, *inter alia*, tracking and identification of items and covers a tag/interrogator based radiocommunications systems, consisting of (i) radio devices (tags) attached to animate or inanimate items and (ii) transmitter/receiver units (interrogators) which activate the tags and receive data back.

Article 3 – Minimum technical parameters

The minimum technical parameters for radio frequency identification devices shall be those specified in the Annex to this Schedule.



Annex to the Twenty-Second Schedule Minimum Technical Parameters for Radio Frequency Identification Devices

Frequency band	Transmit power limit/ field strength limit/power density limit	Additional parameters	Other usage parameters	Frequency band reference (informative)
400-600 kHz	-8 dBµA/m at 10 metres			17
13553- 13567 kHz	60 dBμA/m at 10 metres	The transmission mask and antenna requirements for all combined frequency segments have to provide at least equivalent performance to the techniques described in harmonised standards adopted under Directive 2014/53/EU.		27b
865-868 MHz	2 W e.r.p. Interrogator transmissions at 2 W e.r.p. are only permitted within the four channels centred at 865.7 MHz, 866.3 MHz, 866.9 MHz and 867.5 MHz each with a maximum bandwidth of 200 kHz. RFID interrogator devices placed on the market before 1 January 2018 are "grandfathered", i.e. they are continuously permitted to use in line with the provisions set out in EC Decision 2006/804/EC before 1 January 2018.	Techniques to access spectrum and mitigate interference that provide at least equivalent performance to the techniques described in harmonised standards adopted under Directive 2014/53/EU must be used.		47a



Frequency band	Transmit power limit/ field strength limit/power density limit	Additional parameters	Other usage parameters	Frequency band reference (informative)
916.1- 918.9 MHz	Interrogator transmissions at 4 W e.r.p. only permitted at the centre frequencies 916.3 MHz, 917.5 MHz, 918.7 MHz	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 adopted under Directive 2014/53/EU, performance at least equivalent to these techniques shall be ensured. Bandwidth: ≤ 400 kHz		3
2446.0- 2454.0 MHz	500 mW e.i.r.p.	Techniques to access spectrum and mitigate interference that provide at least equivalent performance to the techniques described in harmonised standards adopted under Directive 2014/53/EU must be used.		58
2446.0- 2454.0 MHz	>500 mW to 4 W e.i.r.p.	Duty cycle limit: 15% frequency hopping spread spectrum must be used.	Power levels above 500 mW are restricted to be used inside the boundaries of a building and the duty cycle of all transmissions shall in this case be ≤ 15% in any 200 ms period (30 ms on / 170 ms off).	c2