



2024/3157

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COMMISSION IMPLEMENTING DECISION (EU) 2024/3157

of 17 December 2024

amending Implementing Decision (EU) 2021/1067 on the harmonised use of radio spectrum in the 6 425–6 425 MHz frequency band for the implementation of wireless access systems including radio local area networks (WAS/RLANs)

(notified under document C(2024) 8803)

(Text with EEA relevance)

THE EUROPEAN COMMISSION,

Having regard to the Treaty on the Functioning of the European Union,

Having regard to Decision No 676/2002/EC of the European Parliament and of the Council of 7 March 2002 on a regulatory framework for radio spectrum policy in the European Community (Radio Spectrum Decision)⁽¹⁾, and in particular Article 4(3) thereof,

Whereas:

- (1) Commission Implementing Decision (EU) 2021/1067⁽²⁾ harmonises the 5 945–6 425 MHz band for wireless access systems including radio local area networks. Table 2 of the Annex to that Decision sets, for Very Low Power (VLP) WAS/RLAN devices, the limit of maximum mean equivalent isotropically radiated power (e.i.r.p.) density for out-of-band (OOB) emissions below 5 935 MHz at – 45 dBm/MHz until 31 December 2024. Moreover, Note 3 of that Table provides that the appropriateness of that limit should be subject to review by 31 December 2024, and that in the absence of justified evidence, a value of – 37 dBm/MHz would apply from 1 January 2025.
- (2) On 21 April 2021, pursuant to Article 4(2) of Decision No 676/2002/EC, the Commission issued a mandate to the European Conference of Postal and Telecommunications Administrations (‘CEPT’) to review by July 2024 the limit of OOB emissions below 5 935 MHz applicable to VLP WAS/RLAN devices using the 5 945–6 425 MHz band, based on, in particular, the study of possible mitigation techniques for the protection of urban rail intelligent transport systems (ITS), with the view to relaxing the limit to – 37 dBm/MHz. This was justified by the need to ensure transport safety and the coexistence of such devices with the ITS, including communication based train control (CBTC), which use spectrum in parts of the 5 905–5 935 MHz frequency band.
- (3) As the CEPT has not been able to deliver the results of the mandate by July 2024, it is essential to ensure legal certainty for transport safety regarding the appropriate limit of maximum mean e.i.r.p. density for OOB emissions to apply below 5 935 MHz for VLP WAS/RLAN devices. Therefore, until a proper review has been completed by the CEPT pursuant to the mandate, it should be ensured that the current value of – 45 dBm/MHz continues to apply beyond 31 December 2024. Sufficient time should also be allowed to the CEPT to complete the expected review and therefore the deadline for such review should be prolonged until 31 December 2025.

⁽¹⁾ OJ L 108, 24.4.2002, p. 1.

⁽²⁾ Commission Implementing Decision (EU) 2021/1067 of 17 June 2021 on the harmonised use of radio spectrum in the 6 425–6 425 MHz frequency band for the implementation of wireless access systems including radio local area networks (WAS/RLANs) (notified under document C(2021) 4240) (OJ L 232, 30.6.2021, p. 1).

- (4) The measures provided for in this Decision are in accordance with the opinion of the Radio Spectrum Committee,

HAS ADOPTED THIS DECISION:

Article 1

Implementing Decision (EU) 2021/1067 is amended as follows:

- (1) Article 4 is replaced by the following:

'Article 4

This Decision shall be subject to review by 31 December 2025 taking into account additional studies and measurements as regards the maximum mean e.i.r.p. density limit for VLP WAS/RLANs out-of-band emissions below 5 935 MHz.;

- (2) the Annex is replaced by the text set out in the Annex to this Decision.

Article 2

This Decision is addressed to the Member States.

Done at Brussels, 17 December 2024.

For the Commission
Henna VIRKKUNEN
Executive Vice-President

ANNEX

‘ANNEX

Harmonised technical conditions for WAS/RLANs in the 5 945–6 425 MHz frequency band

Table 1

Low power indoor (‘LPI’) WAS/RLANs devices

Parameter	Technical conditions
Permissible operation	Restricted to indoor use, including in trains with metal-coated windows (note 1) and aircraft. Outdoor use, including in road vehicles, is not permitted.
Category of device	An LPI access point or bridge that is supplied with power from a wired connection has an integrated antenna and is not battery powered. An LPI client device that is connected to an LPI access point or another LPI client device and may or may not be battery powered.
Frequency band	5 945–6 425 MHz
Maximum mean equivalent isotropically radiated power (‘e.i.r.p.’) for in-band emissions (note 2)	23 dBm
Maximum mean e.i.r.p. density for in-band emissions (note 2)	10 dBm/MHz
Maximum mean e.i.r.p. density for out-of-band emissions below 5 935 MHz (note 2)	– 22 dBm/MHz

Note 1: Or similar structures made of material with comparable attenuation characteristics.

Note 2: The mean e.i.r.p. refers to the e.i.r.p. during the transmission burst which corresponds to the highest power, if power control is implemented.

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 of the European Parliament and of the Council ⁽¹⁾ shall be used. Where 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* in accordance with Directive 2014/53/EU, performance at least equivalent to the performance level associated with those techniques shall be ensured.

Table 2

Very Low Power (VLP) WAS/RLAN devices

Parameter	Technical conditions
Permissible operation	Indoors and outdoors. Use on Unmanned Aircraft Systems (UAS) is not permitted.

⁽¹⁾ Directive 2014/53/EU of the European Parliament and of the Council of 16 April 2014 on the harmonisation of the laws of the Member States relating to the making available on the market of radio equipment and repealing Directive 1999/5/EC (OJ L 153, 22.5.2014, p. 62.).

Category of device	The VLP device is a portable device.
Frequency band	5 945–6 425 MHz
Maximum mean e.i.r.p. for in-band emissions (note 1)	14 dBm
Maximum mean e.i.r.p. density for in-band emissions (note 1)	1 dBm/MHz
Narrowband usage maximum mean e.i.r.p. density for in-band emissions (note 1) (note 2)	10 dBm/MHz
Maximum mean e.i.r.p. density for out-of-band emissions below 5 935 MHz (note 1)	– 45 dBm/MHz (note 3)

Note 1: The mean e.i.r.p. refers to the e.i.r.p. during the transmission burst which corresponds to the highest power, if power control is implemented.

Note 2: Narrowband (NB) devices are devices that operate in channel bandwidths below 20 MHz. NB devices also require a frequency hopping mechanism based on at least 15 hop channels to operate at a value of in-band power spectral density (PSD) above 1 dBm/MHz.

Note 3: The replacement of the limit – 45 dBm/MHz with the limit – 37 dBm/MHz shall be decided by 31 December 2025, based on the CEPT response to the Commission mandate of 21 April 2021.

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. Where 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* in accordance with Directive 2014/53/EU, performance at least equivalent to the performance level associated with those techniques shall be ensured.'
