Commission Implementing Regulation (EU) 2020/911 of 30 June 2020 specifying the characteristics of small-area wireless access points pursuant to Article 57(2) of Directive (EU) 2018/1972 of the European Parliament and the Council establishing the European Electronic Communications Code (Text with EEA relevance)

COMMISSION IMPLEMENTING REGULATION (EU) 2020/911

of 30 June 2020

specifying the characteristics of small-area wireless access points pursuant to Article 57(2) of Directive (EU) 2018/1972 of the European Parliament and the Council establishing the European Electronic Communications Code

(Text with EEA relevance)

THE EUROPEAN COMMISSION,

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

Having regard to Directive (EU) 2018/1972 of the European Parliament and of the Council of 11 December 2018 establishing the European Electronic Communications Code[(1)], and in particular Article 57(2) thereof,

Whereas:

(1) As recognised by Directive (EU) 2018/1972, since low power small-area wireless access points are likely to have a positive impact on the use of radio spectrum and on the development of wireless communications in the Union, the deployment of small-area wireless access points should be facilitated through a permit-exempt deployment regime.

(2) A small-area wireless access point comprises different elements such as a signal processing unit, an antenna system, cable connections and casing. In some cases, the antenna system or portions thereof could be installed separately from the other elements of a small-area wireless access point and connected by one or more dedicated cables. This may be the case for distributed antenna systems or a distributed radio system used by one or multiple operators. A small-area wireless access point may be designed to serve two or more spectrum users.

(3) In order to ensure public acceptance and sustainable deployment, small-area wireless access points subject to the second subparagraph of Article 57(1) of Directive (EU) 2018/1972 should have minimal visual impact. To achieve this, they should be either invisible or mounted in a visually non-obtrusive way onto their supporting structure. Their operation should also ensure a high level of protection of public health, as laid down in Council Recommendation 1999/519/EC[(2)] on the limitation of exposure of the general public to electromagnetic fields (EMF).

(4) Directive 2014/53/EU of the European Parliament and of the Council[(3)] on the harmonisation of the laws of the Member States relating to the making available on

the market of radio equipment provides that radio equipment, including a small-area wireless access point, shall be constructed so as to ensure the protection of people's health and safety.

(5) The physical and technical characteristics of small-area wireless access points subject to the second subparagraph of Article 57(1) of Directive (EU) 2018/1972 should therefore be defined in terms of maximum volume, restrictions on weight and maximum emission power for user connectivity. The choice of maximum volume to delimit the visual impact of a small-area wireless access point should allow design flexibility and adaptability to the physical and technical characteristics of the supporting structure.

(6) The study for the Commission 'Light Deployment Regime for Small-Area Wireless Access Points (SAWAPs)[(4)]'demonstrates that a volume limit of 20 litres should be sufficient to contain the main elements of a small-area wireless access point, while ensuring its unobtrusive character. This maximum volume should apply to any deployment of a small-area wireless access point serving one or more spectrum users, as well as of multiple small-area wireless access points sharing an infrastructure site of small surface, such as a light pole, a traffic light, a billboard or a bus stop, which due to its physical dimensions and/or dense replication in a given area is likely to generate visual clutter.

(7) Small-area wireless access points, should comply with the European harmonised standard EN 62232:2017[(5)]*' Determination of RF field strength, power density and specific absorption rate (SAR) in the vicinity of radiocommunication base stations for the purpose of evaluating human exposur e',* which provides a methodology for the installation of base stations taking into account their emission power for the purpose of evaluating human exposure to the electro-magnetic fields ('EMF'), in compliance with the limits set in Recommendation 1999/519/EC.

(8) This standard applies to all type of base stations divided into five installation classes corresponding to different limits of their equivalent isotropical radiated power (EIRP) of a few milliwatt (Class E0), 2 Watt (Class E2), 10 Watt (Class E10), 100 Watt (Class E100) and above 100 Watt (Class E+) respectively. Out of these classes, considering the installation safety distances to be respected under this standard and since Directive (EU) 2018/1972 provides that small-area wireless access points should be low power equipment, this Regulation should only apply to the installation classes E0, E2 and E10. Table 2 of clause 6.2.4 of EN 62232:2017 requires that the lowest radiating part of the antenna of a Class E10 has a height of at least 2,2 metres above the general public walkway to ensure a distance of at least 20 cm between the main antenna lobe and the human body of a 2 m tall person[(6)].

(9) For aesthetic reasons, the indoor installation of small-area wireless access points of Class E10, which are likely to utilise the maximum volume limit of 20 litres, should be limited to large indoor places with a ceiling height of at least 4 metres, such as museums, stadiums, convention centres, airports, metro-transport stations, railway stations, or shopping centres.

(10) The weight of a small-area wireless access point and its shape should not impose structural reinforcement of the support structure used.

(11) As further development of the relevant standards is foreseen, if they are to cover small-area wireless access points employing active antenna systems, such access points should not fall in the scope of the permit-exempt deployment regime at this stage.

(12) In order to allow supervision and monitoring by the competent authorities, in particular in cases of multiple co-located antenna systems, any operator which has deployed small-area wireless access points in compliance with the characteristics laid down in this Regulation, should submit in due time a notification to the competent authority concerning the installation and location of those access points.

(13) This Regulation is without prejudice to the powers of the Member States to determine the aggregate levels of EMF resulting from the colocation or the aggregation in a local area of small-area wireless access points covered by the second subparagraph of Article 57(1) of Directive (EU) 2018/1972, and to ensure their compliance with applicable aggregate exposure limits in accordance with Union law by means other than individual permits.

(14) The implementation of this Regulation should be regularly monitored in order to facilitate its review if necessary, taking into account national practice and developments in standardisation, in particular with regard to the inclusion of active antenna systems.

(15) This Regulation is without prejudice to national measures regarding safety, utility supply and respect of private property, including the right of owners to determine the use of their property.

(16) This Regulation is without prejudice to the application of less restrictive regimes at national level for the deployment of small-area wireless access points, in order to facilitate commensurate density and low visual impact of small-area wireless access deployment.

(17) The measures provided for in this Regulation are in accordance with the opinion of the Communications Committee,

HAS ADOPTED THIS REGULATION:

Article 1

This Regulation lays down the physical and technical characteristics of small-area wireless access points referred to in the second subparagraph of Article 57(1) of Directive (EU) 2018/1972.

This Regulation shall not apply to small-area wireless access points with an active antenna system.

Article 2

For the purposes of this Regulation, the following definitions shall apply:

(1) ‘equivalent isotropical radiated power (EIRP)’ means the product of the power supplied to the antenna and the antenna gain in a given direction relative to an isotropic antenna;

(2) 'antenna system' means a hardware part of a small-area wireless access point that radiates radio frequency energy for the purpose of providing wireless connectivity to end users;

(3) 'active antenna system (AAS)' means an antenna system of a small-area wireless access point, where the amplitude and/or phase between antenna elements is continually adjusted resulting in an antenna pattern that varies in response to short term changes in the radio environment. This excludes long-term beam shaping such as fixed electrical down tilt. In a small-area wireless access point equipped with an AAS, the latter is integrated as part of the small-area wireless access point;

(4) 'indoor' means any space, including transportation vehicles, that has a ceiling or roof or any fixed or moveable structure or device which is capable of covering all that space, and except for doors, windows and passageways, is wholly enclosed by walls or sides, either permanently or temporarily, regardless of the type of material used for the roof, wall or sides, and regardless of whether the structure is permanent or temporary;

(5) 'outdoor' means any space which is not indoor.

Article 3

1 Small-area wireless access points referred to in the second subparagraph of Article 57(1) of Directive (EU) 2018/1972 shall be fully and safely integrated in their supporting structure and therefore invisible to the general public, or meet the conditions set out in point A of the Annex to this Regulation, and shall comply with the requirements of the European standard laid down in point B of the Annex to this Regulation.

2 Paragraph 1 is without prejudice to powers of the Member States to determine the aggregate levels of EMF resulting from the colocation or the aggregation in a local area of small-area wireless access points and to ensure compliance with applicable aggregate EMF exposure limits in accordance with Union law by means other than individual permits.

3 Operators which have deployed small-area wireless access points, which comply with the characteristics laid down in paragraph 1, shall notify the competent authorities about the installation and location of those access points.

Article 4

This Regulation shall enter into force on the twentieth day following that of its publication in the *Official Journal of the European Union.*

It shall apply from 21 December 2020.

This Regulation shall be binding in its entirety and directly applicable in all Member States.

Done at Brussels, 30 June 2020.

For the Commission

The President

Ursula VON DER LEYEN