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DECREE OF THE MINISTER OF COMMUNICATION AND DIGITAL AFFAIRS OF THE REPUBLIC OF INDONESIA NUMBER 46 YEAR 2025 CONCERNING RADIO FREQUENCY SPECTRUM BASED ON CLASS PERMITS AND TECHNICAL STANDARDS FOR WIRELESS POWER TRANSMISSION

MINISTER OF COMMUNICATION AND DIGITAL AFFAIRS OF THE REPUBLIC OF INDONESIA,

Considering :

a. that based on the provisions of Article 2 paragraph (3) of the Regulation of the Minister of Communication and Informatics Number 2 of 2023 concerning the Use of Radio Frequency Spectrum Based on Class Permits, the Minister may determine changes to the use of Radio Frequency Spectrum for groups of Telecommunication Equipment and/or Telecommunication Devices that use radio frequency spectrum based on class permits, in the event of technological developments;
b. that in order to meet the needs of the latest technology and better efficiency in the use of wireless power transmission technology, it is necessary to add frequency bands as recommended by the International Telecommunication Union;
c. that based on the considerations as referred to in letters a and b, it is necessary to stipulate a Decree of the Minister of Communication and Digital concerning Radio Frequency Spectrum Based on Class Permits and Technical Standards for Wireless Power Transmission;

In view of :

1. Law Number 36 of 1999 concerning Telecommunications (State Gazette of the Republic of Indonesia of 1999 Number 154, Supplement to the State Gazette of the Republic of Indonesia Number 3881) as amended by Law Number 6 of 2023 concerning the Stipulation of Government Regulation in Lieu of Law Number 2 of 2022 concerning Job Creation into Law (State Gazette of the Republic of Indonesia of 2023 Number 41, Supplement to the State Gazette of the Republic of Indonesia Number 6856);
2. Law Number 39 of 2008 concerning State Ministries (State Gazette of the Republic of Indonesia of 2008 Number 166, Supplement to the State Gazette of the Republic of Indonesia Number 4916) as amended by Law Number 61 of 2024 concerning Amendments to Law Number 39 of 2008 concerning State Ministries (State Gazette of the Republic of Indonesia of 2024 Number 225, Supplement to the State Gazette of the Republic of Indonesia Number 6994);

3. Government Regulation Number 46 of 2021 concerning Post, Telecommunications, and Broadcasting (State Gazette of the Republic of Indonesia of 2021 Number 56, Supplement to the State Gazette of the Republic of Indonesia Number 6658);
4. Presidential Regulation Number 174 of 2024 concerning the Ministry of Communication and Digital (State Gazette of the Republic of Indonesia of 2024 Number 370);
5. Regulation of the Minister of Communication and Informatics Number 2 of 2023 concerning the Use of Radio Frequency Spectrum Based on Class Permit (State Gazette of the Republic of Indonesia 2023 Number 329) as amended by the Regulation of the Minister of Communication and Digital Number 2 of 2025 concerning Amendments to the Regulation of the Minister of Communication and Informatics Number 2 of 2023 concerning the Use of Radio Frequency Spectrum Based on Class Permits (State Gazette of the Republic of Indonesia 2025 Number 83);
6. Regulation of the Minister of Communication and Informatics Number 3 of 2024 concerning Certification of Telecommunication Tools and/or Devices (State Gazette of the Republic of Indonesia 2024 Number 124);
7. Regulation of the Minister of Communication and Digital Number 1 of 2025 concerning the Organization and Work Procedures of the Ministry of Communication and Digital (State Gazette of the Republic of Indonesia 2025 Number 17);

DECIDES:

To stipulate DECREE OF THE MINISTER OF COMMUNICATION AND DIGITAL AFFAIRS ON RADIO FREQUENCY SPECTRUM BASED ON CLASS PERMITS AND TECHNICAL STANDARDS FOR WIRELESS POWER TRANSMISSION.

FIRST : Determining the radio frequency spectrum based on class permits for Wireless Power Transmission as follows:
a. 100 – 148,5 kHz;
b. 315–405 kHz;
c. 1700–1800 kHz;
d. 6765–6795 kHz; dan
e. 13,553–13,567 MHz.

SECOND : Establishing technical standards for wireless power transmission as stated in Appendix I which is an integral part of this Ministerial Decree.

THIRD : Provisions for fulfilling technical standards for wireless power transmission as stated in the SECOND Dictum concerning non-ionizing radiation are stipulated in a separate Ministerial Decree.

FOURTH : Provisions for fulfilling technical standards for wireless power transmission as stated in the SECOND Dictum concerning immunity in electromagnetic compatibility requirements are stipulated in a separate Ministerial Decree.

FIFTH : Test reports for wireless power transmission that have been issued before this Ministerial Decree comes into effect may still be submitted as fulfillment of the requirements for an application for a certificate for telecommunications equipment and/or telecommunications devices as long as they do not conflict with this Ministerial Decree and the provisions of laws and regulations.

SIXTH : When this Ministerial Decree comes into effect, the technical standards for wireless power transmission stipulated in the Decree of the Minister of Communication and Information Number 260 of 2024 concerning Technical Standards for Short Range Devices are revoked and declared invalid.

SEVENTH : This Ministerial Decree shall come into force on the date of stipulation.

Stipulated in Jakarta
On February 18th, 2025

MINISTER OF COMMUNICATION AND
DIGITAL OF THE REPUBLIC OF INDONESIA,

MEUTYA VIADA HAFID

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APPENDIX I
DECREE OF THE MINISTER OF COMMUNICATION AND INFORMATICS OF THE REPUBLIC OF INDONESIA
NUMBER 46 YEAR 2025
CONCERNING
RADIO FREQUENCY SPECTRUM BASED ON CLASS PERMITS AND TECHNICAL STANDARDS FOR WIRELESS POWER TRANSMISSION

CHAPTER I
GENERAL PROVISIONS

A. Definition

In this Ministerial Decree, the following terms are defined:

1. Wireless Power Transmission, hereinafter abbreviated as WPT, is a telecommunications tools and/or telecommunications device that functions to transmit electrical power from a power source to an electrical load through an electric field and/or magnetic field for portable and mobile devices.
2. Field Strength is the value of an electric field or magnetic field measured at a certain distance.
3. Spurious Emission is an emission at one or more radio frequency points that are outside the required channel width (necessary bandwidth) and the amount can be reduced without affecting the transmission of related information, including in the Spurious Emission category, namely harmonic emissions, parasitic emissions, intermodulation products, and frequency conversion products.
4. Integrated Antenna is an antenna that is designed as a permanent part of the device without using an external connector and cannot be removed from the device.

B. Abbreviations

1. AC : *Alternating Current*
2. CISPR : *Comité Internationale Spécial des Perturbations Radioelectrotechnique (International Special Committee on Radio Interference, IEC)*
3. dB : *decibel*
4. dBm : *decibel milli watt*
5. dBµA : *decibel micro Ampere*
6. DC : *Direct Current*
7. EMC : *Electromagnetic Compatibility*
8. EN : *European Standard*
9. ETSI : *European Telecommunications Standards Institute*
10. Hz : *Hertz*
11. ICNIRP : *International Commission on Non-Ionizing Radiation Protection*

12. *IEC* : *International Electrotechnical Commission*
13. *ITU-R* : *International Telecommunication Union Radiocommunication Sector*
14. kHz : *kilo Hertz*
15. m : meter
16. mW : *milli Watt*
17. MHz : *Mega Hertz*
18. RBW : *Resolution Bandwidth*
19. RF : *Radio Frequency*
20. SNI : Standar Nasional Indonesia
21. V : *Volt*
22. WPT : *Wireless Power Transmission*

II
TECHNICAL STANDARD

A. Power Supply Requirements

The WPT can be powered by AC or DC power.

For WPT powered by AC, all parameter benchmarks must be met when using a power supply of AC voltage 220 V ±10% and frequency of 50 Hz ± 2%. If using an external power supply, for example an AC/DC power converter, the external power supply must not affect the WPT's ability to meet all technical parameter benchmarks.

B. Non-Ionizing Radiation Requirements

The WPT's non-ionizing radiation requirements are in accordance with the ICNIRP guidelines. The value limits and enforcement mechanisms for non-ionizing radiation requirements are in accordance with the provisions of the THIRD Dictum of this Ministerial Decree.

C. Electrical Safety Requirements

Electrical safety assessment of WPT for parameters:

a. overvoltage or electric strength or dielectric strength; and
b. leakage current or touch current,

must meet the requirements specified in:

1. SNI IEC 60950-1:2016 or the latest;
2. SNI IEC 62368-1:2014 or the latest;
3. SNI 04-6253;
4. IEC 62368-1;
5. IEC 60950-1;
6. IEC 60065; or
7. relevant SNI or IEC standards, for WPT other than audio, video, and information and communication technology.

The WPT electrical safety assessment carried out with a risk-based approach must be carried out according to the process specified in SNI IEC 62368-1:2014 or the latest, or IEC 62368-1, namely:

1. identifying energy sources in the WPT;
2. classifying energy sources (impact on the body or flammable materials, such as the possibility of injury or ignition);

3. identifying protection efforts for energy sources; and
4. considering the effectiveness of protection efforts by considering the fulfillment criteria or standards specified in the SNI IEC 62368-1:2014 or IEC 62368-1 standards.

D. Electromagnetic Compatibility Requirements

WPT must be classified as:

1. fixed equipment, which is a device that is installed permanently (fixed location permanently) or powered by AC power supply;
2. vehicular equipment, which is a device used in a vehicle and powered by the vehicle's main battery; or
3. portable equipment, which is a device used for portable use and has a main power supply in the form of a battery.

If portable equipment and/or vehicular equipment has AC power supply capability, the WPT must be classified as fixed equipment.

The WPT must meet the following EMC requirements:

1. Immunity

   The value limits and mechanisms for enforcing obligations for immunity requirements are in accordance with the provisions in the FOURTH Dictum of this Ministerial Decree.
2. Emission
   a. WPT is required to comply with the emission provisions stipulated in:
      1) SNI IEC CISPR 32:2015 or the latest;
      2) IEC CISPR 32; or
      3) One of the ETSI EN 301 489 series.
   b. Emission parameters that must be fulfilled by WPT are the following:
      1) radiation emissions on the enclosure port of ancillary equipment must meet the requirements specified in:
         a. table A.2 and table A.3 for class A; or
         b. table A.4 and table A.5 for class B,
         in SNI IEC CISPR 32:2015.
      2) Conduction emissions at the DC power port for fixed equipment or vehicular equipment must meet the requirements specified in table A.9 of SNI IEC CISPR 32:2015 or the latest;
      3) Conducted emissions at the AC power port for fixed equipment or equipment with a DC power port powered by a dedicated AC/DC power converter or adapter defined as AC powered equipment, must meet the requirements specified in:
         a. table A.9 for class A; or
         b. table A.10 for class B,
         in SNI IEC CISPR 32:2015 or the latest;
         and/or
      4) Conducted emissions on wired network ports for fixed equipment must meet the requirements specified in:
         a. table A.11 for class A; or
         b. table A.12 for class B,

   in SNI IEC CISPR 32:2015 or the latest,

based on the power port used.
Class A and class B classification according to clause 4 in SNI IEC CISPR 32:2015 or the latest.

E. Technical Operational Provision
1. must follow the established technical provisions; and
2. must not be made with external control facilities or easily accessible control facilities that allow for WPT operational adjustments that do not comply with the technical standards in this Ministerial Decree.

F. Radio Frequency Requirements
WPT must meet the following radio frequency requirements, field strength, and spurious emission requirements:

Table 1. Main Requirements and Testing Methods
Wireless Power Transmission

No.	Radio Frequency Range	Field Strength	*Transmitter Spurious Emission*
1.	100-148,5 kHz	≤ 66 dBµA/m at a distance of 10 meters	EN 300 330
			EN 303 417
2.	315-405 kHz	≤ -5 dBµA/m at a distance of 10 meters	EN 300 330
3.	1700-1800 kHz	≤ -5 dBµA/m at a distance of 10 meters	EN 300 330
4.	6765-6795 kHz	≤ 42 dBµA/m at a distance of 10 meters	EN 300 330
			EN 303 417
5.	13,553-13,567 MHz	≤ 60 dBµA/m at a distance of 10 meters	EN 300 330

G. Antenna Requirements
WPT can use Integrated Antenna

CHAPTER III
TESTING METHODS

A. Electrical safety testing methods
1. Electrical safety testing is carried out according to the methods specified in:
   a. SNI IEC 60950-1:2016 or the latest;
   b. SNI IEC 62368-1:2014 or the latest;
   c. SNI 04-6253;
   d. IEC 62368-1;
   e. IEC 60950-1;
   f. IEC 60065; or
   g. relevant SNI or IEC standards, specifically for devices other than audio, video, and Information and Communication Technology.
2. Electrical safety testing is carried out based on the following assumptions:

a. The WPT is continuously powered by a dedicated external power supply (AC/DC converter or adapter/charger) or by an AC power supply; and
b. The WPT operates with SELV in an environment where overvoltages from the telecommunications network are unlikely to occur. SELV refers to a voltage that does not exceed 42.4 V peak or 60 V DC.

B. Electromagnetic Compatibility Testing Method

1. Immunity
   The test method for immunity requirements is in accordance with the provisions in the FOURTH Dictum of this Ministerial Decree.
2. Emissions
   Emission testing is carried out according to the methods set out in:
   a. SNI IEC CISPR 32:2015 or the latest;
   b. IEC CISPR 32; and/or
   c. one of the ETSI EN 301 489 series.

C. Radio Frequency Requirements Test Method

1. The WPT frequency requirement testing method is in accordance with the testing method in Table 2, or the testing method determined by the director general who organizes government affairs in the field of standardization of telecommunications tools and/or telecommunications devices.

Tabel 2. WPT Radio Frequency Requirements Test Method

No.	Radio Frequency Range	***Radio Frequency Testing Method, Field Strength and Transmitter Spurious Emission***
1.	100-148,5 kHz	EN 300 330
		EN 303 417
2.	315-405 kHz	EN 300 330
3.	1700-1800 kHz	EN 300 330
4.	6765-6795 kHz	EN 300 330
		EN 303 417
5.	13,553-13,567 MHz	EN 300 330

2. WPT testing is carried out by considering the following provisions:
   a. WPT testing is carried out under normal environmental conditions or according to environmental conditions set out in the standard that is the test method;
   b. WPT must be tested based on the configuration with the highest transmit power (RF output power) or field strength;
   c. testing of radio frequency bands and field strength is carried out according to the test method;
   d. transmitter spurious emission testing is carried out with RBW values according to the reference test method used or according to ITU-R SM.329 Recommendation with Quasi Peak Detector.

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DECREE OF THE MINISTER OF COMMUNICATION AND INFORMATICS OF THE REPUBLIC OF INDONESIA NUMBER ... YEAR ... CONCERNING
RADIO FREQUENCY SPECTRUM BASED ON CLASS PERMITS AND TECHNICAL STANDARDS FOR WIRELESS POWER TRANSMISSION

WIRELESS POWER TRANSMISSION OPERATIONAL REQUIREMENTS

The use of Wireless power transmission must meet the following operational requirements:

1. used according to the field strength and spurious emission values as listed in table 1 in Attachment I of this Ministerial Decree;
2. may not be made with external control facilities or easily accessible control facilities that allow for WPT operational adjustments that do not comply with the technical standards in this Ministerial Decree; and
3. may not add signal amplifier tools or devices to the WPT.

MINISTER OF COMMUNICATION AND DIGITAL AFFAIRS OF THE REPUBLIC OF INDONESIA,

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