**DECREE OF THE MINISTER OF COMMUNICATION AND INFORMATION TECHNOLOGY OF THE REPUBLIC OF INDONESIA**

**NUMBER 35 YEAR 2015**

**ON**

**TECHNICAL REQUIREMENTS OF TELECOMMUNICATION TOOLS AND EQUIPMENT OF *SHORT RANGE DEVICES***

**BY THE GRACE OF GOD THE ALMIGHTY**

**MINISTER OF COMMUNICATION AND INFORMATION TECHNOLOGY OF THE REPUBLIC OF INDONESIA**

Considering: a. that the technical requirements of telecommunication tools and equipment of *short range devices,* that have been defined in the Decree of the Minister of Communication and Information Technology Number 34 Year 2012 on Technical Requirements of Telecommunication Tools and Equipment of *Short Range Devices* are no more in conformance with the current situation and need to be replaced;

b. that based on consideration referred to in letter a, it is deemed necessary to issue a Decree of the Minister of Communication and Information Technology on Technical Requirements of Telecommunication Tools and Equipment of *Short Range Devices.*

Bearing in mind: 1. Law of the Republic of Indonesia Number 36 Year 1999 on Telecommunication (State Gazette of the Republic of Indonesia Number 154 Year 1999, Supplement to the State Gazette of the Republic of Indonesia Number 3881);

2. Law of the Republic of Indonesia Number 39 Year 2008 on State Ministries of the Republic of Indonesia (State Gazette of the Republic of Indonesia Number 166 Year 2008, Supplement to the State Gazette of the Republic of Indonesia Number 4916);

3. Law of the Republic of Indonesia Number 30 Year 2014 on Governmental Administration (State Gazette of the Republic of Indonesia Number 292 Year 2014, Supplement to the State Gazette of the Republic of Indonesia Number 5601);

4. Government Regulation of the Republic of Indonesia Number 52 Year 2000 on Provision of Telecommunication (State Gazette of the Republic of Indonesia Number 107 Year 2000, Supplement to the State Gazette of the Republic of Indonesia Number 3980);

5. Government Regulation of the Republic of Indonesia Number 53 Year 2000 on Use of Radio Frequency Spectrum and Satellite Orbit (State Gazette of the Republic of Indonesia Number 108 Year 2000, Supplement to the State Gazette of the Republic of Indonesia Number 3981);

6. Decree of the President of the Republic of Indonesia Number 7 Year 2015 on Organization of State Ministries of the Republic of Indonesia;

7. Decree of the President of the Republic of Indonesia Number 54 Year 2015 on Ministry of Communication and Information Technology;

8. Decree of the Minister of Communication and Information Technology Number 17/PER/M.KOMINFO/10/2010 on Organization and Work Method of the Ministry of Communication and Information Technology;;

9. Decree of the Minister of Communication and Information Technology Number 18 Year 2014 on Certification of Telecommunication Tools and Equipment as amended by the Decree of the Minister of Communication and Information Technology Number 1 Year 2015 on Amendment to the Decree of the Minister of Communication and Information Technology Nmber 18 Year 2014 on Certification of Telecommunication Tools and Equipment;

10. Decree of the Minister of Communication and Information Technology Number 25 Year 2014 on Table of Allocation of Radio Frequency Spectrum;

11. Decree of the Minister of Communication and Information Technology Number 15 Year 2015 on Guideline for the Composition of Technical Requirements of Telecommunication Tools and Equipment..

**DECIDES :**

**To issue : DECREE OF THE MINISTER OF COMMUNICATION AND INFORMATION TECHNOLOGY ON TECHNICAL REQUIREMENTS OF TELECOMMUNICATION TOOLS AND EQUIPMENT OF *SHORT RANGE DEVICES***

Article 1

Any telecommunication tools and equipment of *short range devices* manufactured, assembled, imported for trade and / or for usage in the Territory of the Republic of Indonesia, shall fulfil the technical requirements referred to in the Attachment which is an inseparable part of this Ministerial Decree

Article 2

(1) Evaluation on the obligation of any telecommunication tools and equipment of *short range devices* that fulfil the technical requirements referred to in Article 1 is conducted through testing done in accordance with the provision of legal regulations.

(2) The testing of telecommunication tools and equipment of *short range devices* is implemented in accordance with the technical requirements referred to in the Attachment which is an inseparable part of this Ministerial Decree

Article 3

At the time this Ministerial Decree is coming into force, the Decree of the Minister of Communication and Information Technology Number 34 Year 2012 on Technical Requirements of Telecommunication Tools and Equipment of *Short Range Devices* is abrogated and declared no more valid.

Article 4

This Ministerial Decree shall come into force on the date of its promulgation

In order to make known to every body, instruct the Promulgation of this Ministerial Decree by placing it in the State Announcement of the Republic of Indonesia.

Done at: JAKARTA

On : 31 December 2015

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

**MINISTER OF COMMUNICATION AND INFORMATION TECHNOLOGY OF THE REPUBLIC OF INDONESIA**

Signed

**RUDIANTARA**

Promulgated at Jakarta

on 31 December 2015

DIRECTOR GENERAL OF LEGAL AFFAIRS

OF THE MINISTRY OF LAW AND HUMAN RIGHTS

OF THE REPUBLIC OF INDONESIA

Signed

WIDODO EKATJAHJANA

STATE ANNOUNCEMENT OF THE REPUBLIC OF INDONESIA YEAR 2015 NUMBER 2042.

For copy conform to the original

Ministry of Communication and Information Technology,

Head of Bureau of Legal Affairs,

Signed

Bertiana Sari

**ATTACHMENT**

**DECREE OF THE MINISTER OF COMMUNICATION AND INFORMATION TECHNOLOGY OF THE REPUBLIC OF INDONESIA**

**NUMBER 35 YEAR 2015**

**ON**

**TECHNICAL REQUIREMENTS OF TELECOMMUNICATION TOOLS AND EQUIPMENT OF *SHORT RANGE DEVICES***

**TECHNICAL REQUIREMENTS OF TELECOMMUNICATION TOOLS AND EQUIPMENT OF *SHORT RANGE DEVICES***

Scope of technical requirements of telecommunication tools and equipment of *short range devices* in this Decree is as foloows:

CHAPTER I : General Provisions;

CHAPTER II : Technical Requirements;

CHAPTER III : Testing.

**CHAPTER I**

**GENERAL PROVISIONS**

A. **Definition**

The Telecommunication Tools and Equipment of *Short Range Devices* hereinafter abbreviated as SRD is transmitter and or receiver of low power emission that provides radio communication of short range devices for fixed and mobile application at certain radio frequency band and in using its radio frequency does not obtain protection and may not create harmful interference.

B. **Application**

SRD is applied for *alarm, identification systems, radio detection, vehicle radar systems, remote controls, telecommand, telemetry,* and *on site paging systems,* equipment for *Industrial Scientific and Medical* /ISM research and application.

**CHAPTER II**

**TECHNICAL REQUIREMENTS**

A. **General Requirements**

Every SRD shall fulfil the general characteristic of equipment, i.e.

1. operated at certain radio frequency band that can be used jointly, including users of unprotected radio frequency ; and

2. may not be manufactured with external control facility or easily accessible control facility which enables the occurrence of SRD operational adjustment which is not in accordance with technical requirements contained in this Ministerial Decree.

B. **Primary Requirements**

Every SRD shall fulfil the following main characteristic:

1. Power Supply: 220 VAC or battery;

2. Electromagnetic Compatibility refers to CISPR 22 and CISPR 24 recommendations or the equivalent;

3. Only operates at defined radio frequency band, using maximum ERP and technical limitation referred to in the following table:

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| NO. | FREQUENCY BAND | MAXIMUM ERP | SPURIOUS EMISSION OF TRANSMITTER AND RECEIVER | RADIO STANDARD AND TESTING STANDARD | EXAMPLE OF SRD APPLICATION |
| 1 | 16 kHz - 150 kHz | ≤ 100 dBµV / m at a distance of 3 meters | ≥ 32 dB *below carrier* at a distance of 3 meters or EN 300 224-1 [*conducted emission* 0.25 µW  (*operating system*)  and 2 nW (*standby system*)] | EN 300 224-1 or  EN 300 330-1 | Induction loop system for hearing aid or loop listener hear sounds in order to be clean |
| 2 | 510 kHz - 1600 kHz | ≤ 57 dBµV / m at a distance of 3 meters | ≥ 32 dB *below carrier* at a distance of 3 meters or EN 300 220-1 | 47 CFR 15 or EN 300 220-1 | Wireless microphone |
| 3 | 6 765 kHz -  6 795 kHz | ≤ 100 mW ERP | ≥ 32 dB *below carrier* at a distance of 3 meters or EN 300 330-1  [*Receiver spurious radiation limits* (--22 dBµA / m)] | 47 CFR 15 or EN 300 330-1 | For *Industrial Scientific and Medical* (ISM) application |
| 4 | 13.553 MHz -  13.567 MHz | ≤ 100 mW ERP or ≤ 94 dBµV / m at a distance of 3 meters | ≥ 32 dB *below carrier* at a distance of 3 meters or EN 300 330-1  [*Receiver spurious radiation limits* (--22 dBµA / m)] | 47 CFR 15 or EN 300 330-1 | ISM, *radio detection* instrument, *alarm* system. |

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| NO. | FREQUENCY BAND | MAXIMUM ERP | SPURIOUS EMISSION OF TRANSMITTER AND RECEIVER | RADIO STANDARD AND TESTING STANDARD | EXAMPLE OF SRD APPLICATION |
| 5 | 26.96 MHz -  27.28 MHz | ≤ 65 dBµV / m at a distance of 10 meters or ≤ 500 mW ERP | ≥ 32 dB *below carrier* at a distance of 3 meters or EN 300 220-1 | 47 CFR 15 or EN 300 220-1 | Remote control of activities of hobby/lovers of craft, glider, boat, car models, garage door, camera, and toys. |
| 6 | 29.7 MHz -  30 MHz | ≤ 500 mW ERP | ≥ 32 dB *below carrier* at a distance of 3 meters or EN 300 220-1 | 47 CFR 15 or EN 300 220-1 |
| 7 | 40.5- 41 MHz | ≤ 0.01 mW  ERP | ≥ 32 dB *below carrier* at a distance of 3 meters or EN 300 220-1  [S*purious domain emission limits* 250 nW (*operating system*) and 2 nW (*Standby system*)] | 47 CFR 15 or EN 300 220-1 | Medical and biological telemetry |
| 8 | 40.66 MHz -  40.70 MHz | ≤ 65 dBµV / m at a distance of 10 meters | ≥ 32 dB *below carrier* at a distance of 3 meters or EN 300 220-1 | 47 CFR 15 or EN 300 220-1 | Wireless microphone |
| 9 | 72.08 MHz | ≤ 1000 mW  ERP | ≥ 43 dB *below carrier over* 100 kHz to 2000 MHz; EN 300 390-1 or EN 300 113-1 [*Radiated Spurious Emission for operating system* 0.25 µW (- 36.0 dBm) and 2.0 nW (57.0 dBm) *for Standby system*] | EN 300 390-1 or EN 300  113-1 | Wireless modem, data communication system |
| 10 | 72.20 MHz | ≤ 1000 mW  ERP | ≥ 32 dB *below carrier* at a distance of 3 meters or EN 300 220-1 or 302 208 [S*purious domain emission limits* 250 nW (*operating system*) and 2 nW (*Standby system*)] | EN 300 220-1 or EN 302 208 | Wireless modem, data communication system |

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| NO. | FREQUENCY BAND | MAXIMUM ERP | SPURIOUS EMISSION OF TRANSMITTER AND RECEIVER | RADIO STANDARD AND TESTING STANDARD | EXAMPLE OF SRD APPLICATION |
| 11 | 72.40 MHz | ≤ 1000 mW ERP | ≥ 32 dB *below carrier* at a distance of 3 meters or EN 300 220-1 or 302 208  [S*purious domain emission limits* 250 nW (*operating system*) and 2 nW (*Standby system*)] | EN 300 220-1 or EN 302 208 | *Wireless modem, data communication system* |
| 12 | 72.60 MHz | ≤ 1000 mW ERP | ≥ 32 dB *below carrier* at a distance of 3 meters or EN 300 220-1 or 302 208  [S*purious domain emission limits* 250 nW (*operating system*) and 2 nW (*Standby system*)] | EN 300 220-1 or EN 302 208 | *Wireless modem, data communication system* |
| 13 | 88.00 MHz -  108 MHz | ≤ 60 dBµV / m at a distance of 10 meters | ≥ 32 dB *below carrier* at a distance of 3 meters or EN 300 220-1 | 47 CFR 15 or EN 300 220-1 | *Wireless microphone* |
| 14 | 140.35 - 146.50 MHz | ≤ 100 mW ERP | ≥ 32 dB *below carrier* at a distance of 3 meters or EN 300 220-1 [S*purious domain emission limits* 250 nW (*operating system*) and 2 nW (*Standby system*)] | 47 CFR 15 or EN 300 220-1 | *Radio detection, alarm system* |
| 15 | 158.275 / 162.875 MHz | ≤ 1000 mW ERP | ≥ 32 dB *below carrier* at a distance of 3 meters or EN 300 220-1 or 302 208  [S*purious domain emission limits* 250 nW (*operating system*) and 2 nW (*Standby system*)] | EN 300 220-1 or EN 302 208 | *Wireless modem, data communication system* |
| 16 | 158.325 / 162.925 MHz | ≤ 1000 mW ERP | ≥ 32 dB *below carrier* at a distance of 3 meters or EN 300 220-1 or 302 208  [S*purious domain emission limits* 250 nW (-*operating system*) and 2 nW (*Standby system*)] | EN 300 220-1 or EN 302 208 | *Wireless modem, data communication system* |

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| NO. | | FREQUENCY BAND | MAXIMUM ERP | SPURIOUS EMISSION OF TRANSMITTER AND RECEIVER | RADIO STANDARD AND TESTING STANDARD | EXAMPLE OF SRD APPLICATION |
| 17 | | 170.275 MHz | ≤ 1000 mW ERP | ≥ 32 dB *below carrier* at a distance of 3 meters or EN 300 220-1 | 47 CFR 15 or EN 300 220-1 | *Remote control of cranes and loading arms* |
| 18 | | 170.375 MHz | ≤ 1000 mW ERP | ≥ 32 dB *below carrier* at a distance of 3 meters or EN 300 220-1 | 47 CFR 15 or EN 300 220-1 | *Remote control of cranes and loading arms* |
| 19 | | 173.575 MHz | ≤ 1000 mW ERP | ≥ 32 dB *below carrier* at a distance of 3 meters or EN 300 220-1 | 47 CFR 15 or EN 300 220-1 | *Remote control of cranes and loading arms* |
| 20 | | 173.675 MHz | ≤ 1000 mW ERP | ≥ 32 dB *below carrier* at a distance of 3 meters or EN 300 220-1 | 47 CFR 15 or EN 300 220-1 | *Remote control of cranes and loading arms* |
| 21 | | 180.00 MHz - 200.00 MHz | ≤ 112 dBµV / m  at a distance of 10 meters | ≥ 32 dB *below carrier* at a distance of 3 meters or EN 300 220-1 | 47 CFR 15 or EN 300 220-1 | *Wireless microphone* |
| 22 | | 240.15 MHz - 240.30 MHz | ≤ 100 mW ERP | ≥ 32 dB *below carrier* at a distance of 3 meters or EN 300 220-1 | 47 CFR 15 or EN 300 220-1 | *Radio detection , alarm system* |
| 23 | 300 MHz - 300.33 MHz | | ≤ 100 mW ERP | ≥ 32 dB *below carrier* at a distance of 3 meters or EN 300 220-1 | 47 CFR 15 or EN 300 220-1 | *Radio detection , alarm system* |
| 24 | 312.00 MHz -  316.00 MHz | | ≤ 100 mW ERP | ≥ 32 dB *below carrier* at a distance of 3 meters or EN 300 220-1 | 47 CFR 15 or EN 300 220-1 | *Radio detection , alarm system* |
| 25 | 444.40 MHz -  444.80 MHz | | ≤ 100 mW ERP | ≥ 32 dB *below carrier* at a distance of 3 meters or EN 300 220-1 | 47 CFR 15 or EN 300 220-1 | *Wireless microphone* |
| 26 | 487 MHz -  507 MHz | | ≤ 112 dBµV / m  at a distance of 10 meters | ≥ 32 dB *below carrier* at a distance of 3 meters or EN 300 220-1 | 47 CFR 15 or EN 300 220-1 | *Wireless microphone* |

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| NO. | FREQUENCY BAND | MAXIMUM ERP | SPURIOUS EMISSION OF TRANSMITTER AND RECEIVER | RADIO STANDARD AND TESTING STANDARD | EXAMPLE OF SRD APPLICATION |
| 27 | 923 MHz -  925 MHz | ≤ 500 mW | ≥ 32 dB *below carrier* at a distance of 3 meters or EN 300 220-1 or 302 208  [S*purious domain emission limits* 250 nW (*operating system*) and 2 nW (*Standby system*)] | EN 300 220-1 or EN 302 208 | *Wireless modem, data communication system* |
| 28 | 2.4000 GHz -  2.4835 GHz | ≤ 100 mW ERP | 47 CFR 15.209;  or  EN 300 440-1 or EN 300 328 | 47 CFR 15 or EN 300 440-1 or EN 300 328 | *Zigbee* and SRD Application other than Bluetooth, WLAN (technical requirements of Bluetooth and WLAN that operate at this radio frequency band in accordance with the provision of legal regulation regarding Bluetooth or WLAN). |
| 29 | 5.150 GHz -  5.250 GHz | EIRP ≤ 200 mW, with the provision:  1. Usage must be  *Indoor*;and  2. Its operation must apply mechanism technique of *Dynamic Frequency Selection* (DFS) and *Transmit Power Control*  (TPC).  3. In the event that TPC is not used, the average maximum EIRP must be deducted by 3 dB. | 47 CFR 15.407 (b) or EN 301 893 (-27 dBm / MHz) | 47 CFR 15 or EN 301 893 | SRD Application other than WLAN  (technical requirements of WLAN that operate at this radio frequency band in accordance with the provision of legal regulation regarding WLAN |
| 30 | 5.250 GHz -  5.350 GHz | 47 CFR 15.209  (500 µV / m) | 47 CFR 15 | SRD Application other than WLAN.  (technical requirements of WLAN that operates at this radio frequency band in accordance with the provision of legal regulation regarding WLAN). |
| 31 | 5.470 GHz -  5.725 GHz | 47 CFR 15.407 (b) or EN 301 893 (-27 dBm / MHz) | 47 CFR 15 or EN 300 440-1 | SRD Application other than WLAN.  (technical requirements of WLAN that operates at this radio frequency band in accordance with the provision of legal regulation regarding WLAN). |
| NO. | FREQUENCY BAND | MAXIMUM ERP | SPURIOUS EMISSION OF TRANSMITTER AND RECEIVER | RADIO STANDARD AND TESTING STANDARD | EXAMPLE OF SRD APPLICATION |
| 32 | 5.725 GHz -  5.825 GHz | ≤ 100 mW ERP | 47 CFR 15.209  47 CFR 15.249 (d)  or EN 300 440-1 (500 µV / m) | 47 CFR 15 or EN 300 440-1 | SRD Application other than WLAN (technical requirements of WLAN that operates at this radio frequency band in accordance with the provision of legal regulation regarding WLAN). |
| 33 | 10.50 GHz -  10.55 GHz | ≤ 117 dBµV / m at a distance of 10 meters | 47 CFR 15.209; § 15.249 (d) or EN 300 440-1 (500 µV / m) | 47 CFR 15 or EN 300 440-1 | *Broadband Access* only, *Wireless video transmitter* and other SRD applications. |
| 34 | 24.00 GHz -  24.25 GHz | ≤ 100 mW EIRP | 47 CFR 15.209; § 15.249 (d) or EN 300 440-1 (500 µV / m) | 47 CFR 15 or EN 300 440-1 | *Generic use and for Radio determination: detection, movement and alert application.* |
| 35 | 76 GHZ -  77 GHz | ≤ 37 dBm EIRP when the vehicle moves and  ≤ 23.5 dBm EIRP when the vehicle stops moving. | 47 CFR 15.253 or EN 301 091 (200 nW / cm2) | 47 CFR 15 or EN 301 091 | Short range radar system. Example: *automatic cruise control* and *collision warning systems* for motor vehicles. |

**C.** ***Electromagnetic Compatibility* (EMC)** **Requirement**

*Electromagnetic Compatibility* (EMC) requirement is in line with SNI CISPR 22: 2012.

**CHAPTER III**

**TESTING**

SRD testing is done in accordance with the provision of legal regulation.

**MINISTER OF COMMUNICATION AND INFORMATION TECHNOLOGY OF THE REPUBLIC OF INDONESIA**

Signed

**RUDIANTARA**