

## Guide to WLAN Certification in Indonesia

### Certification in Indonesia

Certificate of approval is required for every telecommunication and ITE equipment entering Indonesian territory. The certificate of approval is issued by Directorate General of Resources and Equipment Standardization for Post and Informatics (SDPPI). Certifications are granted at the system (host) level. The certificate is valid for each type or model number of equipment while product or model series certificate or type approval is not acceptable.

### In-Country Testing

In-Country testing is required prior to certificate issuance by SDPPI. RF / Telecom Test is mandatory while EMC and safety is voluntary. The test will require 2 (two) samples of equipment and it will be conducted by local laboratories which appointed by SDPPI.

### Applicable Standards in Indonesia

WLAN approval test will be based on national standards: KEPDIRJEN No. 058/DIRJEN/1998 (indoor application), KEPDIRJEN No. 268/DIRJEN/2001 (outdoor application) and PERDIRJEN No. 233/DIRJEN/2010. Most of national standards are mainly adopted from IEEE 802.11a/b/g/n, however multi radio mode will only allowable in CPE type of devices while for Access Point devices radio mode will have to be selected either 802.11a or 802.11b/g/n. The key parameters are as follows:

- Access Control Protocol Method: TDMA/FDMA/CDMA/CSMA-CA
- Modulation type: FSK/BPSK/QPSK/QAM/CCK
- Multiplexing technique: OFDM/TDM/FDM
- Spread spectrum: FHSS/DSSS
  
- CNR for  $1 \times 10^{-6}$  symbol error rate:  $\leq 10$  dB
- Spurious all band:  $\leq -50$  dBc
- Receiver sensitivity:  $\leq -58$  dBm
- Radiated Emission Limit: 500  $\mu$ V/m at 3 meters measurement (FCC part 15.209)
  
- Operating Frequencies: 2.4 – 2.4835 GHz and 5.725 – 5.825 GHz
- Maximum bandwidth: 20 MHz
- EIRP (2.4 – 2.4835 GHz): 27 dBm for indoor utilization and 36 dBm for outdoor utilization (KM No. 2/2005)
- EIRP (5.725 – 5.825 GHz): 36 dBm for PtoP & PtoMP application and 33 dBm for mesh application (PERMEN No. 27/2009)
- Minimum data access: DSSS shall be 11 Mbps / channel and FHSS shall be 3 Mbps / channel
- Interface: IEEE 802.3 compliant (Ethernet/E1)

## Documentations Requirements

1. Completed Application Forms: Application Form (FR.PM.5), Inspection Form (FR.PM.4), Power of Attorney to *TEKNOKRAT* Indonesia
2. Technical Constructive File: General information, Installation guide, User manual, BOM, Hardware description, Block diagram, Assembly Top/Bottom, Conducted test report (RF / Telecom and EMC & Safety test)
3. Copy of Certificates of Compliance (from other country)

TEKNOKRAT's services have been specifically designed to support manufacturers, test laboratories and consultants seeking type approval in Indonesia for telecommunications equipment and other ITE. The world's leading telecommunications equipment vendors already recognize the value in our service and entrust their approvals in Indonesia to us. We would be delighted to have the opportunity to support your telecom approvals.

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