IEEE P802.11  
Wireless LANs

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| IMT-2020 (S)RIT Description Template – Compliance Template | | | | | | | |
| Date: 2017-11-17 | | | | | | | |
| Author(s): | | | | | | | |
| Name | | Affiliation | Address | | Phone | email | |
|  | |  |  | |  |  | |
| Author 1 | Affiliation 1 | | Address 1 | Phone 1 | | Email 1 |

Abstract

This document is the compliance template, prepared in accordance with the submission guidelines for IMT-2020 submissions as described in the ITU-R/WP-5D Document M.[IMT-2020.SUBMISSION] titled “Requirements, evaluation criteria and submission templates for the development of IMT-2020”.

This document provides the responses that are needed to assess the compliance of a candidate RIT or SRIT with the minimum requirements of IMT-2020.

The compliance templates are:

– Compliance template for services;

– Compliance template for spectrum; and,

– Compliance template for technical performance..

# Revision history

|  |  |  |
| --- | --- | --- |
| Revision | Date | Changes |
| 0 | November 17, 2017 | Initial draft |
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**5.2.4.1 Compliance Template for Services**

|  |  |  |
| --- | --- | --- |
|  | **Service capability requirements** | **Evaluator’s comments** |
| **5.2.4.1.1** | **Support for wide range of services**  Is the proposal able to support a range of services across different usage scenarios (eMBB, URLLC, and mMTC)?: YES / NO  Specify which usage scenarios (eMBB, URLLC, and mMTC) the candidate RIT or candidate SRIT can support. (1) |  |
| (1) Refer to the process requirements in IMT-2020/2. | | |

**5.2.4.2 Compliance template for spectrum3**

|  |  |
| --- | --- |
|  | **Spectrum capability requirements** |
| **5.2.4.2.1** | **Frequency bands identified for IMT**  Is the proposal able to utilize at least one frequency band identified for IMT in the ITU Radio Regulations?: YES / NO  Specify in which band(s) the candidate RIT or candidate SRIT can be deployed. |
| **5.2.4.2.2** | **Higher Frequency range/band(s)**  Is the proposal able to utilize the higher frequency range/band(s) above 24.25 GHz?:   YES / NO  Specify in which band(s) the candidate RIT or candidate SRIT can be deployed.  NOTE 1: In the case of the candidate SRIT, at least one of the component RITs need to fulfil this requirement. |

**5.2.4.3 Compliance template for technical performance3**

| **Minimum technical performance requirements item (5.2.4.3.x), units, and Report ITU-R M.[IMT-2020.TECH PERF REQ] section reference(1)** | **Category** | | | **Required value** | **Value(2)** | **Requirement met?** | **Comments(3)** |
| --- | --- | --- | --- | --- | --- | --- | --- |
| **Usage scenario** | **Test environment** | **Downlink or uplink** |  |  |  |  |
| **5.2.4.3.1** Peak data rate (Gbit/s) *(4.1)* | eMBB | Not applicable | Downlink | 20 |  | Yes  No |  |
| Uplink | 10 |  | Yes  No |
| **5.2.4.3.2** Peak spectral efficiency (bit/s/Hz) *(4.2)* | eMBB | Not applicable | Downlink | 30 |  | Yes  No |  |
| Uplink | 15 |  | Yes  No |
| **5.2.4.3.3** User experienced data rate (Mbit/s) *(4.3)* | eMBB | Dense Urban – eMBB | Downlink | 100 |  | Yes  No |  |
| Uplink | 50 |  | Yes  No |
| **5.2.4.3.4** 5th percentile user spectral efficiency (bit/s/Hz) *(4.4)* | eMBB | Indoor Hotspot – eMBB | Downlink | 0.3 |  | Yes  No |  |
| Uplink | 0.21 |  | Yes  No |
| eMBB | Dense Urban – eMBB | Downlink | 0.225 |  | Yes  No |  |
| Uplink | 0.15 |  | Yes  No |
| eMBB | Rural – eMBB | Downlink | 0.12 |  | Yes  No |  |
| Uplink | 0.045 |  | Yes  No |
| **5.2.4.3.5** Average spectral efficiency (bit/s/Hz/ TRxP) *(4.5)* | eMBB | Indoor Hotspot – eMBB | Downlink | 9 |  | Yes  No |  |
| Uplink | 6.75 |  | Yes  No |
| eMBB | Dense Urban – eMBB | Downlink | 7.8 |  | Yes  No |  |
| Uplink | 5.4 |  | Yes  No |
| eMBB | Rural – eMBB | Downlink | 3.3 |  | Yes  No |  |
|  | Yes  No |  |
| Uplink | 1.6 |  | Yes  No |  |
|  | Yes  No |  |
| **5.2.4.3.6** Area traffic capacity (Mbit/s/m2) *(4.6)* | eMBB | Indoor-Hotspot – eMBB | Downlink | 10 |  | Yes  No |  |
| **5.2.4.3.7** User plane latency (ms) *(4.7.1)* | eMBB | Not applicable | Uplink and Downlink | 4 |  | Yes  No |  |
| URLLC | Not applicable | Uplink and Downlink | 1 |  | Yes  No |  |
| **5.2.4.3.8** Control plane latency (ms) *(4.7.2)* | eMBB | Not applicable | Not applicable | 20 |  | Yes  No |  |
| URLLC | Not applicable | Not applicable | 20 |  | Yes  No |  |
| **5.2.4.3.9** Connection density (devices/km2) *(4.8)* | mMTC | Urban Macro – mMTC | Uplink | 1 000 000 |  | Yes  No |  |
| **5.2.4.3.10** Energy efficiency *(4.9)* | eMBB | Not applicable | Not applicable | Capability to support a high sleep ratio and long sleep duration |  | Yes  No |  |
| **5.2.4.3.11** Reliability *(4.10)* | URLLC | Urban Macro –URLLC | Uplink or Downlink | 1-10-5 success probability of transmitting a layer 2 PDU (protocol data unit) of size 32 bytes within 1 ms in channel quality of coverage edge |  | Yes  No |  |
| **5.2.4.3.12** Mobility classes *(4.11)* | eMBB | Indoor Hotspot – eMBB | Uplink | Stationary, Pedestrian |  | Yes  No |  |
| eMBB | Dense Urban – eMBB | Uplink | Stationary, Pedestrian,  Vehicular (up to 30 km/h) |  | Yes  No |  |
| eMBB | Rural – eMBB | Uplink | Pedestrian, Vehicular, High speed vehicular |  | Yes  No |  |
| **5.2.4.3.13**  Mobility Traffic channel link data rates (bit/s/Hz) *(4.11)* | eMBB | Indoor Hotspot – eMBB | Uplink | 1.5 (10 km/h) |  | Yes  No |  |
| eMBB | Dense Urban – eMBB | Uplink | 1.12 (30 km/h) |  | Yes  No |  |
| eMBB | Rural – eMBB | Uplink | 0.8 (120 km/h) |  | Yes  No |  |
| 0.45 (500 km/h) |  | Yes  No |  |
| **5.2.4.3.14** Mobility interruption time (ms)  *(4.12)* | eMBB and URLLC | Not applicable | Not applicable | 0 |  | Yes  No |  |
| **5.2.4.3.15** Bandwidth and Scalability *(4.13)* | Not applicable | Not applicable | Not applicable | At least 100 MHz |  | Yes  No |  |
| Up to 1 GHz |  | Yes  No |  |
| Support of multiple different bandwidth values(4) |  | Yes  No |  |
| (1) As defined in Report ITU-R M.[IMT-2020.TECH PERF REQ].  (2) According to the evaluation methodology specified in Report ITU-R M.[IMT-2020.EVAL].  (3) Proponents should report their selected evaluation methodology of the Connection density, the channel model variant used, and evaluation configuration(s) with their exact values (e.g. antenna element number, bandwidth, etc.) per test environment, and could provide other relevant information as well. For details, refer to Report ITU-R M.[IMT-2020.EVAL], in particular, § 7.1.3 for the evaluation methodologies, § 8.4 for the evaluation configurations per each test environment, and Annex 1 on the channel model variants.  (4) Refer to § 7.3.1 of Report ITU-R M.[IMT-2020.EVAL]. | | | | | | | |