



KEMENTERIAN KOMUNIKASI DAN INFORMATIKA REPUBLIK INDONESIA
DIREKTORAT JENDERAL SUMBER DAYA DAN PERANGKAT POS DAN INFORMATIKA
DIREKTORAT PENATAAN SUMBER DAYA

SERTIFIKAT

Diberikan kepada

Dr. Hugeng, S.T., M.T.

Sebagai

OBSERVER

Dalam acara

**19th BORDER COMMUNICATION COORDINATION MEETING BETWEEN
SINGAPORE AND INDONESIA**

BATAM, 28 - 29 AGUSTUS 2019
DIREKTUR PENATAAN SUMBER DAYA

Denny Setiawan

DENNY SETIAWAN

19TH BORDER COMMUNICATION COORDINATION MEETING BETWEEN SINGAPORE AND INDONESIA

NAGOYA HILL HOTEL, BATAM - INDONESIA

28 – 29 August 2019

MINUTES OF MEETING

1. Opening Remarks

- 1.1. Mr. Denny Setiawan, Director of Spectrum Policy and Planning, Ministry of Communications and Informatics (MCI), welcomed the Singaporean delegates to the 19th Border Communication and Coordination Meeting ("BCCM") in Batam, Indonesia. He also thanked the Singapore Delegation for the invitation given to MCI spectrum frequency radio roadmap drafting team for benchmark in Singapore. Therefore, the BCCM has been instrumental for solving interference issue on border and knowledge sharing in spectrum frequency radio between Indonesia and Singapore. He wished for a proper discussion and fruitful result in the 19th BCCM.
- 1.2. Dr. Toh Bee Eng, Senior Deputy Director, Infocomm Resource & Technology, Infocomm Media Development Authority of Singapore (IMDA), expressed her gratitude to MCI for hosting the meeting. To support 5G networks, she shared that IMDA had facilitated 5G trials in the 3.5 GHz and 26/28 GHz bands in Singapore with the aim of readying these key spectrum bands in the near future. IMDA had recently closed its 5G Public consultation and is in the process of reviewing all the responses received and to target to release its decision on the consultation by end of the year. She wished that the administrations and operators of Indonesia and Singapore would continue to work closely together, to achieve good progress and results in the 19th BCCM meeting.
- 1.3. The list of delegates was attached in Annex 1.

2. Approval of Agenda and Working Schedule

- 2.1. The meeting agenda and working schedule were adopted with no amendment as shown in Annex 2 and Annex 3 respectively.

3. Policy and Regulatory Update

- 3.1. MCI shared a presentation on "Policy & Regulatory Update" in Indonesia as attached in Annex 5 and IMDA took note on the presentation.
- 3.2. MCI informed IMDA that there is a new regulation enacted for class license. The regulatory requirements are incorporated in April 2019 which govern

Class Licensed regulation including Licensed Assisted Access (LAA), Dedicated Short Range Communication (DSRC), Wireless LAN (WLAN), Short Range Devices (SRD), and Low Power Wide Area (LPWA) / Non-Cellular IOT services.

- 3.3. The regulation of the SRD had been governed through DG SDPPI Regulation No.161 Year 2019 regarding the technical provisions of telecommunications equipment for short range devices, which covers many different technologies.
- 3.4. MCI informed IMDA that they had completed a nationwide refarming in frequency 800-900 MHz. MCI recommended IMDA to take note on this band in case there maybe some issues to discuss in the future.
- 3.5. MCI informed the meeting that 5G Task Force has been initiated in Indonesia. The Term of Reference of the 5G Task Force is currently in the drafting process. Furthermore, MCI shared the structure of Indonesia's 5G Task Force and the stakeholders involved. While the 5G trials were mainly focusing in the mmWave frequency band, MCI is exploring on the possibility to conduct further trials in the extended C-band in the future.
- 3.6. In response to IMDA query on the standards for DSRC framework, MCI shared that they had reference to ETSI standards.
- 3.7. IMDA shared a presentation on "Policy & Regulatory Update" as attached in Annex 7 and MCI took note on the presentation.
- 3.8. MCI noted that based on the presentation as attached in Annex 7, IMDA has plans to use 3.5 GHz spectrum for 5G in 2021 at the earliest.
- 3.9. MCI highlighted that 3.4 – 4.2 GHz band is currently heavily used for FSS downlink in ubiquitous manner in Indonesia. The use of this band is nationwide including Batam and other locations near the borders with Singapore. MCI shared their concerns that there are potential interference that caused by IMT to FSS receiver in the frequency band of 3.4-4.2 GHz.
- 3.10. MCI proposed that further coordination between IMDA and MCI is needed, before Singapore use 3.5 GHz band for 5G/ IMT, to ensure the coexistence of the FSS receivers operating at 3.4-4.2 GHz band in Indonesian territory and IMT system operating at 3.5 GHz band in Singapore. The meeting agreed for this proposal to be further discussed in the Trilateral Meeting.

4. Status update on Matter Arising from the 18th BCCM

4.1. Coordination on the Use of 2.5 GHz Band between Mobile/Wireless and Broadcast Satellite Services (BSS)

- 4.1.1. MCI shared a presentation on "Coordination on the use of 2.5 GHz" as attached in Annex 6 and IMDA took note on the presentation.
- 4.1.2. MCI informed that Indonesia's BSS operator had taken further actions to seek possible solution for their services and would update Singapore if 2 (two) parameter values have been achieved by Singapore's MNOs to Indonesia's BSS conditions.
- 4.1.3. IMDA urged PT. MediaCitra Indostar to clarify and work with Singapore Operators to derive a tolerable technical parameter during the operator to operator discussion and to clarify on the further details for the course of action. Singtel shared that they would need to discuss in the operator discussion as there was no common methodology on the feasible value to be achieved on the field strength quality and tolerable RSRP threshold for both Singapore and Indonesia.
- 4.1.4. MCI aware there is an absence of any recommendation or standard specifying protection ratio between BSS and LTE, thus, both operators did a measurement to find suitable solution to this issue. This value of -90 dBm was observed using spectrum analyzer during joint measurement conducted in October 2015. The measurement was conducted based on the methodology agreed in O2O meeting, 15th BCCM year 2014 in Yogyakarta.
- 4.1.5. MCI proposed to Singapore's Operator to use the value of RSRP and frequency carrier that have been proposed in 15th BCCM, 16th BCCM, 17th BCCM, and 18th BCCM.
- 4.1.6. Singtel sought clarifications about the type of technical adjustment that have been done by Indonesia on the usage of 2.5 GHz in Riau Island shoreline, PT. MediaCitra Indostar explained the technical adjustment that have been done are antenna reconfiguration and reallocation, but it did not reduce the interference.
- 4.1.7. IMDA sought clarifications the frequency carrier value that less than -90 dBm. MCI explained that the value was refer to the professional consultancy study shared by Singapore at the 9th Trilateral Meeting in 2011. The value of the received satellite signals is approximately -115 dBm, the Indonesia's Proposal for Interference Protection was -90 dBm it is a non-interference free solution from Indonesia.
Afternote: IMDA clarified that the professional consultancy study report was shared by IMDA as reference for initial discussion on this matter. The study was based on worst case scenario. The

meeting agreed in the event of any interference, further coordination should be conducted.

- 4.1.8. IMDA proposed to put the solution of this issue on Operator's Coordination in Paragraph 5.

4.2. Addressing Mobile Signal Spillage Issues

- 4.2.1. MCI proposed to close this agenda item and if there is an interference case reported on this band, it will be resolved on a case by case basis.
- 4.2.2. To allow timely attention of reported mobile signal spillage issues, the meeting agreed with Chairman's proposal to for each mobile operator to update the contact of person in charge (PIC) for further discussion, when required.
- 4.2.3. The meeting agreed to close this agenda item.

4.3. Coordination on 2.1 and 2.3 GHz

- 4.3.1. MCI proposed to modify the agenda to remove the 2.1 GHz and maintain the coordination on 2.3 GHz.
- 4.3.2. MCI reminisce the agreement on Operator's Meeting on 27 November 2018, in Batam, was to complete the harmonization of the 2.3 GHz TDD-LTE system configuration by the end of September 2019. MCI sought IMDA's support on the agreement and to encourage Malaysian Communications and Multimedia Commission (MCMC) to remind their operators to work towards the agreed schedule.
- 4.3.3. IMDA agreed to modify the agenda into "Coordination on 2.3 GHz". Both MCI and IMDA are supportive to engage MCMC during the course of their respective bilateral meetings to work towards the agreed timeline.

4.4. Update on 450 MHz

- 4.4.1. IMDA and MCI agreed to close this agenda item.

4.5. Coordination on the Use of 5091 - 5250 MHz for Fixed Satellite Service (Earth-to-space)

- 4.5.1. MCI updated that coordination is still required as within this band is used for the Microwave Landing System (MLS) and unmanned aircraft system.

4.5.2. IMDA proposed to close this agenda and bring this issue to the Trilateral Meeting.

4.5.3. The meeting agreed with the proposal and close this agenda item.

5. Operator's Coordination

5.1. The meeting took note on the result of Operator's Coordination as attached in Annex 8.

6. New Agenda Items

6.1. There was no new agenda raised at the meeting.

7. Any Other Business

7.1. MCI informed the meeting that Indonesia has a plan to submit a proposal in WRC-19 regarding the extension of the regulatory period (Bringing into Use / BiU) and the extension of suspension period (Bringing Back into Use / BBiU) for frequency assignments related to three orbital slots (113°E, 123°E, and 146°E) as mentioned in Document No. APG19-5/INF-32 from the last APG19-5 meeting. Indonesia would like to kindly seek support from Singapore for this proposal.

7.2. MCI also informed the meeting that in order to have more options for 5G mid band especially in the band 4.8–4.99 GHz, Indonesia has a plan to insert its name into the RR footnote 5.441B in support of the pfd limit to be removed from the existing footnote. Indonesia would like to seek support from Singapore on the agenda. IMDA took note of the intents and would bring back to their respective teams for their information and action.



8. Closing of Meeting

- 8.1. Dr. Toh Bee Eng, the Singapore Head of Delegation thanked MCI for the successful deliberations of this meeting. She also remarked her appreciations for the arrangements made for the meeting.
- 8.2. For closing remark, Mrs. Arifah thanked all delegates for their contributions in making the meeting a success. She also hoped that the Singaporean colleagues have had a pleasant stay in Batam.

For Indonesia Administration



Mrs. Arifah
Deputy Director
Radio Frequency Spectrum
Harmonization,
Directorate General of Resources
Management and Equipment of
Posts and Informatics,
Ministry of Communications and
Informatics

For Singapore Administration



Dr. Toh Bee Eng
Senior Deputy Director, Infocomm
Resource & Technology,
Infocomm Media Development
Authority of Singapore