

# CelcomDigi's Response to the Public Consultation

Agenda Item	Comments and Views on Proposed Malaysia's Positions
<b>Fixed, Mobile and Broadcasting Issues</b>	
<p><b>1.1</b></p>	<p>CelcomDigi noted that the 4800 - 4990 MHz is already in use for International Mobile Telecommunications ("IMT") without restrictions in some countries. While we understand the importance of protection of aeronautical/ maritime mobile services stations located in international airspace/ water from other stations located within national territories, we opine that the power flux-density ("PFD") limit for IMT station should be feasible. Hence, we would like to propose for Malaysia to support Method C with the PFD limit that is acceptable by the mobile industry. In addition, the 4400 - 5000 MHz has already been defined in 3GPP as NR band (n79). The band is very crucial to be used for IMT in Malaysia in near future.</p>
<p><b>1.2</b></p>	<p><b><u>(i) 7025 - 7125 MHz</u></b>            CelcomDigi supports the MCMC's proposed position i.e. Malaysia supports the identification of IMT in the 7025 - 7125 MHz with appropriate regulatory and technical conditions, taking into account the results of studies to ensure the protection of services to which the frequency band is allocated on a primary basis and in adjacent bands, Method 5B.</p> <p><b><u>(ii) 6425 - 7025 MHz</u></b>            We opine that Malaysia should identify the 6425 - 7025 MHz for IMT together with some interested countries in Region 3. This position is proposed due to the following:</p> <p>a) Mobile technologies and services contribute significantly to the country's GDP:</p> <ul style="list-style-type: none"> <li>• In 2022, mobile technologies and services generated just under 5% of Asia Pacific's GDP – a contribution that amounted \$810 billion of economic value added  <i>(reference: GSMA's report on "The Mobile Economy Asia Pacific 2023")</i></li> </ul> <p>b) More mid-band spectrum is required to support rapid growth in 5G subscribers and usages/ applications as mid-band is a vital component for 5G/ IMT-2020:</p> <ul style="list-style-type: none"> <li>• Over 1.73 billion unique mobile subscribers in 2022 which will grow to 2.11 billion by 2023 in the region  <i>(reference: GSMA's report on "The Mobile Economy Asia Pacific 2023")</i></li> <li>• Densely populated cities need on average a total of 2 GHz of mid-band spectrum in the 2025 - 2030 time frame to guarantee the IMT-2020 requirements for 5G  <i>(reference: GSMA's report on "Vision 2030: Insights for Mid-band Spectrum Needs")</i></li> <li>• Currently, many countries including Malaysia are lack of mid-band spectrum for IMT-2020. Hence, Malaysia</li> </ul>

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	<p>needs new mid-band spectrum candidates such as 6GHz to fulfil the huge future spectrum requirements</p> <p>c) Co-existence is feasible for fixed service ("FS")/ fixed satellite service ("FSS") and IMT:</p> <ul style="list-style-type: none"> <li>• A majority of ITU-R sharing and compatibility studies (especially ITU-R WP 5D) have demonstrated that sharing with IMT system is feasible</li> </ul> <p>d) Maturing ecosystem and equipment:</p> <ul style="list-style-type: none"> <li>• 3GPP specifications - R17 defined the UE/BS RF specifications for 6 GHz licensed IMT and allocated the 3GPP band number n104 to the range 6425 - 7125 MHz</li> <li>• According to GSMA's survey on mainstream equipment vendors, mobile phone vendors and chip vendors, the ecosystem of IMT in upper 6GHz band will mature in 2024 and meet large-scale deployment requirements in 2025</li> </ul> <p>e) Economies of scale:</p> <ul style="list-style-type: none"> <li>• Consideration of 6425 - 7025 MHz for IMT identification for Region 3 at WRC-23 will contribute to harmonization and economies of scale</li> </ul> <p>Hence, we would like to propose for Malaysia to identify the 6425 - 7025 MHz for IMT by creating a new Radio Regulations footnote with appropriate conditions.</p> <p><b><u>(iii) 3300 – 3400 MHz</u></b>  We understand that the 3300 – 3400 MHz is being considered for IMT identification for other Regions. Nevertheless, considering the rationale mentioned in point (ii) above, we would like to propose for MCMC to consider identifying 3300 – 3400 MHz for IMT in Malaysia and include Malaysia's name to footnote 5.429F. In order to avoid interference with outdoor radiolocation service, the IMT in 3300 – 3400 MHz shall be limited to indoor usage only.</p> <p><b><u>(iv) Other: 3500 – 3600 MHz</u></b>  In view that the 3500 – 3600 MHz is already identified/ in use for IMT in Malaysia, we would like to propose for MCMC to consider including Malaysia's name to footnote 5.433A.</p>
1.4	<p>CelcomDigi opines that existing allocations for high-altitude platform stations as IMT base stations ("HIBS") should be fully utilised before considering other frequency bands. In addition, some of the frequency bands are overlapping with the frequency bands used for IMT/ 4G in Malaysia. It raises the concern on co-existence/ possible interference whereby protection of primary services including ground-based IMT systems is required and no additional regulatory or technical constraints imposed on the deployment of ground-based IMT systems in those frequency bands. Hence, we would like to propose for Malaysia to support Method A1, B1, C1 and D1 i.e. no changes to Vols. I and II of the Radio Regulations and suppression of Resolution 247 (WRC-19).</p>

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<b>General and Regulatory Issues</b>	
<b>10</b>	<p>CelcomDigi opines that the agenda items for WRC-27 could establish a roadmap for upcoming mobile generations and technology. Implementation of current and future mobile generations require additional spectrum resources for wider contiguous bandwidth in order to cope with the demand. Hence, we support the MCMC's proposed position i.e. "Malaysia is of the view that proposals for agenda item 10 could be supported, subject to further studies and taking into account the potential co-existence with, and protection of the incumbent services" with additional proposal to support new agenda item for WRC-27 to consider possible spectrum identification for IMT in the 7 - 15 GHz frequency range. This is very crucial for Malaysia to achieve a total of 2 GHz of mid-band spectrum in the 2025 - 2030 time frame to guarantee the IMT-2020 requirements for 5G, especially at densely populated cities (<i>reference: GSMA's report on "Vision 2030: Insights for Mid-band Spectrum Needs"</i>).</p>