Attachment

Template for response

Question	Comments/Responses
1	Paragraph 3.1.2.3: It is proposed that 700MHz spectrum to be technology neutral, whereby mobile operators are allowed to deploy 4G or 5G using 700MHz based on ecosystem readiness, traffic migration plan and business strategy. Paragraph 3.1.3.1: It is recommended that MCMC to expedite complete Spectrum Assignment by end of 2019 and target the availability of mobile broadband service in 700MHz by1st quarter of 2020. The earlier spectrum assignment would enable operators to perform more accurate advanced planning and design of radio network, CME, power system, site space and antenna system. The earlier commercialization of 700MHz would also help operators to resolve current hotspot congestions and improve indoor coverage, as well as accelerate the NFCP target of 30Mbps. This will certainly be a solid foundation for MBB development in Malaysia.
2	Paragraph 3.1.2.6: It is recommended that 700MHz spectrum to be allocated with minimum 2x10MHz per block to achieve economical utilization of telecommunication hardware and improved mobile operators' investment efficiency. With minimum 2x10MHz per allocation block, theoretical download speed of 150Mbps with 4R capable devices could be achieved, to close the dividend gap of rural and urban on the basic broadband service experience.
3.	Paragraph 3.2.1.2: WiMax is an outdated technology with high maintenance cost and low customer experience. It is recommended to phase out WiMax service nationwide and relevant spectrum to be re-purposed for 3GPP based technology (i.e. LTE and 5G). It is proposed that downlink and uplink ratio of 3:1 frame structure (vs. WiMax legacy downlink and uplink ratio of 2:2) to be implemented in Malaysia for the benefit of optimal MBB capacity and allow co-existence of LTE and NR in the same spectrum range in future. Paragraph 3.2.2.4: It is proposed that 2300MHz spectrum to be 3GPP-based technology neutral, whereby mobile operators are allowed to deploy 4G or 5G using 2300MHz based on ecosystem readiness, traffic migration plan and business strategy. Paragraph 3.2.3.1： It is recommended to expedite the assignment of TDD2300 to be completed by 1st quarter 2020. The earlier spectrum assignment would enable operators to perform more accurate advanced planning and design of radio network, CME, power system, site space, antenna system, and system configuration of frame structure. Besides, TDD2300 is needed by mobile operators as primary capacity layer for both MBB and WBB services especially in areas without fibre connectivity.

4.	Paragraph 3.2.2.6: It is proposed that 30MHz as the minimum block for assignment of TDD2300 to achieve optimal spectrum utilization and investment efficiency, and avoid oversubscription of interest and spectrum block swap eventually. Large contiguous block of TDD spectrum assignment is optimal for both 4G and 5G deployment to deliver required service experience of mobile broadband and fixed wireless access.
5.	Paragraph 3.3.2.2: It is proposed that 2600MHz spectrum to be 3GPP-based technology neutral, whereby mobile operators are allowed to deploy 4G or 5G using 2600MHz based on ecosystem readiness, traffic migration plan and business strategy.
6.	Paragraph 3.3.2.4: Mitigation techniques between FDD2600 and TDD2600 include: 1. Co-site scenario: antenna vertical and horizontal space isolation 2. Non-co site scenario: inter-site distance space isolation 3. Filter installation to be considered on case by case basis in area whereby space isolation is difficult to achieve. Actual Distance requirement subject to the radio equipment parameters adopted by mobile operators.
7.	No Comment