



**Malaysian Communications and Multimedia Commission**  
Suruhanjaya Komunikasi dan Multimedia Malaysia

## Public Inquiry Report

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Allocation of spectrum bands for mobile  
broadband service in Malaysia

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**29 September 2019**

This Public Inquiry Report was prepared in fulfilment of Sections 61 and 65 of the Communications and Multimedia Act 1998.

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# 1 Introduction

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## 1.1 Public Inquiry Exercise

- 1.1.1 In the Public Inquiry (“PI”) document on the allocation of spectrum bands for mobile broadband service in Malaysia issued on 1 July 2019, the Malaysian Communications and Multimedia Commission (“MCMC”) outlined its preliminary positions on 700 MHz, 2300 MHz and 2600 MHz bands pertaining to, among others:
- i. Proposed award mechanism;
  - ii. Proposed timelines for assignment;
  - iii. Proposed optimum bandwidth; and
  - iv. Principles to determine the spectrum fees.
- 1.1.2 This is in line with the aim of achieving, among others, average speeds of 30 Mbps in 98% of populated areas by 2023 under the National Fiberisation and Connectivity Plan (“NFCP”).
- 1.1.3 The PI document invited feedback from relevant stakeholders on MCMC’s preliminary positions. The PI document specifically sought comments through seven (7) questions.
- 1.1.4 The PI closed at 12 noon on Friday, 30<sup>th</sup> August 2019.

## 1.2 Submissions Received

1.2.1 By the end of the PI period at 12 noon on 30<sup>th</sup> August 2019, MCMC received fifteen (15) written submissions from the following parties:

No.	Submitting Parties	Submission Date
1.	Asiaspace Broadband Sdn Bhd ("Asiaspace")	29 August 2019
2.	Mr. Lee Soon Huat ("Mr. Lee")	29 August 2019
3.	REDtone Engineering and Network Services Sdn Bhd ("Redtone")	29 August 2019
4.	GSMA	30 August 2019
5.	Digi Telecommunications Sdn Bhd ("Digi")	30 August 2019
6.	Maxis Berhad ("Maxis")	30 August 2019
7.	U Mobile Sdn Bhd ("U Mobile")	30 August 2019
8.	PNMB Payfo Sdn Bhd ("PNMB Payfo")	30 August 2019
9.	Sacofa Sdn Bhd ("Sacofa")	30 August 2019
10.	Huawei Technologies (Malaysia) Sdn Bhd ("Huawei")	30 August 2019
11.	Celcom Axiata Berhad ("Celcom")	30 August 2019
12.	YTL Communications Sdn Bhd ("YTLC")	30 August 2019
13.	Altel Communications Sdn Bhd ("Altel")	30 August 2019
14.	Joint submission of Telekom Malaysia Berhad and Webe Digital Sdn Bhd ("TM/Webe")	30 August 2019
15.	Fujitsu Telecommunications Asia Sdn Bhd ("Fujitsu")	30 August 2019

1.2.2 In addition to the above, MCMC also received two (2) submissions after the end of the PI period from the following:

- i. Ericsson (Malaysia) Sdn Bhd; and
- ii. Qualcomm Inc.

1.2.3 Since the submissions were received after the deadline, both these submissions will not be taken into consideration in this PI report.

1.2.4 MCMC now presents this PI Report within the 30-day requirement from the closing date of submissions, as stipulated under section 65 of the Communications and Multimedia Act 1998 ("CMA").

## 1.3 Structure of this Public Inquiry Report

- 1.3.1 Section 2 of this PI Report is structured to follow the PI document, particularly in relation to MCMC's specific questions.
- 1.3.2 The seven (7) questions in the PI document are duplicated in each sub-section with a summary of the comments received.
- 1.3.3 Section 3 of this PI Report highlights MCMC's next steps, upon considering the feedback received from the PI.

## 2 Input From The Public Inquiry

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### 2.1 700 MHz Band

**Question 1:** MCMC would like to seek views on the proposed allocation plan for the 700 MHz band, in particular on:

- i) Award mechanism
- ii) Timeline for assignment

#### i) **Award Mechanism**

2.1.1 Celcom, GSMA, Maxis, Redtone and U Mobile agreed with MCMC's proposal, which is by way of tender.

2.1.2 However, Altel, TM/Webe and YTLC recommended that the 700 MHz band be awarded by way of direct award, in the following manner:

- a) Altel and TM/Webe proposed for a single operator to be directly awarded with the entire 2x40 MHz block in the 700 MHz band. The single operator will deploy the infrastructure as a national provider; and
- b) YTLC proposed for a block of 2x20 MHz to be awarded directly to them to allow for effective competition.

2.1.3 Mr. Lee and Sacofa were of the view that the appropriate award mechanism should be by way of auction, with the following details:

- a) According to Mr. Lee, the concern on spectrum cost for 700 MHz band is not an issue because the main determinant of returns on network investment is price of the service. An auction process will result in rational pricing because both demand and network deployment cost are well known; and
- b) Sacofa indicated that the auction approach would need to include rollout obligations and there should be no restriction on technology to be deployed.

2.1.4 PNMB Payfo was of the view that the whole band should be assigned to a single infrastructure provider that will rollout end-to-end infrastructure.

2.1.5 Huawei indicated that the use of the 700 MHz band should be on a technology neutral basis and operators should be allowed to deploy 4G and/or 5G technology based on ecosystem readiness, traffic migration plans and business strategy.

## ii) **Timeline for Assignment**

2.1.6 Celcom, GSMA and YTLC agreed with MCMC's proposal on the timeline for assignment of the 700 MHz band, which is by 3<sup>rd</sup> Quarter of 2020. Celcom proposed that there should be an earlier provisional assignment within the 1<sup>st</sup> Quarter of 2020 in order to kick start the deployment of the network ahead of the actual spectrum band availability date.

2.1.7 However, Altel, Huawei, Maxis, Redtone and TM/Webe disagreed with the proposal and recommended that the 700 MHz band be awarded to the relevant operators based on the following timelines:

a) Before 3<sup>rd</sup> Quarter of 2020;

- Huawei proposed for the timeline to be brought forward to the 1<sup>st</sup> Quarter of 2020, as they were of the view that an earlier assignment would enable operators to have more time to undertake more accurate planning and design of the network infrastructure.
- TM/Webe highlighted that the timeline could be brought forward to 2<sup>nd</sup> Quarter of 2020 if the assignment is made to only one operator through direct award.
- Altel highlighted that the 700 MHz band should be made available within the 2<sup>nd</sup> Quarter of 2020 as the restacking process will take around 6 months after the completion of the analogue switch off process.

b) After 3<sup>rd</sup> Quarter of 2020.

- Redtone proposed for the timeline of assignment to be within the 4<sup>th</sup> Quarter of 2020 and to be undertaken concurrently with the assignments for both the 2300 MHz and 2600 MHz bands.
- Maxis proposed that the assignment be pushed back to the 1<sup>st</sup> Quarter of 2021, to take into account the possible merger between Axiata and Telenor.

2.1.8 PNMB Payfo, Sacofa and U Mobile proposed for the spectrum to be made available as soon as possible without specifying any preferred date.

2.1.9 Mr. Lee proposed for the timeline to be after the decision on the merger between Axiata and Digi.



**Question 2:** MCMC would like to seek views on the optimum spectrum block per operator for assignment of the 700 MHz band.

2.1.10 Digi, Sacofa and U Mobile agreed with MCMC's proposal that the optimum spectrum block should be 2x10 MHz per operator.

2.1.11 The rest of the respondents' proposal for the assignment of the 700 MHz band are outlined below:

- a) Altel and TM/Webe suggested that the whole 2x40 MHz spectrum block be assigned to a single provider to enable faster data speeds and better quality of service through a 5G ready mobile network. They were of the view that this approach will prevent the duplication of radio and fibre networks;
- b) YTLC suggested that the 700 MHz assignment be prioritised for operators which have not been assigned with spectrum in the low bands. YTLC proposed that a block of 2x20 MHz be assigned to them so that they would be able to effectively compete and continue to invest to meet the NFCP targets. No proposal was made for the remaining 2x20 MHz block;
- c) Redtone suggested that a 2x20 MHz block be reserved for a neutral wholesaler and the remaining spectrum be assigned to other players in order to address the low band imbalance. Blocks of 2x5 MHz or 2x10 MHz were proposed to ensure that there are a variety of players providing Long Term Evolution ("LTE") in the country;
- d) Huawei recommended that the 700 MHz band to be allocated with minimum 2x10 MHz per block to achieve economical utilisation of telecommunication hardware and improve mobile operators' investment efficiency; and
- e) Mr. Lee was of the view that different operators may have different views in relation to what is considered technical optimality of spectrum. As such, the operators should be allowed to express this preference via a simultaneous auction of 700 MHz, 2300 MHz and 2600 MHz bands. An auction of blocks of 2x5 MHz will allow operators to place bids at different prices for each block they want to use. Most will bid high for the first 2 blocks, to secure

a minimum, but one or two may be willing to pay an exceptional price to secure other spectrum blocks.

2.1.12 Additionally, the following respondents suggested for the assignment of 2x45 MHz of the 700 MHz band:

- a) Celcom proposed for the entire 2x45 MHz of the 700 MHz band to be assigned to operators which have the ability to deploy the spectrum rapidly and widely. This would maximise the bandwidth that would be available for mobile users, especially those in rural areas. Celcom's first suggestion is to assign three spectrum blocks of 2x15 MHz each, which will result in higher download speeds and ensure cost efficiency compared to a 2x10 MHz block assignment. Their alternative suggestion is to assign three blocks of 2x10 MHz and one block of 2x15 MHz, so that there will be at least one operator that can deploy efficiently in 2x15 MHz and offer wholesale access to operators that did not get any award within the 700 MHz band;
- b) Maxis suggested a minimum assignment of 2x10 MHz block per operator in order to facilitate optimal LTE performance which is needed for a major operator, as smaller blocks are unable to deliver the desired speeds and capacity. They also suggested that the remaining 2x5 MHz block be awarded on top of an existing block; and
- c) GSMA was of the view that the proposed four blocks of 2x10 MHz is within the range of block sizes generally implemented in international markets. They also suggested that the remaining 5 MHz could be awarded and combined with the winning operator to make a 15 MHz channel or remain as one 5 MHz channel for another operator.

## 2.2 2300 MHz Band

**Question 3:** MCMC would like to seek views on the proposed allocation plan for the 2300 MHz band, in particular on:

- i) Award mechanism
- ii) Timeline for assignment

### **i) Award Mechanism**

2.2.1 Celcom, GSMA, Maxis, Redtone and U Mobile agreed with MCMC's proposal, which is by way of tender. Maxis and U Mobile had the following additional views:

- a) Maxis indicated that the assignment should only be awarded to operators that have already met at least 90% of mobile coverage; and
- b) U Mobile proposed that the band should be jointly allocated as a Time Division Duplex ("TDD") block with the 2600 MHz band. They did not agree with the proposed pre-determined assignment of 2600 MHz band based on current assignment.

2.2.2 Asiaspace, TM/Webe and YTLC stated that they prefer the spectrum to be awarded through direct award, as indicated below:

- a) Asiaspace suggested that MCMC retain the existing allocation to all operators and convert the existing apparatus assignment ("AA") to spectrum assignment ("SA"). Asiaspace also supports the removal of regional distinctions to allow for nationwide deployment;
- b) TM/Webe does not support MCMC's plan to vacate and reassign the band but supports the removal of regional distinctions and assignment on a nationwide basis. They suggested that the band be reassigned (including the unutilised spectrum) to existing nationwide active operators that have made significant investments in this band; and
- c) YTLC strongly opposed any policy to vacate and/or reassign the band and suggested that the current spectrum allocation be maintained by directly converting the band from AA to SA.

- 2.2.3 However, Mr. Lee and Sacofa were of the view that the appropriate award mechanism should be by way of auction, with the following details:
- a) Mr. Lee indicated that his views in response to the question on the 700 MHz band award mechanism applies here as well; and
  - b) Sacofa indicated that the auction mechanism would also need to include rollout obligations to avoid hoarding of spectrum and there should be no restriction on technology to be deployed in the band.
- 2.2.4 Altel and PNMB Payfo did not state any preferred award mechanism in their responses but were of the view that the whole 2300 MHz band should be assigned to a single operator (InfraCo) to deploy nationwide infrastructure.
- 2.2.5 Digi made a general statement to indicate that they supported the award of 2300 MHz band for mobile services but did not mention any preferred award mechanism in their response.
- 2.2.6 Huawei also did not state any preferred award mechanism and proposed Worldwide Interoperability for Microwave Access ("WiMAX") to be phased out and the relevant spectrum be used for LTE and 5G on a technology neutral basis where operators can deploy 4G or 5G based on ecosystem readiness, traffic migration plan and business strategy.

## **ii) Timeline for Assignment**

- 2.2.7 Altel and Redtone agreed with the timeline proposed by MCMC, which is to assign the 2300 MHz band within the 4<sup>th</sup> Quarter of 2020.
- 2.2.8 However, Celcom, Huawei, Maxis and TM/Webe proposed different timeline for the assignment of 2300 MHz band, as follows:
- a) Huawei suggested 1<sup>st</sup> Quarter of 2020 since this would enable operators to undertake more accurate advanced planning and design of the radio network including aspects related to civil and mechanical engineering, power systems, site space, antenna systems and systems configuration of frame structure.

Furthermore, the band is needed as the primary capacity layer for both mobile broadband and wireless broadband services especially in areas without fibre connectivity;

- b) Celcom suggested 2<sup>nd</sup> Quarter of 2020 since the 2300 MHz band is a much needed mobile broadband capacity resource and there is already a well-developed ecosystem for the band with more than 4000 devices (as of November 2018);
  - c) TM/Webe suggested that if the SA is directly awarded to them as the InfraCo, the timeline can be brought forward by 6 to 9 months since the tender process need not be undertaken. Hence, the suggestion to undertake the assignment by the 3<sup>rd</sup> Quarter of 2020; and
  - d) According to Maxis, 5G ecosystem for this band is developing and it is anticipated to be commercially available earliest by the end of 2020. They are therefore proposing the assignment to be undertaken within the 2<sup>nd</sup> Quarter of 2021.
- 2.2.9 PNMB Payfo, Sacofa and U Mobile did not specify any timeline for the assignment, but only indicated that the spectrum should be assigned as soon as possible.
- 2.2.10 Asiaspace and YTLC were totally against the reassignment and as such did not agree to any timeline for the reassignment of the band.
- 2.2.11 Mr. Lee is of the view that the assignment should only be made after the decision on the Celcom and Digi merger, and to be conducted simultaneously with the auctions for the other bands, while Digi did not indicate any timeline but stated that the band will be useful at a later stage for 5G.

**Question 4:** MCMC would like to seek views on the optimum spectrum block per operator for assignment of the 2300 MHz band.

2.2.12 GSMA and Sacofa agreed with MCMC's preference for assignment based on channel bandwidth of 20 MHz per operator.

2.2.13 The rest of the respondents proposed different spectrum blocks for assignment of the 2300 MHz band, as outlined below:

- a) Digi was of the view that the 2300 MHz band will be a useful band as the TDD band will be more important for future 5G services. Digi is supportive of the spectrum block of 10 MHz each;
- b) Redtone suggested a 20 MHz block for a wholesale network as the bandwidth would ensure optimum performance based on a shared LTE network and enable the provisioning of WTTx (wireless-to-the-x) solution. They also suggested that the remaining spectrum be assigned in 10 MHz or 20 MHz blocks;
- c) Maxis suggested that it would be optimal to assign blocks of contiguous 20 MHz and also no restriction be imposed in securing a 30 MHz block;
- d) Huawei proposed for 30 MHz bandwidth as the minimum block for assignment of TDD in 2300 MHz band to achieve optimal spectrum utilisation and investment efficiency, and to avoid oversubscription of interest and spectrum block swap eventually. Large contiguous block of TDD is optimal for both 4G and 5G deployment to deliver required service experience for mobile broadband and fixed wireless access;
- e) U Mobile suggested three spectrum blocks of 30 MHz as it would enable 5G deployment in Malaysia that would be able to deliver mobile broadband speeds that substantially surpass current LTE standards;
- f) YTL suggested to maintain the 30 MHz spectrum block per operator as per the current status and they are against the reassigning of the 2300 MHz band;

- g) Asiaspace suggested that the optimum spectrum block per operator should be 2x20 MHz (40 MHz in total) so that operators are able to take advantage of at least two carriers for carrier aggregation and deliver high capacity and high throughput services;
- h) Celcom suggested allocating the 2300 MHz band in one block of 50 MHz and one block of 40 MHz as it provides a good balance between cost efficiency and high download speeds with the advantage of future migration towards 5G. They also provided an alternative suggestion, which is to allocate the band in three blocks of 30 MHz each. Anything less than 30 MHz would fail to take advantage of the benefits of The 3<sup>rd</sup> Generation Partnership Project ("3GPP") specification for 5G in this band;
- i) TM/Webe suggested that the optimum spectrum blocks for the award should be 60 MHz for 5G and 30 MHz for 4G LTE. They also suggested that the unutilised spectrum should be reassigned to the existing nationwide active licence holders;
- j) Altel suggested that the whole 90 MHz block be awarded to a single operator that will deploy nationwide infrastructure; and
- k) Mr. Lee suggested the assignment be done by three blocks of 10 MHz and the remaining 5 MHz blocks by way of auction which would allow operators to decide for themselves the combination of spectrum blocks they prefer.

## 2.3 2600 MHz Band

**Question 5:** MCMC would like to seek views on the proposed allocation plan for the 2600 MHz band, in particular on:

- i) Award mechanism
- ii) Timeline for assignment

### i) **Award Mechanism**

2.3.1 Celcom, Digi, GSMA, Maxis and YTLG agreed with MCMC's proposal for direct conversion from AA to SA based on actual utilisation.

2.3.2 Altel, Redtone, TM/Webe, U Mobile, Sacofa and Mr. Lee disagreed with the proposal to award this band by way of direct conversion based on actual utilisation. Each of the respondents provided their comments as follows:

- a) TM/Webe and Altel proposed for direct conversion based on actual allocation instead of actual utilisation. They suggested part of the 2600 MHz band be allocated to a single infrastructure provider;
- b) U Mobile proposed for the award to be by way of tender (beauty contest), to be consistent with the approach proposed for the 700 MHz and 2300 MHz bands;
- c) Redtone also recommended for the award to be by way of tender (beauty contest), to limit the total number of operators in the 2600 MHz band and to consider the need to have a wholesale network; and
- d) Mr. Lee and Sacofa were of the view that the appropriate award mechanism should be by way of auction.

2.3.3 In addition to the above, PNMB Payfo recommended for the whole band to be awarded to a single infrastructure provider that will rollout end-to-end infrastructure. Huawei proposed that the assignment of the 2600 MHz band be on a technology neutral basis, and operators should be allowed to deploy 4G and 5G based on ecosystem readiness, traffic migration plan and business strategy.



**ii) Timeline for assignment**

- 2.3.4 Altel, Digi and YTLC agreed with MCMC's proposal that the assignment of 2600 MHz band to be undertaken by the 3<sup>rd</sup> Quarter of 2020.
- 2.3.5 Celcom and Maxis suggested for the SA to start on the 1<sup>st</sup> Quarter of 2020. The assignment can be expedited as no migration is needed and services will not be disrupted.
- 2.3.6 TM/Webe proposed to bring forward the assignment of the 2600 MHz band to the 2<sup>nd</sup> Quarter of 2020 in order to align with their proposal for the 700 MHz band.
- 2.3.7 Redtone suggested for the 700 MHz, 2300 MHz and 2600 MHz bands to be awarded together, by the 4<sup>th</sup> Quarter of 2020. This is to support the bidder's product portfolio planning and to maximise the commercial value of the spectrum.
- 2.3.8 PNMB Payfo, Sacofa and U Mobile suggested for the assignment to be given as soon as possible without specifying any preferred date.
- 2.3.9 Mr. Lee suggested for the award to be made after the decision on the merger between Celcom and Digi.
- 2.3.10 GSMA gave no clear indication but suggested that the proposed timeline could be accelerated considering current incumbency.

**Question 6:** MCMC seeks suggestions on approaches to mitigate interference between FDD and TDD blocks to facilitate efficient spectrum utilisation in the 2600 MHz band.

2.3.11 Altel, Celcom, Digi, Huawei, Maxis, Redtone, TM/Webe, GSMA and U Mobile proposed the following measures:

- a) Separation between Frequency Division Duplex ("FDD") and TDD blocks;
- b) Implementation of filters;
- c) Antenna/site distance separation/coordination; and/or
- d) Restriction on the maximum power of certain channels.

2.3.12 The above measures are proposed based on the standard approaches as documented in several International Telecommunication Union ("ITU") technical reports, Asia-Pacific Telecommunity ("APT") technical reports and European Conference of Postal and Telecommunications Administrations ("CEPT") technical reports.

2.3.13 YTLC did not specifically mention the mitigation measures but highlighted that all operators must adhere to the Standard Radio System Plan ("SRSP") issued by MCMC in order to mitigate the interference.

2.3.14 Additionally, Sacofa proposed that the award of the 2600 MHz band be based on TDD in 3GPP Band 41, instead of the current band arrangement. However, no specific reason was provided for this proposal.

## 2.4 Spectrum Pricing

**Question 7:** MCMC would like to seek views on the appropriate range (per MHz) for SA fees (price component and annual fee component) and the rationale for the proposed fees, for the following spectrum bands:

- i) 700 MHz;
- ii) 2300 MHz; and
- iii) 2600 MHz.

2.4.1 Altel, Asiaspace, Celcom, Digi, GSMA, Maxis, Redtone, Sacofa, TM/Webe, U Mobile and YTLC responded to the spectrum pricing question.

2.4.2 Based on the responses received, generally there are two (2) types of spectrum pricing that were proposed:

- i. Based on AA fee structure; and
- ii. Based on fixed SA fees.

2.4.3 For the first type, Altel, Celcom and YTLC recommended that the SA fees be based on the existing AA fee structure or for comparable fees to be set based on the current annual AA fee, with the following details:

- a) Altel proposed that SA fees should be calculated based on total number of sites to be deployed to achieve target coverage, as most of the operators already have substantial network coverage;
- b) Celcom recommended for the SA fees to be set based on a percentage of the current cost for operators which have deployed base stations in one of the spectrum bands i.e. 50% or up to 100% of current cost. The SA fees also should be set comparable to the current annual AA fee so that the transition from AA to SA would be cost neutral for operators; and
- c) YTLC proposed for MCMC to consider an annual fee equivalent to the existing annual AA fee structure. However, no specific justification was provided.

2.4.4 For the second type which is based on fixed SA fees, Celcom, Maxis, Redtone, TM/Webe and U Mobile outlined their proposals for the SA fees together with the rationale for the proposed fees. Generally, the rationale provided are based on the following:

- a) Benchmarking with prices from global auctions;
- b) Benchmarking of spectrum price with other spectrum bands which have the same propagation properties such as 900 MHz, 1800 MHz and 2100 MHz bands; and
- c) Consideration on a price discount due to several factors such as late release of spectrum or due to licence obligations e.g. service and coverage rollout to achieve the NFCP targets which requires huge capital expenditure.

2.4.5 Based on the above responses, the proposed SA fees (per MHz) as provided by several of the respondents are within the price range indicated below:

Bands	Price Range Per MHz (RM Million)	
	Price Component	Annual Fee Component
700 MHz	4.40 – 16.78	0.30 – 1.47
2300 MHz	0.98 – 12.60	0.12 – 1.20
2600 MHz	0.70 – 12.60	0.14 – 1.20

2.4.6 In addition to the above, some of the respondents also are of the view that spectrum price should be set at a minimum and reasonable level in order to facilitate increased network investments by operators to achieve the NFCP target:

- a) Asiaspace is of the view that MCMC needs to ascertain the current utilisation rate of the awarded spectrum to the mobile operators before deciding on the SA fees i.e. if the mobile operator has a high utilisation rate, then the SA fees should be as minimum as possible for the operator to continue with its roll-out plans;
- b) Digi recommended to set modest spectrum prices for upfront and annual fees, at a level to continue incentivising investments and allowing for financially sustainable operations over the long-term;

- c) Sacofa proposed to set SA fees based on reasonable price such that Cost/MHz/Citizen shall be minimum. The fees should be lower for the higher band as the amount of capital investment needed to cover a similar area is higher than for the lower band. Hence, there should be an incentive built into the fee model; and
- d) U Mobile preferred to set SA fees at a reasonable level to facilitate increased network investments by operators.

2.4.7 Meanwhile, there are other views, as outlined below:

- a) Asiaspace is of the view that MCMC should look at countries like South Korea and Japan, which adopts a pricing mechanism where the spectrum is allocated to mobile operators without the Price Component. However, the mobile operators with huge investments are required to meet coverage and quality targets. Through this, the mobile operators can focus their investments on achieving targets of the NFCP;
- b) Maxis proposed that the annual fee component be waived since operators are already paying large amounts for existing bands;
- c) TM/Webe proposed that the annual fees be waived for the first two years since it coincides with the build out stage of the network utilising the relevant spectrum band and for tax incentives/rebates to be considered; and
- d) YTLC proposed to remove the requirement of the price component or impose a nominal fee so that the operators can use the associated cost for network expansion and improvement of quality of service in line with the NFCP targets. In addition, this is also to allow operator a fair and equitable time to recoup their investments in light of current investments that have been made to rollout their networks in some of the bands.

## 3 Next Steps

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- 3.1 MCMC intends to assess and re-evaluate the initial positions taken on the matters related to this PI due to the diverse opinions in the feedback obtained.
- 3.2 This is to ensure that MCMC is able to develop a comprehensive allocation plan for the 700 MHz, 2300 MHz and 2600 MHz bands after due consideration on the feedback received.
- 3.3 MCMC anticipates that it will arrive at a final position by the end of the year, which will be made public.

/end

