



Suruhanjaya Komunikasi dan Multimedia Malaysia
Malaysian Communications and Multimedia Commission

**PUBLIC INQUIRY ON THE IMPLEMENTATION OF CHERISHED
NUMBER FRAMEWORK**

2 DECEMBER 2019

This Public Inquiry is prepared in fulfilment of Sections 58(2)(b) and 61 of the Communications and Multimedia Act 1998.

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1.0 PREFACE

The objective of this Public Inquiry Paper (“PI Paper”) is to seek views from the industry, other interested parties and members of the public on the implementation of Cherished Number Framework in Malaysia.

Confidential treatment may be requested on any part of the submission that is believed to be proprietary, confidential or commercially sensitive with supporting justification for MCMC’s consideration. In such cases, the submission must be provided in a non-confidential form suitable for publication, with any confidential information redacted as necessary and placed instead in a separate annexe and clearly marked as “CONFIDENTIAL”.

If MCMC grants confidential treatment, it will consider, but will not publicly disclose the information. However, if MCMC rejects the request, the information will be returned and not be considered as part of the submission. Any submission that requests confidential treatment for all, or a substantial part of the submission, will not be accepted by the MCMC.

MCMC invites comments on all proposals put forward in this document and in particular on the specific questions, **by 12.00 noon, 30 January 2020**.

Submissions should be addressed to:

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2.0 ABBREVIATIONS

MCMC	Malaysian Communications and Multimedia Commission
NEAP	Numbering and Electronic Addressing Plan
FPSB	First Price Sealed Bid
MNP	Mobile Number Portability
CMA 1998	Communications and Multimedia Act 1998
Numbering Regulations 2016	Communications and Multimedia (Numbering) Regulations 2016
NSP(I)	Network Service Provider (Individual)

3.0 INTRODUCTION

The Malaysian Communications and Multimedia Commission (“MCMC”) has issued a revised Numbering and Electronic Addressing Plan (“NEAP”) on 17 October 2016. The revision of NEAP allows MCMC to impose numbering assignment fees to the numbering assignment holders following the issuance of the Communications and Multimedia (Numbering) Regulations 2016 (“Numbering Regulations 2016”) which was gazetted on 9 September 2016. This is to ensure that the allocation of scarce national resources such as numbers is managed efficiently and effectively.

MCMC is keen to realise the value of certain numbering assignments which may be considered as special, easily recognisable, memorable or lucky by end users. These numbers are known as “Cherished Numbers”.

Several countries across the world have established methods of realising the economic value of Cherished Numbers. This allows Cherished Numbers to be efficiently assigned to the end users, who regard them highly hence allowing MCMC to realise the economic value of this resource.

The implementation of Cherished Number Framework in Malaysia will require the amendment to the NEAP to enable MCMC to assign Cherished Numbers. In this regard, this Public Inquiry (“PI”) intends to seek views from the industry, interested parties and members of the public on the proposals of implementation of Cherished Number Framework in Malaysia.

4.0 LEGISLATIVE CONTEXT

Under Section 179 of the Communications and Multimedia Act 1998 ("CMA 1998") provides: "*The Commission is vested with the control, planning, administration, management and assignment of the numbering and electronic addressing of network services*".

Under the Numbering Regulations 2016, Cherished Numbers are defined as a set of numbers from reserved numbers determined by MCMC as the Cherished Numbers. Reserved numbers mean any unassigned numbers reserved by the MCMC.

Section 9 of Numbering Regulations 2016 states that the Commission may issue an invitation to invite licensees to apply for the assignment of Cherished Numbers. It also indicates that the fees paid for such assignments are specified by MCMC as set out in the NEAP.

This Public Inquiry is prepared in fulfilment of Sections 58(2)(b) and 61 of the Communications and Multimedia Act 1998, as MCMC considered Cherished Numbers Framework implementation is of significant interest to the public.

5.0 CONSULTANCY ON CHERISHED NUMBER FRAMEWORK

MCMC had on 9 August 2017 appointed Aetha Consulting Limited to undertake a study on the framework for Cherished Numbers. The proposed framework has been supported by international benchmarking of Cherished Number Framework from 16 countries. The possible mechanisms used to assign such numbers was also explored and studied.

The benchmark countries were Australia, Bangladesh, Brunei, China, Hong Kong, India, Lebanon, Pakistan, Qatar, Saudi Arabia, Singapore, Taiwan, Thailand, UAE, USA, and Vietnam. These countries were selected because they met one of the following criteria:

- a) Close geographical proximity with Malaysia;
- b) Similar demographic to Malaysia; or
- c) Well documented policies that provide useful references.

Summary report on the consultant's study and MCMC proposal for the Cherished Number Framework is shown in section 6. The MCMC's recommendations for the Cherished Number Framework implementation are as follows:

- a) Type of Number Where Cherished Numbers Would Be Applicable
 - Benchmarking exercise
 - Type of numbers included in MCMC Cherished Number Framework
- b) Principles of Cherished Numbers
 - Recommendation on the principles of Cherished Numbers
 - Principles to be included in MCMC Cherished Number Framework
- c) Cherished Number Assignment Mechanism
 - Recommended Cherished Numbers assignment mechanism
 - First Price Sealed-Bid ("FPSB")
 - Eligibility of the applicants to participate in FPSB Session
 - Right to use Cherished Numbers

The rationale of proposed amendments to the NEAP is explained in section 7.

6.0 CONSULTANT STUDY AND RECOMMENDATIONS

6.1 Type of Numbers Where Cherished Numbers Would Be Applicable

6.1.1 Benchmarking Exercise

6.1.1.1 Based on the 16 benchmark countries, the types of numbers which were found to include Cherished Numbers globally, are as follows:

- a) Mobile Numbers;
- b) Geographic Numbers;
- c) Paging Numbers;
- d) Special Service Numbers (SSN) – includes premium service numbers and toll free numbers (1800 and 1300 numbers); and
- e) Short Codes – include short access codes and common inter-carrier short codes such as 15454 or 62333.

6.1.1.2 The benchmarking studies reveal several alternative approaches to awarding Cherished Numbers. Among the methods are as follows:

a) Australia

Cherished Numbers rights in Australia are sold directly by the regulator to end users. Numbers were originally auctioned every two weeks, with end users selecting which numbers should be included in the auction. However, since 2015 all numbers are now available for direct purchase on an online site, a process set in various tiers depending on scarcity of the Cherished Numbers.

b) Hong Kong

Under the Special Number Agreement (SNA) proposed in 2002, Cherished Numbers would be split into primary and secondary numbers, based on how valuable they are. Primary numbers would be assigned directly to the public via auction. Secondary numbers would be assigned in blocks

to operators, also via auction. In order to allocate and assign the Cherished Numbers, the regulator has previously reserve certain blocks as the Special Number Blocks. However, in 2015, the regulator has proposed to de-reserve the Special Number Blocks as the proposal for SNA has not been commonly agreed by the industry. On 25 January 2018, the regulator has announced the decision to de-reserve the Special Number Blocks as part of the implementation of measures for more efficient utilisation of numbers.

c) Singapore

Number blocks are assigned to operators sequentially, with approximately 100 blocks in each process. All blocks have the same starting price, unless an operator requests an out-of-sequence block to be auctioned, which then has a much higher starting price. Blocks which receive no bids at auction can later be assigned sequentially by paying the reserve price.

d) Taiwan

All number resources are allocated to operators free of charge, who may then sell Cherished Numbers to end users by any means. However, before assignment, operators must declare which numbers they intend to sell as cherished. The regulator then receives 70% of the revenue from all sales of Cherished Numbers by operators.

e) Thailand

Cherished Numbers are auctioned by the regulator directly to end users. The auctions occur infrequently and include only the highest value Cherished Numbers. Reserve prices are based on the relative quality of the Cherished Numbers.

6.1.1.3 Table 1 shows the comparison made between the 16 countries, focusing on the following:

- a) Whether the country has a Cherished Number Framework implemented by the regulator;
- b) The method of assignment mechanism;
- c) Types of Cherished Numbers. This refers to numbers generally sought after by the consumers in a particular country. It does not necessarily need to be numbers which are recognised as Cherished Numbers by the regulator.

No	Country	Cherished Number Framework by Regulator	Assignment Mechanisms by Regulator / Third Party	Types of Cherished Numbers
1.	Australia	✓	Regulator assigns to end users	Freephone/ Toll Free
2.	Bangladesh	X	Third party	Mobile
3.	Brunei	✓	Regulator assigns to operators	Mobile, Geographic, Paging/Data service and Freephone/Toll Free
4.	China	X	Third party	Mobile
5	Hong Kong	✓ (Not implemented as there is no commonly agreed scheme among service providers regarding the framework implementation)	<i>(Based on Special Number Arrangement proposed by the Regulator in 2002)</i> High valuable numbers to be assigned to end users (auction) Less valuable numbers to be assigned to operators (auction)	<i>(Based on Special Number Arrangement proposed by the Regulator in 2002)</i> Mobile, Geographic, Paging, Freephone/ Toll Free and Short codes
6	India	X	Third party	Mobile
7	Lebanon	✓	Regulator assigns to operators	Mobile and Geographic
8	Pakistan	X	Operators sell Cherished Numbers to end users	Mobile

No	Country	Cherished Number Framework by Regulator	Assignment Mechanisms by Regulator / Third Party	Types of Cherished Numbers
9	Qatar	✓	Regulator assigns to operators	Mobile, Geographic and Freephone/Toll Free
10	Saudi Arabia	✓	Regulator assigns to operators	Mobile, Short Codes
11	Singapore	✓	Regulator assigns to operators	Mobile, Geographic, Paging, Freephone/Toll Free and Short Codes
12	Taiwan	✓	Regulator assigns to operators (revenue share)	Mobile, Geographic, Paging, Freephone/Toll Free and Short Codes
13	Thailand	✓	Regulator assigns to end users (auction)	Mobile
14	UAE	x	Third party	Mobile and Freephone/Toll Free
15	USA	✓	Official third party (recognised by the regulator) assigns to end users	Freephone/Toll Free only
16	Vietnam	x	Operators assigned to end users (fixed prices)	Mobile

Table 1: International Benchmarks

6.1.1.4 The consultant used these benchmarks to assist in identifying which approaches that is suitable for Malaysia if implemented.

Type of Numbers	Number of Countries
Mobile	14
Geographic	6
Paging	4
SSN	8
Short Codes	4

Table 2: Type of Numbers Considered as Cherished Numbers by Number of Countries

6.1.1.5 Table 2 shows that 14 out of 16 countries considered **Mobile Numbers** to be suitable for classification as Cherished Numbers. SSN is also quite popular, as half of the countries considered it to be Cherished Numbers.

6.1.1.6 USA and Australia only recognised Freephone/Toll Free services as Cherished Numbers under their framework.

6.1.2 Type of Numbers Included in MCMC Cherished Number Framework

6.1.2.1 Under the NEAP, the numbers available for use in connection with network and applications services in Malaysia are categorised as follows:

- a) Geographic Numbers;
 - Fixed telephony and data services or other similar services.
- b) Non-Geographic Numbers;
 - Short Numbers (Short Codes, Special Service Number prefixes & Access Code);
 - Special Service Numbers; and
 - Mobile Numbers (including numbers having a nomadic characteristic).
- c) Other Numbers
 - Data Network Numbers; Telex Numbers; International Public Telecommunications Numbers; ATM network Addresses; Signalling Point Codes; Routing Numbers.

- 6.1.2.2 MCMC proposed to introduce Cherished Number categorisation for **Mobile Numbers** since it is nomadic and can be maintained by end users. The implementation of Mobile Number Portability (“MNP”) also add more value to the Cherished Numbers.

Question 1:

Based on the findings from the benchmarking exercise, MCMC is considering to introduce Cherished Number categorisation for Mobile Numbers. Please provide your views or suggestions on other type of numbers which is suitable for Cherished Number categorisation.

6.2 Principles of Cherished Numbers

6.2.1 Recommendation on the Principles of Cherished Numbers

- 6.2.1.1 The principles of Cherished Numbers refer to the features which determine whether any given number should be given cherished status.
- 6.2.1.2 Cherished Number is a number which is more desirable to end users, due to the specific digits it contains. The Cherished Number is also used as a marketing tool by companies to make their business more prominent to consumers. The benchmarking exercise quantifies this interest by studying the patterns and features behind numbers, which can subsequently be grouped into categories.
- 6.2.1.3 These features are divided into five categories as follows:
- a) **repeated digits** mean a run of consecutive digits being the same number, e.g. 999999, 00000;
 - b) **sequences** refer to a run of digits in ascending or descending order, e.g. 12345, 98765;
 - c) **groups** mean a group of digits which form recognisable or memorable patterns, e.g. 245 245, 193391;
 - d) **lucky numbers** are digits which are considered lucky in that particular country’s culture, e.g. 8 in China; and

- e) **phonewords** refer to a group of digits which can be remembered by entering certain words or phrases into a phone keypad, e.g. TAXI represents 8294, PIZZA represents 74992.

No.	Country	Repeated Digits	Sequences	Groups	Lucky Numbers	Phone words
1.	Australia	✓	✓	✓	✗	✓
2.	Bangladesh	✓	✓	✓	✗	✗
3.	Brunei	✓	✓	✓	✓	✗
4.	China	✓	✓	✓	✓	✗
5.	Hong Kong	✓	✓	✓	✓	✗
6.	India	✓	✓	✓	✗	✗
7.	Lebanon	✓	✓	✓	✗	✗
8.	Pakistan	✓	✓	✓	✗	✗
9.	Qatar	✓	✓	✓	✗	✗
10.	Saudi Arabia	✓	✓	✓	✗	✗
11.	Singapore	✓	✓	✓	✓	✗
12.	Taiwan	✓	✓	✓	✓	✗
13.	Thailand	✓	✗	✓	✓	✗
14.	UAE	✓	✓	✓	✗	✗
15.	USA	✓	✓	✓	✗	✓
16.	Vietnam	✓	✓	✓	✓	✗
Total		16	15	16	7	2

Table 3: Principles of Cherished Numbers by Countries

6.2.1.4 Based on Table 3, repeated digits, groups and sequences are the most common feature of a Cherished Number and are recognised by all countries. Lucky numbers are prevalent in countries which have a high Chinese population, and Phonewords are only given cherished status in Australia and the USA.

a) Repeated digits

Three main factors which determine the value of a Cherished Number containing repeated digits.

- **Length of the run:** The longer run of repeated digits would be more valuable to an end user than one with a short run. A number with a longer run will be more memorable and attractive to an end user. A number with the longest run of repeated digits is the most

valuable feature of a Cherished Number. In Taiwan (098**9999999**) and Thailand (096**6666666**) are very valuable.

- **Position of the run number within the number:** In most cases, the run is most valuable at the end of the number. The run number in the middle of a number makes it less valuable unless the number contains another cherished feature. For instance, in Bangladesh, number 017308**44444**, 01701**44444**1, 017057**00000** and 01796**00000**8 are very valuable.
- **The total number of different digits which appear in the number:** The fewer different digits a number contains, the more valuable it will be. In the UAE, the numbers 0507570000 and 0504068888 both end in a run of four repeated digits. However, the former contains just three different digits (0,5 and 7) whereas the latter contains five different digits (0,4,5,6 and 8). As a result, the first number is approximately four times the price of the second.

b) Sequences

The most valuable in terms of Cherished Numbers is a run of consecutive digits. This can be ascending or descending, such as in the number 84347**12345** and 93612**54321** which are available in India. Other sequences which are deemed to be cherished include those which skip every other digit, as shown in the numbers 888 344 **2468** and 888 841 **3579** available in the USA.

c) Groups

Group of numbers refers to Repeat Digits (e.g. 111 222), Repeat Patterns (e.g. 11 22 33) and Mirrors (e.g. 1221, 1234 4321). There are very few examples of Cherished Numbers containing that format from the benchmark countries.

d) Lucky Numbers

Number eight is very valuable in countries with a high Chinese population such as Hong Kong, Singapore, Taiwan,

Thailand, Vietnam and China. If a Cherished Number consists of number eight, the value of the number will increase.

The study found that Vietnam is the only country where the number nine had an effect on the price of a number.

e) Phonewords

In Australia and the USA, there are cases where a number is cherished based on the numerals spell out of a certain word or phrase on a phone keypad. For example, the number 844 6538754 can be written as 844 6JETSKI and 1300 749928 as 1300 PIZZA8 These number can be very valuable to businesses as a marketing tool, making their phone number more prominent to consumers.

6.2.2 Principles to be Included in MCMC Cherished Number Framework

6.2.2.1 The benchmarking exercise has enabled MCMC to look into all possible patterns or arrangements which can make a number more attractive. As a result, the principles which are used for valuation of Cherished Numbers is as shown in table 4:

No.	Principles	Type of Pattern	Pattern Style	Example
1.	Repeated digits	Repeated single digits	01YZXXX AAAA	0117638 1111
		Repeated double digits	01YZXXX ABAB	0117638 1212
		Repeated triple digits	01YZX ABCABC	01176 149149
		Repeated quadruple digits	01Y ABCDABCD	011 14091409
2.	Maximum digit occurrences	Multiple occurrences of common digit	N/A	01176513111
3.	End pattern length	The pattern occurs at the end of a number	N/A	01176513 111
4.	Digit non-occurrences	Number of digits which do not occur	N/A	01171017701 Digits which do not occur: 2,3,4,5,6,8,9
5.	Increasing sequences	Increment +1	01YZX ABCXXX	01176 123 149
		Increment +2	01YZX ACEXXX	01176 135 649

No.	Principles	Type of Pattern	Pattern Style	Example
		Increment +01	01YZX NANBNC	01176 121314
		Increment +10	01YZX ANBNCN	01176 112131
		Increment +11	01YZX APBQCR	01176 112233
		Increment +20	01YZX ANCNEN	01176 113151
6.	Decreasing sequences	Increment -1	01YZX CBAXXX	01176 321149
		Increment -2	01YZX ECAXXX	01176 531149
		Increment -01	01YZX NCNBNA	01176 171615
		Increment -10	01YZX CNBNA	01176 312111
		Increment -11	01YZX CRBQAP	01176 332211
		Increment -20	01YZX ENCNAN	01176 513111
7.	Lucky digit occurrences	Occurrences of '8'	N/A	011 81881281
		Occurrences of '9'	N/A	011 91991291
8.	Overall pattern occurrences	The total number of digits which are: i. repeated digits ii. increasing sequences and iii. decreasing sequences	N/A	01177017701

Table 4: Principles of Cherished Numbers**Question 2:**

MCMC proposes to have the principles of Cherished Numbers as per Table 4. MCMC welcomes any feedback and views on other principles that would be more suitable to be used in valuing Cherished Numbers in Malaysia.

6.3 Cherished Numbers Assignment Mechanism**6.3.1 Recommended Cherished Numbers Assignment Mechanism**

- 6.3.1.1 The benchmarking exercise has recommended five (5) approaches in awarding Cherished Numbers, these included:
- Assigning blocks of Cherished Numbers to operators through bidding;
 - Assigning blocks of Cherished Numbers to operators at a fixed cost;
 - Giving blocks of Cherished Numbers to operators and taking a share of any revenues they generate from those numbers;

- d) Assigning individual numbers to end users through bidding;
and
- e) Assigning numbers to end users for a fixed fee.

6.3.1.2 The two (2) approaches which are being considered by MCMC are as follows:

First Approach: Assignment to Service Provider through Bidding

- a) Number blocks containing Cherished Numbers are assigned to service providers through bidding. This is permitted with the existing Numbering Regulations 2016.
- b) This would be the most effective to implement, as it is allowed under the existing Numbering Regulations 2016. Additionally, since the approach is assigning a number in blocks, there is no requirement for any changes to the Numbering Management System (“NUMSYS”).

Second Approach: Assignment to End Users through Bidding

- a) High value numbers are assigned directly to end users through bidding process, while the remaining numbers being awarded in blocks to service providers.
- b) The Numbering Regulations 2016 need to be amended to support this approach. The current Numbering Regulations 2016 specifies that the invitation for an assignment of Cherished Numbers is made to licensees. Therefore, amendment is needed to allow MCMC to invite end users to apply for an assignment of Cherished Numbers.

6.3.1.3 MCMC proposes to use the first approach, which is to assign the Cherished Numbers to service providers through bidding as the mechanism for awarding Cherished Numbers in Malaysia.

Question 3:

MCMC proposes to assign Cherished Numbers to service providers through bidding exercise. Please provide your views or suggestions on any other method to be implemented in Malaysia in assigning Cherished Numbers.

6.3.2 First Price Sealed-Bid (“FPSB”)

6.3.2.1 MCMC proposes for a close bidding exercise for the assignment of Cherished Numbers to the service providers. This bidding exercise called the First Price Sealed-Bid (“FPSB”), is a close bidding where the eligible licensees will submit their sealed-bids in envelopes with the bid price into a bidding box on a day specified by the MCMC. No participants will know the bid price of other participants who participate in the FPSB process. The highest bidder will be declared the winner.

6.3.2.2 This method is cost-effective as there is no requirement to appoint a third party to conduct a bidding session for Cherished Number assignments.

Question 4:

MCMC welcomes any views or suggestion regarding MCMC’s proposal to conduct close bidding exercise to service providers. MCMC would also like to seek your views on the assignment of Cherished Numbers directly to end users (through bidding process).

You may also provide your views or suggestions on the alternative Cherished Numbers assignment mechanism.

6.3.3 Eligibility of the Applicants to Participate in FPSB Session

6.3.3.1 The eligibility of applicants to participate in FPSB session for the assignment of Cherished Numbers shall be as follows:
a) the applicant is NSP(I) licence holder which holds valid numbering assignments assigned by MCMC directly to the

licensee, for the provisioning of Public Cellular Service (“PCS”); and

- b) the NSP(I) licensee shall not be in breach of any provisions under the CMA 1998, the subsidiary legislation issued under the CMA 1998, or any other instruments, plans, guidelines or regulatory policies made or issued under the CMA 1998.

6.3.3.2 Invitation for FPSB

MCMC will issue an invitation to participate in FPSB session for the assignment of Cherished Numbers to all eligible NSP(I) licensees at least forty-five (45) days prior to the FPSB session. An application form called FPSB form would be included in the invitation letter for the Cherished Numbers bidding session.

6.3.3.3 FPSB session

The interested NSP(I) licensee is required to complete the FPSB form and submits to MCMC with the bid price for an assignment of Cherished Numbers. The complete FPSB form shall be accompanied by a non-refundable of the application fee for each Cherished Numbers block. The FPSB form must be sealed in envelope(s) and deposited in the bidding box on the date and time specified by MCMC.

6.3.3.4 Selection of winner

The selection of winner will be as follows:

- a) MCMC will list the bid price submitted by all participants. The successful applicant is based on the highest price bidder for the assignment of Cherished Numbers.
- b) The winner will be required to pay the assignment fee(s) and submit the details of the Cherished Numbers won in the NUMSYS.

6.3.3.5 Proposed process flow

The proposed process flow for the assignment of Cherished Numbers is shown in Chart 1:

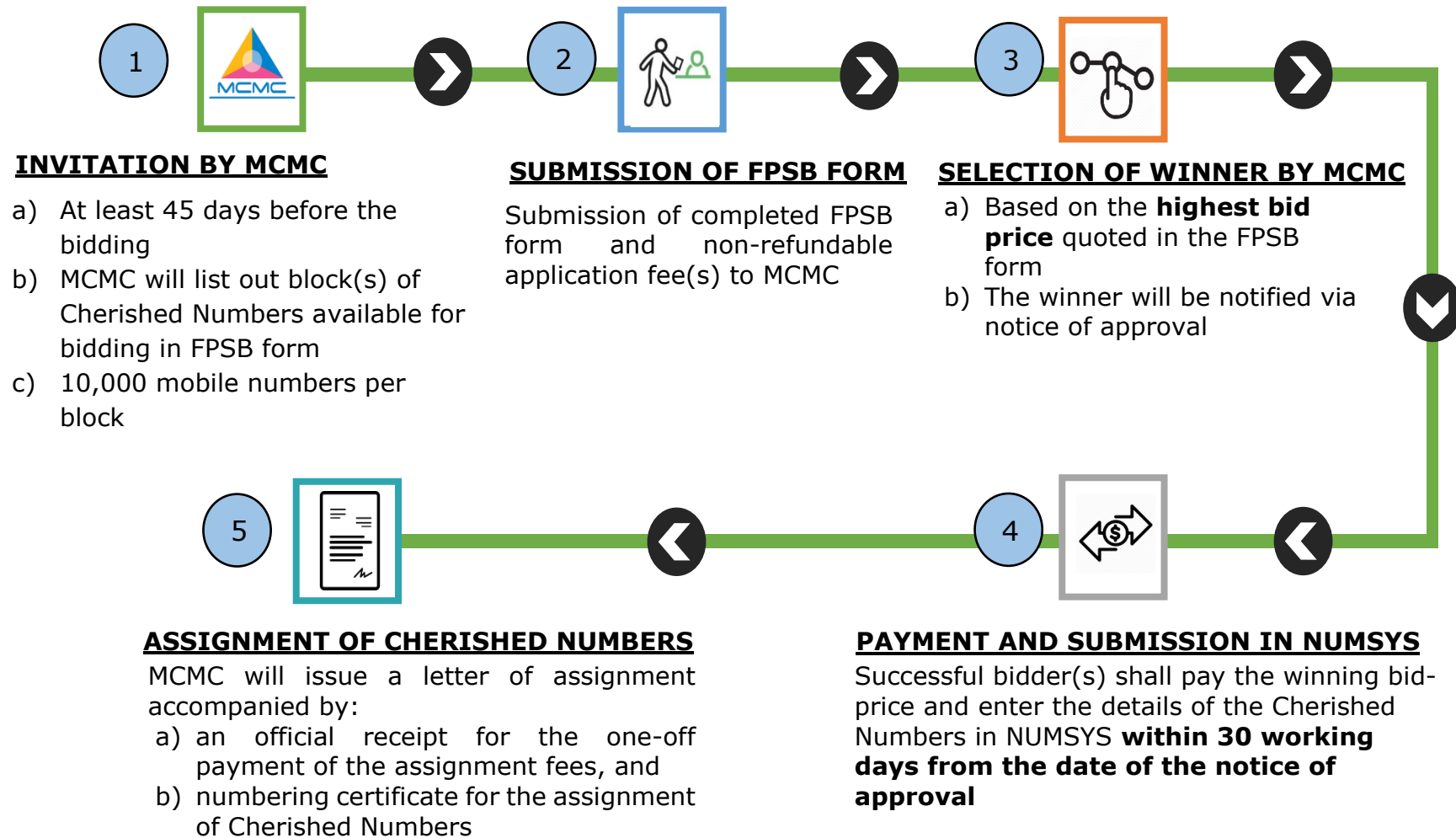


Chart 1: Proposed Process Flow for Cherished Number Assignments via FPSB

Question 5:

MCMC welcomes any feedback or views on the eligibility criteria set by MCMC to participate in the bidding exercise. MCMC is also open for any views or improvement which can be made on the current process flow for the assignment of Cherished Numbers.

6.3.4 Right to Use Cherished Numbers

- 6.3.4.1 Duration of right to use by end user
MCMC proposes that Cherished Numbers issued to end user by assignment holders with indefinite duration, subject to the number continues to be used and active.
- 6.3.4.2 Resale of numbers by end user
MCMC would like to recommend to allow the resale of Cherished Numbers. By allowing transfer of Cherished Numbers, it facilitates those Cherished Number rights holder leaving Malaysia indefinitely or demise of a, it is then possible to transfer the number to someone else.
- 6.3.4.3 Return of numbers by assignment holder
For Cherished Numbers returned to MCMC, assignment holder will not be entitled to any refund of fees paid to secure the rights to the number.

Question 6:

MCMC welcomes any feedback and views on the following:

- a) MCMC's proposal to grant an indefinite duration of Cherished Numbers.
- b) MCMC's proposal to allow reselling or trading of Cherished Numbers between end users.

MCMC would also like to seek views and suggestion on the method which can be used to prevent or curb illegal transactions of numbers by third party seller.

7.0 KEY CHANGES IN THE NEAP

7.1 Proposed Amendments to the Numbering and Electronic Addressing Plan (NEAP)

7.1.1 MCMC will take into consideration feedback, suggestions and views received from the public in amending the NEAP.

7.1.2 MCMC proposes to amend the NEAP to incorporate the new Cherished Number Framework as per Table 5.

Question 7:

MCMC welcomes any feedback and views on the rationale for the NEAP amendments.

Note: Changes are shown with underline while any deletion is shown with strikethrough

Subject	Amendment/Modification/ New Provision	Rationale
Assignment of Numbers – Cherished Numbers	New Provision under 3.1.3.3 <u>3.1.3.3 Cherished Numbers means any Non Geographic Number(s) and/or block(s) from reserved numbers determined by the Commission as Cherished Numbers.</u>	Non Geographic Number(s) here mainly refers to mobile numbers as the international benchmarking exercise done by the consultant shows that 14 out of the 16 countries studied consider mobile numbers to be a suitable number type for the implementation of a Cherished Number concept. The use of Mobile Numbers is widespread and not tied to a particular location, hence making this category of numbers attractive to end users.

Subject	Amendment/Modification/ New Provision	Rationale
<p>Application for an Assignment of Cherished Numbers</p>	<p>New provisions in NEAP under subsection 3.3.1</p> <p><u>3.3.1 The eligibility of the applicants to participate in any mechanism for the assignment of Cherished Numbers shall be as follows:</u></p> <p><u>3.3.1.1 The applicant is a NSP(I) licensee(s) which holds a valid numbering assignment(s) assigned by the Commission directly to the licensee(s), for the provisioning of Public Cellular Services; and</u></p> <p><u>3.3.1.2 The NSP(I) licensee shall not be in breach of any provisions under the Act, the subsidiary legislation issued under the Act or any other instruments, plan, guidelines or regulatory policies made or issued under the Act.</u></p>	<p>The approach is for assignment of the Cherished Number blocks to service providers through bidding process to be permitted in line with Regulation 9 of the Numbering Regulations 2016 - the Commission may invite a licensee to apply for Cherished Numbers.</p>
<p>Application for an Assignment of Cherished Numbers</p>	<p>New provisions in NEAP under subsection 3.3.2</p> <p><u>3.3.2 The following principles are adopted when deciding whether a number is a Cherished Number:</u></p> <p><u>3.3.2.1 Repeated digits;</u></p> <p><u>3.3.2.2 Increasing sequences;</u></p> <p><u>3.3.2.3 Decreasing sequences;</u></p> <p><u>3.3.2.4 Maximum digit occurrences;</u></p> <p><u>3.3.2.5 Lucky digit occurrences;</u></p> <p><u>3.3.2.6 End pattern length;</u></p> <p><u>3.3.2.7 Digit non-occurrences; and</u></p> <p><u>3.3.2.8 Overall pattern occurrences</u></p>	<p>These principles were developed to identify, rank and value of Cherished Numbers. These principles were identified by the consultant appointed by MCMC based on the international benchmarking exercise and a study of the value assigned to numbers by unofficial third party sellers in Malaysia.</p>

Subject	Amendment/Modification/ New Provision	Rationale
Application for an Assignment of Cherished Numbers	<p>New provisions in NEAP under subsection 3.3.3</p> <p><u>3.3.3 If the Commission decides to assign Cherished Numbers by way of auction, tender or any other means, the Commission may issue and publish guidelines in respect of the assignment of Cherished Numbers, as may be deemed necessary by the Commission.</u></p>	<p>The development of the guidelines is in accordance to Regulation 21(1) of the Numbering Regulations 2016 where “an assignment holder shall not impose any payment for the issuance of any numbers to the end users, whether for an administrative fee or otherwise, except in accordance with any guidelines made by the Commission”. The guidelines will also guide Cherished Numbers applicant in the process to bid for Cherished Numbers.</p>
Evaluating an application for the assignment of numbers	<p>Modification on subsection 3.4.1.6</p> <p>3.4.1.6 assignments must be an efficient use of the resource and successful applicants must be able to use the assigned numbers within the time stipulated in the conditions of assignment. In the absence of such a condition, the default period for use of the assigned numbers is twelve (12) months from the date of the assignment, <u>except in the case of Cherished Numbers.</u></p>	<p>This is to allow assignment holders of Cherished Numbers to plan when and how to market and impose payment for Cherished Numbers to end users. Not imposing restrictions in regard to numbers utilisation will make the assignment Cherished Numbers to become more attractive.</p>
Evaluating an application for the assignment of numbers	<p>Modification on subsection 3.4.5</p> <p>3.4.5 In the event of a competing application for the assignment of the same numbers or number blocks, the Commission shall give primacy to the “first come first served” principle, <u>with the exception of Cherished Numbers, where the Commission may assign the numbers or number blocks by an</u></p>	<p>For Cherished Numbers, a First Price Sealed-Bid (FPSB) mechanism will be implemented. Using this mechanism, eligible licensees will submit sealed-bids in envelopes with the bid price into a bidding box on a day specified by the MCMC. No participants will know the bid price of other participants who</p>

Subject	Amendment/Modification/ New Provision	Rationale
	<u>alternative mechanism (e.g. an auction), at a date and time chosen by the Commission.</u>	participate in the FPSB process. The highest bidder will be declared the winner of the FPSB process.
Form of assignment	Modification on subsection 3.6.2 3.6.2 The approval of any application or the grant of an assignment shall not be construed as conferring on any person any proprietary right over the numbers being applied for or assigned, as the case may be. <u>This also applies to Cherished Numbers.</u>	The end user acquires the right to use Cherished Numbers in perpetuity, provided he or she ensures that the said number is always in continuous use (end user shall subscribe to a network service provider in Malaysia for Public Cellular Services). This 'right to use' shall not be interpreted in any manner whatsoever, that the end user is granted with the ownership of the said number.
Conditions for Cherished Number Assignments	New provisions in NEAP under subsection 3.8.3 and 3.8.3.1 3.8.3 <u>The following conditions shall apply to all Cherished Numbers assigned by the Commission under this Plan:</u>	This would avoid any secondary market where Cherished Numbers is being traded between the assignment holders.
	<u>3.8.3.1 The assignment holder shall not charge, sell, auction, trade or otherwise transfer Cherished Number assignments to other assignment holder.</u>	

Subject	Amendment/Modification/ New Provision	Rationale
Conditions for Cherished Number Assignments	<p>New provisions in NEAP under subsection 3.8.3.2</p> <p><u>3.8.3.2 The assignment holder for Cherished Number assignments is permitted to charge, sell, auction or trade the right to use the Cherished Numbers in perpetuity issued to end-user(s).</u></p>	<p>Assignment holder for Cherished Numbers will be able to charge the end user(s) for the issuance of Cherished Numbers. This would be the main incentive for an eligible assignment holder to bid for and acquire a Cherished Number assignment from MCMC at a premium price.</p>
Conditions for Cherished Number Assignments	<p>New provisions in NEAP under subsection 3.8.3.3</p> <p><u>3.8.3.3 The assignment holder is required to ensure that the end-user(s) who acquire the right to use a Cherished Number(s) in perpetuity shall ensure that the said numbers are always in continuous use (end-user shall subscribe to a network service provider in Malaysia for Public Cellular Services). It shall be a duty of the assignment holder to ensure that the end-user uses the said number lawfully and that the number is in use at all times (end-user subscribes to a network service provider in Malaysia for Public Cellular Services).</u></p>	<p>End user(s) shall have the right to use a Cherished Number in perpetuity, provided always the said number is used lawfully, and in service in Malaysia. The end user must be at all times registered with a service provider licensed under the Communications and Multimedia Act 1998, for the provisioning of public cellular services in Malaysia. This is to ensure that the number is always registered in the network and remains traceable.</p>
Conditions for Cherished Number Assignments	<p>New provisions in NEAP under subsection 3.8.3.4</p> <p><u>3.8.3.4 The assignment holder shall ensure that the transfer of Cherished Numbers between end-user(s) be within the same network service provider or applications service provider for the purposes of said transfer.</u></p>	<p>It is to ensure the transfer of numbers between end user(s) is always recorded by the service provider. This provision is similar as for normal mobile numbers.</p>

Subject	Amendment/Modification/ New Provision	Rationale
Conditions for Cherished Number Assignments	<p>New provisions in NEAP under subsection 3.8.3.5</p> <p><u>3.8.3.5 The assignment holder shall ensure that the end-user(s) of Cherished Numbers have the right to port-out via mobile number portability to other network service providers. For end-user(s) who have ported out and failed to comply with subsection 3.8.3.3, the said Cherished Numbers shall return to the original assignment holder.</u></p>	<p>All PCS subscribers will have the right to mobile number portability (MNP) service. This applies to the holders of Cherished Numbers and normal mobile numbers.</p>
Conditions for Cherished Number Assignments	<p>New provisions in NEAP under subsection 3.8.3.6</p> <p><u>3.8.3.6 Cherished Numbers that have been issued shall not be suspended or cancelled by the assignment holder except:</u></p> <p><u>(a) where the end-user(s) has not complied with the conditions of use of the issued numbers as may be specified by the assignment holder;</u></p> <p><u>(b) in compliance with any decision made by the Commission; or</u></p> <p><u>(c) upon the end-user's request</u></p>	<p>Any suspension or cancellation made by assignment holder needs to adhere to one of these three reasons. This provision is similar to the one exist for normal numbering assignments.</p>
Conditions for Cherished Number Assignments	<p>New provisions in NEAP under subsection 3.8.3.7</p> <p><u>3.8.3.7 Any Cherished Numbers which have been cancelled by the assignment holder after the number has been used in respect of any network or applications service shall not be re-issued by the assignment holder for at least six (6) months from the date of the cancellation. This six (6) month period is referred to as the cooling-off period, whereby the number</u></p>	<p>The cooling-off period is imposed to allow the time for the disassociation between a subscriber and a given number before the number is issued to a new subscriber.</p>

Subject	Amendment/Modification/ New Provision	Rationale
	<p><u>shall be placed in quarantine and cannot be re-issued to any person during the six (6) month quarantine period.</u></p>	
<p>Conditions for Cherished Number Assignments</p>	<p>New provisions in NEAP under subsection 3.8.3.8</p> <p><u>3.8.3.8 The assignment holder shall keep and maintain records of Cherished Numbers issued to its end-user(s) and the records shall contain the following matters:</u></p> <ul style="list-style-type: none"> <u>a) the details of the numbers issued;</u> <u>b) the name of the end-user with the numbers issued;</u> <u>c) the current addresses of the end-user; and</u> <u>d) any other details as may be determined by the Commission.</u> 	<p>Similar to the normal numbering assignments, the assignment holder needs to obtain record of the end user for the issued numbering assignments. This is important in the case there is any complaint or issue related to the numbering assignments.</p>
<p>Conditions for Cherished Number Assignments</p>	<p>New provisions in NEAP under subsection 3.8.3.9</p> <p><u>3.8.3.9 There is no utilisation period required for Cherished Number assignments specified by the Commission.</u></p>	<p>This allows assignment holder of Cherished Number assignments to has freedom in marketing Cherished Number assignments to their targeted users.</p>

Subject	Amendment/Modification/ New Provision	Rationale
<p>Conditions for Cherished Number Assignments</p>	<p>New provisions in NEAP under subsection 3.8.3.10</p> <p><u>3.8.3.10 The assignment holder of Cherished Numbers shall submit a usage report in a format specified by the Commission within thirty (30) Working Days from 31 December of every calendar year. The following information shall be set out in the report:</u></p> <ul style="list-style-type: none"> <u>a) the current use in percentage terms of all assignments issued;</u> <u>b) numbers currently being quarantined from being re-assigned;</u> <u>c) numbers ported (if applicable);</u> <u>d) the prices charged by the assignment holder(s) for numbers designated as platinum, gold, silver and bronze in a particular Cherished Number Blocks(s) assigned by the Commission; and/or</u> <u>e) any other information as may be specified by the Commission.</u> 	<p>The utilisation report which includes information on the price will enable MCMC to assess whether the price charged to the assignment holder is worthwhile compared to assigning this resource directly to end users. MCMC can use this information to reflect on the needs to consider a new reserve price for Cherished Numbers depending on the market demands.</p>

Subject	Amendment/Modification/ New Provision	Rationale
Conditions for Cherished Number Assignments	<p>New provision in NEAP under subsection 3.8.3.11</p> <p><u>3.8.3.11 Where the revision, variation or revocation of this Plan results in the re-numbering of numbers which have been used in relation to a network service or applications service, the Commission may, where applicable, prepare a migration plan setting out the procedures and timetable for the changes due to the revision, variation or revocation. It is pertinent for the assignment holder of Cherished Numbers to note that such migration plans may result in the modification of numbers, number patterns and structures for Cherished Numbers.</u></p>	<p>This provision is to ensure MCMC is well protected and is able to make changes to any numbering structure, including that of Cherished Numbers, if necessary.</p>
Conditions for Cherished Number Assignments	<p>New provisions in NEAP under subsection 3.8.3.12</p> <p><u>3.8.3.12 The assignment holder shall also comply with the standard conditions for assignments mentioned in Part B, Section I, subsection 3.8.1 of this Plan.</u></p>	<p>The assignment holder of Cherished Number assignments should also comply with Standard Conditions for Assignments on top of the Standard Conditions for Cherished Number Assignments.</p>
Application for Assignment of Additional Numbers	<p>Modification on subsection 3.11.1</p> <p><u>3.11.1 The applicant shall be eligible to apply for an assignment of additional numbers upon achieving seventy percent (70%) utilisation of the existing assignment of all numbers. This is not applicable in the case of application(s) for the assignment of Cherished Numbers.</u></p>	<p>This is to allow all eligible applicant(s) to apply for the assignment of Cherished Numbers. It is not prudent to tie utilisation of normal numbers with the applicant's eligibility to apply for Cherished Numbers. These are two different types of numbers, whereby a normal number is a "need" whilst a Cherished Number is a "want"</p>

Subject	Amendment/Modification/ New Provision	Rationale
<p>Transfer of Numbers Between End-Users</p>	<p>Modification on subsection 4.1.3.1</p> <p>4.1.3 The assignment holder may refuse to effect the transfer if, in its reasonable opinion, the transfer request:</p> <p>4.1.3.1 is a part of an act of charging, selling, auctioning or trading the right to use a number issued to the requesting end-user, <u>unless the number has been explicitly designated by the Commission as a Cherished Number; or</u></p> <p>4.1.3.2 cannot be practicably undertaken due to technical impediments which cannot be reasonably resolved.</p>	<p>This is to allow end users to trade and re-sell their right to use the Cherished Numbers.</p> <p>By allowing the resale of Cherished Numbers, end users will be willing to pay a better sum of money to acquire the right to use such numbers.</p>

Subject	Amendment/Modification/ New Provision	Rationale												
Charges for Numbering Assignments and Electronic Addressing Provisioning	New table on subsection 14.2.4.3 <table border="1"> <thead> <tr> <th colspan="3"><u>FEE(S) FOR ASSIGNMENT OF CHERISHED NUMBERS</u></th> </tr> <tr> <th><u>No.</u></th> <th><u>Types of fee(s)</u></th> <th><u>Amount of fee(s) (RM)</u></th> </tr> </thead> <tbody> <tr> <td>1.</td> <td>Application fee(s)</td> <td>3,500.00 per application</td> </tr> <tr> <td>2.</td> <td>Assignment fee(s) (One-off Payment)</td> <td>Fees are determined from an auction/tender or any other mechanism utilised by the Commission for this purpose. Fee(s) or bid price must be paid within the stipulated time frame specified by the Commission</td> </tr> </tbody> </table>	<u>FEE(S) FOR ASSIGNMENT OF CHERISHED NUMBERS</u>			<u>No.</u>	<u>Types of fee(s)</u>	<u>Amount of fee(s) (RM)</u>	1.	Application fee(s)	3,500.00 per application	2.	Assignment fee(s) (One-off Payment)	Fees are determined from an auction/tender or any other mechanism utilised by the Commission for this purpose. Fee(s) or bid price must be paid within the stipulated time frame specified by the Commission	<p><u>Fee(s) payable to the Commission by assignment holders for Cherished Numbers</u></p> <p>A new charge for the fees to be levied for Cherished Numbers has been introduced for clarity. A one-off assignment fee shall be charged and it will be based on the winning bid amount.</p>
<u>FEE(S) FOR ASSIGNMENT OF CHERISHED NUMBERS</u>														
<u>No.</u>	<u>Types of fee(s)</u>	<u>Amount of fee(s) (RM)</u>												
1.	Application fee(s)	3,500.00 per application												
2.	Assignment fee(s) (One-off Payment)	Fees are determined from an auction/tender or any other mechanism utilised by the Commission for this purpose. Fee(s) or bid price must be paid within the stipulated time frame specified by the Commission												

Table 5: Proposes Amendment/Modification/New Provision of NEAP

ANNEX

A. LIST OF QUESTIONS

Subject	Questions
Type of Numbers Included In MCMC Cherished Number Framework	<p>Question 1: Based on the findings from the benchmarking exercise, MCMC is considering to introduce Cherished Number categorisation for Mobile Numbers. Please provide your views or suggestions on other type of numbers which is suitable for Cherished Number categorisation.</p>
Principles of Cherished Numbers	<p>Question 2: MCMC proposes to have the principles of Cherished Numbers as per Table 4. MCMC welcomes any feedback and views on other principles that would be more suitable to be used in valuing Cherished Numbers in Malaysia.</p>
Recommended Cherished Number Assignment Mechanism	<p>Question 3: MCMC proposes to assign Cherished Numbers to service providers through bidding exercise. Please provide your views or suggestions on any other method to be implemented in Malaysia in assigning Cherished Numbers.</p> <p>Question 4: MCMC welcomes any views or suggestion regarding MCMC's proposal to conduct close bidding exercise to the service providers. MCMC would also like to seek your views on the assignment of Cherished Numbers directly to end users (through bidding process).</p> <p>You may also provide your views or suggestions on the alternative Cherished Numbers assignment mechanism.</p>
Eligibility of the Applicants to Participate In FPSB Session	<p>Question 5: MCMC welcomes any feedback or views on the eligibility criteria set by MCMC to participate in the bidding exercise. MCMC is also open for any views or improvement which can be made on the current process flow for the assignment of Cherished Numbers.</p>
Right to Use Cherished Numbers	<p>Question 6: MCMC welcomes any feedback and views on the following:</p> <ol style="list-style-type: none"> a) MCMC's proposal to grant an indefinite duration of Cherished Numbers. b) MCMC's proposal to allow reselling or trading of Cherished Numbers between end users. <p>MCMC would also like to seek views and suggestion on the method which can be used to prevent or curb illegal transactions of number by third party seller.</p>

Subject	Questions
Proposed Amendment to the Numbering and Electronic Addressing Plan (NEAP)	Question 7: MCMC welcomes any feedback and views on the rationale for the NEAP amendments.

B. TEMPLATE FOR RESPONSE

Please provides the comments/responses in the Table below:

Question	Comments/Responses
1.	
2.	
3.	
4.	
5.	
6.	
7.	

