



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

# Public Consultation Report

## Implementation of Fixed Number Portability ("FNP") in Malaysia

16 July 2021

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## GLOSSARY

|      |  |
|------|--|
| ACQ  | All Call Query   |
| DEL  | Direct Exchange Line   |
| FNP  | Fixed Number Portability   |
| FSNL | Flexible Subscriber Number Line  |
| ISDN | Integrated Services Digital Network  |
| IWG  | Industry Working Group   |
| MCMC | Malaysian Communications and Multimedia Commission   |
| MNP  | Mobile Number Portability  |
| MSA  | The Commission Determination on Mandatory Standard on Access, Determination No. 3 of 2016  |
| MSAP | Variation to the Commission Determination on the Mandatory Standard on Access Pricing (Determination No. 1 of 2017), Determination No. 1 of 2020 |
| NEAP | Numbering and Electronic Addressing Plan (Developed by MCMC pursuant to Section 180 of the Communications and Multimedia Act 1998)               |
| NGN  | Next Generation Network  |
| NPC  | Number Portability Clearinghouse   |
| NPDB | Number Portability Database  |
| OR   | Onward Routing   |
| PC   | Public Consultation  |
| SNL  | Subscriber Number Level  |
| TGA  | Talian Gerak Alih Sdn Bhd (Operator of Number Portability Clearinghouse for MNP)   |
| VoIP | Voice over Internet Protocol   |
| WLL  | Wireless Local Loop  |

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## SECTION 1: INTRODUCTION

### Background

The Malaysian Communications and Multimedia Commission (“MCMC”) had on 18 December 2020 embarked on a Public Consultation (“PC”) on the implementation of Fixed Number Portability (FNP) in Malaysia by issuing a PC paper.

The PC paper introduced the concept of FNP and outlined an international benchmarking exercise. The PC paper proposed several types of FNP that may be applicable for Malaysia based on results of the benchmarking exercise. The PC paper also invited public to comment on the technical and procedural aspects of FNP.

At the end of the PC period on 1 March 2021, MCMC received a total of nine (9) submissions, whereby eight (8) submissions were received from mobile and fixed service providers and one (1) submission from an international organisation.

**Table 1: Submissions Received**

| No. | Submission  | Documents |
|-----|---|-----------|
| 1.  | Celcom Axiata Bhd (“Celcom”)                              | 7 pages   |
| 2.  | Cenerva Limited (“Cenerva”)                               | 20 pages  |
| 3.  | Digi Telecommunications Sdn Bhd (“Digi”)                  | 9 pages   |
| 4.  | Maxis Broadband Sdn Bhd (“Maxis”)                         | 52 pages  |
| 5.  | REDtone Engineering & Network Service Sdn Bhd (“REDtone”) | 3 pages   |
| 6.  | Telekom Malaysia Bhd (“TM”)                               | 14 pages  |
| 7.  | TT dotCom Sdn Bhd (“TIME”)                                | 12 pages  |
| 8.  | U Mobile Sdn Bhd (“UMobile”)                              | 3 pages   |
| 9.  | YTL Communications Sdn Bhd (“YTLC”)                       | 5 pages   |

MCMC now presents this PC report as the conclusion for the Public Consultation exercise.

## Structure of the PC report

This PC report is structured based on the PC paper with the fourteen (14) questions along with the summary of comments received. Following the summary is MCMC's final views in response to the questions and comments given, outlined in the sections below:

SECTION 2: INTERNATIONAL BENCHMARKING

SECTION 3: TECHNICAL ASPECTS OF FNP

SECTION 4: COSTS OF FNP

SECTION 5: PROCEDURAL ASPECTS OF FNP

SECTION 6: WAY FORWARD

## SECTION 2: INTERNATIONAL BENCHMARKING

### **Question 1:**

Based on the findings from the benchmarking exercise, MCMC seeks general views and comments on the implementation of FNP in Malaysia.

### Summary of submissions received

Celcom, Cenerva, Digi, Maxis, REDtone, TIME, UMobile and YTLG generally support the implementation of FNP in Malaysia, except for TM.

Celcom noted that the benchmarking exercise and findings are useful. However, the success of FNP implementation may differ and subject to multiple consideration in Malaysia. Consumer behaviour, economy and social, business demand and demographic are some of the factors, which may influence the result of FNP's success implementation.

Cenerva concurred with much of the benchmarking and background analysis provided by MCMC. Based on Cenerva experience, different market may serve different consumer demands for FNP and MNP services. MNP tends to enhance choice for retail subscribers and FNP typically generates strong demands from the corporate sector. For example in Brazil, its FNP porting rates were 4.4% largely driven by enterprise use, compared to only 3.6% for MNP. Similar MNP/FNP profiles are often seen in European markets as shown in the MCMC's benchmarked countries. Therefore, Cenerva emphasised the importance of FNP in enhancing market competition should not be underestimated.

Cenerva also highlighted that number portability is not just an enabler of consumer choice, it is also a key driver of competition. This is not necessarily a function of the porting rate achieved, as international experience suggest that 2-4% of subscribers typically port in a well-designed system. Cenerva further highlighted that around 4.4% of the Malaysian mobile subscribers' base attempted to port over the past 12 months, whereby, more than 50% of porting requests were rejected. Thus, the underlying successful porting rate for Malaysia is quite low compared with other countries such as, India, where the reporting rate is much higher



at 6.45%. The high level of rejection and relatively low consumer demand for mobile porting is acting as a significant disincentive for mobile users to consider porting their number to an alternative service provider. Cenerva deduced that if FNP is to be successful in Malaysia, the process must be efficient and consumer friendly with minimal scope for unfair rejection. Number portability forces service providers to compete harder, through pricing, quality and innovation, in order to retain existing customers and win new customers from other service providers.

Cenerva also suggested that a properly developed and well-implemented porting process which has the capacity to enhance competitive dynamics, benefitting consumers and those in enterprises, corporations and government. This level of activity can act as a major boost to economic activities, as service providers invest in, for example 5G mobile, full fibre fixed networks, in order to gain competitive advantage.

Cenerva concluded that FNP could bring positive competitive benefits to the Malaysian fixed telecommunications sector, but the MCMC and relevant stakeholders should consider best practices from other markets to ensure an efficient, fair, robust and attractive to all types of customer. Cenerva also believed that the potential of FNP provides the opportunity for MCMC to radically overhaul and improve the current MNP for the benefit of consumers and competition.

Digi supported any initiatives that can bring benefits to the industry, particularly customers. Implementation of FNP in Malaysia is one of those initiatives that Digi believed will garner multiple benefits not just to the customers, but also to the service providers and regulators.

Digi echoed the views from regulators of other countries such as, European Union ("EU"), the Australian Competition and Consumer Commission ("ACCC") and Infocomm Media Development Authority of Singapore ("IMDA"). Number portability is a key facilitator of consumer choice and effective competition in a competitive telecommunications environment for the EU, Australia, and Singapore.

Digi believed that the implementation of FNP in Malaysia will be advantageous, where the number portability offers customers the freedom to choose and switch service providers at will while maintaining their valuable identity, i.e., their telephone numbers, ultimately leading to an overall more competitive market. However, Digi was concerned that the

cost of FNP implementation needs to be reasonable for service providers and be determined and agreed upon in an industry working group ("IWG") before implementing FNP.

Maxis stated that FNP would enable benefits for not only fixed voice but also more importantly the high-speed broadband, data and ICT segments due to bundling. This is especially critical as these segments comprise the majority of end-user spend and continue to grow. Evidence from other markets also suggests that FNP may enable improved fixed broadband affordability and accelerated adoption of advanced ICT services due to greater innovation in the marketplace.

Maxis agreed with MCMC's proposal to introduce FNP in Malaysia as it will spur enhanced competition and innovation in the marketplace, with benefits for end-users across the residential and enterprise markets as well as the overall economy. This is in line with international best practice, with leading regulators globally recognising the benefits of FNP and have thus implemented it. In addition, FNP will spur the take-up of advanced digital service and thus aligned with the government's ambitions of accelerating the growth of Malaysia's digital economy.

Maxis is of the opinion that it is important for MCMC to review regulation of other aspects which may hinder the effectiveness of FNP in improving competition and ensuring the interests of end-users are protected and the benefits of FNP are maximised. These include contractual clauses in fixed voice, fixed broadband and other related connectivity and ICT services which may unfairly discourage users from switching provider; harmonising the FNP regulation with Mandatory Standard on Access ("MSA") obligations to ensure that wholesale access involving FNP is not unjustly blocked; wholesale HSBB activation timelines as a prolonged timeframe will delay service activation for end-users and deter them from porting to their preferred service provider; and implementing wholesale price regulation for fixed voice services under the Mandatory Standard on Access Pricing ("MSAP") as the lack of price regulation can hinder retail competition.

REDtone is of the view that implementation of FNP in Malaysia is a good move in increasing healthy competition of fixed number service to consumer. This will allow consumers to switch service providers without having to change their number. With the advent of technology and solution, FNP will allow customers to choose the packages that suit their needs without any inconvenience.

TM does not agree for FNP to be implemented in Malaysia even though TM understands the motivation behind the FNP implementation, which is said to improve competition within the fixed market. However, according to TM the fixed telephony is a sunset service and TM does not foresee the introduction of FNP could trigger more competition in the market.

TM noted that FNP is a regulatory measure that had been implemented extensively globally since 1995-2010, when fixed voice yielded a significant portion of revenue in telecoms markets and before fixed broadband and mobile service had achieved their current pre-eminence. Relatively few countries have implemented FNP since 2010, and very few since 2015 as the focus of regulatory intervention has shifted on the fixed broadband and mobile market.

TM further elaborated five reasons on why FNP should not be implemented due to imbalance market share, insignificant benefits to competition, unnecessary diversion of focus and investment, fixed number is not a barrier to competition and FNP is costly and complex to implement.

Firstly, TM highlighted that as the current imbalance market share (which TM held majority market share) put TM in an unfair disadvantage if FNP is implemented. TM suggested that existing policies should focus more on encouraging service providers to invest in fixed network hence widening the coverage of fixed infrastructure and create competition rather than eroding the value of the service providers that took the risks to invest during the early days. By having extensive fixed infrastructure would contribute to fixed broadband, fiberising mobile tower and support 5G.

Low investment by other service providers have resulted in TM continues to be the major service provider with more than 90% market share (refers to DEL only). TM suggested for MCMC to consider to assess whether there might be a potential failure on lack of investment from other service providers and would the implementation of FNP encourages them to invest. TM also emphasised that there is no clear footing among existing service providers unlike the mobile market condition when MNP was implemented. Implementation of FNP will only put TM in unfair disadvantage as the likeliness of customer to port in to TM is very small with current ratio of 90:10. This will further penalise incumbent service provider as how TM has experienced with Access Deficit where TM has not been fully compensated for its copper network investment.

Secondly, TM is also of the view that FNP will not address the low penetration rate of fixed telephony since the porting transaction will only revolve around existing customers and no longer growth in the fixed telephony market. TM stated that current fixed telephony subscriptions stood at 6.4 million as compared with mobile services subscription at 43 million. Furthermore, FNP will not guarantee price reduction and increase of fixed broadband penetration. Other factors that could contribute to such trend in the telecommunications market namely, evolution of technology, adoption of digital economy, increasing technological literacy of population etc. The existing instruments by MCMC to promote competition in the fixed services such as, Access List are sufficient to allow other service providers to seek access and offer fixed services without deploying their network. Moreover, FNP will only provide further 'short-cuts' for other service providers to capture fixed customers and does not promote healthy competition within the fixed market.

Thirdly, TM believed that FNP is an unnecessary diversion of focus and investment. The investment shall be better focused in improving fixed coverage and providing broadband services, which is crucial during the new norm. An extensive FNP arrangement for a sunset service such as, fixed telephony will only be a waste of resources. The regulatory focus should remain on mobile and broadband services that is driving the economy. The recently announced MyDIGITAL initiative along with JENDELA are indeed demanding for undivided commitment and investment to support the national agenda.

Fourthly, TM is of the view that fixed number is not a barrier to competition as nowadays it is easier for business to switch to other service providers and inform customers on change of number via website and social media platforms. As everything is paperless due to digitalisation, there is no longer a need to produce printed materials that would then must be amended. TM further stated that fixed number has become the least popular method in personal and business communications at large.

Fifthly, TM mentioned that FNP is uneconomical to implement given the expected complexities and costs as compared to the insignificant benefits that will be gain from FNP. Frequent references in the press about issues and delays related to implementation, suggested that FNP is indeed a complex process that could take years to overcome. For example, MNP itself took 3 years to implement. The complexities may affect customers'

expectation and experience. TM suggested that all should be prudent and more selective to ensure reasonable returns, benefit to *rakyat* or industry and not distracting effort on non-value added activity. TM also highlighted that based on the benchmarking study, the average take-up rate is just at 6% over an average of 12 years of implementation period across the countries.

TIME agreed that the launch of MNP in Malaysia in 2008 promoted further competition amongst service providers that also enable the consumers to choose service providers. In general, TIME agreed that FNP will also promote competition in the fixed telephony market and brings about similar benefits to fixed voice subscribers. FNP will significantly reduce switching barriers for customers from one service provider to another. TIME also subscribed to the notion that FNP is particularly more relevant to business customers.

TIME highlighted on the MCMC's benchmarking study across the benchmarked countries with about 6% take-up rate. In this regard, TIME urged MCMC to consider conducting a customer survey in the fixed voice market to gauge the interest for FNP and its potential take-up rate. This is important as FNP requires resource allocation by the industry players and the use of fixed services has also reduced significantly. TIME further highlighted that reduction in prices could have be mainly due to competition and advancement in telecommunications technologies.

TIME disagreed with MCMC's findings on FNP implementation have impacts to the bundling take-up rate. TIME argued that service bundling is taking place in Malaysia even without FNP. TIME also noted that fixed broadband penetration is more directly correlated to GDP per capita rather than FNP implementation.

UMobile agreed that FNP will promote a healthy atmosphere for fair competition among service providers in providing fixed line (including fixed broadband) services in Malaysia. FNP will also change the competition landscape in Malaysia and make fixed services more affordable to consumers, spur the take-up of fixed services and directly increase broadband penetration.

YTLC supported the implementation of FNP and agreed with MCMC's analysis that FNP will promote penetration and competition in the fixed line and fixed broadband markets. FNP will promote the growth of new service

providers offering innovative IP based voice and data services at competitive prices. Currently, the main constraint to switching is retention of existing numbers by potential subscribers, especially businesses. FNP will allow users to switch to more competitive and better quality fixed services without the hassle of changing numbers.

YTLC further highlighted that the current MNP cost sharing which is based on the straight line approach is prohibitive and burdensome on small service providers. As such, YTLC suggested for a more equitable and fairer system to be considered for FNP.

## Discussion

MCMC noted that majority agree with the implementation of FNP in Malaysia.

MCMC would like to clarify that the high rejection rate in MNP is due to several factors. As at Q4 2020, MCMC identified top three rejections based on MNP Business Rules which are SP71 (31.08%) whereby one or more MSISDNs did not reply to the SMS validation, SP52 (14.90%) whereby the account is overdue with current service provider and SP10 (14.14%) when the customers replied with incorrect national registration identification number. The NPC system has been developed and maintained by Talian Gerak Alih Sdn. Bhd. (TGA) since 2008 with 100% service availability.

MCMC noted on the views that 6% take-up rate of FNP implementation in the benchmark study is considered low. On the other hand, taking into MNP's experience as a comparison, MNP recorded 4,371,810 of porting requests which translated into 10.07% take-up rate in year 2020. This spike of increase is only achieved later after 10 years of implementation. FNP as a fixed service have different environment regarding the contract terms and technical difficulties. Therefore, achieving 6% take-up rate for FNP especially during the early period could be considered as an achievement.

MCMC did not rule out possibility that fixed broadband penetration is more directly correlated to GDP per capita rather than FNP implementation.

MCMC also agrees that price reduction especially on fixed broadband services is due to the implementation of MSAP in 2018 as well as technological advancement.

MCMC agrees with the opinion regarding trend on service bundling in Malaysia. MCMC noted that the FNP is not only for fixed telephony but also other fixed services such as, fixed broadband and VoIP. Based on the feedback received, MCMC can conclude that there is a rising trend for service bundling especially on triple-play services as a result of convergence. There is also a trend to bundle services for fixed and mobile services for service provider offering both services. MCMC's only concern regarding this trend is that it is important to ensure that service bundling does not restrict or hinder porting.

On the MSAP arrangement, service providers may provide suggestions once MSAP review is conducted by MCMC.

Currently, the incumbent service provider has a significant market share in fixed services market. The table below shows the market share of the incumbent service providers over other service providers:

**Table 2: Trend on Market Share in Fixed Services (DEL and VOIP) 2018, 2019 and 2020**

| <b>Year</b> | <b>Market Share Own By Incumbent Service Provider</b> | <b>Market Share Own By Other Service Providers</b> |
|-------------|---|--|
| 2018        | 89.45%  | 10.55%   |
| 2019        | 84.74%  | 15.26%   |
| 2020        | 82.49%  | 17.51%   |

MCMC is of the view that to a certain extent, the increase in market share by other service providers is partly due to the implementation of MSAP, which regulates the pricing for HSBB network service for Layer 2 and Layer 3.

Despite a downward trend of incumbent service provider's market share with an average of 3.5% per year from 2018 to 2020, it continues to lead with 82.49% market share.

MCMC believes that the imbalance market share should not be a reason for not to implement FNP at this point in time. The table below shows the approximate market share of incumbent service providers when FNP is implemented in the respective countries<sup>1</sup>:

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<sup>1</sup> Data provided by Aetha Consulting Limited

**Table 3: International Benchmarking - Incumbent Service Provider Market Share in Fixed Voice Lines**

| <b>Country</b> | <b>Incumbent Service Provider Market Share In Fixed Voice Lines</b> |
|----------------|---|
| Albania        | 74.00%  |
| Brazil         | 80.43%  |
| Bulgaria       | 90.80%  |
| Croatia        | 98.00%  |
| Hong Kong      | 95.63%  |
| Mexico         | 85.64%  |
| Singapore      | 99.90%  |
| South Korea    | 95.60%  |
| Spain          | 97.70%  |
| Sweden         | 99.90%  |
| UK             | 90.00%  |
| USA            | 96.95%  |

This indicates that market share of incumbent service provider should not be the deciding factor for FNP implementation. MCMC is of the view that FNP can be implemented at any given time provided that the benefit is clear and can outweigh the cost of implementation.

However, MCMC has concerns that if FNP is implemented at this juncture that the implementation will not benefit the majority of end-users in Malaysia. Currently, there are a huge number of areas without access to other fixed services. MCMC does not see the benefit of implementing FNP if only a small number of end-users are able to utilise and benefits from this service. As a comparison, this is certainly not the case for MNP where mobile services are much widespread and there are abundance of choices for good mobile reception from multiple service providers in a specific area.

As at 31 May 2021, MCMC has assigned a total of 36,627,000 geographic numbers by service providers as follows:

**Table 4: Number of Charge Area Location Which Each Service Providers Assigned**

| <b>No.</b> | <b>Service Providers</b> | <b>No. of Charge Areas</b> | <b>Total Assigned Numbers</b> |
|------------|--------------------------|----------------------------|-------------------------------|
| 1.         | Celcom                   | 73                         | 861,000                       |
| 2.         | Digi                     | 45                         | 337,000                       |
| 3.         | Maxis                    | 239                        | 2,520,000                     |
| 4.         | REDtone                  | 168                        | 319,000                       |
| 5.         | TM                       | 443                        | 29,568,000                    |



| No. | Service Providers | No. of Charge Areas | Total Assigned Numbers |
|-----|-------------------|---------------------|------------------------|
| 6.  | TIME              | 131                 | 2,946,000              |
| 7.  | XMT               | 1                   | 2,000                  |
| 8.  | YTLC              | 10                  | 74,000                 |

Source: NUMSYS, 31 May 2021

This indicates service providers' appetite to invest in fixed infrastructure in a specific area. It shows that other service providers need much work to match the coverage offered by TM. In order to ensure a successful implementation of FNP, other service providers need to expand their fixed services so that FNP can become a service that can be enjoyed by majority of the *Rakyat*. It is only right for MCMC to expect the expansion of fixed services by service providers as FNP implementation is an initiative requested by industry during an industry consultation on the National Fiberisation and Connectivity Plan in October 2018.

FNP should not be used as a means to cherry pick high value customers such as business customers in Klang Valley. On contrary, the service providers' are obliged to capitalise FNP as the means to reach other parts of Malaysia such as east coast of Peninsular Malaysia, Sabah and Sarawak. Only then, FNP can be a successful initiative which is beneficial to all consumers regardless of their location in Malaysia.

MCMC recognises all efforts by service providers in supporting JENDELA initiatives. JENDELA, which has two phases of implementation, aims to provide more comprehensive coverage and better quality of broadband experience for the *Rakyat* by end of 2025. The success of JENDELA will enable FNP to play a supporting role in the after effect of JENDELA as consumers will have the freedom to choose their service provider which offers the best value product.

### MCMC's final view

Based on the submission, majority agree with MCMC's proposal to implement FNP in Malaysia. The majority also agree with the international benchmark study conducted by MCMC that FNP could bring positive competitive benefits to Malaysia fixed services.

MCMC believe that the implementation of FNP is able to remove a barrier to consumer choice and switching, mainly facilitating more effective competition in the fixed services market. Furthermore, coupled with the

rise of bundled services, it could also exert a wider influence on competition across the telecommunications market. As a result, the benefits are wide ranging and applicable to stakeholders, including customers (both residential and businesses), service providers and industry at large.

However, it is to be noted that the implementation of FNP is complex and may not as direct as MNP, hence further discussion is needed with the industry and relevant stakeholders on matters among others are technical and technology capability, implementation cost, as well as relevant processes.

## SECTION 3: TECHNICAL ASPECTS OF FNP

### 3.1 FNP Services

#### **Question 2:**

MCMC seeks public views for service provider portability to be considered for Fixed Number Portability implementation in Malaysia.

#### Summary of submissions received

Celcom, Cenerva, Digi, Maxis, REDtone, TIME, UMobile and YTLC supported the implementation of service provider portability, except for TM.

Celcom agreed for service provider portability to be implemented but noted significant costs associated with the implementation, particularly at the network level for the service providers to upgrade the current infrastructure and software.

Cenerva believes the Malaysian fixed telecommunications sector meets all of the test requirements to introduce number portability, for instance, a sufficient scale to generate consumer demand for porting; an established and robust competition; the regulator and industry desire to proceed with introducing fixed Number Portability; an established interconnection between existing providers; a clear service requirements and mandate defined by the regulator; and a stable numbering plan.

Cenerva also identify that Malaysian consumers are aware and familiar with

the ability to move their mobile number to the service provider that best meets their needs, the key players in the Malaysian fixed telecom sector are already involved in operating the MNP system and the prevalence of Next Generation Networks (“NGN”) means that most providers will already have core network and business systems with inbuilt Number Portability functionality. Normally, Cenerva would estimate that the cost of implementing Number Portability functionality and supporting the number portability service would cost operators with similar profiles to Malaysian operators, between \$15 million and \$25 million per network. However, in view that most of the Malaysian industry stakeholders are either already supporting mobile Number Portability or have Number Portability compliant next generation networks, then the set-up capital investment burden on individual operators should be much reduced. Similarly, Cenerva concur with the MCMC view that expanding the scope of the current Malaysian MNP NPC to operate the fixed number portability service will reduce the NPC development and operator integration costs as well as fast track the development, implementation and launch of a fixed number portability service.

However, based on the porting demand data provided in the consultation paper, it is evident that the current Malaysian MNP service is sub optimal since the high level of rejections will have probably impacted consumer demand and perceptions of number porting. Thus, Cenerva recommends that MCMC uses this initiative to take the opportunity to review and lead the enhancement of the Malaysian mobile number portability service to align with global best practises in terms of efficiency and customers’ experience.

Cenerva supports the MCMC view that FNP should be considered for implementation in Malaysia for the benefits of consumers and to drive market competition. From Cenerva’s experience across the world, Cenerva pointed out that the potential consumer beneficiaries from FNP unlikely should be different from those currently using the MNP service, since demand for FNP is likely to be driven by enterprise and corporate customers.

Digi supported service provider portability as one of the FNP services to be implemented in Malaysia. Digi highlighted that few players now offer cost-effective fixed voice service bundles with the fixed broadband service and have observed take-up on the subscription. Digi shared that GlobalData has forecasted that the fixed communications services revenue in Malaysia to

grow at a compounded annual growth rate (CAGR) of 3.9% from US\$2.2 billion in 2019 to US\$2.6 billion in 2024. Digi believed that service provider portability will offer multiple benefits, including allowing freedom to customer to switch service providers without changing their number. It will also provide opportunities to acquire customers, which will lead to competition in the market. In the long run, end users would benefit in the form of improved competitive pricing and better quality of service.

Maxis believed that service provider portability is the primary form of FNP that has been implemented in other markets and is crucial towards enabling competition. Therefore, Maxis strongly supported the introduction of service provider portability. Maxis also emphasised that service provider portability in Malaysia should be introduced while encompassing all key types of fixed numbers (including 1300/1800), regardless of technology, including Direct Exchange Line ("DEL"), Voice over Internet Protocol ("VoIP"), Integrated Services Digital Network (ISDN) and Wireless Local Loop ("WLL"). This will maximise the benefits of FNP for end-users while accounting for continued technology evolution in the market.

In principle, TM disagreed with the implementation of FNP in Malaysia. According to TM, service provider portability would be a correct and effective approach if there are other comparable competitors within the fixed services market, as this would encourage competition amongst the industry players. However, such market condition never exists in Malaysia. Thus, service provider portability would only facilitate churn, i.e. port-out from the incumbent. Instead of full-fledged FNP, which is costly to be implemented, TM suggested that MCMC consider to adopt partial or selective number portability that can be implemented to address the concern on competition since the prime target for number portability are business customers. This may involve the review of numbering assignments to allow movement of numbers from one provider to another. Implementation can be done using existing call routing arrangement between service providers without investing heavily in a whole new number database and systems that not last. TM also suggested that Malaysia should do away with FNP policy and focus on method that works well for the nation.

REDtone fully supported the implementation of service provider portability as its implementation will encourage technology innovation, better packages and diversified solutions between service providers. This will motivate customers to switch service providers. Hence, increasing competition and benefit the economy as it will stimulate demand for

telecommunications services. This will also increase broadband penetration that has been evident to the countries that have implemented FNP.

TIME fully supported the proposal that service provider portability be considered for the implementation of FNP in Malaysia as it will benefit both the service providers and consumers. Consumers will be able to maintain their number, which is most favourable to them and can choose their preferred service providers offering the most attractive packages. This will drive the industry players to remain competitive in their offering, largely benefiting the consumers.

UMobile agreed with service provider portability as it was the most well-received FNP approach based on the benchmarked countries. Furthermore, it creates a competitive environment among service providers by motivating more innovative packages, improving the value they offer to customers, and increasing the efficiency of their operations to prevent churn from their network.

YTLC agreed with service provider portability. However, the change of service providers should not be limited to the same location. Previously PSTN allowed the change of location whilst retaining the same number within the same exchange area. However, the use of IP based network now allows the change of location to be extended "nationwide" not just the same area, combining the benefits of service provider portability and location portability.

## Discussion

Majority agreed with service provider portability to be implemented for FNP, as it would offer huge benefits. This includes allowing customers to switch service providers without changing their fixed number and increasing competition among the service providers.

MCMC agreed with a view that the current fixed service market in Malaysia has met all criteria needed for a successful service provider portability implementation.

MCMC agreed with the suggestion to combine service provider and location portability for FNP. This will maximise the benefits of both portability services especially for business customers such as, small and medium-sized enterprises where retaining the same fixed line number is crucial for their

operation. Companies especially manufacturers will be able to utilise and benefit from the collaborative IP based services offered by various service providers which would assist in expanding business and address their business needs.

MCMC noted on concerns pertaining to cost of implementation of service provider portability to the service providers.

MCMC will only consider geographic numbers at the start of FNP implementation. Currently the use of geographic numbers are limited to fixed telephony and data services. Subsequently, the NPC system can be upgraded to include other categories of numbers such as, non-geographic numbers i.e. short numbers or special service numbers.

MCMC is of the view that onward routing can cause complications between service providers and poses additional challenges for new service providers entering the market, as they are required to accept bilateral agreements with existing service providers in order to provide portability services. Furthermore, it will not resolve the problem faced by existing end-users.

### MCMC's final view

MCMC in its PC paper proposed to consider service provider portability for FNP implementation. Based on submissions received, majority are keen for the implementation of service provider portability.

MCMC does not agree with proposal to introduce service provider portability only to business customers via onward routing. This approach is selective and unfair to general public and may cause unnecessary complications.

MCMC maintains its position to implement service provider portability.

#### **Question 3:**

MCMC seeks public views on its proposal that service portability not to be considered for Fixed Number Portability implementation in Malaysia

### Summary of submissions received

Celcom and YTL are in favour of service portability, except for Cenerva, Digi, Maxis, REDtone, TM, TIME and UMobile.

Celcom supported service portability to be considered for FNP implementation in Malaysia, however Celcom is of the view that now is not the right time to do so. Celcom further added that the implementation of service portability should be reviewed and considered when the JENDELA commitments are delivered and the industry is ready for full convergence. An in-depth analysis on the impact and assessment need to be carried out. While there are some significant differences between the provisioning of mobile and fixed services number portability, Celcom believed that the FNP and MNP policies should be consistent.

Cenerva concurred with MCMC's proposal that service portability should not be adopted in Malaysia since it operates the calling party pays charging approach and that number portability should be restricted to mobile to mobile and fixed to fixed services only. Cenerva highlighted that service portability is available in the United States and Canada largely due to the different charging model whereby the receiving party pays. Therefore, most regulators have decided to restrict the number portability to service provider portability and have excluded service portability between different types of fixed and mobile service.

Cenerva further highlighted that where operators provide fixed line services through their cellular or mobile networks, regulators need to determine whether these services are truly fixed or mobile. Where the regulator determines that fixed wireless or WLL services to be considered as fixed services, then it is important that regulator allocates specific number ranges which help the look and feel of existing fixed services and ensure that the operator's charging and tariffing approach is aligned to equivalent fixed services.

Digi agreed with MCMC's proposal as service portability may not be relevant in Malaysia due to the current numbering structure.

Maxis agreed that service portability should not be considered at this stage. The current interconnection rates which are differentiated by service (e.g. fixed or mobile) result in differentiated voice tariffs for dialing fixed lines versus mobile lines as offered in the market. Implementation of service portability with current access regulation and numbering plan may affect the transparency end-users have over their actual voice tariffs. Therefore, Maxis proposed that MCMC consider to conduct a market survey to gauge end-users demand for service portability after the initial implementation of

FNP is completed. This is in line with the approach seen in other markets such as, Hong Kong. If there is a strong demand for service portability, MCMC can then further assess its implementation in conjunction with the numbering plan and access regulation to ensure harmonisation and thus mitigate the negative impact for end-users.

REDtone suggested that implementation of service portability will disrupt the fixed market and incur extensive time to revamp the access regime and network capability. Hence, REDtone agreed that service portability should not be adopted.

TM is not agreeable with service portability to be implemented due to the complexity of the arrangement, given that Malaysian telephony numbering is clearly segregated according to type of numbers i.e. geographic and non-geographic. Furthermore, this would be an enormous task that requires a total revamp of the Numbering and Electronic Addressing Plan ("NEAP"). In addition, there is no motivation for end-users to port their home numbers to become mobile or vice versa.

TIME is not in favour of service portability to be implemented. Service portability will require major modifications to the service providers' own network configuration resulting in unnecessary cost implications.

UMobile noted that it is not practical to implement service portability as Malaysia does not have a neutral numbering plan. It requires a significant and total revamp of the access regime and numbering plan.

YTLC highlighted that service portability has its benefits and should be considered at some time in future. This will require the revision of the numbering system and should be the way to proceed.

## Discussion

Majority are of the view that service portability should not be implemented, except when the industry is ready for full convergence including network capability, review of the access regulation and the existing numbering plan.

The NEAP categorised the numbers available for use in connection with network and application services into three types: geographic numbers, non-geographic numbers, and other numbers. In order to implement service portability, a total revamp of existing numbering plan is required.



This includes reviewing the existing interconnection charging as well as service provider's network capability.

MCMC noted on the suggestion for a market survey to gauge demand on service portability. This suggestion can be considered if service portability becomes more relevant in the future. MCMC will continue to monitor the development and industry readiness on full convergence before implementing service portability.

#### MCMC's final view

MCMC maintains its position for service portability not to be implemented.

**Question 4:**

MCMC seeks comments on its proposal that location portability (within state boundaries) to be considered for Fixed Number Portability implementation in Malaysia.

### Summary of submissions received

All parties agreed with the implementation of location portability.

Celcom noted that due to the technical complexity of location portability, as a start Celcom suggested for portability to be within the same geographical area. This can potentially be reviewed once FNP is matured in the later stage.

Cenerva mentioned during the early number portability implementation worldwide, markets were driven by the need to enhance competition following the liberalisation of telecommunications markets and erosion of the incumbent monopoly in fixed telephony services. With the advent of competition, the consumer tariffing and charging approaches were determined by the network topology of the incumbent service provider, for instance, charging by area code, single or double tandem, and nationwide or long distance charging.

Cenerva further explained that with the introduction of next generation networks by incumbent service provider resulting in the consolidation and collapsing of traditional complex network and the growth of new entrant competitors with simplified nationwide core networks. This has resulted in regulators challenging conventional area or tandem based charging and correspondently questioned the legacy view that fixed number portability should be restricted to porting numbers within specific area code driven regions or districts.

Cenerva agreed with location portability but suggested that MCMC assess the views of all industry stakeholders to derive at the most appropriate consensus view on how location portability is defined across Malaysia.

Digi noted that the definition of location portability is the ability of the subscribers to retain their number with the same service provider when

moving within the service coverage area of the service provider. For example, the subscribers are moving from its office in Ampang to another location within the same area, or another office in Kota Bharu. In both cases, the subscribers do not change service provider. Based on this, Digi highlighted that the location portability could be considered as proposed by MCMC. However, this depends on the technology capability of the service providers to support this type of FNP.

Maxis supported location portability and suggested that this should be within areas with the same area code instead of state boundaries as proposed by MCMC. Implementation of location portability within state boundaries may be unnecessary restrictive as end-users can move locations across states within the same area code e.g. Negeri Sembilan and Melaka. Allowing for number portability across states that are within area code will increase the potential benefits for end-users.

REDtone favoured service portability to apply across state boundaries as this will be beneficial for the efficiency of numbering resources, economic advantage for service providers and competition which will be to the advantage of the end-users. REDtone further explained that there will be significant changes to the NEAP, however, REDtone believed that the changes would result in good progression for the growth of the industry.

TM is of the view that allowing a customer to change location while keeping the same telephone number (without changing service provider) is doable and can be implemented in Malaysia. Since 2017, TM has migrated its legacy copper network onto the next generation network which simplified many processes resulted to a flatter and less clutter network architecture. With the new network architecture, assignment of geographic numbers based on longitude and latitude is no longer relevant as the new network only requires few nodes to serve as compared to the previous need for PSTN exchanges. TM highlighted that it has already implemented this arrangement within TM network since 2018, known as Flexible Subscriber Number Line ("FSNL") initiative. FSNL provides flexibility for geographic numbers assignment that would allow movement of Subscribers Number Level ("SNL") within wider boundary e.g. within the state boundaries. However, to avoid complexities in terms of the current numbering arrangement and call routing which is still using the NATESCA map, TM only allowed the movement of numbers within the state boundaries with the same area code.

Therefore, TM is of the view that it is economical to implement location portability within the state boundaries with same area code as opposed to the service provider portability that is costlier and complex to execute. Furthermore, location portability is able to provide a better customer experience as it resolves relocations issues and help to improve numbers utilisation as well.

TIME supported the proposal that location portability within state boundaries be considered for FNP implementation in Malaysia. By allowing portability within state boundaries, numbering resources can be managed effectively where number blocks that are not utilised in the current SNL area can now be reallocated to other locations within limits. Similarly, it is widely known that number blocks in certain areas are not as favourable as some other numbers. With the introduction of FNP, the numbering resources can be managed more effectively. There are also other cursory advantages, for example enterprise consumers will eliminate any unnecessary marketing and administration cost which otherwise would have been incurred when companies move their business locations (within state boundaries).

UMobile agreed with the proposal to implement location portability within state boundaries and maintain each state's area code. However, it is important that any impediments as highlighted by certain service providers on the need to have significant changes to NEAP should be addressed in advance.

YTLC noted that Next Generation Network (NGN) and IP networks have the capability of implementing location portability at a national level. However, state based location portability i.e. within the same state code, should be considered as a start. The current NATESCA system based on exchange location should be reviewed.

## Discussion

Based on the submissions received, it is clear that majority agreed that location portability is a good step forward for MCMC to implement FNP. The implementation of location portability is doable and cost effective. This is due to NGN implementation that simplifies the network and requires fewer nodes to serve.

MCMC noted on the suggestion for location portability within the same area

code instead of state boundaries. MCMC is receptive towards this suggestion as area code such as 03, 04, 05, 06 and 09 are shared by several states or geographical area within the same area code as follows:

**Table 5: Area Code for State/Geographical Area**

| <b>Area Code</b> | <b>State/Geographical Area</b>  |
|------------------|---|
| <b>03</b>        | Selangor, Kuala Lumpur and Putrajaya<br><i>Mantin, Negeri Sembilan</i><br><i>Tanjung Malim, Perak</i><br><i>Genting Highlands, Pahang</i> |
| <b>04</b>        | Perlis, Kedah and Penang<br><i>Pengkalan Hulu, Perak</i>  |
| <b>05</b>        | Perak<br><i>Cameron Highlands, Pahang</i><br><i>Ulu Bernam, Selangor</i>  |
| <b>06</b>        | Melaka and Negeri Sembilan<br><i>Muar, Johor</i><br><i>Tangkak, Johor</i>   |
| <b>07</b>        | Johor   |
| <b>08X</b>       | Sarawak   |
| <b>08Y</b>       | Sabah   |
| <b>087</b>       | Labuan  |
| <b>09</b>        | Kelantan, Terengganu and Pahang   |

Where,

$X = 2 \text{ to } 6; Y = 7 \text{ to } 9.$

MCMC also noted the possibility to expand at national level in future.

MCMC also noted that location portability will allow service providers to better manage their numbering resources.

### MCMC's final view

MCMC maintains its position to implement location portability within state boundaries with the same area code upon review of the NEAP in Q3 2021.

MCMC agrees for location portability within the same area code (without state boundaries restriction) to be implemented by end 2022, to allow sufficient time for service providers to assess and enhance their network capability.

## 3.2 Technical Solutions for FNP

### **Question 5:**

MCMC seeks comment on its preliminary view that an All Call Query ("ACQ") approach should be implemented, supported by a Centralised Number Portability Clearinghouse ("NPC") utilising a Centralised Number Portability Database ("NPDB").

### Summary of submissions received

Celcom, Cenerva, Digi, Maxis, REDtone, TM, TIME and UMobile agreed that All Call Query ("ACQ") approach to be considered for FNP implementation in Malaysia. Meanwhile, only YTL is not agreeable to the ACQ approach and prefers an Onward Routing ("OR") method to implement FNP.

Celcom fully supported ACQ approach as adopted in the MNP implementation. Celcom highlighted that this approach will reduce cost, fair, with no intervention and clear set of rules by which service providers must communicate and share data related to the porting process.

Cenerva agreed with the recommendation that FNP should be managed and operated across all service providers in Malaysia using a centralised system. This enables a standardised porting process and in line with the current management and delivery of MNP service.

Cenerva elaborated that ACQ routing is widely adopted in almost all number portability implementations over the past ten years. This includes other Asian jurisdiction such as India, Iran, Kazakhstan, Russia, Singapore, the Philippines and Vietnam. Cenerva further detailed the advantages and disadvantages of ACQ. Cenerva further elaborated on advantages of NPC which can be operated by a third party, adaptable to different type of services and it offers a consistent consumer porting experience.

Digi is of the view that technically ACQ is the most efficient solution compared to the other options (Onward Routing and Query on Release). Digi also concurred that a centralised NPC utilising a centralised NPDB would be an effective solution and already a well established practice for MNP. To support the benchmarked findings, Digi also listed down countries

that have adopted ACQ namely, Belgium, Canada, Denmark, Finland, Germany, Hong Kong, Netherlands, Norway, Singapore, Spain, Sweden, India, United States of America, Mexico and Brazil.

Maxis supported MCMC's preliminary view that the technical solution for FNP should be based on ACQ approach supported by a centralised NPC utilising a centralised NPDB. This is a technically efficient approach in line with international best practices and has also been used successfully for MNP in Malaysia.

REDtone highlighted that MNP has been established for many years via ACQ, and agreed that the same approach should be extended to support FNP.

TM agreed that ACQ approach is the most logical and reasonable to be implemented. This is because that ACQ is proven and has been adopted by the industry for MNP implementation since 2006. A centralised NPDB will ensure data integrity of the porting database as all service providers' network receive the same information. TM also noted that findings from MCMC's benchmark study also support these arrangements.

TIME also agreed with the adoption of ACQ, which is an off-switch approach, as currently implemented in MNP. The off-switch approach is appropriate as it provides lesser impacts on the call itself comparatively with an on-switch approach. TIME also agreed with the implementation of a centralised NPDB as it will enable more effective distribution of the database to all service providers for off-switch checking.

TIME further emphasised that adopting the same approach as MNP will be cost efficient to implement. The ACQ approach is also the most efficient call set-up process since the call will be directly terminated to the recipient service providers, implementable by identifying the number that is ported via the NPDB.

UMobile agreed with the ACQ approach supported by a centralised NPC utilising a centralised NPDB. It has been widely adopted internationally and in line with the current technical solution for MNP in Malaysia.

YTLC highlighted that due to the absence of an economic analysis of the various models of FNP, in particular cost impact to the fixed network, YTLC continues to support OR as the solution to implement FNP. YTLC mentioned

that the Office of Communications (“OFCOM”, United Kingdom (UK) commissioned an economic analysis of FNP with the view of implementing the ACQ or Query on Release (“QoR”) solutions. It was found that the implementation cost of the solutions were deemed to be too high. For example, the Net Present Value of the economic benefits of ACQ was negative GBP 200.6 million over 10 years at a discount rate of 7.5% (which is significantly lower than the weighted average cost of capital of most Malaysian fixed and mobile service providers). The implementation of ACQ was estimated to involve CAPEX of GBP250 million. Consequently, OFCOM decided to continue with OR and not implement ACQ or QoR.

Therefore, YTLC concluded that the CAPEX for the implementation of ACQ or QoR in Malaysia similarly to be high. The cost distribution amongst the service providers will certainly be disproportionate to market share, and the costs could outweigh any potential benefits. The high cost will be detrimental to the existence of smaller networks. YTLC further deduce that OR has lower costs and is therefore most suitable because cost correlates to the volume of porting. It also removes the need to maintain a costly database.

## Discussion

It is noted that MCMC’s proposal for the FNP to use ACQ approach supported by a centralised NPC utilising a centralised NPDB is widely received and agreed by majority.

MCMC noted that the current apportionment of costs among the service providers are disproportionate to market share. There is some weight in this argument since the cost for MNP is shared via straight line method among porting participants.

MCMC noted that whilst the setup cost of OR or QoR without centralised NPC and centralised NPDB is much lower, they do not offer consistent or efficient porting process, and may require to increase network capacity investment and greater maintenance and operating costs in a long term. MCMC noted that UK has already implemented FNP via OR before their discussion to upgrade to ACQ. Considering the above, Malaysia has already passed the point to discuss on OR as ACQ is already implemented for MNP.

MCMC found that ACQ, an off-switch solution, brings many other benefits such as, shorter porting time and faster routing of calls. It is also the best



practice implemented by countries in the benchmarking exercise. Furthermore, the technical solutions have been used successfully for MNP in Malaysia since 2008.

### MCMC's final view

MCMC maintains its position for an implementation of FNP using ACQ approach supported by a centralised Number Portability Clearinghouse ("NPC") utilising a centralised Number Portability Database ("NPDB").

#### **Question 6:**

MCMC seeks comment on its preliminary view that FNP should be deployed by upgrading and adapting the existing Number Portability Database ("NPDB") developed for MNP, with the process overseen by a single database administrator for both FNP and MNP

### Summary of submissions received

Celcom, Cenerva, Digi, Maxis, REDtone, TM, TIME and UMobile agreed with MCMC's proposal to have a single database administrator for both FNP and MNP. The only exception is YTLC as it prefers the implementation of OR; hence, integration with MNP does not arise.

Celcom supported the proposal to upgrade the existing NPDB and adapting it for both FNP and MNP. The upgrade costs would be significantly lower than the cost of establishing a standalone or distributed solution. It would also be faster to implement compared to establishing a new independent platform.

Cenerva concurred with the MCMC's proposal to consider upgrading and adapting the current Malaysian NPC to support both fixed and mobile number portability services since the Malaysian service providers already inter-work with the current NPC which minimises core network and business system development and integration activities. The implementation of a combined and improved fixed and mobile number portability service could be fast track.

Digi opined that ACQ with a centralised NPDB is well accepted in Malaysia for MNP and is running well, therefore there can be cost efficiencies to build upon existing infrastructure for FNP. Hence, Digi agreed with the view of upgrading and adapting the existing NPDB as an efficient approach, and for it to be managed by a single database administrator for both MNP and FNP.

Maxis believed that upgrading and adapting the existing NPDB is an efficient and cost-effective solution that avoids unnecessary duplication of common elements and is in line with international best practice as seen in other markets. This can enable FNP to be introduced faster to benefit end-users with greater cost savings that they may enjoy. In particular, Maxis expects that leveraging the existing MNP database can allow FNP implementation to be completed within a 12-month timeframe.

REDtone is favourable to extend NPDB for MNP to support FNP as building or establishing another clearing house would be open to cost inefficiency. REDtone also highlighted that it would be beneficial in terms of resources efficiency as the current set up for MNP can be utilised for FNP, allowing NPDB to continue to administer in the current setting. REDtone also emphasised that clearing house should be self-sustainable and not a profit-oriented organisation as this will ensure the success of FNP.

TM agreed with the proposal for a single administrator to manage database for both FNP and MNP. However, this would depend on the capability and adaptability of the existing NPDB for MNP. To what extent it can be upgraded and expanded to include FNP would require further deliberation in the IWG.

TIME noted that adopting the existing NPDB for MNP will reduce the possible costs to be incurred as the implementation will utilise a single database together with MNP. Furthermore, the network configuration is more simplified where only one standardised database is used and not differentiated between FNP and MNP. However, TIME opined that by introducing a separate database administrator for FNP, additional costs would have to be incurred as there will be extra set up costs on the system. Similarly, an additional call process flow will need to be incorporated.

U Mobile agreed with the proposed adaption of the NPDB for use in FNP but highlighted that there should be a thorough assessment of the cost of implementation.

## Discussion

The proposal to upgrade the current NPDB to cater for FNP is widely accepted.

MCMC noted that a lower cost is expected for the upgrade of NPC compared to establishing a new central clearinghouse. It was also highlighted that the current working relationship between service providers and operator of the NPDB can expedite the process of upgrading the NPDB to support FNP. MCMC also agreed that there should be a thorough assessment of the cost implementation by IWG.

### MCMC's final view

MCMC maintains its position for FNP to be implemented by upgrading and adapting existing NPDB developed for MNP. Further deliberation on cost implementation need to be undertaken by IWG.

## SECTION 4: COSTS OF FNP

### **Question 7:**

MCMC seeks comment on its preliminary view that shared establishment costs should be recovered from service providers on the basis of cost recovery with costs allocated using a hybrid approach. MCMC seeks comment on its proposal to finalise the details of the cost allocation mechanism in consultation with industry through the formation of an industry working group (IWG).

### Summary of submissions received

Celcom, Cenerva, Maxis, REDtone, TM and UMobile supported MCMC's proposal for a hybrid approach on shared establishment cost recovery.

Celcom noted that establishment costs should be recovered from service providers by applying a hybrid approach where the costs are split into a fixed and variable component, essentially adopting the straight-line approach for a certain proportion of costs and the market share approach for the rest. Details of the cost allocation approach could be finalised in consultation with the industry through the formation of IWG.

Cenerva generally assumed that establishment/set-up costs for the Malaysian service providers and FNP stakeholders should be broadly similar. Based on Cenerva's experience of recovering these costs in other jurisdictions suggests that it is appropriate that each service provider and FNP stakeholder should be responsible for their own establishment/set-up costs, and that such costs should not be recoverable from other stakeholders or the consumer. Cenerva estimated the cost of expanding the scope of the existing NPC to include managing the FNP service will be incremental.

Cenerva further elaborated that number portability markets across the world follow a variety of NPC cost recovery models, including:

- Recipient charged for successful ports. Benefits net recipients but places risk on the NPC provider since actual demand is not certain;
- Monthly service charges split equally across all operators. All operators incur equal NPC service charges irrespective of whether they are net recipients or donors;

- NPC charges allocated by market share. Penalises dominant operators who may also be net donors;
- NPC charges allocated by number range. Penalises dominant operators who may also be net donors; or
- Hybrid per port and monthly service charging. Reduces the cost burden on net donors by focusing the NPC costs to net recipients.

Cenerva noted that the above mechanisms are reasonable and fair, but a key consideration is the “Practicality” associated with each cost methodology, i.e. the complexity and cost of calculating and apportioning the fixed costs to each operator on a monthly or quarterly basis.

Cenerva concurred with the MCMC’s view that a hybrid NPC per porting and monthly service cost recovery approach is appropriate for the Malaysian fixed number portability service, but this should be assessed against the current NPC cost recovery for mobile number portability porting activity.

Digi believed that the approach for FNP’s cost allocation should be in line with the current approach adopted in MNP i.e., the straight-line method. Digi concurred with the formation of an IWG to allow a comprehensive commercial and technical assessment to be conducted.

Maxis supported MCMC’s preliminary view that the shared establishment costs should be recovered from service providers on the basis of cost recovery via a hybrid approach. This combines the straight-line and market share allocation approach seen in other markets and can balance the trade-offs that both offer, thus ensuring that no single service provider obtains a significant unfair advantage.

However, details on the components of shared establishment costs that should be allocated by the straight-line approach versus the market share approach remain unclear and need to be clearly defined and agreed by industry stakeholders. Maxis further proposed that where feasible, MCMC may take a share of the initial CAPEX involved in establishing FNP to facilitate industry adoption, this is in line with the approach used for MNP. In addition, Maxis stated that there is no need to revisit the cost allocation arrangements for MNP as these have been agreed upon and implemented successfully. Maxis supported MCMC’s proposal that such cost allocation details should be finalised through the formation of an IWG and highlights the need for it to be chaired by an independent party.

REDtone supported hybrid approach where the costs are split into a fixed and variable component, essentially adopting the straight line approach for a certain proportion of costs and the market share approach for the rest. In addition, REDtone agreed that the details of the cost allocation approach should only be finalised in consultation with industry through the formation of an IWG.

TM agreed with the proposal for costs allocation to be based on hybrid approach. As TM will be the most significantly impacted by this policy, TM looks forward to a fair cost allocation that would be able to compensate the cost that TM would need to incur just to enable FNP (own cost and shared cost) plus the revenue loss due to churn. TM does not foresee any significant opportunity for port-in from other service providers. TM believed such important aspect would need to be deliberated at the IWG

TIME did not state its preference but noted that the estimated establishment cost for the Voice Platform to incorporate necessary network changes with the existing network in implementing the FNP using the ACQ method is significant. The estimated establishment cost does not include additional expenses such as, administration and IT system upgrade costs. The estimated cost is non-exhaustive and will increase significantly once the actual solution is identified and finalised.

Taking into consideration that the proposed solution for FNP is yet to be decided, TIME supported the idea that details of the cost allocation mechanism to be finalised in consultation with the industry through the formation of an IWG.

UMobile agreed with MCMC's proposal to consider a hybrid approach involving a fixed and variable component. UMobile supported that details of the cost allocation approach should be finalised in consultation with industry through the formation of an IWG.

YTLC noted that MCMC had not undertaken an economic analysis of comparative costs of both the on-switch and off-switch models. Therefore, YTLC does not provide any views on the proposal.

## Discussion

Majority supports MCMC's proposal for a hybrid approach regarding shared establishment cost recovery except for Digi which prefers straight line

method while TIME and YTLC do not provide specific preference for the shared establishment cost.

MCMC noted on the tendency to adopt straight-line method as it is proven to be successful for MNP. However, MCMC encourages service providers to explore the possibility of a hybrid approach to ensure a fair allocation method for all stakeholders.

All agree that the detailed cost allocation approach needs to be discussed and deliberated in the IWG.

### MCMC's final view

MCMC maintains its position that a hybrid approach be adopted for the shared establishment cost recovery and for the cost allocation mechanism to be discussed in consultation with the industry through IWG.

#### **Question 8:**

MCMC seeks comment on its preliminary view that service providers should be permitted to recover the administrative costs of porting through the levying of Donor Compensation and Porting Charge. Furthermore, MCMC seeks comment on its proposal to regulate the maximum level of such charges.

### Summary of submissions received

All agreed in principle with MCMC's proposal that service providers should be permitted to recover the administrative costs of porting by levying Donor Compensation and Porting Charge.

Celcom noted that service providers should be permitted to recover the administrative costs of porting by levying charges equivalent to the Porting Charge and Donor Compensation as per MNP guidelines. However, the maximum level of administrative porting charges should be limited, and the maximum Porting Charge and Donor Compensation charge should be regulated in line with MNP.

Cenerva believed it may be appropriate to allow recipient service providers to decide whether to charge consumers for porting their services, but such charges should be determined in accordance with the principles of “relevant costs”, “cost minimisation”, and “practicality”. By allowing recipient service providers to determine whether to charge consumers for porting or not, Cenerva believed market competitive forces could minimise or eliminate consumer FNP charging. However, Cenerva suggested for MCMC to retain the right to review consumer FNP charging and, where appropriate, set a maximum limit. In line with best practices from other number portability implementations, Cenerva suggested not to allow donor service providers to levy FNP related charges to consumers.

Cenerva concurred it is reasonable for MCMC to consider donor service providers FNP related charges, but where appropriate, MCMC should reserve the right to review and assess donor charges and set a maximum limit.

Digi believed that Donor Compensation and Porting Charge should be implemented in line with MNP rules. However, the amount needs to be decided after the joint study among the industry (and MCMC) are conducted. Digi also agreed that regulating the maximum level of charges would avoid barrier to consumer switching and a long negotiation process among the service providers.

Maxis agreed with MCMC’s preliminary view that Donor Compensation and Porting Charge should be allowed, emphasising that they are intended only to recover administrative costs and must not be used for other means, including leveraging it to block switching. Maxis suggested that Donor Compensation charge to be capped at no more than 34% higher than MNP’s current charge of RM10. Maxis opined that Donor Compensation charges should have a discount structure for bulk ports to ensure alignment with the cost recovery principle. Maxis suggested that Donor Compensation charge to entail three categories. The first category with ten (10) or less quantity of numbers with no volume discount (i.e. RM13.40 per number). The second category with 11 – 99 quantity of numbers, will have 65% discount (i.e. RM4.69 per number); and for third category with 100 or more quantity of numbers, will have 84% discount (i.e. RM2.14 per number).

Maxis also stated that regulating the maximum level of Porting Charge for FNP to be the same as MNP is reasonable and commercially viable from both service providers and end-users, as long as service providers continue



to have the same flexibility to waive these charges for end-users.

REDtone agreed that Porting Charge should not be a barrier to customers switching. Thus, maximum Porting Charge should be regulated by MCMC.

TM opined that Donor Compensation is a reasonable charge to be imposed as it is a common practice under MNP. TM opined that Porting Charge may not be practised in reality. The reason being, recipient network may want to encourage porting in. Imposing Porting Charge may discourage potential subscribers. TM has no issue having a provision that would allow such fees to be imposed. For consumer benefit, MCMC may regulate the ceiling rate of such charges.

TIME noted that regulating a maximum level of Donor Compensation charge is required to prevent the donor service providers from charging higher costs to deter its customers from porting out. Furthermore, a regulated Porting Charge would enable end-users to gauge the cost of porting.

UMobile believed that the industry's input on the amount of maximum Porting Charge and Donor Compensation will ensure that the Porting Charge do not inhibit consumers from switching.

YTLC opined that one-time charge is preferred. A recurring charge will increase the cost of calls for the porting number and acts as a disincentive to porting.

## Discussion

All agree that service providers should be permitted to recover the administrative costs of porting by levying Donor Compensation and Porting Charge.

MCMC is of the opinion that any matter regarding fee for Donor Compensation and Porting Charge needs to be deliberated in IWG. Subsequently, MCMC may incorporate the outcome in the NEAP.

MCMC noted that the donor service providers should not be allowed to charge their customers as it inhibits porting. MCMC provides flexibility for recipient service providers to charge customers. However, the charges may be waived depending on the recipient service providers.

MCMC noted on suggestion to cap Donor Compensation Charge at no more than 34% higher than MNP to incentivise donor service providers to complete their porting process efficiently.

MCMC noted on suggestion regarding discount structure for Donor Compensation. The suggestion implied that the effort and costs incurred by the donor service providers for bulk ports do not scale linearly with the number of ports, thus suggesting a discount structure based on volume. Hence, further discussion among service providers is required. Currently, for MNP, there is no discount structure for Donor Compensation charge.

MCMC agrees on setting a maximum Porting Charge similar to MNP is reasonable as long as service providers continue to have the flexibility to waive these charges for end-users.

MCMC noted that Porting Charge may not be practised. However, as per MNP, it provides flexibility for service providers to recover the cost of porting. Service providers are free to decide as long as the amount charged do not exceed Porting Charge allowed in the NEAP.

MCMC concurs with the suggestion that both Donor Compensation Charge and Porting Charge should only be a one-time charge.

### MCMC's final view

MCMC maintains its position to allow service providers to recover administrative costs of porting by levying Donor Compensation and Porting Charge. The maximum level of these charges need to be decided upon consultation with the industry through IWG.

## SECTION 5: PROCEDURAL ASPECTS OF FNP

### **Question 9:**

MCMC seeks comment on its proposal that the porting process is recipient-led.

### Summary of submissions received

All agreed with MCMC's proposal that a recipient-led process should be adopted for FNP as per the MNP implementation.

Cenerva concurred with MCMC's recommendation that FNP porting process should be recipient-led as it is viewed as being much more consumer friendly and efficient, since the recipient as a beneficiary in the porting process, is incentivised to experience a smooth transfer of number to their network.

Digi concurred with the proposal on porting process to be recipient-led. This is consistent with the current MNP process in Malaysia and also similar to other International and European standard, except for the UK and India.

Maxis agreed with MCMC's proposal that porting process should be recipient-led as this is a more efficient process for end-users, thus lowering barriers to switching and maximising consumer benefits. Maxis added that one of the main tasks for the IWG should be the design and publication of the end-to-end recipient-led process for FNP using existing MNP process where appropriate.

TM noted that any initiative to port-out should be led by the recipient network due to the conflict of interest between donor network and the soon to be ported out subscriber. Nevertheless, FNP is not as straightforward as MNP, which requires only a change of SIM card to effect successful porting. In addition, FNP may require close coordination between donor and recipient service providers due to the expected technical complexities. Therefore, further discussion on the porting process needs to be discussed in IWG.

TIME provided an opinion that the recipient-led porting process is much more efficient in ensuring the fastest and simplest way for the porting

process to be completed, as porting will benefit the recipient service providers than the donor. TIME also cautioned that if the porting process is donor-led, there are possibilities for donor service providers to hinder the porting process, which could prevent customers from porting out.

## Discussion

All agree with MCMC's proposal that porting process must be recipient-led, as it is more consumer friendly and efficient, thus lowering barriers to switching and maximising consumer benefits.

MCMC is of the view that IWG needs to ensure all technical complexities are addressed. This includes the design and publication of end-to-end recipient-led process.

## MCMC's final view

MCMC maintains its position that a recipient-led porting process is the best way forward for FNP implementation.

### **Question 10:**

MCMC seeks comment on its proposal to set the maximum regulated porting time for FNP.

## Summary of submissions received

All agreed with MCMC's proposal that the maximum porting time should be regulated.

Cenerva highlighted that FNP is more complicated and requires longer timeframes. For instance, it may require the recipient service providers to initiate a "truck roll" to complete connectivity at the customer premises or may involve engineering intervention at the local exchange or street cabinet. Quite often, the recipient service providers may be delayed to activate the new service if customers are not able to provide access to the premises in a timely manner.

Cenerva also suggested defining a starting point of the porting process. It

is critical since many service providers operate extended service activation lead times. It will be used as point of validation of porting request by the NPC and later for handover to the donor service providers for approval. This will allow the recipient service providers to complete their set-up.

Cenerva suggested that a fixed porting timeframe should be a maximum of five (5) days from the point of validation of port request by the NPC and handover to the donor service providers for approval to port completion.

Digi believed that for efficiency and customer experience, regulated porting time should be consistent with the current process for MNP. However, this will also depend on the final operational process flow agreed by the industry for execution.

Maxis agreed with MCMC's proposal to set the maximum regulated porting time for FNP as this prevents the porting process from becoming unnecessarily prolonged, which can deter switching and diminish the benefits of FNP. Maxis proposed that the regulated porting time for simple porting should be set at no more than three (3) working days which is in line with international benchmarks. Maxis further proposed that different types of complex porting (e.g. involving multiple numbers and/or locations from a single customer) should be clearly defined and allowed additional timeframe. This should be capped at a maximum of seven (7) additional working days, in line with international benchmarks.

Maxis explained that for porting which relies on wholesale service activation, the porting process should run concurrent with the service activation process without unnecessary delays. MCMC should ensure that the porting process does not delay service activation, as long as the maximum regulated porting time falls within the agreed wholesale service activation timeframe.

REDtone supported MCMC's proposal to regulate the maximum porting time to ensure that customers' porting experience is not compromised. In addition, REDtone noticed that most countries have adopted one (1) day maximum porting time and urged MCMC to consider the maximum porting time to be within 1-3 days and not 3-7 days, which is the least implemented in other countries.

TM agreed with the proposal on regulating maximum porting time allowable for FNP knowing that this will significantly impact the customers' experience

journey, thus the take-up rate for FNP. However, when setting up the maximum regulated porting time, TM suggested that due consideration be given on the differences between MNP and FNP. TM further highlighted that FNP requires proper coordination between donor and recipient network, thus a longer time is needed to process the port-out request.

TM suggested that it is normal for business customers (since this will be the prime target of FNP) to have various solutions on top of their normal fixed line subscription. Therefore, when porting out, the recipient network should be compatible enough to support all of these solutions to ensure smooth transition that would not disrupt the customers' experience. Otherwise, customers must be advised accordingly to manage their expectation. An alternative should be provided in view of any inability to match the experience so that a customer is aware and able to make an informed decision.

TM encouraged MCMC to consider all factors when setting maximum regulated porting time. A conservative approach towards FNP porting time is deemed to be prudent for the first few years of implementation, and benchmarks can be used to support. The setting of ambitious porting time targets that are not achievable can negatively impact end users' experience, increase complaints, and reduce the take-up of service in the long term. Therefore, TM suggested to further discuss and decide on the porting timeframe in IWG.

TIME opined that the appropriate regulated maximum porting time for FNP should not be as per MNP's since the process to port for fixed services is much more complex than mobile services. While TIME agreed that there is a need to regulate the porting time, there are many factors that need to be considered, as there are possibilities of physical changes that need to be implemented before any porting is initiated. In addition, with the existing service level agreement, the trunk commissioning is configured manually, which requires integration/testing with the customer's PBX.

TIME further elaborated that the porting time for FNP is also highly dependent on other factors, including the involvement of a centralised administrator. In the case of a corporate customer, a validation from the authorised party with the relevant signature and approval will take no less than 21 days. Unlike MNP, such a process might not be possibly done via SMS. TIME suggested a more detailed discussion on the topic once the IWG is established.

YTLC proposed the maximum regulated porting time to be 24 hours.

## Discussion

All parties agree that porting time should be regulated. However, there are several opinions regarding the best porting timeframe.

MCMC is of the opinion that it is essential to define the starting point of the porting process. The starting point needs to be agreed by all stakeholders and may be defined in the NEAP.

MCMC agrees that the process of porting fixed services is more complex than mobile services. Therefore, the solution towards a suitable porting time needs to consider all technical challenges faced by each service provider and the porting clearinghouse.

## MCMC's final view

MCMC maintains its position to regulate the porting time for FNP.

MCMC opines that porting timeframe needs to be discussed further in IWG by using MNP porting timeframe, which is two (2) days for consumer porting and five (5) days for non-consumer (business customers) porting as the initial discussion. In ensuring a reasonable porting timeframe, any technical difficulties need to be considered due to the differences between MNP and FNP.

### **Question 11:**

MCMC seeks comment on its proposal to regulate the maximum permissible time for loss of service during the porting process

## Summary of submissions received

All parties agreed with the proposal to regulate maximum permissible time for loss of service during the porting process.

Celcom suggested that the maximum permissible time for loss of service during porting process should be significantly less than one (1) working

day.

Cenerva proposed a porting approach, namely "Make Before Break". "Make Before Break" services function by the recipient service providers activating the ported number on their network before the donor service providers deactivate the number and account. "Make Before Break" porting approaches tend to be used in more recent number portability service implementations that minimise customer disruption during the porting process.

Cenerva suggested for MCMC to consider establishing a function whereby the NPC notifies customers by SMS or email when their number has been ported, i.e. at the same time the routing broadcast update message is sent out to all networks local routing databases. Utilising the NPC to centrally communicate with the porting customer at key points in the porting process significantly enhances the customer porting experience and optimise the porting process efficiency.

Cenerva proposed for MCMC to regulate the implementation of "Make Before Break" process for both fixed and mobile number portability requiring all service providers to update their local routing databases within 20 seconds of receipt of the NPC porting broadcast messages. On this basis, MCMC would regulate the loss of customer service during the porting process to be limited to a maximum of a few minutes.

Digi stated that regulation on the maximum permissible time for loss of services during the porting process is crucial to protect customers' experience, especially to the corporate or business segment. However, FNP operational flow needs to be established and made clear, particularly to synchronise between service providers.

Maxis agreed with MCMC's proposal to regulate the maximum permissible time for loss of service during the porting process. This is crucial to minimise barriers to switching for end-users at the same time maximise the benefits of FNP.

Maxis proposed that the maximum permissible time for loss of service for single number porting should be set at no more than 3 hours which is in line with international benchmarks. In addition, the maximum permissible time for loss of service for bulk porting should be set at no more than 8 hours for a single customer, with details on a reasonable timeframe to be



agreed among service providers through IWG due to the need for coordination across stakeholders (e.g. end-users, donor, recipient, NPC).

Maxis encouraged MCMC to consider measures to reduce service disruption during the porting process, including implementing temporary call diversion and off-peak porting. This can further lower barriers to switching for end-users. These measures can be included as a requirement under FNP provisions.

REDtone agreed with the proposed 20 mins to 3 hours maximum time for loss of service as benchmarked internationally and following best practice.

TM emphasised that due consideration, as stated in previous feedback in Question 10, be given when deciding the appropriate amount of permissible time for loss of service. This matter should be thoroughly deliberated at the IWG.

TIME supported the proposal to regulate the maximum permissible time for loss of service during the porting process. Unregulated time for loss of service can be manipulated to be a deterrent for customers to port. TIME is of the opinion that unregulated maximum permissible time for loss of service during the porting process will deter businesses from porting over to another service provider. Most of the current fixed number active users are business community. The benefits of FNP will not be fully taken advantage of should there be inadequate measures introduced to safeguard the end-users' interest.

UMobile opined that service providers should decide whether international benchmark (between 20 minutes and 3 hours) should be adopted. A maximum 24 hours' standard should be considered.

YTLC suggested that international best practices of between 20 minutes to 3 hours be used.

## Discussion

MCMC noted on the proposal to consider regulating service providers to implement a "Make Before Break" approach to minimise or eliminate any loss of service resulted from FNP. However, a specific time for a loss of service need to be defined.

MCMC has received various feedback on the suitable time for a loss of service. MCMC would like the loss of service to be as minimal as possible. MCMC found that all parties agree for a loss of service to be less than 24 hours (1 day).

MCMC noted on the proposal to implement temporary call diversion and off-peak porting to decrease loss of service due to porting. This matter is to be discussed at IWG along with the NPC operator to ensure an effective solution.

### MCMC's final view

MCMC maintains its position to regulate the maximum permissible time for loss of service during the porting process. The details will be incorporated into NEAP once it has been finalised by IWG.

#### **Question 12:**

MCMC seeks comment on its proposal that the acceptable reasons for rejecting a port request should be defined within the FNP regulations. Furthermore, MCMC seeks comment on its proposal to, where possible, harmonise the acceptable reasons for rejecting a port request between FNP and MNP.

### Summary of submissions received

All parties agreed that the acceptable reasons for rejecting a port request should be defined clearly within the FNP framework. However, there are contrasting opinions on the applicable reasons and whether it should be harmonised with MNP.

Celcom stated that rejection codes should be reviewed to clearly identify the acceptable reasons for rejecting a port request within the number portability regulations to prevent invalid rejection by the donor service providers and guarantee that subscribers can exercise their right to port. Hence, the details of these acceptable reasons could be finalised in consultation with the industry through the formation of an IWG.

Cenerva suggested that NPC should be maximised to perform initial

checking of porting requests and customer self-validation. The scope for donor checks and hence rejections is reduced dramatically to debt or contract status if permitted as a reason for stopping; whether the number has been reported stolen or lost (mobile only); validating that the recipient service providers has correctly completed the sales process, for example, checking whether the number/ service to reported is prepaid or postpaid (mobile only) and whether it is bundled or being separated (voice vs broadband vs ancillary services – fixed only); and the number to be ported is subject to security service/ police scrutiny.

Thus, the scope for harmonising donor checking and rejection between fixed and mobile number portability is limited, unless debt or service contract status are reasons for rejecting porting requests. Cenerva suggested to ensure that the rejection framework are reviewed to remove unnecessary rejection reasons and only permit legitimate and reasonable donor checking and rejection.

Digi agreed that as far as it is relevant to FNP, the port rejection reasons can be consistent with the rules under MNP as it is important to streamline and harmonise MNP and FNP to maintain a good customer experience.

Maxis agreed with MCMC's proposal to define acceptable reasons for rejecting port requests within the FNP framework, this is in line with international best practice and should be developed based on key principles to protect consumers and promote competition. The list of reasons should be clearly defined and exhaustive to minimise ambiguity and prevent invalid port rejections.

While Maxis agreed in principle that the rejection reasons should be harmonised where possible for both MNP and FNP, there is a need to refine the current reasons to ensure alignment with the objectives of protecting consumers and promoting competition, such as making the current reasons more explicit to minimise ambiguity and prevent abuse. For example, "non fulfilment of contract obligation" is a rejection reason currently under MNP that may give donor service providers a broad scope to reject valid port requests. This can potentially include citing an ongoing contract period as "non fulfilment of contract obligation" and thus rejecting the port request which is not in line with international best practice. Maxis reiterated the importance of the rejection reasons to be clearly defined and exhaustive, including refining current MNP reasons to achieve this.

REDtone agreed that reasons for rejection should be pre-defined within the FNP framework that is in line with international best practice and that have been applied for MNP. In addition, it should also be acceptable by all service providers that this is for the best interest of their customers.

TM believed that both fixed and mobile services are quite different in nature, thus not all acceptable reasons for rejecting a port request under MNP can be directly applied to FNP. MNP precedence can be used to develop a potential list of reasons for port rejections, however, any element will need to be customised and carefully tested in the fixed Malaysian environment context before finalisation. This should be dealt with thoroughly by the IWG.

TIME believed that the reasons that can be considered for FNP in rejecting a port request are overdue payments with the current service provider and customers who are still bound by the contractual terms with the current service provider unless the customer is willing to absorb the termination cost and penalty. These reasons are acceptable for FNP as experienced in MNP implementation. Similarly, these reasons would also prevent customers from taking advantage of the porting process, such as, leaving any outstanding bills unsettled or haphazardly terminating active contracts with their current service providers.

UMobile concurred that acceptable reasons for rejecting a port request should be clearly stipulated in the number portability business rules for reasons identified by MCMC. While there might be benefits in harmonising the porting process between fixed and mobile numbers, the details of acceptable port-out requests and rejections should be extensively consulted in the IWG.

## Discussion

MCMC noted that the rejection codes for FNP to be consistent with MNP. In addition, the current MNP rejection codes need to be reviewed and be more explicit.

MCMC agrees that FNP is different in nature and customisation to the port rejections need to be made to ensure that it matches the porting process for FNP.

MCMC agrees with both rejection reasons on overdue payment and

contractual bound as it is similar to the MNP rejection codes. Ultimately, it is dependent on the IWG to decide which rejection reasons are most suitable for FNP.

MCMC also noted on a suggestion to maximise the NPC model, but consideration must be made before maximising the NPC model. Thus far, MCMC did not receive complaints from service providers on the NPC's current responsibility, which suggests that they are satisfied with service provided by the NPC.

### MCMC's final view

MCMC maintains its position to define the reasons for porting rejection.

MCMC also concludes that a thorough review of the rejection codes must be undertaken by IWG to ensure that it is explicitly written and does not cause an unnecessary burden for end-users to port.

#### **Question 13:**

MCMC seeks comment on its preliminary view that win-back (i.e. the practice of donor networks contacting customers for marketing purposes on receipt of a port request) should be prohibited.

### Summary of submissions received

All submissions agreed that win-back practice should be prohibited.

Celcom noted that prohibiting win-back encourages a level playing field, especially for new service providers. It would also incentivise service providers to compete more aggressively. Fixed service providers would be less certain about which customers intend to leave and would have to keep headline prices competitive to prevent switching. There would be less of an incentive to reserve the best deals for departing customers because customers could leave without warning. Retention would become more proactive as service providers would be incentivised to contact out of contract customers to advertise current offers.

Cenerva agreed that win-back is prohibited from the point that the donor service provider is made aware of the customer's intention to port their

number for a period of 90 days after the porting transaction is completed. Cenerva suggested that the donor service provider is permitted to contact the customer once the supporting transaction has been completed for the sole purpose of discussing and collecting outstanding debt.

Cenerva also agreed that the win-back prohibition period is aligned to the onward porting restriction and is managed by the NPC. In this regard, the donor service providers are treated in the same manner as other service providers in the market. The win-back activity is pointless since the NPC will not permit further porting of a number until the onward porting restriction period i.e. 90 days, has been completed.

Maxis agreed with MCMC's preliminary view that win-back activity should be prohibited, as it prevents a level playing field in the retail marketplace, with larger service providers having an unfair advantage due to asymmetries information. Consumers will be negatively affected from win-back activity as they would lose the ability to compare prices along with other lower retail competition.

Maxis also mentioned that prohibiting win-back would be in line with many markets globally as well as previous MNP implementation in Malaysia. MCMC should further consider related restrictions such as, ensuring that exit surveys are not leveraged as a means for win-back activity.

TM found that prohibition of win-back activity is acceptable on condition that the customer has paid all outstanding balance inclusive of contractual penalty (if any).

TIME believed that the donor service providers should not be allowed to contact customers for marketing purposes on receipt of a port request. When a port request is received from a customer, the recipient service providers will have to immediately expedite all relevant processes. Among others, this will involve physical and non-physical works such as, fiber pulling, device procurement, and network setup and configuration required to be completed before the porting process is finalised. It is not fair for the recipient service provider if any win-back is allowed as costs would have already been incurred from the time of initiation.

UMobile agreed that there are incentives for the donor service providers to engage customers who have initiated port-out requests to persuade customers to remain with their current network. However, similar to MNP

this practice should also be prohibited in FNP.

YTLC stressed that the donor service provider should not undertake activities to influence the port-out decision once the customer has opted to port-out.

## Discussion

All submissions agree that win-back practice should be prohibited.

MCMC noted that all believed that this would lead to a more level playing field. Furthermore, exit survey should not be misused for win-back activity. MCMC opines that win-back activity should not be masked with different terminology to justify any enticement. Therefore, it might be best that donor service providers are only permitted to contact customers after a certain period.

MCMC noted that any contractual debt should be settled before the porting process is completed. Therefore, the customers must ensure their existing account is not under any contractual debt.

## MCMC's final view

MCMC maintains its position that win-back practice should be prohibited.

### **Question 14:**

MCMC seeks comment on its intention to form an industry working group to finalise the details of the FNP guidelines

## Summary of submissions received

All submissions agreed that IWG needs to be formed to finalise the details of FNP guidelines.

Celcom supported MCMC's proposal to establish IWG to establish the FNP guidelines. The success of MNP implementation was primarily due to strong commitment and collaboration between MCMC and the industry. A fair and transparent process to discuss in an open platform allows acceleration of successful implementation.

Cenerva agreed for the establishment of IWG, with MCMC retaining responsibility to set the agenda, lead and drive the FNP implementation and launch process and be responsible for all key FNP service decisions. MCMC should also develop an appropriate and comprehensive FNP framework for Malaysia while setting a clear and achievable implementation schedule. MCMC also should establish an effective management forum to engage FNP stakeholders. The forum comprising of a working group (which is responsible for making recommendations to the MCMC on detailed FNP operational and launch matters and implementing FNP guidelines), and a Steering Committee comprising senior sponsors from each stakeholder (to support implementation progress and act as an escalation point for contentious and challenging issues).

Cenerva also suggested that the FNP service implementation and launch should be managed by cross-stakeholder working and steering groups reporting to the MCMC, with the MCMC retaining responsibility for making key decisions.

Digi highlighted that the formation of IWG would enable comprehensive assessments of FNP and subsequently finalise the details of the FNP guidelines.

Maxis suggested that the working group should support not only the development of FNP guidelines but also continue to oversee the implementation of FNP as seen in other markets. The IWG could be configured with an executive body (chairman, senior executives from the service providers) charged with a group responsible for the overall delivery and operation of FNP. The executive body would be supported by their technical and process-oriented teams with representatives from the service providers that would be responsible for the detailed implementation.

Maxis emphasised that the IWG must have a neutral, independent chairman to ensure impartiality given the diverse interests amongst the different stakeholders. Ensuring that the chairman is independent of any members of the working group is of utmost priority, this should entail an individual that is not currently working for any member and has not done so over the past 2 years. In addition, the chairman should preferably also not work for MCMC and not represent it, with a representative from MCMC appointed as chairman only if no suitable independent candidate can be found. Such an approach would also allow MCMC to focus on a supervisory role.



TM found that an IWG must be established to develop an acceptable common practice for various FNP aspects. In fact, this is a basic requirement to ensure all issues be discussed and resolved among FNP participants prior to the same being adopted. However, TM cautioned that a good mediator with a great understanding of the situation at hand (neutral) is essential to be part of the working group as this grouping will probably have an imbalance opinion due to TM being the only service provider with a significant market share thus becoming the most impacted once this policy be implemented. In the absence of a good mediator will only result in the other seven (7) players to lead and shape the outcome of the discussion simply being the majority party in the IWG. TM is adamant that the intended outcome should always be guided by the principle of seeking the most amicable solution for all.

TIME noted that the IWG discussion on the implementation of FNP should also entail matters such as, billing processes, porting time, installation and charges, which will have to be thoroughly discussed.

YTLC voiced its opinion that the governance structure of the IWG should prevent more prominent service providers from having overriding influence. The views of smaller service providers should also be considered. YTLC also proposed that MCMC undertakes an economic assessment of the implementation of FNP. The proposed analysis should include the costing of both the on-switch and off-switch models.

## Discussion

MCMC noted that all submission agree that IWG needs to be established ahead of FNP implementation. The IWG should be responsible for FNP guidelines and discuss other relevant matters such as, billing processes, porting time, installation, and charges.

MCMC also noted on the proposal for an independent IWG Chairman with good mediator skills. This will ensure that all perspectives are considered before making any decision.

## MCMC's final view

MCMC maintains its position that IWG should be established to discuss further issues pertaining to FNP implementation.

## SECTION 6: WAY FORWARD

MCMC would like to record its appreciation to all parties on the submissions made. This has enabled MCMC to plan on the way forward pertaining to FNP and numbering policy in Malaysia.

Based on the feedback received as well as data from benchmark study, it is apparent that FNP will provide a more competitive landscape to fixed service market. Thus, providing further incentives for service providers to invest in improved services and price offerings to compete for both new and existing users.

Considering the above, MCMC has decided to implement service provider portability for FNP. This is a decision which has been carefully considered by taking into account all views from stakeholders especially its benefits to all consumers in Malaysia. MCMC believes that consumers in Malaysia will be able to enjoy the same benefits provided by service provider portability.

The first step for FNP implementation will be the establishment of IWG. This will allow all service providers/stakeholders to have meaningful input to the process of implementing FNP and it is in line with the approach previously adopted for MNP. The purpose of this IWG is to work through the details of FNP implementation and decide on how best to resolve any outstanding administrative or technical issues.

It is MCMC's intention to implement service provider portability as soon as possible. However, considering administrative, regulation and technical challenges that need to be addressed, MCMC sees the needs to allow IWG to finalise the implementation timeline of FNP. MCMC will ensure that the FNP implementation timeline is reasonable so that consumers can enjoy FNP as soon as possible.

Another key decision that MCMC has made is to implement location portability within state boundaries with the same area code upon review of the NEAP in Q3 2021.

MCMC concurred to implement location portability within same area code (without state boundaries restriction) to be implemented by end 2022, to allow sufficient time for service providers to assess and enhance their network capability.

As the current fixed network is based on Next Generation Network (“NGN”), MCMC has decided to revise the concept of Subscriber Number Level (“SNL”) digit to enable service providers to implement location portability. By revising the current concept of SNL, the first digit of Subscriber Number will not be tied with level boundary (as in the current Schedule A of the NEAP). The only indication of a geographic numbers to a geographical location is based on area code.

The implementation of location portability is also consistent with MCMC strategy to ensure that numbering resources which are national scarce resources be utilised efficiently.

MCMC hoped this will solve issues for end-users who would like to maintain numbers while changing their location within the same area code, with the same service providers. All service providers should implement this service to ensure that more end-users can benefit from location portability.

The location portability implementation will be made possible via the Numbering and Electronic Addressing Plan (“NEAP”) amendment notice to be issued by Q3 2021.

16 July 2021