



Malaysian Communications and Multimedia Commission

The Draft National Fiberisation and Connectivity Plan

Industry Consultation Report

29 March 2019

Preamble

This Industry Consultation Report is issued as a result of an Industry Consultation session held by the Malaysian Communications and Multimedia Commission (“the Commission”) at the Marriott Putrajaya Hotel on 29 October 2018, as well as at other engagement sessions held with relevant stakeholders. A copy of the presentation slides is available for reference at the following link:

https://www.skmm.gov.my/skmmgovmy/media/General/pdf/Industry-Consultation_NFCP_General.pdf.

The Commission would like to thank everyone who participated and submitted their feedback, either as individuals, interested parties or licensees during the consultation period. The feedback has been very beneficial in assisting the Commission in improving the Draft National Fiberisation and Connectivity Plan (“NFCP”) presented on 29 October 2018.

Moving forward, the Commission also welcomes additional feedback, which may be considered in improving the NFCP. These can be submitted via email to nfcp.sec@mcmc.gov.my.

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SECTION 1 : THE DRAFT NATIONAL FIBERISATION AND CONNECTIVITY PLAN ('DRAFT NFCP')

1.1 Introduction

In September 2018, the World Bank issued a report, "Malaysia's Digital Economy : A New Driver of Development"¹, which highlighted that "Malaysia needs to create a dynamic ecosystem for its digital economy that embodies changes to its infrastructure, regulations, skills, and public finance". More specifically, productivity, innovation, and livelihood can be improved using digital technologies². Additionally, the World Bank report also highlighted that Malaysia needs to address affordability, quality of service, market concentration and regulatory challenges to ensure that Malaysia's digital infrastructure provides ubiquitous, reliable, and ultrafast broadband service; which is key to unlocking the potential of the digital economy.

Despite the high cost of deployment and low returns, the 11th Malaysia Plan (2016-2020) emphasised the need to improve coverage for digital infrastructure, especially in the rural areas. In October 2018, a mid-term review of the 11th Malaysia Plan ("Mid-Term Review") was undertaken, and the following issues were highlighted:

*"High cost and low ROI remains as major challenges in the deployment of digital infrastructure, attributing to inadequate broadband coverage, especially in rural areas. The deployment of digital infrastructure is also constrained by several issues including the issuance of the right of way and permits for communication infrastructure by the state governments and local authorities. This has led to variations in quality and cost due to the practice of some state governments imposing exclusivity in the deployment of digital infrastructure. In addition, inconsistent and complicated procedures at the local authority level have contributed to the delays in broadband roll-out."*³

¹ World Bank Group. 2018. Malaysia's Digital Economy: A New Driver of Development. Washington, DC: World Bank. License: Creative Commons Attribution CC BY 3.0 IGO.

² Such as the internet, smartphones, Big Data, the internet of things, artificial intelligence, and other technologies

³ The Mid-Term Review of the Eleventh Malaysia Plan, 2016-2020: New Priorities and Emphases

Moving forward, the Mid-Term Review recommended that improvements be made to ensure digital connectivity, affordability and quality as part of the effort to strengthen the ecosystem for economic activities, and to balance regional growth (Strategy C3).

The Minister of Communications and Multimedia Malaysia (“the Minister”) also has stressed the importance of access to the Internet, indicating that this is no longer a privilege or a luxury, and that it is in fact, a necessity and a survival tool. In this regard, the Minister, at the “Malaysia : A New Dawn” conference held in October 2018, highlighted some of the initial targets that he wanted for digital connectivity for the country, which included widespread availability of affordable broadband at higher speeds⁴.

In light of the need to improve the country’s digital connectivity, crafting of the NFCP began in October 2018. The Draft NFCP was developed to put in place nationwide digital connectivity that is robust, pervasive and affordable, to benefit the country, and to enable adoption of new technologies and future digital services.

The NFCP evolved from the National Fiberisation Plan, which was initially focused on increasing fibre networks throughout the country. Expansion of fibre networks is still crucial, but alternative technologies need to be relied upon to connect areas where fibre cannot be deployed or will be too costly to do so. This is where the connectivity part of the NFCP comes in, with a wider focus on ways of connecting the entire country, by leveraging on different technologies, such as fixed, wireless and satellite.

The Draft NFCP sets out, among others, the targets, action plans and strategies to accelerate deployment of digital infrastructure. The 5-year plan aims to:

- i. address issues that hinder the widespread availability of high quality and affordable digital connectivity;
- ii. support the needs of the country moving forward and harness opportunities offered by new services / technologies; and
- iii. provide clarity in terms of strategic directions for initiatives to support the digital economy and adoption of future technology.

⁴ https://www.kkmm.gov.my/pdf/ucapan/2018/181009_SPEECH_YBM_A_NEW_DAWN.pdf

Initially, the Draft NFCP outlined 17 targets to be achieved through four (4) action plans:

A. Ensure optimum deployment of digital infrastructure

1. Average speed of 30 Mbps in 98% of populated areas;
2. 100% premises passed in State Capitals and selected high impact areas with up to 500 Mbps;
3. 20% of premises passed in sub-urban and rural areas with up to 500Mbps;
4. Fibre network passes 70% of schools and government offices, hospitals and police stations near schools;
5. Gigabits availability in selected industrial areas and to all State Capitals;
6. Phasing out of copper network;
7. Assessment of technical standards that should be mandated for infrastructure deployment;
8. Allocation of 700MHz and reallocation of 2300MHz and 2600MHz;
9. Mobile coverage along Pan Borneo highway upon completion;
10. Submarine Cable Landing Centres ('SCLC') in Sabah & Sarawak to link directly to international cables; and
11. Policy position on 5G related issues.

B. Provision of affordable services and improve quality to drive the digital economy

12. Entry level fixed broadband package at 1% of Gross National Income ('GNI');
13. Double the speed at half the price; and
14. Yearly publication of Quality of Service Report.

C. Promote competition

15. Extension of liberalisation in key strategic activities.

D. Participation in the digital economy

16. 100 rural e-commerce fulfilment centres; and
17. Quality of Service for courier service.

These initial targets and action plans were prepared based on initial consultations with limited stakeholders as well as from the initial targets announced by the Minister at the “Malaysia : A New Dawn Conference” in October 2018.

1.2 Industry Consultation Exercise

For the purpose of inviting comments and views from the industry on the Draft NFCP, the Commission conducted a consultation session with the industry on 29 October 2018 in which the Draft NFCP was presented. 247 attendees from 145 organisations attended the said session.

While the consultation was closed on 12 November 2018, the Commission continued to receive submissions and feedback on the Draft NFCP after that. As at the publication of this Industry Consultation Report, the Commission received 31 written submissions from the licensees and non-licensees, as outlined below:

Licensees

1. Axiata Group Berhad
2. Celcom Axiata Bhd.
3. DiGi Telecommunications Sdn Bhd
4. edotco Malaysia Sdn Bhd
5. Extreme Broadband Sdn Bhd
6. Fenomena Majukaya Sdn Bhd
7. Fibrecomm Network (M) Sdn Bhd
8. iFIBER Sdn Bhd
9. Mass Rapid Transit Corporation Sdn Bhd
10. Maxis Broadband Sdn Bhd
11. MEASAT Satellite Systems Sdn Bhd / MEASAT International (Malaysia) Sdn Bhd
12. MyISP Dot Com Sdn Bhd
13. Neutral Transmission Malaysia Sdn Bhd
14. NTT MSC Sdn Bhd
15. Pesona Network Engineering Sdn Bhd
16. Privasat Sdn Bhd
17. Redtone Engineering & Network Services Sdn Bhd
18. Sacofa Sdn Bhd

19. Symphonet Sdn Bhd
20. Telekom Malaysia Berhad
21. TIME dotCom Bhd
22. U Mobile Sdn Bhd
23. VC Telecoms Sdn Bhd (formerly known as Visi Cenderawasih Sdn Bhd)
24. YTL Communications Sdn Bhd

Non-Licensees

25. Facebook Inc.
26. Individual
27. Malaysia Digital Economy Corporation
28. Malaysian Technical Standards Forum Bhd
29. Tenaga Nasional Berhad
30. Three-OPP (M) Sdn Bhd
31. US-ASEAN Business Council

Industry comments, views and input were specifically sought in respect of the following few areas:

- i. The targets, as outlined earlier;
- ii. The work plans and initiatives. These include, among others, passive infrastructure sharing, mapping of sites and database improvement for better and coordinated planning, revision and development of technical codes / instruments, Universal Service Provision ('USP') framework review etc.;
- iii. The Right-of-Way ('RoW') issues;
- iv. Implementation challenges and ways to address infrastructure deployment barriers; and
- v. Other general areas of the Draft NFCP.

Additionally, the Commission also undertook separate sessions with other stakeholders including small and medium enterprises, financiers, analysts, as well as related interest groups in order to obtain a better understanding of the challenges and requirements in improving coverage, affordability and quality of broadband infrastructure and services.

SECTION 2 : INPUT FROM INDUSTRY CONSULTATION EXERCISE AND THE COMMISSION RESPONSE

2.1 Industry feedback

The feedback gathered from the Industry Consultation exercise comprises confidential and non-confidential feedback / information. Hence, for the purpose of this Industry Consultation Report:

- i. feedback will be consolidated, generalised, summarised and structured by areas of concerns to avoid repetition; and
- ii. no specific references are made to the details of the respondents.

Generally, the feedback covers the following broad-based areas:

- 1. Issues concerning Federal / State / Local Authorities;
- 2. Infrastructure Planning and Deployment;
- 3. Spectrum related issues;
- 4. Access / Competition;
- 5. USP / Funding;
- 6. Consumer related matters;
- 7. Technology; and
- 8. Other matters.

The summarised and consolidated feedback, together with the Commission response on the issues are outlined in the Table below:

1. Federal / State / Local Authorities

Feedback	Commission Response
<ul style="list-style-type: none">• Overlapping powers between the Federal and State Governments in various matters is identified as one of the challenges in deploying digital infrastructure.	The Commission notes that there are multiple jurisdictions and laws involved for telecommunications to be recognised as public utility. In this regard, a policy decision is required to reflect this position, and discussions are ongoing with the relevant authorities in

Feedback	Commission Response
<ul style="list-style-type: none"> • “Public utility approach” may be relevant to address the challenges and may require legal reforms. • Streamlining of the legislations and processes (e.g. Communications and Multimedia Act 1998 [‘CMA’], Street, Drainage and Building Act 1974, Town and Country Planning Act 1976, Uniform Building By-Law [‘UBBL’], <i>Garis Panduan Perancangan Infrastruktur</i> [‘GPP-I’]), etc. to address the challenges in the deployment of digital infrastructure. 	<p>determining the best approach to undertake this.</p>
<ul style="list-style-type: none"> • Exclusivity of State-Backed Companies (‘SBCs’) in deploying digital infrastructure in the States. • The overlapping role and functions of One Stop Agency (‘OSA’) in relation to the One Stop Centre (‘OSC’) at the Local Authorities (including the need to audit OSA). 	<p>The Commission together with the Ministry of Communications and Multimedia (‘KKMM’) will continue to engage with State Governments through various platforms (e.g. Majlis Negara bagi Kerajaan Tempatan) to seek resolution on these issues.</p>
<ul style="list-style-type: none"> • The need to streamline the different processes at the Local Authorities level. • Difficult and burdensome RoW requirements, including the requirements for hefty deposits by other stakeholders such as JKR. • State and Local Authorities should embark on the OSC 3.0 initiative whereby all new and existing sites submissions are performed online. • Potential issues in implementing smart city / 5G networks. • Collaboration with Federal and State Governments - involve standards development for turnaround time and use of public buildings and street infrastructure. • The need to streamline infrastructure deployments via a coordination committee. 	

2. Infrastructure Planning and Deployment

Feedback	Commission Response
<ul style="list-style-type: none"> • Coordinated planning (including redefining the area for planning) is required. • Effective database for better infrastructure planning (e.g. avoid duplication, integrated database with States infrastructure, common platform to announce availability of infrastructure, neutral third party to manage). • Improvements for a practical and well-coordinated data collection by the Commission. 	<p>The Commission is currently improving database and collection of information to enable better coordinated planning and sharing of infrastructure.</p>
<ul style="list-style-type: none"> • To consider promulgating new law / regulation to promote infrastructure sharing. • Infrastructure sharing - passive (including cabinet, equipment room etc., common infrastructure, State Governments to create common utilities ducting, 'Stokab approach'). • Sharing of civil infrastructure cost. • Certification requirement for contractors. • Streamline requirements / specification for compliance by building owners / developers. • Review / develop relevant technical documents to ease infrastructure deployment. • Mandating fibre for building. • Common trenching for Pan Borneo highway. • Issue of handing over of infrastructure by developers. • Site acquisition on commercial basis. • "Call-Before-You-Dig" – participation by all utility providers. 	<p>There needs to be a regulatory approach and mechanism to promote the deployment and sharing of infrastructure. The Commission has identified various documents that needs to be developed including the GPP-I (<i>Garis Panduan Perancangan Infrastruktur</i>), certification requirements, and other relevant regulatory instruments (e.g. technical codes) to streamline these requirements, including operationalisation of Chapter 1 Part X of CMA and proposed amendments to UBBL.</p>
<ul style="list-style-type: none"> • Affordable satellite broadband for remote areas. 	<p>NFCP is technology neutral and not limited to fibre only. Specific technologies may be used upon assessment and gap analysis in</p>

Feedback	Commission Response
<ul style="list-style-type: none"> New SCLC may be required, but SKR1M capacity remains unused. 	<p>consultation with the stakeholders, and also taking into account the cost implication.</p> <p>Notwithstanding SKR1M's capacity, there is a need to promote Sabah and Sarawak's competitiveness through network diversity.</p>

3. Spectrum

Feedback	Commission Response
<ul style="list-style-type: none"> Spectrum pricing / fee structure – matters for consideration by the Commission in determining the price and fees. The need to review Spectrum Regulations and Spectrum Plan. Longer spectrum holding period (20 years, instead of 15 currently practiced) 	<p>The Commission notes the recommendation to review the matters in the Spectrum Regulations, including fees and pricing of spectrum, assignment methodologies etc. Pricing aspect of spectrum may be considered during spectrum re-allocation process.</p> <p>The Commission may have other considerations in setting the period of spectrum assignment taking into account advances in technology, specific requirements for spectrum, international practices and other relevant factors.</p>
<ul style="list-style-type: none"> Spectrum for wireless backhaul, utilisation of unused frequency. Radio Access Network ('RAN') sharing / spectrum sharing regime. Fair and adequate allocation to achieve the required speed and reliability. Clear spectrum allocation policy / review of re-allocation is needed. Additional wireless spectrum can allow increased mobile data speeds via Carrier Aggregation. Allocating many operators have led to inefficient spectrum utilisation and less total spectrum per operator. 	<p>The study on spectrum optimisation by the Commission may address the issue of optimum spectrum allocation and use among service providers. The Commission does not limit the potential use of spectrum including RAN sharing, as well as use of new spectrum bands as long as it benefits the consumer and meets the relevant technical requirements (i.e. World Radio Conference, Spectrum Plan etc).</p>

Feedback	Commission Response
<ul style="list-style-type: none"> Different technologies of 5G, 4G, Wi-Fi and unlicensed LTE will need to work together. 	
<ul style="list-style-type: none"> Spectrum requirement / roadmap for 5G to be finalised by Q2 2019. Plan for cell siting for 5G. 2G shut-off. “Second Digital Dividend”. 	<p>The Roadmap for 5G spectrum is currently being studied by the National 5G Taskforce, formed in November 2018.</p> <p>The Commission will undertake a study on 2G upgrading.</p> <p>The use of spectrum for mobile services including any revision to existing band plan is subject to the outcome of study on spectrum optimisation.</p>

4. Access / Competition

Feedback	Commission Response
<ul style="list-style-type: none"> Mandating of passive infrastructure disincentivises infrastructure owners which provide services and should be looked at from a market concentration approach. Security reason as a ground of refusal to access SCLCs. Mandatory Standard on Access Pricing (‘MSAP’) costing using LRIC (Long-run Incremental Cost) results in affordable MSAP rates but the end cost is still above 1% GNI (port rental is already RM45). Further review of MSAP is needed to lower prices. 	<p>The Commission notes the views provided on regulating passive infrastructure; however, the Commission also notes that there may be other considerations such as revenue incentives, asymmetric regulation and access to RoW (including operationalisation of Chapter 1 Part X of CMA).</p> <p>The Commission notes that access to SCLCs remains a challenge despite improvements made to the Mandatory Standard on Access (‘MSA’). However, further details may be required (e.g. formal complaints) to enable further investigation and improvements.</p> <p>The Commission notes the challenges in implementing the 1% GNI in view of the MSAP rates. In this regard, the Commission will review the proposed targets on affordability.</p> <p><i>“Double the Speed at Half the Price”</i> target was achieved through the implementation of MSAP in 2018.</p>
<ul style="list-style-type: none"> Mobile broadband vs fixed broadband (higher spending on mobile, substitutability etc.). 	<p>The Commission will be carrying out a strategic review of the communications markets in 2019. Among others, the study will address whether there is a need to consider</p>

Feedback	Commission Response
<ul style="list-style-type: none"> • Structural / Functional separation, Industry competition – (e.g. NETCO, OPCO, FIBRECO) • Neutral infrastructure provider. 	<p>functional or structural separation and fixed mobile convergence.</p>
<ul style="list-style-type: none"> • To remove exclusion of telecommunication services from the Competition Act 2010. • Access to TNB / TM poles and public structures to be mandated. • Regular review of access instruments to address new issues such as speed requirements, methodologies, sharing of passive infrastructure etc. • Improve Standard Access Obligations instead of MSA and MSAP. • Active supervision from the Commission on the enforcement of access framework is required. 	<p>Competition matters in the telecommunications sector requires specific expertise. The competition provisions in the CMA have been formulated to take into account specific issues that relate to this sector. In other jurisdictions such as Singapore and Thailand, the sector regulator has powers to deal with competition issues as well. Additionally, the Commission also collaborates with the Competition Commission to ensure the approaches are aligned in addressing competition issues.</p> <p>Access framework including MSAP and access list is reviewed every 3 years, and may take into consideration of new developments or requirements as highlighted.</p> <p>Awareness and understanding on the access framework is important to ensure the efficient implementation access. Licensees are also encouraged to lodge complaints on matters related to access issues.</p>

5. USP / Funding

Feedback	Commission Response
<ul style="list-style-type: none"> • For uneconomical areas – to look for potential funding sources. • Funding or subsidising the build and operation of a network – then open for wholesale. • Study on investment – an independent consultant is needed to identify investment requirements. • Funding models such as Ring Fencing revenue, Public-Private Partnership to address funding issues, pooling government funding. • Government support through funding. 	<p>The Commission will develop appropriate funding models and consult the relevant stakeholders on the matters raised.</p>

Feedback	Commission Response
<ul style="list-style-type: none"> Foreign investment is not required. 	
<ul style="list-style-type: none"> The need to review USP processes to meet the timelines and NFCP targets. Mandating domestic roaming obligation on USP provider. Reduction of USP contribution to help lower the cost of service. 	<p>Current USP framework including the processes, objectives and the definition of underserved groups / areas will be reviewed. While the review is being undertaken, existing processes will be improved (e.g. tender decision-making).</p> <p>The Commission takes note of the proposal for domestic roaming to be mandated in USP areas and will consult the industry further on this matter.</p>
<ul style="list-style-type: none"> Alternative mechanism to address universal access to broadband (e.g. voucher, tax incentives etc.). 	<p>Other mechanisms to address universal access to broadband will be explored in the USP framework review.</p>
<ul style="list-style-type: none"> 100% clawback as a mode of funding / incentive for fibre roll-out. 	<p>The Clawback approach will be revisited in the review of USP framework.</p>

6. Consumer

Feedback	Commission Response
<ul style="list-style-type: none"> Parameters for Quality of Service ('QoS') measurements to be agreed amongst the industry. Publication of consumer satisfaction rating. 	<p>The Commission will determine the appropriate approach and mechanism on QoS reporting by licensees.</p>
<ul style="list-style-type: none"> Alternative approach to measure affordability (5% below the average monthly income, Affordability Drivers Index (ADI), special incentive to B40, measure at household level). To consider household spending on broadband. 	<p>The Commission welcomes the proposals on alternative approaches to measure pricing and will assess relevancy to the NFCP targets.</p>
<ul style="list-style-type: none"> Broadband speed definition and implication of cost. Supply of high-speed broadband has to be on demand basis and subject to business viability and gradual increment. 	<p>In general, the average 30 Mbps as highlighted in NFCP is achievable, and in this regard, the spectrum optimisation study and the analogue TV switch off are important contributing factors.</p>

Feedback	Commission Response
<ul style="list-style-type: none"> Use of other technology to meet the speed requirement. 	
<ul style="list-style-type: none"> The General Consumer Code to be updated for inclusion of rebate mechanism - for a provider not meeting the service commitment. 	<p>The Commission notes the proposal to update the General Consumer Code on matters related to compensation / rebate. This matter is being considered under the review of the General Consumer Code currently undertaken.</p>

7. Technology

Feedback	Commission Response
<ul style="list-style-type: none"> Mixed technologies to meet targets. Use of satellite, other passive infrastructure such as water pipes and sewerage as backhaul / last mile technologies, pole to lay fibre. 	<p>NFCP is technology neutral and is not limited to fibre only. Specific technologies may be used upon assessment and gap analysis in consultation with the stakeholders.</p>
<ul style="list-style-type: none"> Copper technologies - to be kept at minimal use, can deliver the required speed, needed for emergency and fibre in-building and to find solution for copper related service if copper is to be fully phased out. Leverage from TNB's infrastructure – to roll-out FTTH, fiberising telco towers. Propose migrating buildings with VDSL to fibre. 	<p>The Commission notes the responses provided, which is in line with NFCP.</p>
<ul style="list-style-type: none"> Alternative energy for electricity (solar, fuel cell). Unavailability of electricity supply. 	<p>The Commission supports industry's initiatives that can address energy supply issues. Additionally, it is also the operators' responsibility to ensure their networks are operational (including sourcing for alternative energy sources) so as to ensure uninterrupted service.</p>

8. Others

Feedback	Commission Response
<ul style="list-style-type: none"> Awareness on the Commission's position and telecommunications need in the States. 	<p>The Commission notes the awareness issue and will continue to engage State</p>

Feedback	Commission Response
<ul style="list-style-type: none"> • Continuous industry training by the Commission. 	<p>Governments and Local Authorities via the Commission's regional offices to ensure common understanding.</p> <p>The Commission will resume its Training Programme for the industry in 2019.</p>
<ul style="list-style-type: none"> • Internet exchange/ regional gateway and data centre/ East West Gateway/ fibre level peering. • Mandate robust Service Level Agreement (SLA) for fibre restoration. • Ring architecture to improve redundancy and resiliency. 	<p>The Commission notes that MyIX's objective is to keep domestic Internet traffic locally and IP transit is not allowed so as to protect domestic players. However, the Commission also notes the view that Internet exchange / peering may also promote smaller operators to roll out at the last mile.</p> <p>The Commission welcomes commercial initiatives to improve network diversity, efficiency and latency through peering and will further consult the stakeholders on this matter.</p> <p>On fibre restoration, the Commission notes that is a commercial arrangement between operators.</p>
<ul style="list-style-type: none"> • Cabotage restriction for the installation and maintenance of submarine cable networks. • Submarine consortium to link Sabah Sarawak. • New Submarine Cable Landing Stations (SCLS) to be encouraged through legislation that permits ownership without telecom licence; or lifting restriction on foreign ownership of a licensee. • Licensing liberalisation (up to 100% foreign equity). • Government to own SCLC. • To mandate non-exclusivity for international border crossings. 	<p>The Commission takes note on the issues raised on cabotage and will engage the relevant ministries (KKMM, Ministry of Transport, Wisma Putra, etc) to address this issue.</p> <p>The policy position on licensing matters related to SCLCs may be considered under the liberalisation study.</p>
<ul style="list-style-type: none"> • Health, Safety and Environmental ('HSE') concern, including electromagnetic field ('EMF'). • Aesthetic requirement. • Smart pole solution. 	<p>The Commission acknowledges that there are concerns on HSE matters especially on consumers and workers' safety, in addition to environmental issues. The Commission will collaborate with MTSFB and other stakeholders to identify relevant matters that need to be addressed.</p>

Feedback	Commission Response
	<p>The Commission takes note of the remarks given on the 'outrageous sites' that may affect community aesthetics. The Commission encourages service providers to engage the community and the Local Authorities to address the matters concerned.</p>
<ul style="list-style-type: none"> • e-SIM. • Essential National Bands. • Fixed Number Portability ('FNP'). • Net neutrality. • Single marketplace / e-commerce store and market place presence for all rural/micro/small SMEs. • General feedback on NFCP (e.g. NFCP is operational and not ambitious enough, to look at the approach in roll out commitment). 	<p>The Commission encourages any initiatives that would benefit the consumers.</p> <p>The Commission will engage separately with the relevant licensees on specific matters highlighted in the submissions as these matters may require further studies (e.g. e-SIM, Essential National Bands, FNP).</p>

2.2 Key issues to be prioritised

Based on the feedback, the Commission further identified four (4) key issues to be prioritised, as follows:

Issue	Details
Funding	<ul style="list-style-type: none"> • There are heavy investments along the value chain (e.g. permits, RoW, civil works, equipment, submarine cable and support system, etc.); • Continuous technology improvements are required (e.g. higher speed, upgrading, 4G-5G, coverage for new areas); • Many small operators in the industry, but they may lack funding due to various uncertainties (operating costs, creditworthiness and access to funding, awareness and competency); and • Uncoordinated investments create confusion in the value chain (local authority, banks, USP, demand creation).
RoW	<ul style="list-style-type: none"> • Uncoordinated, costly, bureaucratic and diverse requirements, and processes for RoW and infrastructure roll-out at State and Local

Issue	Details
	<p>Authority levels result in delays in broadband development, uncompetitive prices and sub-par broadband infrastructure;</p> <ul style="list-style-type: none"> • Lack of understanding and no priority placed on communication and infrastructure installation by the stakeholders; and • Lack of regulatory coherence, support and consolidated action by all stakeholders to address issues on the ground.
Spectrum	<ul style="list-style-type: none"> • Optimising spectrum allocation to enable provisioning of higher quality services; • Certainty required in policies to support new growth (e.g. 5G, digital dividend, use of USP funds, IR 4.0, etc.); and • Improved regulatory framework for spectrum allocation.
Competition/Access	<ul style="list-style-type: none"> • Facilities-based vs service-based competition; • The need for a neutral infrastructure provider; • Limited competition in the fixed market; • Access to passive infrastructure, and promoting sharing of civil infrastructure; and • Lack of industry awareness on the implementation of access framework.

SECTION 3 : REVISED DRAFT NFCP

Upon considering the feedback received from the consultations, the Commission has made improvements to the Draft NFCP, including the goal, strategies, targets and action plans, as well as formulating relevant programmes / initiatives to achieve the targets. The revised Draft NFCP outlining the revised goal, strategies, targets and action plans will be issued separately from this Industry Consultation Report.

SECTION 4 : NFCP – THE WAY FORWARD

The publication of this Industry Consultation Report is not the end of the NFCP journey. Further improvements to the NFCP including the targets, action plans and the initiatives will be undertaken through constant and continuous engagements with the relevant stakeholders to ensure it remains relevant and updated for implementation. The Commission continues to welcome any idea, feedback or proposal from any parties to improve the NFCP for the benefit of the Rakyat, industry and the Government.

/end