The Draft National Fiberisation and Connectivity Plan (NFCP)

Industry Consultation

October 29, 2018

Draft National Fiberisation and Connectivity Plan - Industry Consultation

Ballroom 1, Level 3
Putrajaya Marriott Hotel

Monday
October 29, 2018

8:30 am – 9.15 am	Registration and Breakfast
9.30 am – 9.45 am	Opening Remarks
9.45 am – 10.30 am	Presentation on the Draft National Fiberisation and Connectivity Plan
10.30 am – 11.30 am	Question and Answer
11.30 am	Session ends

The world has moved from just broadband plans…

	EU	INDIA	UNITED KINGDOM	SINGAPORE
Name / Year	• Digital Agenda for Europe (DAE) 2010 • Gigabit Society 2016	National Digital Communications Policy May 2018 (approved Sept 2018) "Fibre First Initiative"	Future Telecoms Infrastructure Review July 2018	iN2015 (2005) Infocomm Media 2025 (2015) (some areas under consultation)
Speed targets	Gigabit Society - all economic drivers with Gigabit connectivity, all urban areas, railroads and highways with 5G, 100Mbps connectivity	• 1Gbps at all Gram Panchayats (village councils) • 50Mbps to all citizens • 100Mbps to institutions	Gigabit-capable roll-out	iN2015 – Fixed (1Gbps), Wireless (5Mbps)
Coverage targets	• Major cities with 5G by 2020 • All households	• Fixed to 50% HH • Connectivity to all areas	• 15 mil houses fibred by 2025 • Nationwide fibre by 2033 • Competition of 2 Gigabit networks	Nationwide by 2012
Public utility / RoW etc	Broadband as universal service - EU Universal Service Directive	Telecom infra as "critical and essential infrastructure", similar to water, railways, etc	Reduce barriers to deployment – simplify wayleave agreements, standardise local authority processes, easy access to passive infra	• Fibre-ready scheme for residential
Other areas	5G action plan, Wi-Fi for Europe, prioritising investments	5G deployment, R&D, local manufacturing, start-ups, capacity building, improve public service, IR4.0, security and data protection, disaster relief	Reduce cost of deployment for fixed and mobile, unrestricted access to poles and ducts, promote market entry and new network operators, switchover to fibre, separation of Openreach, 5G initiatives	• Heterogenous Network (HETNET), Smart Nation Platform, Wireless@SG • Data, experimentation and connectivity

Source : MCMC from www.gov.uk, www.mci.gov.sg, www.dot.gov.in, ec.Europa.eu

Rancangan Malaysia ke-11 (2016-2020) - Mid term review

TARGETS	PERFORMANCE AND CHALLENGES	WAY FORWARD
Broadband services • 95% in populated areas by 2020 • 100Mbps in all households in state capitals and selected high impact growth areas by 2020 • 20Mbps in 50% of households in suburban and rural areas by 2020	**Broadband services** • 92.1% in populated areas in 2017	**Broadband services** • Improve fibre coverage and commercial deployment for broadband coverage via the NFCP
Broadband affordability • Reduction of broadband cost to 1% of GNI by 2020	**Broadband affordability** • Broadband price at 1.1% of GNI as at 2017 • MSAP implemented in Jan 2018	**Broadband affordability** • Ensure affordability for broadband services while ensuring continued investments
Infrastructure planning • Collaboration between state and local authorities on the planning and deployment of digital infrastructure • Smart cities deployment	**Infrastructure planning** • Gazette of UBBL by all states except Wilayah Persekutuan • Right-of-Way (RoW) and permitting challenges by local authorities • Exclusivity in planning and approval resulting in increased cost and quality of service • Inconsistency in local procedures delay roll-out initiatives	**Infrastructure planning** • Enforce UBBL amendment for new developments for commercial and residential properties • Amend relevant laws for broadband to be recognised as public utility • Address RoW, permits and complex procedures

The NFCP
- An Overview

1. The NFCP was developed in response to the urgent need, among others, to improve broadband quality and coverage, reduce broadband price, enable Internet access for all, and expand fibre networks.

2. The communications infrastructure must be able to support the needs of the country in this digital era, and enable all Malaysians to harness the vast opportunities offered by new technologies and innovations.

3. The NFCP is intended to provide clarity in terms of strategic direction for the implementation policies/initiatives that support the digital economy, whilst creating a conducive environment to facilitate adoption of future technologies.

4. The overall implementation timeline of the NFCP will be for five (5) years until 2023.

Addressing challenges on coverage, affordability and quality digital infrastructure

Context

Coverage, affordability and quality digital infrastructure remain a major challenge

Countries are **moving beyond** mere broadband plans and low speed

Digital infrastructure is important to address balanced regional growth, income disparity, etc

However, governance and transparency are also important to assist in addressing coverage challenges

Neighbouring countries are moving fast to install fibre (Vietnam has 6m subs, Indonesia has 2m subs, while Thailand has 7.6 premises passed, and Philippines has 2.5m) *

High fixed coverage is desirable, but at what cost?

Issues

Addressing inadequate coverage

- Expanding current LTE coverage from 80% to 95% and beyond
- Expanding fibre coverage and use
- Improve connectivity for Sabah and Sarawak
- Ensuring spectrum availability, and efficient use of spectrum

Ensuring affordable services

- Promote increased penetration for fixed broadband (2.6m subscribers @Q2 '18)
- Addressing SME and business needs (66% employees are working in SMEs**, 900k SME establishments)

Improving quality of service

- Increased competition will drive operators to improve in terms of price and quality
- Demand from business will drive quality
- Better bandwidth, especially Sabah and Sarawak will promote equitable growth
- Quality installation (esp at homes)

Strategy (NFCP)

- Fibre-first, plan for copper phase-out
- Liberalise strategic activities to allow for increased competition (multiple operators to expand fixed broadband infrastructure)
- Prepare spectrum for 5G and other requirements
- Planning broadband as public utility
- Share infrastructure and use federal/state buildings to improve roll-out rate
- Sustainable and environmentally-friendly infra
- Addressing bottlenecks for connectivity

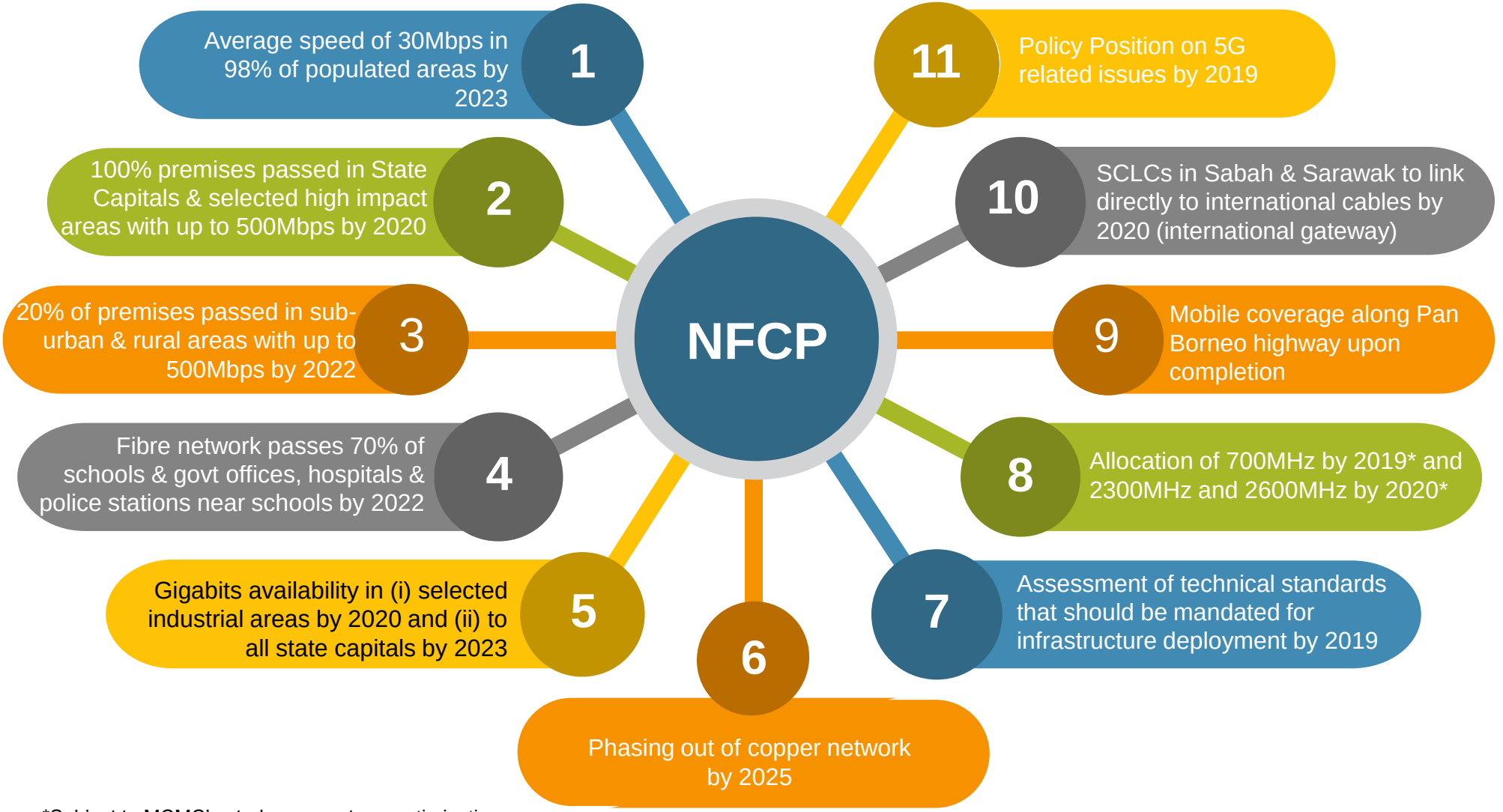
- Reduce roll-out cost by sharing passive infra
- Coordinate planning to reduce delay, civil infra cost
- Establish new approach for pricing beyond 2020
- Universal access for broadband

- Addressing QoS issues effectively and transparent reporting of licensees' performance
- Establish codes for "world-class" installation to ensure speed commitment and quality are met
- Develop SOP for developers and other stakeholders to improve transparency, understanding and delivery of installation

* iDate Research 2017, ** SMECorp 2017,

Targets for NFCP (1/2)

A. Ensure optimum deployment of digital infrastructure



*Subject to MCMC's study on spectrum optimisation

Targets for NFCP (2/2)

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

12. Entry level fixed broadband package at 1% of GNI by 2020

13. Double the speed at half the price by 2019

14. Yearly publication of QoS Report

C. Promote competition

15. Extension of liberalisation in key strategic activities by 2019

D. Participation in the digital economy

16. 100 rural e-commerce fulfillment centres by 2020

17. QoS for courier service by 2019

NFCP targets by year

2019

A7 Assessment of technical standards that should be mandated for infrastructure deployment

A8 Allocation of 700MHz*

A11 Policy Position on 5G related issues

B13 Double the speed at half the price

B14 Yearly publication of QoS Report

C15 Extension of liberalisation in key strategic areas

D17 QoS for courier service

2020

A2 100% premises passed (state capitals) & selected high impact areas - up to 500Mbps

A5 Gigabits availability in select industrial areas

A8 Allocation of 2300MHz and 2600MHz*

A10 SCLCs in Sabah & Sarawak to link directly to international cables (international gateway)

B12 Entry level fixed broadband package at 1% of GNI

B14 Yearly publication of QoS Report

D16 100 rural e-commerce fulfillment centres

2021

B14 Yearly publication of QoS Report

MIDTERM REVIEW

2022

A3 20% of premises passed in sub-urban & rural areas with up to 500Mbps

A4 Fibre network passes 70% of schools & govt offices, hospitals & police stations near schools

B14 Yearly publication of QoS Report

2023

A1 Average speed of 30Mbps in 98% of populated areas

A5 Gigabits availability in all state capitals

B14 Yearly publication of QoS Report

2025 & beyond

A6 Phasing out of copper network by 2025

A9 Mobile coverage along Pan Borneo highway upon completion

B14 Yearly publication of QoS Report

*Subject to MCMC's study on spectrum optimisation

Challenges in implementing NFCP

Implementing policy approval on communications infrastructure as public utility

- Providing internet access for each household, upon demand
- Ensuring buy-in from stakeholders to roll-out infrastructure as public utility
- Ensuring quality communications infrastructure with a fibre first policy (including phasing-out copper networks)
- Amending relevant legislations including CMA98
- Promoting competition

Commitment from State Governments to reduce implementation cost and assist in infrastructure deployment

- Reducing implementation cost by streamlining RoW and removing OSA
- Coordinating planning and approval requirements with local and state authorities

Costing and Funding requirements to meet targets

- Ensuring sufficient investments to drive roll-out of communications infrastructure
- Identifying cost and funding requirements to meet infrastructure and service requirements
- Meeting Rakyat's requirements for quality broadband at affordable price

Proposed Initiatives/ Work Plans for Relevant Targets

Targets A1, A2, A3, A4, A5, A6, A7 (1/15)

Preliminary – industry feedback required

Type of development	Initiative	Work Plan
Brownfield (1)	**Incentivise building owners/managers to prepare for fibre** • Building Managers/Owners of brownfield should be made aware of the importance of upgrading passive infra to allow operators to supply fibre • Some incentives/awareness may be needed **Share passive infrastructure among operators for fibre** • Operators need to prove that their installations are world class, can reduce cost (civil), shareable and safe	• # of apartments, buildings etc identified • Passive infra cost breakdown, incentive structure • Type of installation – façade, ducting etc – new SOP/guideline for fibre in renovated buildings • Awareness, SOP development • Training and certification under the Fifth Schedule (Regulation 26(4) of Technical Standards Regulations 2000) • Review existing code/document to support the initiative • Ensure compliance to other laws eg Strata Management Act 2013 • Streamline local authority approval process, RoW requirements • Develop Code/SOP for sharing of pole, ducts and manhole • Improve database/mapping to promote sharing

Targets A1, A2, A3, A4, A5 , A7 (2/15)

Preliminary – industry feedback required

Type of development	Initiative	Work Plan
Brownfield (2)	**Technical / siting requirements for existing installation** • Existing sites may require improvement from 3G/4G • Need to provide clarity and guidance to contractors, local authorities etc on site re-use • Cabinet/Cabinet Committee approval on the proposed use of State and Federal buildings/ land/ RoW as potential sites to improve coverage	• Identify sites and improve database – types (rooftop, tower, etc), permit validity etc • Prepare and share yearly migration plan with MCMC, local authority, state exco, UPEN etc • Update/develop existing new codes/SOP on sites improvement, use of other utilities, street furniture, in-building installations etc • New industry SOP/guideline for building contractors/architects on site/in-building requirements for building renovation • New industry SOP/guideline on process/steps/standards to be used on State/Federal buildings/ land/ RoW etc

Targets A1, A2, A3, A4, A5, A6, A7 (3/15)

Preliminary – industry feedback required

Type of development	Initiative	Work Plan
Greenfield	**Enforce UBBL for fibre** • UBBL enforcement by MCMC is necessary to ensure universal access, quality installation and infra audit can be undertaken • No copper installation for newbuilds - residential and commercial **Sites for mobile coverage** • New development areas require site to improve mobile coverage	• Review current requirements / process / codes to support the initiative • Establish database of Certified Persons to endorse Borang G20 for CCC • Training and Certification under the Fifth Schedule (Regulation 26(4) of Technical Standards Regulations 2000) • Create database/mapping of premises, units approved and certified • Quarterly/Yearly reporting on certification, take up etc • Industry collaboration with local authorities to identify new development areas for the coming years • Awareness and engagement with developers for masterplan development to include mobile sites, or in building design • Review current Codes and develop new ones to assist local authority, developers, town planners, architects in accommodating mobile site requirements

Targets A1, A2, A3, A4, A5, A6, A7 (4/15)

Preliminary – industry feedback required

Requirements	Initiative	Work Plan

Industry Plan (1)	**Industry Plan for Fixed and Mobile Coverage**
	• Submission from operators are required for MCMC to coordinate planning, identify target areas, issues, etc
		• Industry to submit overall plan (until 2023), including yearly plan to meet/over the stated targets:
		  • Assumptions, costing, projections, plan on greenfield, brownfield, incl. copper phase-out etc
		  • Coverage, premises passed, plan for infrastructure sharing, etc
		  • Current processes/procedures for planning, approval related to RoW, local authority approval etc, and ways to improve
		• Industry collaboration on :
		  • Improvement of processes, data/GIS development/submission/accuracy, etc
		  • Review/update of all existing codes/SOP for fixed and mobile installation
		  • Engagement with stakeholders – contractors, local and other authorities on ways to improve installation process and risk management

Targets A1, A2, A3, A4, A5 (5/15)

Preliminary – industry feedback required

Requirements	Initiative	Work Plan

Industry Plan (2)	**Industry Plan for Fixed and Mobile Coverage**
	• Submission operators are required for MCMC to coordinate planning, identify target areas, issues, etc
		• Streamline planning with MCMC:
		  • Definitions (Urban, Rural etc), boundaries, mapping, demand study, gap analysis
		  • Long term planning using National Physical Plan, National/State Structure Plan, Local Plans, Special Area Plans, National Urbanisation Policy, Dasar Perancangan Fizikal Desa Negara etc
		  • Improve data submission, frequency of submission, etc
		• Issuance of Communications Infrastructure Planning Guide and implementation at state/local authority level
		  • Finalisation of the Guide with relevant Ministries/Departments/Agencies
		  • Publicity and awareness for operators, contractors, town planners

Targets A1, A2, A3, A4, A5, A9 (6/15)

Preliminary – industry feedback required

Requirements	Initiative	Work Plan

Communications infrastructure as public utility	**Cabinet approval on policy**
	• Communications infrastructure is to be recognised as public utility to facilitate infra deployment at lower cost
		• Operationalisation of :
		  • CMA98 RoW provisions under Chapter 1 Part X, including timeline, SOP, documentation, regulatory tools required
		• Identification of other amendments to enable public utility status :
		  • Town and Country Planning Act 1976
		  • Street, Drainage and Building Act 1974 (Act 133)
		  • Local Government Act 1976
		  • Uniform Building By-Laws 1984 (UBBL) and corresponding state laws
		  • etc
		• Review/prepare existing/new code/SOP/guideline/standards to ensure implementation and operationalisation of the public utility status
		• Stakeholder engagement and management to address concerns

Infrastructure roll-out is still a challenge on the ground

	Submission of permit application	Evaluation & recommendation	Approval and award of permit
Description	• **Submission through OSA/SBC** mandatory in some states • In other states applicants may choose to apply directly or through a OSA/ SBC	• Communications infra approvals to be subsumed under current OSC at PBT • OSCs review, deliberate and provide recommendations on applications • OSC Charter is time-based	• Local authority reviews OSC's recommendation and makes the final decision to issue or reject application
Key Issues	**Different requirements for different local authorities** • Delays in application submission process (for towers) **Cost of permit approvals and renewals** • Different cost/fee/etc required by OSA or other parties including JKR • Transparency issue as fees may not be sanctioned by law eg. "Sumbangan Wang Amanah", "Yuran Audit" **Inefficiencies due to** exclusivity • Delays in roll-out due to misaligned preferences • Multiple processes despite OSC under PBT	**Lack of transparency and clarity** • Limited clarity on timeline for approval e.g. >2 yrs for some applications • Applications rejected for reasons already addressed by MCMC e.g. health impact • The timeline may be impacted as OSA process is not under OSC Charter **Lack of data and follow-up** • Timely and accurate industry data on installation required to allow planning and for records • Installation issues – quality of road resurfacing, debris, contractors' delay, road closures, etc	**PBT may reject applications even if recommended for approval by OSC** **Additional or arbitrary requirements may further delay roll-out** **Increase in deposit fees by JKR in 2017 may delay roll-out as capital is tied-up (eg HDD from RM50 to RM6,500).** **Stiffer penalties under Act 133 amendment in 2018 from RM1k to RM100k for damage to street, road, pavement etc.**

Preliminary – industry feedback required

Right-of-Way (RoW) – Global Best Practices

	BEST PRACTICE	MALAYSIA – CURRENT PRACTICE AND APPROACH
Permission and Approvals	• US – shot-clock permission (90 days co-location/150 days) for tower - window for local authority approval • Austria – Free RoW without authorisation for public property • Germany – Free RoW and need to update database quickly • Netherlands – free access and coordinated civil works • Greece – comms regulator processes applications, authorities to approve within 4 months	• Current process on RoW – Local authorities, JKR, landowners etc • Timeline for approvals, authorities/committees involved, forms required, online submission etc? • Types of civil works requiring approvals • Recommendations for improvements
Digging and Trenching, Fibre Installation	• "Call Before You Dig" • China – FTTH in new buildings and refurbished homes • Europe – high speed ready for new buildings and remodelled homes • Portugal – 2 fibres per home and no monopoly for in-building	• Current industry practice on civil works – individual/collaboration? "Call Before You Dig" • Contractors' management, post-installation evaluation • Sharing of infra – type of sharing, arrangements, etc • Breakdown on cost – civil works, equipment, material etc – how these costs can be reduced/shared? • Recommendations for improvements
Quality	• Only high quality grade fibre – 1700 fibre count (Boston), 1728-undersea fibre (2.8km undersea HK metro) • GIS mapping – mandatory in North America, Western Europe, Japan, S. Korea, China (recommended), Bangladesh – nationwide mapping, S. Africa – mapping and display rollout status • Fibre installation standard – standards to ensure speed and build requirements are met	• Current industry practice on GIS mapping – status, accuracy, audit etc, in addition to reporting to MCMC • Mandatory underground mapping relevant in Malaysia? • What are new and additional standards to ensure end-to-end quality installations? • Recommendations to improve? • Are Malaysian manufacturers ready to meet domestic demand?

Addressing infrastructure challenges – finding the middle ground

Preliminary – industry feedback required

Different stakeholders' requirements and expectations	Approach	Proposed Solution
MCMC • Implementation of UBBL to increase fibre-ready homes • Speedy and cost-effective fibre rollout to improve backhaul and access • Accessible data for reporting, consultation and management	1 *Eliminate middlemen, reduce bureaucracy and increase roll-out speeds*	• *Moratorium on approval for communications infrastructure to facilitate deployment* • *Submissions may still be required, but may be time-based, or given "Permitted Status"*
Industry • Transparent process for ease of deployment • Speedy and cost-effective fibre deployment to recover investments and meet targets	2 *Address concerns on potential nuisance, damage and delay*	• *"Industry pledge"* on commitment to address the concerns* • *Industry-based escrow deposit to be used to pay penalties for installations that cause damage etc* • *Roll-out coordination, infrastructure sharing and improved access to ducts to reduce risks and roll-out cost*
Authorities • Cities may be competitive in the future, but there are immediate concerns • Roll-out may create nuisance, damage and uncertainty to the public, property and authorities • Cost needed to monitor and ensure works are planned and done in a satisfactory manner	3 *Address planning, cost and UBBL areas*	• *Improve data submission to MCMC to streamline rollout, reduce damage to comms infra,etc* • *Develop Code/Standard/Process to implement UBBL – to ensure installation based on standards etc* • *Transparent charges based on rule of law – fees/charges must be sanctioned/codified*

*can also be Undertaking if these were taken up as voluntary codes

Targets A3, A4 (7/15)

Preliminary – industry feedback required

Requirements	Initiative	Work Plan
Universal access for broadband	**USP 2.0** • Review of USP framework is important to ensure universal access for broadband, returns on investment, sustainability and efficient management of the USP Fund • More Rakyat will benefit and will be able to enjoy broadband services	USP 2.0: • Review completed by 2019 • Assessment on existing projects for sustainability and cost efficiency by 2019

Target A1, A8, A11, B14 (8/15)

Preliminary – industry feedback required

Requirements	Initiative	Work Plan

Spectrum Study	**Allocation of 700MHz in 2019, 2300MHz and 2600MHz**
	• Release of 700MHz is dependent on analogue TV switch off
		• Spectrum study to:
		  • Identify optimum spectrum use to provide mobile services
		• Issuance of assignment documents for
		  • 700MHz in 2019*
		  • 2300MHz in 2020*
		  • 2600MHz in 2020*

*tentative

Targets A11 (9/15)

Preliminary – industry feedback required

Requirements	Initiative	Work Plan
Policy Position on 5G	**Establishment of National 5G Task Force** • National 5G Task Force comprising representatives from various industries, ministries, and other stakeholders	• National 5G Task Force will be formed in 2018 to: • Prepare Report on 5G Key Challenges and 5G Nationwide Implementation Plan • 5G TestBed

Targets A9, A10 (10/15)

Preliminary – industry feedback required

Requirements	Initiative	Work Plan

Sabah and Sarawak Initiatives	**Mobile Coverage along Pan Borneo Highway**
	• Commercial deployment to ensure mobile coverage along Pan Borneo Highway is available upon completion
	
	Direct connectivity to international submarine cable systems
	• Direct connectivity will address current congestion of domestic cables linking Sabah and Sarawak to Mersing and Cherating, as well as to improve competitiveness and quality of service with reduced latency and increased bandwidth
		• Pan Borneo Highway :
		  • Mapping and gap analysis on Pan Borneo Highway
		  • Site identification and project managers identification
		  • Collaborate with State Governments to streamline planning and approval
		• Submarine cable connectivity :
		  • Collaborate with State Governments to identify new landing sites, incentives by State Government
		  • Design capacity, investors, costing etc

Targets B12, B13 (11/15)

Preliminary – industry feedback required

Requirements	Initiative	Work Plan

Improving consumer take up	**Achieving affordable broadband service for fixed and mobile broadband**
	• Affordability is important to promote take up and use of high speed broadband and other digital services
		• 1% GNI by 2020:
		  • Entry level package at determined speed
		  • Double the speed half the price
		  • New pricing strategies needed based on intensified competition
		• Review of MSAP – every three years

Target A6, A7, B14 (12/15)

Preliminary – industry feedback required

Requirements	Initiative	Work Plan

Quality installations that meet international standards	**Review of existing documents**
	• Updated code/guide/standard
	• Identification of new requirements
	• Availability and awareness on the requirements
	
	Fibre-first policy
	• Copper phase-out by 2025
		• Fibre for new and existing sites :
		  • Microwave sites for mobile
		  • Passive infra for buildings
		  • Connectivity to kampungs
		• New/revised standards for passive and fibre installation :
		  • Installation standards by 2019
		  • Consumer premises by 2019
		  • Collaboration with Energy Commission to develop standard/guideline on use of TNB infrastructure
		• Fibre-first
		  • Measures/SOP to address related services eg. Emergency services based on copper networks
		  • Migration of copper-based services
		  • Plan on re-use/re-purpose of existing copper-based passive infra (ducts/trays) etc?
		  • De-registration of copper-based standards

Target B14 (13/15)

Preliminary – industry feedback required

Requirements	Initiative	Work Plan
Publicly available data on quality of service	**Ensuring transparent and consumer-friendly information on quality of service** • Consumer empowerment will drive operators to improve service, ensure prices are affordable.	• Yearly publication, awareness and dissemination of QoS Report starting 2018 • Industry communications plan etc • Alternate approaches for measuring QoS

Target C15 (14/15)

Preliminary – industry feedback required

Requirements	Initiative	Work Plan

Extension of liberalisation in key strategic activities	**Promote new investments to achieve the targets**
	• Current deployment rate is not enough
	• Last 2%-5% coverage may be a tough challenge
	• Consideration on industry structure
		• Identify priority areas :
		  • New submarine cable systems for international connectivity
		  • Satellite broadband for remote areas to address cost and environmental concerns
		  • Last mile to further accelerate build-out coverage (fibre)
		  • Data centres to promote hubbing and improve QoS
		• Collaborate with MITI, MIDA etc to facilitate new investments
		• Study on functional/structural separation to promote competition

Targets D16, D17 (15/15)

Preliminary – industry feedback required

Requirements	Initiative	Work Plan

Reliable and trusted e-commerce fulfillment / delivery	**Access and delivery coverage expansion initiatives**
	• Availability of fulfillment centres will allow SMEs and rural areas to participate in the digital economy
		• National Address Platform
		  • Framework on National Address Platform
		  • Identification and assignment of 200k addresses (Address for All)
		• Improve delivery network coverage and performance
		  • 100 rural e-commerce centres
		  • Regulate QoS for courier service
		• Postal Transformation Plan for Sabah and Sarawak

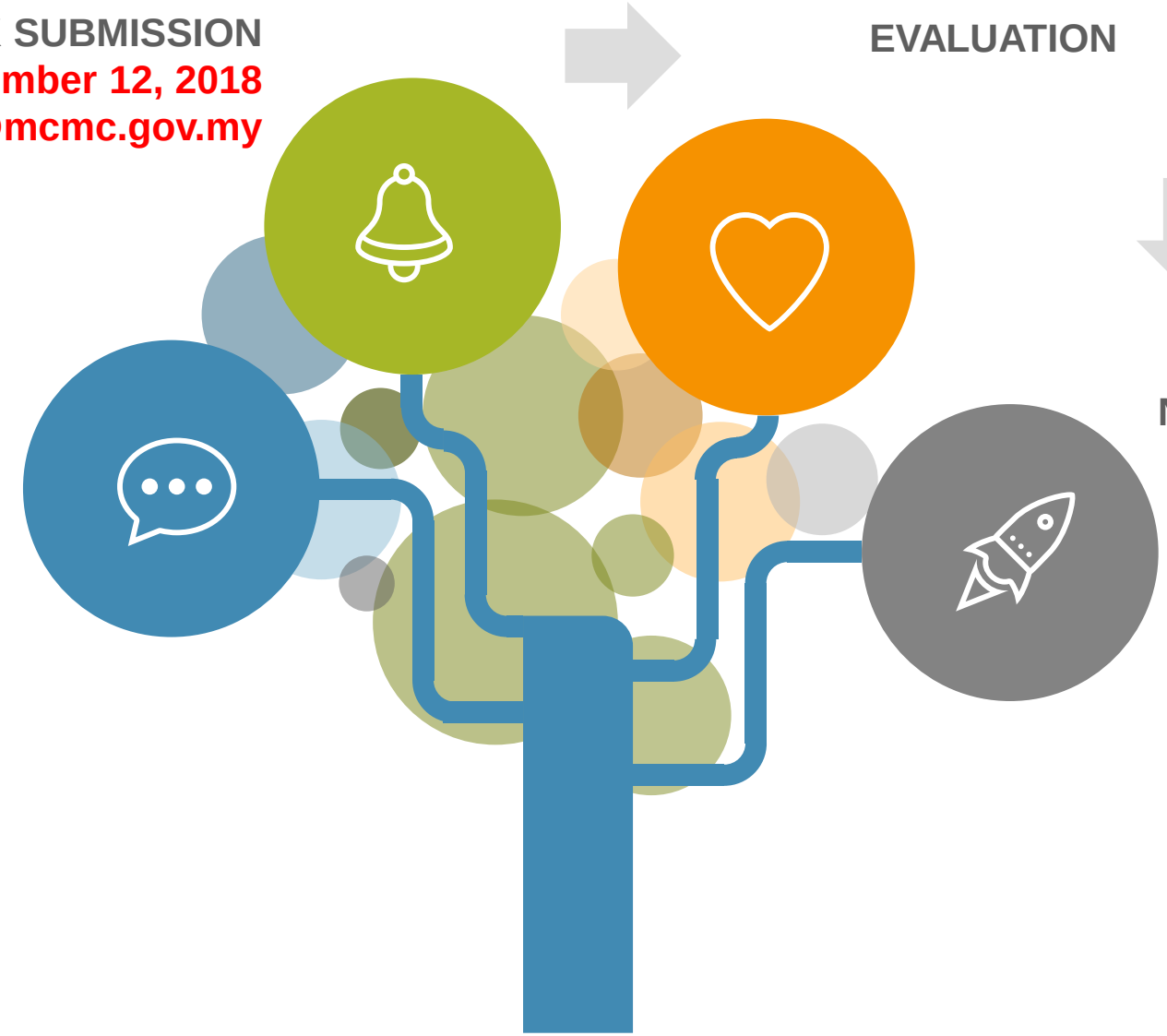
NFCP - NEXT STEPS

INDUSTRY CONSULTATION
October 29, 2018

FEEDBACK SUBMISSION
MONDAY, November 12, 2018
Email : nfcp.sec@mcmc.gov.my

EVALUATION

NFCP STARTS



End and Thank You!

Question and Answer Session

Email your feedback submission to nfcp.sec@mcmc.gov.my

By MONDAY, November 12, 2018

Recent amendment to the Street, Drainage and Building Act 1974 – time to improve our industry's SOP

Denda 100 kali ganda gagal baiki jalan

Oleh Luqman Arif Abdul Karim
cnews@nstp.com.my

KUALA LUMPUR: Kontraktor yang gagal membaiki dengan sempurna sebarang kerja pengorekan jalan awam bakal berdepan hukuman denda sehingga RM100,000.

Peningkatan denda sebanyak 100 kali ganda menerusi pembentangan Rang Undang-Undang (RUU) bagi meminda Akta Jalan, Parit dan Bangunan 1[illegible]kan selepas dibahas oleh 18 ahli Parlimen dan dibacakan kali ketiga di hadapan Yang Dipertua Dewan Rakyat, Datuk Mohamad Ariff Md Yusoff serta mendapat sokongan sebulat suara.

Pindaan lain turut mencakupi peningkatan denda minimum daripada RM500 kepada RM50,000 bagi kesalahan mengambil tempat turap tanpa mendapat kebenaran bertulis daripada pihak berkuasa tempatan (PBT) atau agensi penguat kuasa yang sah di sisi undang-undang.

Menteri Perumahan dan Kerajaan Tempatan, Zuraida Kamaruddin, berkata usaha memperkukuhkan akta itu mendapat sokongan daripada kerajaan negeri, sama ada ditadbir pembangkang atau kerajaan, yang bersetuju mengangkat pindaan berkenaan seiring usaha memartabat kualiti jalan demi manfaat pengguna.

"Peruntukan kos bagi melaksanakan kajian geoteknikal dan siasatan berkala, seperti diperuntukkan dalam pindaan akta ini pula akan ditanggung pemaju, bukan PBT seperti mana dibimbangi segelintir pihak.

"Pegawai yang akan mengendalikan kajian dan siasatan berkala itu pula bukan dari PBT, sebaliknya perlu dilakukan pemaju serta disahkan jurutera bertauliah yang bebas," katanya ketika menggulung pembentangan RUU berkenaan, di Dewan Rakyat, hari ini.

Terdahulu, Zuraida ketika membentangkan RUU berkenaan bagi bacaan kali kedua berkata, cadangan menaikkan kadar denda itu dibuat selepas mendapati denda sedia ada sebanyak RM1,000 dilihat tidak berkesan sebagai langkah pencegahan.

"Banyak aduan berkenaan pengorekan, kerosakan dan kualiti pembaikan jalan, antaranya berpunca daripada kerja penyelenggaraan jalan oleh individu atau syarikat utiliti tanpa kelulusan PBT," katanya.

Selain jalan awam, Zuraida berkata denda itu akan terpakai bagi kesalahan merosakkan siar kaki, harta kepunyaan PBT, kaki lima atau di sepanjang laluan yang berhak digunakan orang awam.

Katanya, pindaan terhadap Seksyen 39 akta berkenaan membabitkan cadangan menaikkan denda minimum RM500 sedia ada kepada RM50,000 bagi kesalahan mengambil tempat turap tanpa mendapat kebenaran bertulis daripada PBT atau kuasa

"Pindaan lain turut mencakupi peningkatan denda minimum daripada RM500 kepada RM50,000 bagi kesalahan mengambil tempat turap tanpa mendapat kebenaran bertulis daripada pihak berkuasa tempatan (PBT) atau agensi penguat kuasa yang sah di sisi undang-undang."

"Banyak aduan berkenaan pengorekan, kerosakan dan kualiti pembaikan jalan, antaranya berpunca daripada kerja penyelenggaraan jalan oleh individu atau syarikat utiliti tanpa kelulusan PBT," katanya.

https://www.bharian.com.my/berita/nasional/2018/10/486868/denda-100-kali-ganda-gagal-baiki-jalan

Ensuring Balanced Urban-Rural Growth

Definisi Bandar :

Kawasan yang diwartakan serta kawasan tepu bina yang bersempadan dengannya dan gabungan kedua-dua kawasan ini mempunyai penduduk 10,000 orang atau lebih; atau *kawasan pembangunan khusus; atau pusat pentadbiran daerah walaupun penduduk kurang daripada 10,000 orang dan sekurang-kurangnya 60% penduduknya berumur 15 tahun dan ke atas terlibat dalam aktiviti bukan pertanian.

Sumber : Dasar Perbandaran Negara ke 2 (2016-2025)

Coordinating planning for the future
DASAR PERBANDARAN NEGARA KE 2 (2016-2025)

Rajah 5.15: Pelan Hierarki Bandar Negeri Johor

PETUNJUK:

HIERARKI PETEMPATAN
- Bandar Wilayah
- Bandar Utama
- Bandar Tempatan

KAWASAN PEMELIHARAAN & PEMULIHARAAN
- Hutan Simpanan Kekal & Kawasan Perlindungan
- Hutan
- Badan Air

KAWASAN PERTUMBUHAN
- Kotabesar
- Zon Promosi Pembangunan
- Tapu Bina Sedia Ada
- Tapu Bina Masa Hadapan
- Koridor & Hab Pembangunan Transit Nasional (Sedia Ada)
- Koridor & Hab Pembangunan Transit Nasional (Cadangan)
- Koridor & Hab Pembangunan Transit Negara

KAWASAN PERTANIAN
- Tanaman Padi di Luar Jelapang Padi Negara
- Tanaman Komoditi

LAIN-LAIN
- Pelabuhan
- Terminal
- Jeti Penumpang
- Lapangan Terbang
- Jalan Raya
- Lebuh Raya Sedia Ada
- Lebuh Raya Cadangan
- Laluan Feri

INFO RINGKAS HIERARKI BANDAR NEGERI JOHOR

Bandar Negeri 1
Bandar Utama 9
Bandar Tempatan 25

6.3 PRINSIP 3 - Ekonomi Bandar Yang Berdaya Saing

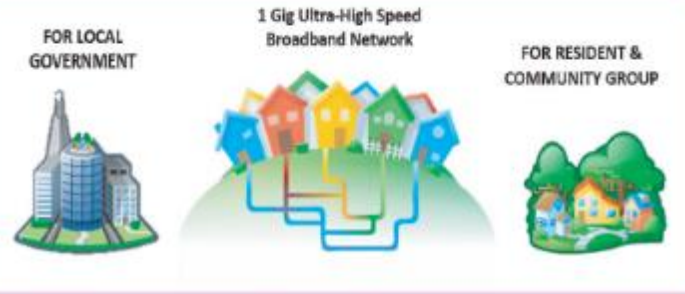
OBJEKTIF 3.3	:	Penyediaan Sistem Komunikasi Yang Cekap Dan Efektif
STRATEGI 3.3.1	:	Peningkatan sistem komunikasi di semua bandar
TINDAKAN 3.3.1.1	:	Menyediakan jalur lebar berkelajuan tinggi (high speed broadband) di kawasan bandar secara menyeluruh pada kadar yang kompetitif (perincian daripada DPN 2006)

Justifikasi: Fasiliasi perdagangan dan kualiti perkhidmatan logistik menyumbang kepada kemajuan bandar yang lebih berdaya saing iaitu membantu menyusun aktiviti ekonomi yang lebih padat, tersusun dan terhubung baik (well-connected).

AGENSI PEMANTAU	:	KKMM
AGENSI PELAKSANA	:	PBT, SKMM
AGENSI SOKONGAN	:	Syarikat Perkhidmatan Komunikasi, MDEC

Indikator Pemantauan (Di Peringkat Bandar)	Purata kadar perkhidmatan internet dan jalur lebar berkelajuan tinggi	
Penilaian Pencapaian	>8.4 Mbps 5.5 - 8.4 Mbps <5.5 Mbps	Amat Memuaskan Memuaskan Kurang Memuaskan
Pemakaian Tindakan Mengikut Hierarki Bandar	1 : Bandar Global 4 : Bandar Utama	2 : Bandar Wilayah 3 : Bandar Negeri 5 : Bandar Tempatan
Tempoh Pelaksanaan	Jangkamasa Panjang (Tempoh Pemantauan	: 2017 - 2025 : 2023)

Ilustrasi/ Contoh/ Amalan Terbaik



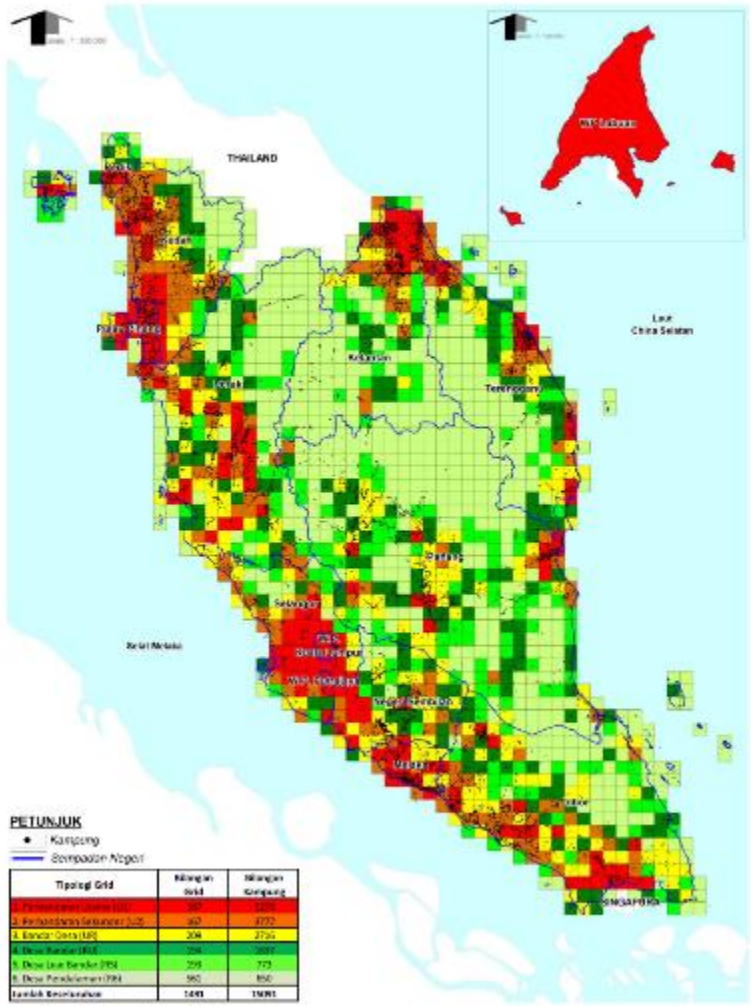
Dasar Perancangan Fizikal Desa Negara - Planning for our kampungs

Jadual 3.1 : Kriteria Tipologi* Bagi Sistem Grid Desa

Tipologi Grid	Kriteria
Perbandaran Utama *Major Urban* (U1)	• Sebahagian daripada kawasan metropolitan dan kawasan perbandaran utama. • 90 peratus kawasan tepu bina. • Jumlah penduduk melebihi 25,000 orang. • Berada di dalam pusat bandar.
Perbandaran Sekunder *Secondary Urban* (U2)	• Sebahagian dari ibu negeri dan daerah serta bandar utama. • 70-90 peratus kawasan tepu bina. • Jumlah penduduk 10,000-25,000 orang. • Jarak ke pusat bandar terdekat : 5-10 km.
Bandar Desa *Urban Rural* (UR)	• Kawasan bandar (pusat petempatan utama) di luar konurbasi utama negara – pinggir bandar. • 70-90 peratus kawasan tepu bina. • Jumlah penduduk 5,000-10,000 orang. • Jarak ke pusat bandar terdekat : 10-20 km.
Desa Bandar *Rural Urban* (RU)	• Bandar / pekan (pusat petempatan kecil). • 50 peratus kawasan tepu bina. • Jumlah penduduk kurang 5,000 orang. • Jarak ke pusat bandar terdekat : 20-40 km.
Desa Luar Bandar *Rural* (R5)	• Pusat pertumbuhan desa (PPD) dan perkampungan utama. • 70 peratus kawasan terdiri daripada hutan dan kawasan pertanian. • Jumlah penduduk kurang 2,500 orang. • Jarak ke pusat bandar terdekat : 40-50 km.
Desa Pedalaman *Major / Mainly Rural* (R6)	• Kawasan pedalaman dengan bilangan kecil perkampungan. • 90 peratus adalah kawasan hutan dan pertanian. • Jumlah penduduk kurang 1,000 orang. • Jarak ke pusat bandar terdekat : >50 km.

Sumber : DPF Desa Negara, 2016.
** Nota : Tipologi adalah jenis, klasifikasi / pengkelasan.*

Rajah 3.1 : Taburan Kampung Mengikut Tipologi Sistem Grid Desa



Sumber : DPF Desa Negara, 2016

Are multiple operators good for competition?

2.7.1. Infrastructure competition

Where properly implemented, FTTP deployment has usually led to an increase in network competition. It has allowed both existing alternative operators (by using incumbents' ducts) and new entrants (using their own ducts) to engage in infrastructure competition with the incumbent telecommunications and cable operators.

Table 1. Evolution of Network Competition across Countries

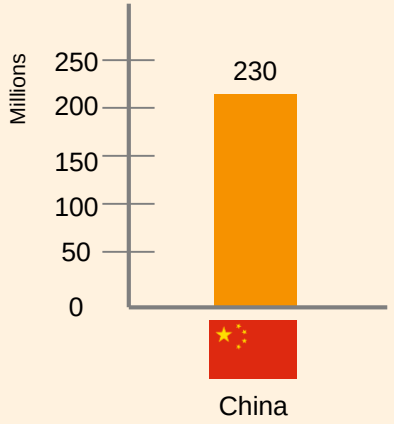
Country	Customers with Access to Competing Fixed Broadband Networks (% households)					
	2005			2017		
	1 network	2 networks	3 or more	1 network	2 networks	3 or more
Spain	52%	48%		42%	23%	38%
New Zealand	100%			69%	31%	
Sweden	62%	38%		39%	25%	36%
France	61%	29%		61%	11%	18%
Australia	90%	10%		100%		
Germany	37%	63%		32%	59%	8%

Source: Telegeography, except NERA estimates for Germany (2017) based on Breitbandatlas data; France (2017), based on ARCEP data; and Sweden (2017) based on European Commission data.

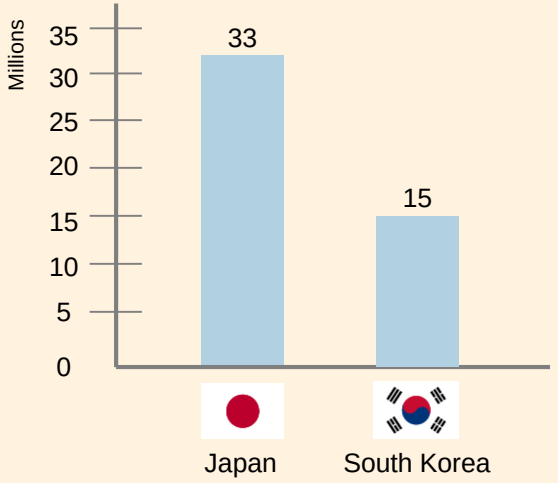
Malaysia is falling behind in fibre subscription

Total FTTH/B Subscribers by country

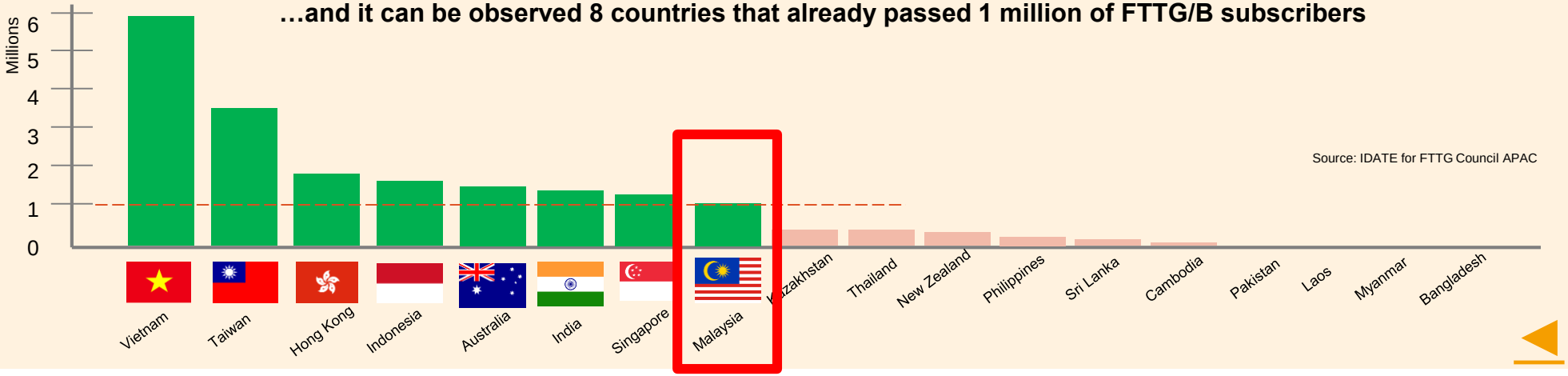
While China has increased its fibre subscribers and is still the leading country…



…countries like Japan and South Korea also have more than 30 or 10 million FTTH/B subscribers…



…and it can be observed 8 countries that already passed 1 million of FTTG/B subscribers

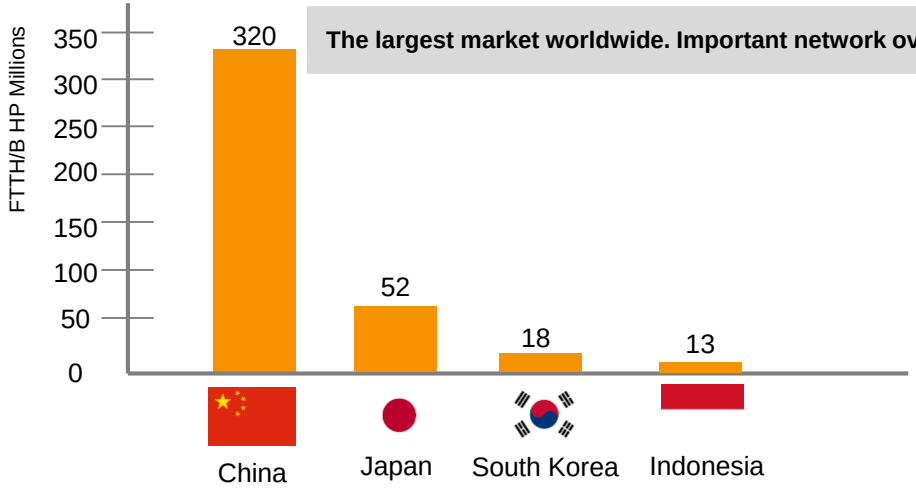


Source: IDATE for FTTG Council APAC

As well as in fibre coverage

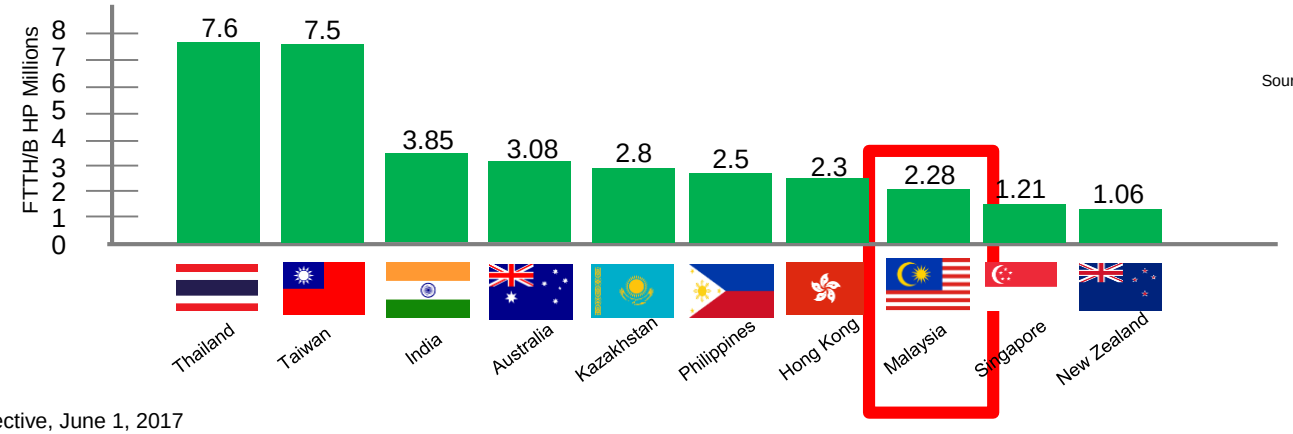
Total FTTH/B Homes Passed by country

The Top-4: China is N^{0} 1 by far due to the size of its market. Even though, countries like Japan, South Korea and Indonesia have reached 50 or more than 10 million homes passed with FTTG/B networks



The largest market worldwide. Important network overlapping. Coverage higher than gvt's objectives

Also it can be observed 10 countries that have deployed FTTH/B networks passing more than 1 million homes

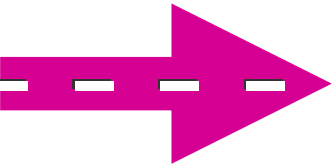


Source: IDATE for FTTG Council APAC

Idate research. FTTH Global Perspective, June 1, 2017

Achieving 100% fixed coverage – a pipe dream?

How long does it take to have 100% fixed coverage in Malaysia?



ACCELERATED – 5 years
Achieve by 2023
1.5m HH/year

NFCP – 8 years
Achieve by 2031
650k HH/year, 63% by 2023

AS-IS – 100 years
Achieve by 2118
Organic, 200kHH/year

Fi Permit Dan Proses Permohonan Infrastruktur Komunikasi

Fi & Caj

- Fi permit yang dikenakan oleh pihak OSA & PBT tidak selaras
- Pelbagai bentuk caj yang dikenakan oleh agensi di peringkat Negeri dan Persekutuan seperti caj OSA, caj permit dan lesen perniagaan PBT, wang sumbangan dan wang amanah kepada Kerajaan Negeri, wang deposit JKR, cukai taksiran dan caj permit khas tanah pertanian PTG, yuran audit, dan lain-lain.

Proses Permit

- Proses dan kaedah permohonan permit yang berbeza mengikut keperluan pihak PBT dan Kerajaan Negeri
- Proses kelulusan permohonan pembangunan infrastruktur komunikasi yang panjang (6-12 bulan) terutamanya melibatkan pertukaran syarat nyata tanah dan Kebenaran Merancang.

Proses yang panjang serta pelbagai fi dan caj yang dikenakan menyebabkan kerja-kerja pelaksanaan infrastruktur komunikasi sukar disiapkan dalam tempoh yang telah ditetapkan

Jenis Fi Permit Dan Caj Yang Dikenakan Dalam Proses Permohonan Infrastruktur Komunikasi

CAJ TAHUN PERTAMA

One Stop Agency (OSA) – Permohonan melalui OSA
- Kecuali P.Pinang

One Stop Centre (OSC) – Permohonan kepada OSC
- Semua PBT kecuali Sabah

Pihak Berkuasa Tempatan (PBT)
- Wang Deposit (K. Lumpur, Putrajaya, Perak,)
- Wang Amanah dan Wang Sumbangan (Johor)
- Lesen Perniagaan (N. Sembilan)

Pejabat Tanah Galian (PTG)
- Cukai Taksiran (Kelantan)
- Deposit Tanah Pertanian (Perak)
- Permit Khas Tanah Pertanian (Johor, Melaka, N. Sembilan, Perak)

Kerajaan Negeri (KN) – Sumbangan Khas
- Pahang

CAJ TAHUN BERIKUTNYA

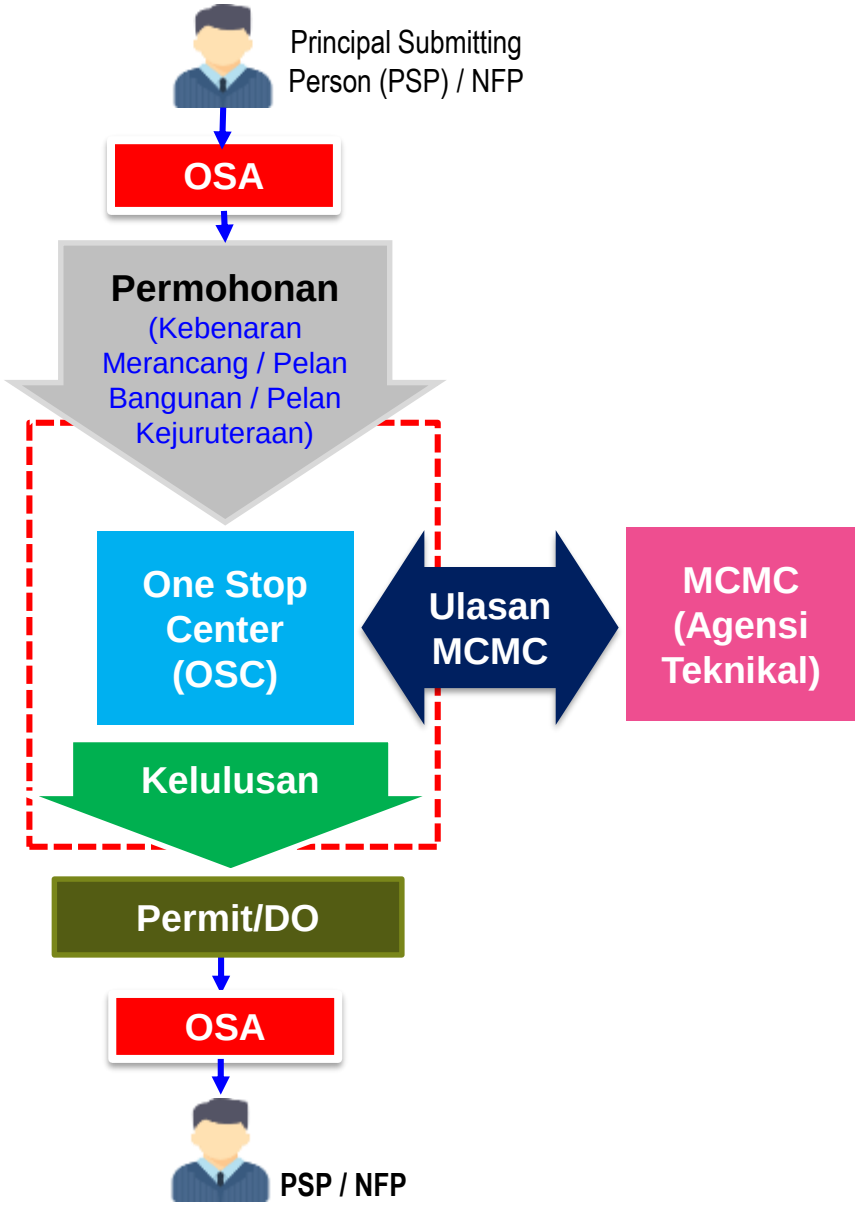
OSA – Pembaharuan permit
- Semua negeri kecuali Pulau Pinang & Melaka

PBT – pembaharuan permit struktur telekomunikasi
- Semua negeri kecuali Sabah

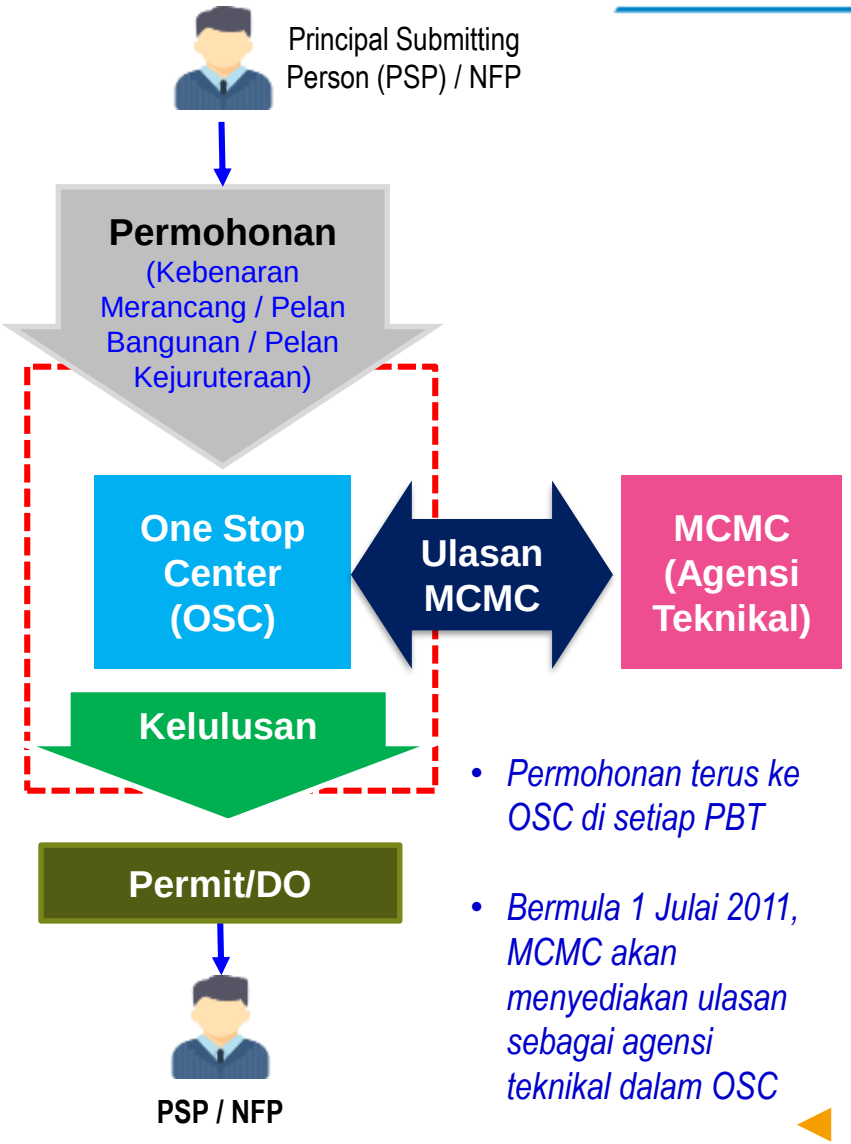
PTG
- Cukai Taksiran (Kelantan, N.Sembilan)
- Permit Khas Tanah Pertanian (Johor, Melaka, Perak, N.Sembilan)

Proses Permohonan Permit

Dengan OSA



Tanpa OSA



- *Permohonan terus ke OSC di setiap PBT*
- *Bermula 1 Julai 2011, MCMC akan menyediakan ulasan sebagai agensi teknikal dalam OSC*

Increase in deposit fees by JKR

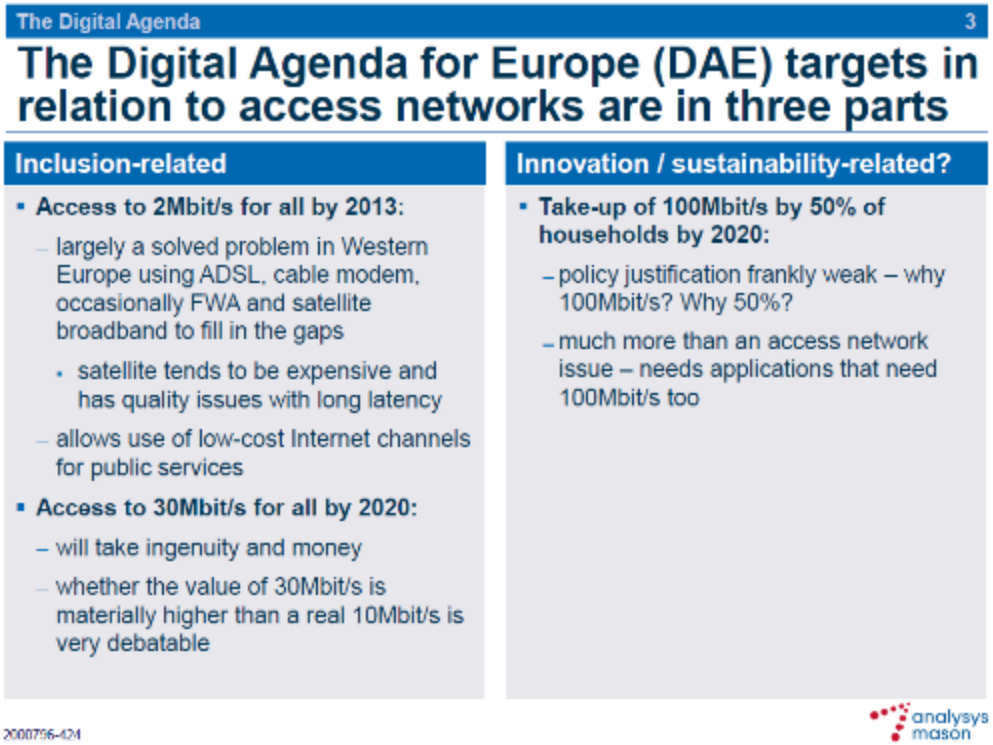
- Mulai 1 Jan 2017, pihak JKR telah menguatkuasakan prosedur permohonan serta kadar wang cagaran yang baharu bagi kerja korekan jalan oleh pihak utiliti

- Kadar tersebut menyebabkan semua syarikat utiliti khususnya pihak Telco berdepan dengan peningkatan kos yang mendadak dalam projek *fiberisation* termasuklah projek MCMC sendiri

Jenis Kerja	Kadar 2016	Kadar 2017	Pindaan Jun 2017
Horizontal Directional Drilling (HDD)	RM50/m	RM6,500/m	Tiada perubahan
Potong bahu jalan (tidak berturap)	RM30/m	RM800/m RM5,000 (min)	RM400/m
Potong permukaan jalan berturap / Micro Trenching	RM30/m	RM8,000/m RM10,000 (min)	Tiada perubahan
Excavation Pit	RM1,000/pit	RM25,000/pit	Tiada perubahan

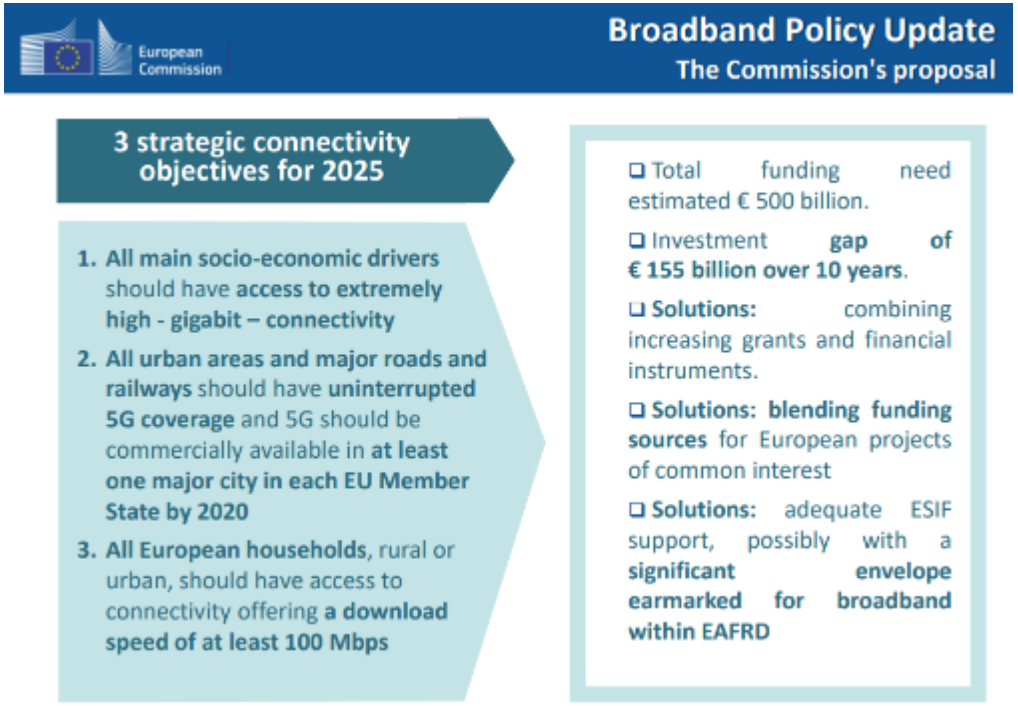
The Digital Agenda for Europe 2010 was updated in 2016 to create a Europe-wide Gigabit Society

Digital Agenda 2010's targets for 2020



http://www.analysysmason.com/contentassets/c982e4d754944d6aa7130fc907925380/4_presentation_james_allen.pdf

Gigabit Society's 2025 targets



https://atenekom.eu/wp-content/uploads/2017/11/02_GW17_EU-Commission-policy-update_FerreroF.pdf

List of existing technical documents – guidelines, standards etc – to assess relevance and requirements

JTM Documents

- General framework on road openings for telecommunications trenching, 1 March 1997
- REG-R 002 Regulatory framework on the sharing of radiocommunications infrastructure 1998 (could have been subsumed under TSIR RNI)

MCMC/MTSFB documents

- Technical Standard and Infrastructure Requirements (TSIR) - Fixed Network Infrastructure (Part 1) (2008)
- Technical Standard and Infrastructure Requirements: Fixed Network Infrastructure for Simple Development Properties (2016)
- Technical Standards of In-Building Fibre Cabling for Fibre-to-the-Premise (First Revision) (2016)
- Technical Code of Practice for the Installation of Network (2014)
- Radiocommunications Network Facilities – In-Building (2017)
- Radiocommunications Network Facilities – Smart Pole (2017)
- Technical Standards and Infrastructure Requirements : Radiocommunications Network Infrastructure (External) (Part 3) (2009)
- Guideline on the provision of basic civil works for communications infrastructure in development areas (2009)

KPKT/local authority documents

- Garispanduan menara dan struktur sistem pemancar komunikasi dalam kawasan pihak berkuasa tempatan 2002– propose to be revoked, along with other state guidelines and use TSIR Radiocomm. Approval processes to be subsumed under the revised Senarai Semak at OSC
- Senarai Semak – to identify and revise the documents required in line with abolishment of OSA
- Garispanduan tapak infra komunikasi (draf)
- Garispanduan Laluan Kemudahan utiliti