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TRA Responses to Comments Received

1st Round Consultation: 26 June – 24 July 2019

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Comments to the draft Scheduled of Fees				
1	Schedule of Fees 3(4)(i)(i)	Mr. Stephen	Gross Revenue should include all sources of revenue; otherwise, the subsidized licensee would have an unfair advantage over other licensees, thereby negating the purpose of market liberalization. The subsidy alone benefits only the subsidized licensee, and excluding the amount of the subsidy from the calculation of fees owed by the subsidized licensee would double or compound the advantage that the subsidized licensee has over the competition.	Section 302 (aa) of the Telecommunications Act defines gross revenues as those "received by the service provider from the provision of communications services and from interconnection and access." This narrow statutory definition excludes sources of revenue such as Government grants and distributions. To provide guidance as to the application of the Telecommunications Act, Section 3(4)(i) of the Schedule of Fees provides specific examples of sources of revenue that are not included within the statutory definition. The Authority also notes that, under the Telecommunications Act, the calculation of gross revenues serves three distinct regulatory purposes: it is necessary to determine dominant service provider status (Section 302(p)(i)); it is the basis to assess license fees (Section 336(2)(e); 336(3)); and it is the reference threshold value to impose penalties (Section 384(b)). To avoid any unfair

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				or discriminatory treatment, all service providers will be subject to the same definition and calculation of gross revenue for these regulatory purposes. Based on the above reasoning, the Authority will not make the change proposed by the commenter.
2	TRA Consultation Comments on License Fees	FSMTCC (OAE)	The OAE is a telecommunications operator / service provider. There can be no doubt about that. OAE's mission is to offer high quality international bandwidth over sea cables on a non for profit and non-discriminatory basis. A mark-up of 5% for contingency purposes may be added to the costs of OAE's operations. OAE distinguishes 3 categories of expenses in its Business Plan, perhaps costs plan is a better name. 1. <u>OAE operating costs</u>: these are the expenses for Salaries & Payroll, Board of Directors, General (office) Expenses. Annualized these costs will grow to from $300,000 in 2019 to app. $375,000 in 2024. Salaries & Payroll represent 2/3 of OAE operating costs. If OAE would not exist its activities would be executed by the operators, it would add to their costs and not generate additional revenue.	Section 302 (aa) of the Telecommunications Act defines gross revenues as those "received by the service provider from the provision of communications services and from interconnection and access, less the sum of the interconnection and access charges paid by the service provider to another person in the Federated States of Micronesia; and payments made by the service provider to an unrelated person outside the Federated States of Micronesia for the carriage of telecommunications traffic originating in the Federated States of Micronesia to destinations outside of FSM." This narrow statutory definition excludes sources of revenue such as Government grants and distributions in the calculation of gross revenues for the recipient of the grant. The Authority notes, however, that if OAE uses funds from a grant to pay FSMTC, those

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			2. Sea Cable related expenses: these are the expenses for sea cables declared ready for service and in use like operations and maintenance costs invoiced by third parties. Current annualized level is around $ 600,000 based on contracts in place full year around growing to $750,000 in 2022 when EMC system is fully in service. These are all costs that are independent of the existence of an OAE. Any operating unit managing the sea cable assets would have to pay those. If OAE would not exist these costs would be paid by the service providers as direct costs and not increasing any revenue. The presumption that this is revenue over which license fees should be paid adds an unnecessary burden to the industry. 3. FSMTC outsourcing expenses: these are costs for services provided by FSMTC to OAE like Hantru-1 IRU Deed (3a), Cable Landing Costs, Utilities and Security (3b). The current cost level is $ 840,000 in 2019 growing to almost	grant funds would not be calculated in OAE's gross revenue, but would be counted as FSMTC's gross revenue, as these funds were not granted to FSMTC, but are instead a payment for services rendered based on a commercially negotiated agreement with OAE. However, according to Section 302 (aa) as quoted above, any of OAE's operating expenses that relate to payments made for interconnection and access, to FSMTC or another party, would be subtracted from OAE's gross revenues. The Authority also notes that Section 336(2)(e) of the Telecommunications Act clearly states that "operating license fees for individual licenses shall be based on a percentage of the gross revenues of the licensee." The draft Schedule of Fees necessarily was written to align with the guidelines set forth in the Act. The Authority is well aware that every licensee will incur operating costs, not just OAE. However, the statutory standard requires payment of regulatory fees calculated on the basis of gross revenues as defined in the Act, not net revenues. Therefore, all service providers will be subject to the same application of the rules to avoid any unfair or discriminatory

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			$1,100,000 in 2024. Hantru costs are approximately 2/3 and Cable landing costs are 1/3. Total costs for 2019 is $1,500,000 of which $ 840,000 will have to be paid to FSMTC (category 3) if FSMTC sends OAE an invoice for that amount. It seems unlikely that FSMTC will do that as it risks to have to pay 5% mark-up to OAE ($42,000) and 1,25% of the revenue to TRA (S10,500). OAE would charge the FSMTC invoice to the FSM service providers, thus creating revenue for OAE over which it also has to pay to TRA 1,25% ($10,500). As these costs are included in OAE operating costs it would charge it back to the service providers. Currently discussions are held between FSMTC and OAE about the invoicing process on both sides. Critical is that invoices of category 2 will be paid by the service provider including mark-up. OAE will continue to pay its operating costs in category 1 from the government grant it received earlier in the year until depletion. Grants are not seen as revenue. The	treatment. Based on the above reasoning, the Authority will not make the change proposed by the commenter.

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			creation of OAE and the conditions specified in in the FSMTC IRU Deed with respect to OAE using FSMTC assets and facilities creates market distortion in the sense that revenue that is not really revenue but essentially nothing else than cost sharing gets levied twice. <u>Alternative</u> OAE proposes to pay TRA license fees over the 5% mark-up over the costs it passes on to the service providers, a small amount that will not lead to an extra burden for the service providers.	
3	Consultation Document, section 4.1.2.3 (Licensing Fees)	Digicel	Digicel disagrees with the proposed approach for setting license fees. Such an approach will result in a license fee regime that unfairly discriminates between licensees depending on the nature of the service they provide and the revenues they earn. In some cases it may also influence a decision as to whether or not to invest in infrastructure or to be a reseller of another individual licensee's services. The revenue thresholds proposed for class licensees may also create perverse commercial incentives. For example, a class	As rightly noted, Section 336(2) of the Telecommunications Act outlines that class and individual licensees should be treated differently, and that individual license fees "shall be based on a percentage of the gross revenues of the licensee," and that class license fees "shall be a fixed sum." The two-pronged approach for setting license fees has been set in order to comply with the framework set forth in section 336(2). While Digicel asserts that a graduated scheme is not a "fixed sum," the Authority notes that the proposed scheme is consistent with the

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			licensee with annual gross revenues of US$3 million is proposed to be subject to a license fee of US$25,000. However, if that licensee were to increase its annual gross revenues by just $1 its license fee would increase by US$25,000 to an annual license fee of US$50,000. This may lead to situations where revenues are mis-reported or commercial initiatives are put on hold in order to avoid engaging in what would clearly be unprofitable behaviour. While Digicel understands that the proposed revenue thresholds may have been set in an effort to comply with the requirements of section 336(2)(f) of the Act, which requires that "*operating license fees for class licenses shall be a fixed sum*", Digicel does not consider that the proposed schedule achieves that outcome. This is because there is no single "fixed sum" that is applied to class licensees, with fees proposed to be proportionate to revenues. Digicel submits the solution to this issue is for there to be a requirement for any person deriving gross revenues of more than US$100,000 per annum either directly or indirectly from the provision of communications services to hold an individual licence and be subject to the individual fee	Telecommunications Act in as much as the draft Schedule of Fees sets forth a fixed amount that class licensee will pay, as determined in the graduated fee scale. The proposed approach for setting license fees, namely a 1.25% fee of gross revenues for individual license fees, and a graduated fee scale for class licenses, aims to address the potential for unfair discrimination. The graduated fee scheme is aimed at limiting the risk that licensees offering similar end-user services (either on a facilities-based or service-based basis) are subject to significantly different fees. Considering the general licensing framework set forth in the Telecommunications Act (discussed in response # 4 below), the Authority notes that setting a single fixed sum fee for all class licensees, would likely lead to competitive distortions under specific scenarios. For example, setting the class license fee at USD 1,000 may result in a virtual mobile network operator (MVNO) with revenues of USD 2 million paying fees of USD 1,000 per annum, while a competing mobile network operator (MNO) holding an individual license with the same revenues paying a fee of USD 25,000. Under the proposed scheme, both class and individual licensees with gross revenues of

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			which is currently proposed to be set at 1.25%. Digicel further proposes that the minimum fee payable by individual licensees be set at US$1,000 per annum. For class licensees, Digicel proposes that the annual fixed sum payable should be US$1,000. Digicel considers that the quantum of such a fee should not be too onerous in the context of the provision of communications services and that it is at a level that is reasonable to cover the TRA's likely costs of oversight and administration in respect of a class licensee.	USD 2 million would be subject to a USD 25,000 fee. The Authority acknowledges that revenues on the upper and lower bounds of each revenue bracket may lead to situations of inaccurate reporting, and this risk has been tempered by making each revenue class as small as possible, without overly complicating the scheme with a multitude of small brackets. Regarding Digicel's proposal that a minimum fee payable by individual licensees be set at USD 1,000 per annum, the Authority assures Digicel that the 1.25% fee will apply to all individual licensees with revenues above the *de minimus* threshold at USD 100,000. This would equate to a minimum fee payable by individual licensees of USD 1,250, not USD 1,000. Based on the above reasoning, the Authority will not make the change proposed by the commenter.
Comments to the draft Telecommunications Operating License Rules				
4	Consultation Document, section 4.1.2.1 (Licensing)	Digicel	Digicel respectfully submits that the proposed approach to distinguishing between the requirement to hold an individual license or a class license is flawed. While Digicel has no issue with the proposed	The Telecommunications Act establishes the individual license as a facilities-based license while the class license is a service-based license and does not authorize the Authority to impose an individual licensing requirement based on revenues, as detailed below.

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			criteria under which an individual licence must be obtained, Digicel believes that it should be expanded to include *any* provider of a communications service with annual gross revenues in excess of US$100,000. This is for two reasons: - Firstly, Digicel considers that the TRA is entitled to hold more details about any large communications service provider and that it is necessary for the TRA to do so in order to properly oversee the function of the telecommunications sector; and - Secondly, the differences between individual licensees and class licensees are important with respect to the calculation and imposition of license fees (see below).	Section 329 of the Telecommunications Act addresses licenses for communications networks and services. Section 329(2) authorizes the Authority to issue two types of operating licenses. The Authority may issue an individual license "to authorize the ownership or operation of any specified communications network and the provision of any communications service." The Authority may issue a class license "to authorize the provision of any communications service." Section 329 of the Code clearly distinguishes between individual and class licenses based on ownership and operation of specified communications networks. Thus, only entities that own or operate a specified communications network are subject to individual licensing. The Authority is not permitted to require non-facilities based providers of communications services to obtain an individual license because the provider's revenues exceed a certain threshold. However, the proposed Operating License Rules, as drafted, would effectively enable the Authority to address Digicel's first concern.

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				Section 47 of the proposed Operating License Rules relates to the provision of information. Section 47(1) states: "The Authority may establish additional notification and provision of information requirements, including regular reporting obligations, provided that such requirements are necessary and desirable for the purpose of the Authority carrying out its functions or exercising its powers under the Code." This provision allows the Authority to issue additional or more detailed reporting requirements on any large communications service provider, if needed to carry out its functions or powers, regardless of whether the provider holds an individual or class license. Digicel's second concern is addressed in the Authority's response on license fees below.
5	Consultation Document, section 4.1.2.3 (Licensing)	Digicel	Digicel disagrees that voice and messaging services offered over the public Internet ("**OTT services**") should be exempt from the requirement to hold a license. Such services compete directly with voice and messaging services provided by communications network operators and there is no good reason why all providers of competitive services should not be subject to	Section 12(2)(b) of the draft Operating License Rules does not exempt all voice and messaging services offered over the public Internet, which Digicel refers to as OTT services. Instead, the proposed Operating License Rules exempt from operating license requirements only those "voice and messaging services offered over the public Internet *that are not*

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			a consistent set of regulations around consumer protection, privacy, content, financial systems and national security, regardless of the technology or platform that is used to deliver them and pay the same level of taxes, fees and levies. In Digicel's respectful submission, exempting OTT service providers from the regulatory framework will result in a situation now faced in many other countries where Governments and Regulators are unable to assert their rightful sovereign control over the provision of services to their citizens. This has resulted in a syphoning off of tax revenue and the proliferation of hate speech, misinformation and privacy breaches. Moreover, the uneven playing field that such an exemption would provide would inevitably diminish incentives for investment by other licensees and will directly impact the Government's universal access and service objectives and would otherwise be inconsistent with the requirements of the FSM Telecommunications Act 2014 ("**Act**"). Digicel submits that, rather than providing an exemption, OTT service providers should be expressly included within the ambit of the	*assigned Telephone Numbers*." [Emphasis added.] That is, providers of OTT voice and messaging services that are assigned telephone numbers would be subject to the licensing requirement. OTT voice and messaging services that would be subject to licensing requirements would include, for example, certain VoIP services that allow users to obtain public telephone numbers in order to make and receive calls from public mobile or fixed networks. The proposed Operating License Rules view the assignment of public resources (in this case numbering resources) as the bright line in determining whether a licensing obligation applies. This distinction is in line with international trends. For example, the recently adopted European Electronic Communications Code (EECC) differentiates between "number-based interpersonal communications services" (NB-ICS) and "number-independent interpersonal communications services" (NI-ICS). NB-ICS includes traditional communications services and OTT voice and messaging services that connect with publicly assigned numbering resources. These services are subject to

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			licensing regime.	registration and other regulatory obligations. In contrast, NI-ICS services, which do not connect with publicly assigned numbering resources, are not subject to registration obligations. Further, there is currently no evidence that use of OTT services in the FSM are creating the harms that Digicel suggests. Certain issues that Digicel describes, such as "proliferation of hate speech, misinformation and privacy breaches" would not be resolved by the Operating License Rules or the Telecommunications Act. Instead, they would be addressed through data protection, consumer protection and other general laws. At this stage, the Authority believes imposing a license obligation on all voice and messaging services offered over the public Internet, even if they are not assigned numbers, would likely result in unnecessary regulatory burdens that may harm uptake and adoption of communications services, without resolving the underlying issues that may arise. If, in the future, the Authority determines that the license exemption in the draft Operating License Rules should be reviewed, then it may do so pursuant to its powers under the

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				Telecommunications Act.
6	Proposed Telecommunications Operator License Rules, section 27 (Licensing)	Digicel	Digicel is concerned that the proposed Telecommunications Operator License Rules include a unilateral right for the TRA to vary the terms of a Licence. While Digicel acknowledges that the section obliges the TRA to consult prior to determining a variation, we submit that an unfettered ability to vary individual licences once issued, is likely to increase uncertainty and the risks of infrastructure investment and deter entry to the market. It is also not clear the inclusion of such a power in the Rules is consistent with the scheme of the Act, which provides no express power for the TRA to vary the terms of licenses once they are issued.	The Telecommunications Act grants the Authority the power to make licensing rules specifying "[g]eneral licence conditions which apply to all 24 operating licences." (Section 330(1)(e). In addition, Section 305 grants the authority broad powers to "issue licenses". The Authority believes that provisions that enable it to modify licenses are an important part of an effective regulator's functions and powers and should be part of the general conditions of a license. License variation is a standard element to license rules. Section 27 of the draft Operating License Rules is therefore in line with international practices and is intended to provide the Authority with the ability, subject to the limiting conditions discussed below, over the long-term to amend license conditions in response to shifting market realities. Notably, Section 21 of the draft Operating License Rules affords licensees the maximum license duration permitted by the Act—20 years for individual licenses. These lengthy license terms are intended to incentivize

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				licensees to invest in their networks and services and ensure that they have ample time to recoup investments. Lengthy license durations also mean that market conditions are likely to evolve which may require adjustments to regulatory requirements contained in licenses. The Authority will not have unfettered ability to vary licenses. The license variation provisions in the draft Operating License Rules include protections against arbitrary or discriminatory modifications. First, any modification must be based on reasonable grounds. Second, the basis for modification must be aimed at promoting specified policy objectives that are consistent with the Act. Third, modifications must be subject to principles of non-discrimination and fairness. Lastly, any proposed modifications must be subject to consultation. The Authority notes that, provisions enabling regulators to vary the terms of the license are commonly found in licenses and license rules. In Singapore, for example, all telecommunications licenses, including the Service-Based Operator (Individual) License, contain a provision on the "Variation of Terms

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				of License," stating that "the Authority may vary or amend any of the terms and conditions of the Licence by giving the Licensee at least one (1) month's prior written notice." Fiji, Hong Kong, and Malaysia are a few other examples of countries with mechanisms enabling the regulator to modify licenses, generally subject to notice and consultation requirements. Based on the above reasoning, the Authority will not make the change proposed by the commenter.
7	TRA Consultation Comments on License	FSMTCC (OAE)	<u>Issue</u> How does TRA see the market opportunities for small local service providers like ISP's that have a local presence only and do not have immediate ambition to roll out operations to other states in FSM. More specifically, how would an ISP that only operates in Yap, or Chuuk, or Pohnpei, or Kosrae get access to "cheap bandwidth" of FSM fiber optic cables under management of the Open Access Entity. OAE offers 10Gbs access ports that are far too expensive for small ISPs. To stimulate and foster start-ups cheap bandwidth should be made available. The only option these ISP's now have is to contract with FSMTC. It is unclear to me if the price level that would be	We agree that the issue raised by the OAE will be critical to ensure a vibrant and competitive market for the provision of telecommunications services in FSM. The provision of access to wholesale services or bottleneck facilities is a key focus of the draft Interconnection and Access Rules. As such, should a small ISP wish to obtain access to specific wholesale services, it must file an access request in accordance with the draft rules. Should access be denied to a bottleneck facility, for example, the Authority may review the matter on a case-by-case basis pursuant to section 42(1) of the draft Interconnection and Access Rules.

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			quoted by FSMTC to ISP's is on a real wholesale level or just a copy of the retail prices. A small ISP will not have the financial means to pay fees that are based on the assumptions that a (new) license holder will serve all 4 FSM states. <u>Alternative</u> The alternative should be a mandatory wholesale offer from large service provider(s) to ISP's based on incremental costs. Wholesale offers that are retail "look-a-likes" in terms of pricing and terms and conditions should be discouraged. In the absence of a wholesale offer from FSMTC, OAE is willing to look into opportunities to serve small local ISP's if that pleases TRA.	Moreover, in accordance with section 343(2)(e) of the Telecommunications Act, price squeezing is explicitly considered as conduct that has the effect or likely effect of substantially lessening competition and is hence illegal. In such cases, the Authority may exercise its enforcement powers in the terms of section 344 of the Act. The Authority thus believes there are sufficient regulatory tools at its disposal to address the matters highlighted by the commenter, but will closely monitor developments in the market to ensure that citizens benefit from effective competition and that conduct with the effect of lessening or likely lessening competition is deterred or corrected.
Comments to the draft Interconnection and Access Rules				
8	Consultation Document, section 4.4.2.4 (Interconnection and Access)	Digicel	Digicel disagrees that a "bill and keep" pricing methodology is permissible under the terms of the Act which provides: - As part of the Act's General Objectives specified at section 303(e), that "*interconnection"* should be "*cost based*"; and - At section 341(3) that TRA shall "*take into account internationally accepted principles for*	The definition of prices and pricing principles for interconnection and access is a central issue to ensure effective implementation of the draft Interconnection and Access Rules. The Authority believes that the methodology and levels of compensation for the use of the various wholesale interconnection and access services made available in the FSM will have a direct impact in promoting entry and effective

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			determining regulated prices, including methodologies designed to reflect actual costs". In Digicel's submission, "bill and keep", i.e. pricing a service at zero charge, cannot be considered to be a cost based pricing methodology as it does not take into account the costs of providing the service (which cannot logically be "zero"). Digicel also disagrees that the specification of bottom up cost modelling in a country the size of FSM is likely to be a reasonable approach to setting interconnection prices. That is because the costs of undertaking such modelling are likely to far outweigh the benefits it would provide. Instead, Digicel proposes that the TRA place greater reliance on international benchmarking as a means to establish interconnection pricing in the event of a dispute. Such an approach is also consistent with section 341(4) of the Act which expressly permits international benchmarking and the Act's objective of providing proportionate regulation. It is not clear to Digicel why spectrum fees are	competition in the country going. The Telecommunications Act sets guiding principles to establish prices or pricing principles in the draft rules: • First, one the objectives of the Act is to provide for "cost-based interconnection and access on an equitable and non-discriminatory basis for operators of communications networks."[1] • Second, the Act notes that in setting prices and pricing principles, the Authority "shall take into account internationally accepted principles for determining regulated prices, including methodologies designed to reflect actual costs."[2] This provision is understood to require the Authority to "take into account" principles to set regulated prices accepted internationally, and in particular that it should "take account" of methodologies that reflect "actual costs" (i.e., historical costs). • Third, the Act states that the Authority may use benchmarking as a means to determine "interim interconnection and access prices" (section 341(4)) and that

[1] Section 303(1)(e) of the Telecommunications Act.
[2] Section 341(3) of the Telecommunications Act.

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			proposed to be excluded from the calculation of the cost of mobile voice termination. Spectrum fees and other regulatory fees are a legitimate costs incurred in providing call termination services and denying a licensee to recover a fair proportion of such fees from call termination services would be an error in Digicel's view.	such benchmark-based prices shall apply until "interconnection and access prices or pricing principles are made" under the Interconnection and Access Rules (section 341(4)(a)). Benchmarking is thus the only methodology to set interconnection prices explicitly mentioned in the Act, and the Authority understands the plain language of the Act to limit its to setting "interim" prices. Once Interconnection and Access Rules are adopted, as is the current intention of the Authority through this consultation process, the pricing principles contained in such rules will supersede any benchmark-based pricing that could have been determined by the Authority. We read this language to mean that the pricing principles to be used to set permanent prices (i.e., not interim) and set forth in the draft rules must be different from the methodology that the Authority must use to set interim prices under the Act. The Authority thus considered the use of benchmarking as a methodology to set permanent termination pricing, and its potential benefits is a market with the scale of the FSM, but we ultimately discarded this approach based on the legal limitations

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				noted above. Against this backdrop, the Authority's analysis underpinning the draft Interconnection and Access Rules considered, in accordance with section 341(3) of the Telecommunications Act, various pricing principles and methodologies to estimate cost-based interconnection and access pricing. The Authority reviewed: • Different wholesale charging arrangements, including Calling Party Network Pays (CPNP)[3] and Bill and Keep (BAK)[4]. • Different modeling approaches covering (i) top-down;[5] (ii) bottom-up;[6] and (iii) hybrid approaches.[7] • Cost-allocation alternatives were reviewed, including (i) long run incremental costs (LRIC)[8] and (ii) fully allocated costs (FAC).[9]

[3] Under this system, the originating network is required to pay a charge, generally on a per usage basis (e.g., per second or per minute), to the terminating operator for interconnection traffic exchanged between their networks.
[4] Under this system, interconnecting operators set their termination rate to zero and, as a result, do not charge each other for terminating calls. Instead, the costs associated with mobile call termination are recovered from the subscribers as part of the overall retail pricing structure.
[5] Top-down (TD) cost models rely on costs actually incurred by operators and take into account the operating costs and historic capital costs of the company. The goal is to attempt to replicate an existing network and its cost structure.
[6] Bottom-up (BU) cost models rely on detailed data and construct a hypothetically efficient network using engineering, economic and accounting information and principles. This hypothetical network can provide multiple telecommunications services, including interconnection services. The costs of the network (including capital costs, operations, and maintenance costs) are then allocated to all services provided.
[7] Hybrid (HY) cost models use the results of a BU model checked against TD financial and operating data. Historic costs and operational data are used to validate the assumptions, algorithms and relationships in the BU model, placing a greater degree of reliance on the forward-looking elements in the model.
[8] LRIC methodology estimates the incremental cost of the termination service in the long-run when all costs are considered to be variable (i.e., both fixed and variable costs).

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				• Different approaches toward measuring costs were also taken into account, including: (i) forward looking costs[10] or (i) historical costs.[11] Having considered international practices and available pricing methodologies, the Authority is proposing in the draft rules to allow providers to set interconnection and access prices based on three approaches: • First, commercial negotiation may be implemented to set interconnection and access prices that are reasonable. This is consistent with the requirements set forth in section 338 of the Telecommunications Act whereby the Authority must give deference to negotiated outcomes. • Second, parties may adopt cost-based prices. This is consistent with the provisions of section 303(1)(e) of the Act. Furthermore, the draft rules require that in the case of interconnection services, prices be based on a bottom up, FL-LRIC+ cost modeling approach, while termination prices shall be based on

[9] FAC allocates all costs, including those which are joint and common, across the products or services produced based on allocation rules.
[10] Forward-looking costs (FL) or current costs reflect the costs that a provider would incur in building a new network at the time the analysis is conducted thus eliminating inefficiently incurred costs.
[11] Historical costs (HC) or actual costs refer to the costs actually recorded and accounted for in the operator's books. Pricing based on historical costs enables providers to recoup their past expenditures, but fails to encourage efficiency as it can be based on obsolete technology.

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				bottom up, FL-pure LRIC modeling exercise. This choice took into account international practices and on this basis the Authority chose, within the boundaries of its discretion under the Act, to exclude the use of FAC which relies on actual costs as this approach is inconsistent with international regulatory practice over the last decade. • Third, parties may use bill and keep to set interconnection and access prices. Further, the draft rules state that this will be the preferred option for the Authority to resolve disputes in relation to termination services (for two-way access). Bill and keep is used in several countries (including recently by the regulator in the Solomon Islands to resolve interconnection pricing dispute) and is the prevalent approach for the exchange of Internet traffic internationally. That said, we understand Digicel's argument that bill and keep is not a cost-based approach for exchanging traffic. However, on this point we note that the international trend in setting termination pricing is increasingly leading to prices ever closer to zero, especially considering the shift to IP-based services. Considering this global trend, we

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				note that bill and keep is a form of in-kind payment mechanism which reflects the costs of both parties. This is generally the case for the exchange of SMS traffic, for instance. As per voice traffic, it is possible that in a market like FSM an entrant in a duopoly will rapidly gain market share (based on traffic) and may, within a few years, achieve a balanced traffic exchange with the incumbent (or even potentially terminate more traffic on the incumbents' network). This outcome will be more likely if a bill and keep approach is used as this will likely incentivize use, as shown in the recent dispute in the Solomon Island. Under this scenario, the Authority believes that voice call termination using bill and keep could be considered a cost-based approach, particularly considering the likely future conditions of the FSM market. Based on the above reasoning, the Authority notes that as the liberalization process advances and competition in the market takes root, we will closely monitor market developments and may, if warranted, revisit this matter in the future. Recognizing current level of capacity and budget constraints of the Authority and the industry, we believe this

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				policy is consistent with the Telecommunications Act and seeks to leverage the simplicity of implementation taking account of national conditions.
9	Consultation Document, section 4.4.2.5 (Interconnection and Access)	Digicel	Digicel is concerned that both "equal access" and "number portability" have both been designated as "mandatory services" when neither of those services has been adequately defined and no justification for their imposition has been provided. In particular, Digicel is concerned that the designation may cause the imposition of substantial costs on the industry but without providing commensurate benefits. In Digicel's respectful submission, neither of those services should be designated as mandatory services until further detailed analysis and consultation has been undertaken, consistent with an overriding cost-benefit requirement for regulatory intervention.	The Authority appreciates Digicel's concern and would like to reassure the commenter that the inclusion of "equal access" and "number portability" as mandatory ancillary services in section 38(1)(a) of the draft Interconnection and Access Rules does not mean that licensees will be required to offer such services once the rules are adopted by the Authority. In fact, the language of the proposed section is clear on this point, stating that such services will be considered ancillary service "where warranted." For example, under the section 357(2) of the Telecommunications Act, the Authority may make number portability rules should we determine (i) that there is a reasonable likelihood of demand for number portability; and (ii) that the benefit outweighs the costs of introducing number portability. Accordingly, the Authority would have to make such a determination in the future. A similar approach would be followed by the Authority in the case of equal access.

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				Section 38(1)(a) of the draft Interconnection and Access Rules is thus aimed at ensuring that, should the Authority determine in separate proceedings that equal access or number portability must be offered in the market, then such service should be construed as mandatory ancillary services for the purpose of the draft Interconnection and Access Rules.
Comments to draft Spectrum Licensing Rules				
10	Spectrum Licensing Rules 15(1)(a)	Mr. Stephen	According to FSMTC&I frequency chart, FSMTC has been assigned 113 MHz from the ~900MHz spectrum, leaving no frequencies for new service providers. Mr. Stephen proposes adopting an approach of first come, first served without allocating more than 50% of spectrum to a single licensee	As the spectrum management functions transition from the Department of Transportation, Communications and Infrastructure (DTC&I) to the Authority, we must ensure that access to this valuable resource is aimed at fulfilling the general objectives of the Act. Among these, we administer spectrum in a manner to promote effective and efficient use of this resource (section 303(1)(c) of the Act) and provide conditions for effective competition among service providers (section 303(1)(c) of the Act). In line with these objectives, the draft Spectrum Licensing Rules set forth a clear framework for the assignment of spectrum. Specifically, the rules provide for three types of processes that may be used to assign

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				spectrum, including (i) first-come, first-served, (ii) call for applications published by the Authority and (iii) competitive tenders (Section 15(1) of the draft Spectrum Licensing Rules). In cases where we determine that a particular band has, or may have, high economic value, we will publish a request for application to assess demand (Section 17 of the draft Spectrum Licensing Rules). This is consistent with Section 333(1)(c) of the Act requiring the rules to specify "the parts of the radio frequency spectrum for which a spectrum licence may only be issued following a request for applications published by the Authority." Should excess demand be found, then the draft rules (section 17(4)(a)) require the Authority to assign the spectrum using a competitive process in accordance with Section 333(1)(f) of the Act. All other bands (i.e., those where supply does not exceed demand) are to be assigned on a first-come, first-served basis. We believe the approach described is consistent with the text of the Act as well as with established international spectrum management practice. In addition, the draft Spectrum Licensing Rules

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				provide that the Authority may establish aggregation limits to (i) promote competition and innovation and (ii) avoid undue spectrum concentration in the market (section 9(3) of the draft Spectrum Licensing Rules). These limits, were warranted, will be aimed at avoiding the concerns raised by the commenter. Lastly, it should be noted that current assignments granted to FSMTC in the 900 MHz cover 2x12 MHz (800-892 / 925-937 MHz) and not 113 MHz as stated by the commenter (See DTC&I, Frequency Authorization Notification, Oct. 26, 2018). Considering that this band (3GPP band n8) comprises a duplex of 2x35 MHz (i.e., a total of 70 MHz in the 880-915/925-960 MHz range), we believe there is ample spectrum available for assignment to promote entry and competition.
General comment on the consultation process				
11	Consultation process adopted	Mr. Naich	Extracts of comments received: A) "<u>Modest Suggestion for the Consultation Process</u> In light of the foregoing comments, I would haphazardly offer the following suggestions for consideration:	The Authority fully agrees with the importance of conducting open and transparent consultation processes that facilitate all potential stakeholders, including citizens, business, and government alike, to fully participate and present their views. We firmly believe providing adequate opportunity

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			1. Apart from the written comments exercise, engage the TRA in a series of "townhall" meetings of briefing sessions in all the four states. This second phase of the consultation process will enable TRA to do its "show and tell." TRA is a new kid on the island; it must be presented to the community – and it must tell its story, so that FSM TRA is not confused with FSM TC and how it is related/differentiated with the Open Access Entity (OAE). In a conversation when the cable was "pulled up" at Kurassa in Weno, I listened to a conversation among three members of the Chuuk State Legislature whom you did not wish to interrupt for clarification for having said all they did – and not wishing to cause embarrassment or discomfort. And at the Northwest Leadership Conference held late last year at Chuuk High Tide Conference center, the issue of "expanding towers" to selected islands in the region was brought up. There was a lot of excitement, which is good. But there was a significant level of ignorance that could result in great disappointment if not handled appropriately – and the object of the World	for comments will greatly help the Authority in crafting a regulatory framework that adequately implements the principles and policies set forth in the Telecommunications Act and is tailored to meet the needs of the FSM and our people. The Authority must also point out that in conducting consultation we are bound by the statutory requirements set forth in the Telecommunications Act as to the formalities and requirements for such processes. Specifically, the Telecommunications Act sets forth two types of consultation processes the Authority may undertake.[12] The first consultation process (formal consultations) applies to instances where the Act specifically requires the Authority to carry out "consultations" in order to "issue a final decision."[13] In such cases, the Act requires the Authority to undertake a formal, two-round consultation process to seek stakeholder inputs. The second consultation process (informal consultations)set forth in the Act applies to

[12] Section 321 of the Telecommunications Act.
[13] Sections 321 (1) and (7) of the Telecommunications Act.

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			Ban is not accurately and adequately explained. The point here cannot be exaggerated – the level of ignorance about TRA is prevalent. How can there be meaningful written comments when, to begin with, there is little congruence of basic understanding of what TRA is vis-à-vis TC and OAE and what are the stars that TRA is directed, as conditions of its World Bank funding to follow or sail under. The face-to-face briefings in the four states will require money. I don't know how much this show and tell will cost; but the money would be worth the expenditure. It will be in the interest of the public – a necessary cost of carrying out a public obligation. TRA is given a task; it must be given the wherewithal to execute it; otherwise it is expected to do carry out a mission impossible. It must be identified with the public interest, so that it is confused with other profit-making entities. 2) Prior to finalizing the draft telecom rules, including those for spectrum, it is also suggested that TRA develops very simple	instances where the Telecommunications Act does <u>not</u> explicitly require the Authority to "consult," but the Authority nevertheless wishes to do so "as it deems appropriate in the circumstances."[14] The Act refers to these as "other consultations" but does not set out a formal process the Authority must follow to consult In addition to the two types of consultations previously discussed, the Act also mandates that "rules and regulations shall be promulgated in accordance with the Administrative Procedures Act."[15] In accordance with this general mandate, it is clear that the Authority must use the regulation making process established in section 102 of the Administrative Procedures Act (APA) to adopt "rules and regulations".[16] In this context, and to maximize participation in the crafting of the rules package put forth for consultation, the Authority opted to undertake the following: • First, we launched an informal consultation process on June 26, 2019. To

[14] Section 321 (1) of the Telecommunications Act.
[15] Section 391 (2) of the Code.
[16] Section 102(3) of the APA specifically requires that "regulations must be adopted in compliance with this section".

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			brochures, bullet proof types, for dissemination or use in the townhall meetings. TRA could utilize the radio stations in the states to disseminate the information. The TRA website should also be further publicized. 3)Apart from launching a media exposure, TRA should also make a conscious effort in notifying the telecom operators, beyond FSM TC, that operate in the Asia-Pacific region or that are likely to adventure into the FSM market. Enhancement of transparency is critical to competition. In other words, this will enhance confidence in the TRA's process for competition. 4)TRA should not be bashful to engage the FSM diplomatic missions to assist in the media dissemination.	this end, we published a consultation notice on our website, provided a detailed summary of our proposed decisions and offered the public a draft set of rules for review and comment. To further publicize our initiative, we drafted a press release which was published in the Kaselehlie Press on July 8, 2019. We also made a concerted effort to reach out to over 9 telecommunications service providers active in the region that were identified by our research as potential interested parties to enter and compete in the FSM market. We tried to cast as wide a net as possible with the aim of disseminating our proposed rules as broadly as possible. We granted 30 days to receive comments in this process. • Second, in our consultation document (See Next steps, at p. 26), we clearly stated that, once comments to the first round were received, we would initiate a second round of consultation under Section 102 of the Administrative Procedures Act as required by Section 391(2) of the Telecommunications Act. We expect this process will provide a further 30 days to present comments. Moreover, under the Administrative

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				Procedures Act, the TRA will post copies of the consultation in key government office in all four states and air radio announcement in all states, including in the local languages. We expect this process will provide further transparency and afford opportunities to all potential stakeholders to engage with us in our ongoing rulemaking process. • Third, due to the novel and highly technical subject matter within the Authority's purview, we plan to continue socializing and educating the general public of our mission and goals under the Telecommunications Act once our rules are adopted. We agree with the commenter that it is critical for the Authority to openly and continuously engage the public and will continue to take this work very seriously. We have given a lot of thought as to how best to consult as many stakeholders interested in participating and providing inputs to our draft rules. As described above, we believe our ongoing consultation and our approach toward eliciting comments is not only consistent with legal requirements to which we are bound, but is designed to provide transparency -by publishing all our draft rules-

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				, to give ample opportunity to receive comments -two rounds of comments of 30 days each- as well as to ensure widespread dissemination -publishing our notice online, notifying key potential investors directly, and posting copies in relevant pubic offices and broadcasting radio announcements on all four states (forthcoming actions under the APA process). That said, we welcome all inputs that may further help us promote transparency, raise awareness of our work and inform the public of our work and how it will impact their daily lives.