

September 27, 2021

Federated States of Micronesia Telecommunication Regulation Authority P.O. Box 1919 Pohnpei FM 96941 Tel: +691 320-2812 http://www.tra.fm

Mr. Kembo Mida Chief Executive Officer Chuuk Public Utility Corporation P.O. Box 2202 Pohnpei FM 96941

Dear Kembo,

The TRA greatly appreciates your answers to the questions set out in our letter of 20 August. Having reviewed the answers provided by all parties, we consider that additional information would be useful to our decision-making. In order to progress the TRA's work on whether particular fiber optic communications facilities should be declared bottleneck facilities, the TRA requires additional specific information on the minimum standards and unit costs of providing services that your organization has achieved, or is planning to achieve, using fiber optic or alternative facilities.

Pursuant to our powers under section 379 of the Telecommunications Act 2014 (*Requirement to supply information or documents or give evidence*), we require that you provide the following information. We will use the information in deciding whether, and to what extent, fiber optic communications facilities are bottleneck facilities for the purposes of the Act. For ease of collating the responses, Appendix 1 provides a response template that we would appreciate you filling out. We will also provide the template in the form of an excel file, and would appreciate you submitting your response electronically if possible.

Minimum standard of service

- 1. Please indicate the minimum standard of service that you are currently achieving or plan to sustainably achieve (whichever is superior) for approximately 99% (or other percentage as indicated by you) for the telecommunications services that you are providing or receiving. Please provide at least:
 - a. the upload speed on the connection
 - b. the download speed on the connection
 - c. the latency on the connection
 - d. the jitter on the connection
 - e. the availability of the connection in terms of percentage of time the connection is available and achieving the indicated speeds and latency in a typical year,

for each of the following services if they are relevant to you (you either supply these services or purchase them in order to enable you to supply telecommunications services to customers):

- a. Satellite backhaul services to enable internet traffic to flow to and from FSM and between islands in the FSM
- b. Submarine backhaul fiber services to enable internet traffic to flow to and from FSM and between islands in the FSM
- c. Fiber to the Premise (FTTP) broadband services for a typical household or small business
- d. Fixed Wireless broadband for a typical household or small business
- e. Satellite to customer services for a typical household or small business
- f. Digital Subscriber Line (DSL) broadband services using copper wires for a typical household or small business

We expect that, at a minimum, the above items b to d would be applicable for your organization.

To the extent that targeted or achievable service levels for each service materially differ by geographic area within FSM, please provide the above information broken down by relevant geographic area and an explanation of what causes the material difference in service levels. To do this, please insert additional rows where relevant in the response template and specify the relevant geographic location.

Unit costs and average revenues

- 2. For the services that you included in your answer to Question 1 please provide the approximate unit cost you are paying or plan to pay your suppliers (if you are purchasing the service), or the average revenues you are earning or plan to earn from your customers (if you are selling the service) as follows:
 - a. for satellite backhaul services, please provide the unit cost or average revenue per Gbps per month
 - b. for submarine backhaul fiber services, please provide the unit cost or average revenue per Gbps per month
 - c. for FTTP services, please provide the unit cost or average revenue per connection per month
 - d. for Fixed Wireless services (if relevant)
 - c. for satellite to customer services please provide the unit cost or average revenue per connection per month
 - f. for DSL services please provide the unit cost or average revenue per connection per month

Please identify whether your customers are or will be other licensees or retail end-users. If you supply or plan to supply services to both, report your prices or proposed prices to each separately.

To the extent that the unit costs or average revenues for each service materially differ by geographic area within FSM, please provide the above information broken down by relevant geographic area and an explanation of what causes the material difference in cost or revenue levels. To do this, please insert additional rows where relevant in the response template and specify the relevant geographic location.

Please respond by no later than 5pm October 15th, 2021.

When responding to the above questions, please indicate whether and explain in detail why you consider any of the information to be "sensitive information" as defined in section 322 of the Act. We may publish some or all of your answers to the questions, unless it is "sensitive information."

Sincerely. Takuro Akinaga Chief Executive

APPENDIX 1: Response Template

Relevant Technology	Geography (State "FSM-wide", or add rows and specify area)	Question (unit of answer)	Response (N/A if not applicable)
a. Satellite Backhaul		1.a Upload speed (Gbps)	
		1.b Download speed (Gbps)	
		1.c Latency (milliseconds)	
	_	1.d Jitter (milliseconds)	
		1.e Availability (% of year)	
		2.a Unit cost or average	
		revenue (\$/Gbps/month)	
b. Submarine Backhaul		1.a Upload speed (Gbps)	
		1.b Download speed (Gbps)	
		1.c Latency (milliseconds)	
		1.d Jitter (milliseconds)	
	P1	1.e Availability (% of	
		year)	
		2.b Unit cost or average	
		revenue (\$/Gbps/month)	
c. FTTP		1.a Upload speed (Gbps)	
		1.b Download speed	
		(Gbps)	
		1.c Latency (milliseconds)	
		1.d Jitter (milliseconds)	
		1.e Availability (% of	
		year)	
		2.c Unit cost or average	
		revenue	
		(\$/connection/month)	
d. Fixed Wireless		1.a Upload speed (Gbps)	
		1.b Download speed	awaye na miloo na Priorita energia a construction da anti-
		(Gbps)	
		1.c Latency (milliseconds)	
		1.d Jitter (milliseconds)	
		1.e Availability (% of	
		year)	

	2.d Unit cost or average revenue (\$/connection/month)
e. Satellite to customer	1.a Upload speed (Gbps)
	1.b Download speed (Gbps)
	1.c Latency (milliseconds)
	1.d Jitter (milliseconds)
	1.e Availability (% of year)
	2.e Unit cost or average revenue (\$/connection/month)
4 10 4	
f. DSL	1.a Upload speed (Gbps)
	1.b Download speed (Gbps)
	1.c Latency (milliseconds)
	1.d Jitter (milliseconds)
	1.e Availability (% of
	year)
	2.f Unit cost or average
	revenue (\$/connection/month)