



## Feedback on Consultation Paper: Bottleneck Fiber Optic Communications Facilities

### Information of commenting party

Full name	Pieter Bakker
Organization	FSM Cable Corporation
Phone number	
Email	pieter.bakker@fsmcable.com
Is confidential information being submitted?	No

### Comments

	Comment	Proposed changes	Confidentiality <sup>1</sup>
	<i>Please describe comments on specific section or question. Please be as detailed as possible and explain why you hold your views and what the potential impact of the Authority's proposed declaration would be</i>	<i>Please suggest an alternative to the proposed declaration (if applicable)</i>	<i>If confidential, please explain reasons for confidentiality request</i>
34	<p>OAE considers this a real issue where existing fiber networks have been built. Weno has an extensive fiber network and OAE needs access to fiber to connect to FSMTC radio towers (which are considered bottleneck facilities) to provide connectivity to service providers to allow them to provide fiber services on the islands of Tonowas, Udot and Eot.</p> <p>OAE would otherwise have to overbuild the fiber that FSMTC has built to Xavier and Tanachau. This would be a sub optimal use of funds.</p>		

<sup>1</sup> Confidentiality requests are managed under the rules set out in Section 322 of the Telecommunications Act. Respondents should clearly mark which information is claimed as being confidential and should provide reasons of what commercial harm will result should the information be published. Respondents who make a request for confidentiality should also provide a redacted copy of their submission, with all confidential information removed, that the TRA may publish.

	<p>More importantly, OAE notes that without the ability of competing service providers to get access to the fiber that has already been built, the people and businesses of Weno will not have any choice in terms of who they get as a service provider. This will end up with Weno having higher prices and poor services.</p>		
36a	<p>Yes, OAE agrees with the proposition that submarine and terrestrial fiber communication facilities are bottleneck facilities as defined in the Act. They cannot economically be replicated and achieve low prices. OAE believes that all homes, business- and Government offices should have access to fiber. In order to achieve that, OAE believes that the price needs to be low. Fiber networks have high fixed costs and very low incremental capacity costs. To achieve low prices to consumers the fixed costs of building the network need to be shared by as many customers as possible. Duplicating networks means twice the fixed costs need to be shared amongst the same number of customers. It may also mean that Operations and Maintenance (O&amp;M) costs for two independent networks are unnecessary higher than for one network as O&amp;M efficiency gains are hard to achieve.</p> <p>The reason for OAE's existence is to ensure that fiber assets are able to be shared by all providers to deliver the lowest cost possible. The fiber assets are grant-funded and do not incur capital costs that need to be paid back.</p> <p>In the absence of capital costs that are in the end to be borne by customers the O&amp;M costs are the only remaining area for network efficiency gains.</p>		No
36b	<p>OAE's view is that both submarine and terrestrial fiber communications facilities are essential for the production of modern, reliable and high-speed communications</p>		

	<p>services in FSM. Satellite, wireless and copper can all deliver a service, but not to the quality and price that fiber can deliver.</p> <p>Fiber is essential for low cost, high quality and high-speed connectivity essential for FSM's development.</p>		
36c	<p>Physically, networks can be duplicated. There is no unique skill or resource that any participant in FSM has that is unique.</p> <p>Economically though it is not possible to achieve low prices and high take up if networks are duplicated. FSM is a developing nation with low GDP per person; it needs access to the lowest priced, highest quality bandwidth and this can only be done by using network assets efficiently.</p> <p>Duplicating investment means that prices have to be higher to cover the costs and higher prices means less take-up.</p> <p>This is well described in paras 29 and 30.</p>		
36d	<p>In the submarine cable field, OAE does not believe that it is practical to duplicate. OAE agrees with the statements in paras 27 and 28.</p> <p>In terrestrial, given the pricing that OAE as announced, it does not make any economic sense to duplicate the infrastructure. OAE will offer a fiber connection to a house for \$10 per month.</p> <p>Again, OAE agrees with para 29,30 and 31.</p> <p>The ONT and optical equipment may be able to be replicated depending on how the network is built. OAE's network is designed as a layer 1 open access network where service providers bring their own ONT and</p>		

	<p>OLT equipment. OAE provides a “dark” fiber network.</p> <p>FSMTC’s network in Weno is likely to require the OLTs and ONTs to be included as a bottleneck facility because of how the physical network has been built with cascading splits. Access is likely to be required at a layer 2 level or Bitstream level. Layer 1 access would also be required but it is likely that there is only limited fiber available because of the design.</p> <p>The preferred option for a network like Weno is that the network is upgraded with additional capacity to allow for layer 1 access which would allow competing service providers to provide their own ONTs and OLTs rather than having to rely on FSMTC to provide a bitstream service. The issue with a bitstream service is that it will be constrained by the investment and technology decisions made by FSMTC and will potentially limit product- and service innovation and competition.</p>		
36e	<p>No. While different, individual point to point links may be able to be built. Duplication of networks is not sustainable in the long run. It increases costs and will lead to higher end user service costs that are unnecessary if assets are shared.</p>		

Please complete this form in full and submit to [consultations@tra.fm](mailto:consultations@tra.fm) or in person before **June 25<sup>th</sup> 2021** to:

Takuro Akinaga  
 Chief Executive  
 FSM Telecommunication Regulatory Authority  
 Suite 1A, Varner-Boylan Building  
 Pohnumpomp, Nett Municipality  
 Pohnpei FM 96941, Federated States of Micronesia

---

