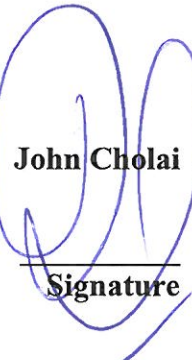


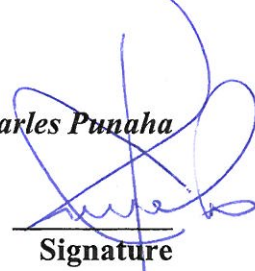
**SERVICE-SPECIFIC PRICING PRINCIPLES
(SUBMARINE CABLE SERVICES)
DETERMINATION 2019**

The NATIONAL INFORMATION AND COMMUNICATIONS TECHNOLOGY AUTHORITY makes this Determination under section 135 of the *National Information and Communications Technology Act 2009*.

December 17, 2019


John Cholai
Signature

Member


Charles Punaha
Signature

Member

National Information and Communications Technology Authority

PART I – PRELIMINARY

1 Name of Determination

This Determination is the *Service-Specific Pricing Principles (Submarine Cable Services) Determination 2019*.

2 Commencement

This Determination commences on the 1st January 2020 (*commencement date*).

3 Interpretation

- (1) Subject to subsection (2), unless the context otherwise requires, terms used in this Determination have the same meaning as in the Act.
- (2) In this Determination, unless the context otherwise requires –
 - (a) “*Act*” means the *National Information and Communications Technology Act, 2009*;
 - (b) “*maximum price*” means the maximum price that an access provider may charge for the submarine cable transmission capacity service during the period in which the maximum price applies.
 - (c) “*physical colocation*” means a point of between the access seeker’s network and the access provider’s network that is located inside a cable landing station;
 - (d) “*submarine cable service*” means –
 - (i) an international submarine cable transmission capacity service;
 - (ii) an international submarine cable gateway access service; and/or
 - (iii) an international submarine cable duct access service.
 - (e) “*virtual colocation*” means a point of interconnection between the access seeker’s network and the access provider’s network that is located outside the cable landing station, and may be notionally part-way along a physical link. This location may be adjacent to the station or at a reasonably distant location, depending on the options available. In this case, the access seeker's equipment is connected to the cable landing station by a link between the virtual colocation point and the cable landing station.

4 Determination

The National Information and Communications Technology Authority determines, pursuant to section 135 of the Act, that the service-specific pricing principles specified in Part II are to apply to the following services declared by the Minister under section 130 of the Act –

- (a) the international submarine cable transmission capacity service;
- (b) the international submarine cable gateway access service;
- (c) the international submarine cable duct access service.

PART II – PRICING PRINCIPLES

Division 1 – Submarine cable services

5 Price related terms and conditions for the submarine cable services

- (1) A total service long run incremental cost (TSLRIC+) analysis or a fully allocated cost (FAC) analysis is an appropriate costing methodology to inform NICTA of the efficient costs of supplying a submarine cable service.
- (2) To determine the efficient costs of supplying a submarine cable service, NICTA may (without limitation) do any of the following –
 - (a) use one or more cost models that have been prepared by or for –
 - (i) NICTA;
 - (ii) an access provider; and/or
 - (iii) an access seeker,that have been made available to and accepted by NICTA for this purpose;
 - (b) adjust the actual costs claimed by an access provider or access seeker to reflect –
 - (i) productive efficiencies available in the operations of the access provider;
 - (ii) scale and scope efficiencies available to the access provider; and
 - (iii) other efficiencies available to the access provider,that should, in NICTA’s opinion, be shared with access seekers;
 - (c) determine the economic life of the assets employed in the supply of the service based on –
 - (i) the practice of the access provider in the use and replacement of similar assets in Papua New Guinea;
 - (ii) the economic lives accorded to similar assets by other regulatory authorities in other countries; and/or
 - (iii) the practices of other network operators in the use and replacement of similar assets in Papua New Guinea and other countries;
 - (d) determine a reasonable return on the access provider’s investment over the economic life of the assets employed in the supply of the service taking into account any concessionary donor or similar finance and based on the actual risks and returns accepted by providers of debt and equity capital to –
 - (i) the access provider; and/or

- (ii) other network operators providing equivalent services in Papua New Guinea or in other countries that, in NICTA's opinion, are reasonably similar to Papua New Guinea; and
- (e) determine the efficiencies that shall be taken into account having regard to –
 - (i) information provided by the access provider in relation to its own costs and potential efficiencies;
 - (ii) information provided by other operator licensees in relation to their costs and potential efficiencies in Papua New Guinea; and/or
 - (iii) benchmarked information from countries that, in NICTA's opinion, are reasonably similar to Papua New Guinea; and
- (f) take into consideration relevant international benchmarking studies to the extent that doing so is consistent with the Act and to Section 134 in particular, both for the purposes of final arbitration of disputes relating to wholesale access and for interim determinations under Section 146.

Division 2 – International submarine cable transmission capacity service

6 Additional price related terms and conditions for the international submarine cable transmission capacity service

- (1) The price of the international submarine cable transmission capacity service may be different in terms of the price per megabit per second for services of different transmission capacities provided that the extent of any such difference in price shall be no more than is reasonably warranted by the cost of providing service and/or accepted price differentials in accordance with common international practice.
- (2) The price of the international submarine cable transmission capacity service may be different in terms of the price per megabit per second where the period of contractual commitment by access seeker differs to the extent that a longer contractual commitment reduces the costs and risk to the access provider, or where the cost and risk to the access provider is reduced because of the payment method adopted by the access seeker, such as payment in advance.
- (3) The maximum price per megabit per second per month for the supply of the international submarine cable transmission capacity service is specified in Schedule 1 in relation to each period set out in that Schedule..

7 Non-price terms and conditions for the international submarine cable transmission capacity service

If the transmission capacity of the international submarine cable transmission capacity or related infrastructure is subject to a fault or other condition that reduces the capacity available for a period, the capacity constraint shall be borne proportionally by the access

provider and all access seekers to the extent that preference may be given to those users that, before the service constraint in question occurs, have paid a premium for full or best available service continuity under such circumstances.

Division 3 – International submarine cable gateway access service

8 Non-price terms and conditions for the international submarine cable gateway access service

- (1) Subject to availability of suitable accommodation and supporting facilities, the choice between physical collocation and virtual collocation as part of the international submarine cable gateway access service shall be determined by the access seeker.
 - (2) An access provider shall ensure that all collocated equipment that is controlled by the access provider has adequate separation from other facilities to ensure safety of plant and personnel. An access provider may charge the access seeker to recover the cost of such separation.
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SCHEDULE 1 – MAXIMUM PRICES

(Subsection 6(3))

The maximum price for the international submarine cable transmission capacity on a lease basis for each year covered by this Determination is–

Time period	APNG-2 cable Kina per Mbps per month	Pipe Pacific Cable 1 (PPC-1) Kina per Mbps per month	Kumul Cable System 1 – International Link Kina per Mbps per month	Coral Sea Cable Kina per Mbps per month
Commencement Date to 31 st December 2020	K910	K185	None specified at this stage	K185
1 st January 2021 to 31 st December 2021	K910	K185	None specified at this stage	K135
1 st January 2022 to 31 st December 2022	K910	K165	None specified at this stage	K90
1 st January 2023 to 31 st December 2023	K910	K140	None specified at this stage	K75

Note 1: If, without agreement by NICTA, an access provider charges or seeks to charge prices that exceed the maximum prices shown in this Schedule, NICTA may intervene to address the matter whether at the request of an access seeker or access provider, or on its own initiative. It shall be incumbent on the relevant access provider to provide justification for any charge in excess of the maximum in the circumstances.

Note 2: As noted, above maximum price for each period applies to leased capacity. If an access provider wishes to provide submarine cable capacity on the basis of an Indefeasible Right of Use (IRU) basis then NICTA will amend the table to include an appropriate maximum price.

Note 3: Because of the significant anticipated growth year on year of international submarine cable capacity in PNG it is NICTA's intention to review prices at least every 2 years, and more frequently if circumstances warrant. However it is noted that a review may be undertaken more regularly if access seekers and access providers agree to such reviews in their service agreements or if disputes arise requiring arbitration.

Note 4: No maximum prices are specified at this time in relation to the provision of international submarine cable transmission capacity services on Kumul Cable System 1. NICTA will specify such prices at the earliest time after cost information becomes available.