

# ***SERVICE-SPECIFIC PRICING PRINCIPLES (SUBMARINE CABLE SERVICES) AMENDMENT DETERMINATION 2020***

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

Dated **23 December, 2020**

**Noel Mobiha**  
  
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Signature  
Board Chairman

**Kila Gulo-Vui**  
  
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Signature  
Chief Executive Officer

National Information and Communications Technology Authority

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## **1 Name of Determination**

This Determination is the *Service-Specific Pricing Principles (Submarine Cable Services) Amendment Determination 2020*.

## **2 Commencement**

This Determination commences on 1<sup>st</sup> January 2021 (*commencement date*).

## **3 Authority**

This instrument is made pursuant to Section 135 of the *National Information and Communications Technology Act 2009*.

## **4 Amendments**

- a) This instrument amends and supersedes the Principal Determination as gazetted in *Gazettal Notice No. G1041* dated 17 December 2019;

- (b) Schedule 1 sets out the amendments to the Principal Determination as set out in the applicable items in that Schedule.

**5 Compilation**

Schedule 2 contains the consolidation of the *Service-Specific Pricing Principles (Submarine Cable Service) Determination 2019* which, incorporates the amendments set out in Schedule 1, and supersedes the Principal Determination.

**SCHEDULE 1 – AMENDMENTS TO THE SERVICE-SPECIFIC PRICING PRINCIPLES (SUBMARINE CABLE SERVICES) DETERMINATION 2019**

**1. Section 1 - Name of Determination**

Section 1 of the Principal Determination is amended by repealing the entire section and replacing it with the following new Section 1:

“This Determination is the *Service-Specific Pricing Principles (Submarine Cable Services) Amendment Determination 2020*”.

**2. Section 2 - Commencement**

Section 2 of the Principal Determination is amended by repealing the entire section and replacing it with the following new Section 2:

“This Determination commences on the 1<sup>st</sup> January 2021 (*commencement date*)”

**3. Section 3 - Interpretation**

- (a) Section 3 of the Principal Determination is amended by:

- (i) repealing subsection 3(b) and replacing it with the following new subsection 3(b):

““*maximum average price*” means the maximum weighted average price that an access provider may charge in total for the submarine cable transmission capacity service during the period in which the maximum price applies”;

- (ii) inserting a new subsection 3(c) as follows:

““*NICTA*” means the National Information and Communications Technology Authority”, and

- (b) Consequently, replacing the existing subsection referencing to:

- (i) 3(c) with “3(d)”;  
(ii) 3(d) with “3(e)”, and  
(iii) 3(e) with “3(f)”;

**4. Section 4 - *Determination***

Section 4 of the Principal Determination is amended by deleting “The National Information and Communications Technology Authority” in line 1 and replacing it with “NICTA”.

**5. Section 6 - *Additional Price Related Terms and Conditions for the International Submarine Cable Transmission Capacity Services***

Section 6 of the Principal Determination is amended by:

- (a) Repealing subsection (1) and replacing it with the following new subsection (1):

“(1) The price of the international submarine cable transmission capacity services may be different in terms of the price per megabit per second for services of different transmission capacities provided -

- (a) 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; and
- (b) that any such prices are included in a Reference Interconnection Offer that has been accepted by NICTA pursuant to Section 142 of the Act.”

- (b) Repealing subsection (2) and replacing it with the following new subsection (2):

“(2) The maximum average 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.”

- (c) Repealing subsection (3) and replacing it with the following new subsection (3):

“(3) For the purposes of assessment of compliance with this Determination the weighted average price chargeable for the international submarine cable transmission capacity services shall be determined using the following method -

- (a) For each wholesale customer (access seeker) the capacity (in Mbps) that has been sold for the relevant period shall be determined;
- (b) For each wholesale customer the chargeable revenue attributable to the capacity in paragraph (a) in Kina shall be determined;
- (c) The aggregate of all capacity to all wholesale customers during the period shall be calculated;

- (d) The aggregate of all chargeable revenue amounts for all wholesale customers attributable to the capacity total in paragraph (c) shall be calculated;
- (e) The weighted average price for the period in terms of Kina per Mbps per month shall be calculated by dividing the figure in paragraph (d) by the figure in paragraph (c) and then further dividing that amount by the number of months in the period.
- (f) if the amount calculated in paragraph (e) is equal to or below the maximum average price for the period in Schedule 1, there shall be compliance, otherwise not.

- (d) Inserting a new subsection (4) and a new subsection (5) immediately after subsection (3) as follows:

“(4) It shall be the responsibility of the wholesale service provider to provide NICTA with the information, especially the price charged and capacity sold to each access seeker, required to undertake the calculation described in subsection (3) within 30 days of the completion of the period in question.

(5) If NICTA requests in writing, the wholesale service provider shall provide NICTA with the information set out in subsection (4) or other relevant information on a monthly basis for so long as NICTA may require and in the form NICTA requires. NICTA may also seek at any time the details of individual new and existing customers should verification of data be required”.

**6. Section 7 - *Non-Price Terms and Conditions for the International Submarine Cable Transmission Capacity Services***

Section 7 of the Principal Determination is repealed in its entirety;

**7. Section 8 - *Non-Price Terms and Conditions for the International Submarine Cable Gateway Access Service***

Consequently, Section 8 of the Principal Determination is amended by deleting the section reference to number “8” and replacing it with the number “7”;

**8. Schedule 1 - *Maximum Prices***

Schedule 1 of the Principal Determination is amended by repealing Schedule 1 of the Principal Determination and replacing it with a new Schedule 1 as follows:

## **“SCHEDULE 1 – MAXIMUM AVERAGE PRICES**

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

<b>Time period</b>	<b>All international submarine cable systems</b>
	<b>Kina per Mbps per month</b>
Commencement Date to 31 <sup>st</sup> March 2021	K 209
1 <sup>st</sup> April 2021 to 31 <sup>st</sup> December 2021	K 198 (indicative)
1 <sup>st</sup> January 2022 to 31 <sup>st</sup> December 2022	K 145 (indicative)
1 <sup>st</sup> January 2023 to 31 <sup>st</sup> December 2023	K 104 (indicative)

*Note 1:* The maximum average prices are for all international submarine cable systems, specifically APNG- 2, PPC-1, Kumul and Coral Sea Cable System.

*Note 2:* Maximum average price amounts for the annual periods from 1<sup>st</sup> January 2021 are indicative only. NICTA will review each of the amounts shown as soon as possible after the commencement of the period to which it relates taking into account all relevant considerations including actual demand for the service in the previous period.

*Note 3:* All maximum average prices are based on an average capacity sale of 1,000 Mbps (or 1 Gbps).”

## SCHEDULE 2 – THE SERVICE-SPECIFIC PRICING PRINCIPLES (SUBMARINE CABLE SERVICES) DETERMINATION 2019

### 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 1<sup>st</sup> January 2021 (*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 average price*” means the maximum weighted average price that an access provider may charge in total for the submarine cable transmission capacity service during the period in which the maximum price applies;

(c) *NICTA* means the National Information and Communication Technology Authority;

(d) “*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;

(e) “*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.

(f) “*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**

NICTA 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 –
    - (iv) productive efficiencies available in the operations of the access provider;



- (v) scale and scope efficiencies available to the access provider; and
  - (vi) 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 –
    - (vii) the practice of the access provider in the use and replacement of similar assets in Papua New Guinea;
    - (viii) the economic lives accorded to similar assets by other regulatory authorities in other countries; and/or
    - (ix) 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 –
    - (x) the access provider; and/or
    - (xi) 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 –
    - (xii) information provided by the access provider in relation to its own costs and potential efficiencies;
    - (xiii) information provided by other operator licensees in relation to their costs and potential efficiencies in Papua New Guinea; and/or
    - (xiv) 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 services may be different in terms of the price per megabit per second for services of different transmission capacities provided (1) 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; and (2) that any such prices are included in a Reference Interconnection Offer that has been accepted by NICTA pursuant to Section 142 of the Act.
- (2) The maximum average 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.
- (3) For the purposes of assessment of compliance with this Determination the weighted average price chargeable for the international submarine cable transmission capacity services shall be determined using the following method:
  - (a) For each wholesale customer (access seeker) the capacity (in Mbps) that has been sold for the relevant period shall be determined;
  - (b) For each wholesale customer the chargeable revenue attributable to the capacity in sub-paragraph (a) in Kina shall be determined;
  - (c) The aggregate of all capacity to all wholesale customers during the period shall be calculated;
  - (d) The aggregate of all chargeable revenue amounts for all wholesale customers attributable to the capacity total in sub-paragraph (c) shall be calculated;
  - (e) The weighted average price for the period in terms of Kina per Mbps per month shall be calculated by dividing the figure in sub-paragraph (d) by the figure in sub-paragraph (c) and then further dividing that amount by the number of months in the period.
  - (f) If the amount calculated in sub-paragraph (e) is equal to or below the maximum average price for the period in Schedule 1, there shall be compliance, otherwise not.
- (4) It shall be the responsibility of the wholesale service provider to provide NICTA with the information, especially the price charged and capacity sold to each access seeker(s), required to undertake the calculation described in paragraph (3) within 30 days of the completion of the period in question.

- (5) If NICTA requests in writing, the wholesale service provider shall provide NICTA with the information set out in paragraph (4) or other relevant information on a monthly basis for so long as NICTA may require and in the form NICTA requires. NICTA may also seek at any time the details of individual new and existing customers should verification of data be required.

### **Division 3 – International submarine cable gateway access service**

#### **7 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 colocation and virtual colocation 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.

### **SCHEDULE I – MAXIMUM AVERAGE PRICES**

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

<b>Time period</b>	<b>All international submarine cable systems</b>
	<b>Kina per Mbps per month</b>
Commencement Date to 31 <sup>st</sup> March 2021	K 209
1 <sup>st</sup> April 2021 to 31 <sup>st</sup> December 2021	K 198 (indicative)
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<i>Note 1:</i>	The maximum average prices are for all international submarine cable systems, specifically APNG- 2, PPC-1, Kumul and Coral Sea Cable System.
<i>Note 2:</i>	Maximum average price amounts for the annual periods from 1 <sup>st</sup> January 2021 are indicative only. NICTA will review each of the amounts shown as soon as possible after the commencement of the period to which it relates taking into account all relevant considerations including actual demand for the service in the previous period.
<i>Note 3:</i>	All maximum average prices are based on an average capacity sale of 1,000 Mbps (or 1 Gbps).