

# **A Submission on the Draft Specific Pricing Principles for the International Submarine Cable Access Services**

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## EXECUTIVE SUMMARY

The declaration by the Minister for Information and Communication of the following wholesale services of *International submarine cable transmission capacity service* and *International submarine cable gateway access service* on 21 March 2013 is a welcome development in the telecommunications industry, and the ICT sector, in particular, of Papua New Guinea (PNG). The National Research Institute (NRI) also welcomes the call by National Information Communication Technology Authority (NICTA) for the public to make submissions on the pricing principles NICTA will adopt when considering access pricing issues for the above declared wholesale services.

Theoretically, the market in which the International Submarine Cable falls under is a natural monopoly. Given the large sunk costs involved, there is scope for only one firm to operate and oversee the International Submarine Cable. Therefore, it warrants and ideally for a PNG-owned company to operate and own the trunk (the International Submarine Cable). The wholesale pricing principles then apply to the prices charged on the “wholesale” of the telecommunications services provided by the International Submarine Cable through this PNG-owned company. Note that we advocate PNG ownership but not PNG State ownership. This distinction has to be clearly understood.

Given the critical importance of the International Submarine Cable to the telecommunications industry of PNG and its wider implication on the socio-economic condition of the country, NRI is of the strong view that a solid governance mechanism is established over the International Submarine Cables which enter the country via Madang and Port Moresby. As such, NRI strongly proposes that a separate commercial entity should be set up to provide wholesale telecommunication services through the International Submarine Cables to retail subscribers (businesses). In other words, the trunk infrastructure (International Submarine Cables) should be owned by ideally a PNG-owned enterprise. Importantly, this arrangement will eradicate any conflict of interest in providing wholesale telecommunication services to the country. NRI, therefore, strongly opposes a model where a telecommunication company which owns the wholesale telecommunication services of the International Submarine Cable services also engages in providing retail telecommunication services. Such an arrangement will present a conflict of interest situation, which would undermine efficiency, innovation and value-for-money provision of telecommunication services.

Allowing a separate entity to own the wholesale sector of the International Submarine Cable would allow for more competition at the retail sector, which would enhance the delivery and provision of fair pricing of communication services. Efficient and lower cost of communication services would in turn drive the socio-economic improvement of the people, the development aspirations of the government, and business development across the country. The specific pricing principle discussed in this submission should apply to the wholesale aspect of the International Submarine Cables, while competition and innovation should allow for efficiency and value-for-money service provision at the retail sector of the International Submarine Cable. NRI’s views on the wholesale pricing principles are discussed in Sections 2, 3, and 4 of this submission.

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## 1. Introduction

This is National Research Institute (NRI)'s submission in response to a call for public consultation by the National Information and Communication Technology Authority (NICTA) on the Draft Specific Pricing Principles for the International Submarine Cable Access Service. In response to NICTA's call for public consultation, NRI will provide comments and make submissions on the two wholesale services which were declared by the Minister for Communications and Information Technology on 21 March 2013, namely, (i) *International Submarine Cable Capacity Services*, and (ii) *International Submarine Cable Gateway Access Services*. Section 2 deals with (i) *International Submarine Cable Capacity Services*, and Section 3 considers (ii) *International Submarine Cable Gateway Access Services*. Section 4 presents the Institute's stance on the governance and ownership of the wholesale aspect of the International Submarine Cables. The final section of the submission presents the concluding remarks.

## 2. International Submarine Cable Transmission Capacity Services

In this section, we present our responses to the pricing principles relating to the International Submarine Cable Transmission Capacity Services. Subsection 2.1 presents our responses/comments of the draft determination. The numbers in brackets preceding each sentence correspond to the specific number of each section of NICTA's draft Determination. In subsection 2.2, some issues arising from the Draft Determination are discussed.

### 2.1. Pricing Principles in the Draft Determination

(6) NRI generally **agrees** with NICTA on the principles on which service-specific wholesale prices will be set. In particular, NRI **notes and agrees** that: (i) the price of the transmission capacity service may be different in terms of the price per megabit per second for services with different transmission capacities, but the extent of any such difference shall be no more than warranted by the cost of providing service and/or accepted price differentials in accordance with common international practice; (ii) If the transmission capacity of the submarine cable 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 all customers, with the exception of customers who have paid a premium for full or best available service continuity under such circumstances before the service constraint in question.

(7.1) NICTA should specify the price of the transmission capacity service both in the interim and in the final determination, **in consultation with the Independent Consumer & Competition Commission (ICCC)**.

(7.2) NRI **notes** that NICTA will determine the price of the transmission capacity service based on a consideration of one or more cost models that have been prepared by or for: (a) NICTA; (b) the access provider; and/or (c) the access seeker; and which have been made available to, and accepted by, NICTA for this purpose.

(7.3) NRI **notes** the cost standard to be applied as: (a) total service long run average incremental cost (TSLRIC), to which shall be added an equi-proportionate mark-up to reflect a reasonable contribution to common costs that are accepted by NICTA as reasonably needed and appropriate for the provision of the transmission capacity service; or (b) fully allocated cost (FAC); or (c) a hybrid of TSLRIC and FAC. **NRI suggests cost standard (c) – the hybrid of (a) and (b) could be used.**

(7.4) NRI **notes** that in determining the efficient costs of providing the transmission capacity service under the cost recovery principle, NICTA may make adjustments to the actual costs claimed by an access provider or access seeker to reflect: (a) productive efficiencies available in the operations of the access provider; (b) scale and scope efficiencies available to the access provider; and (c) other efficiencies available to the access provider, that should, in NICTA's opinion, be shared with access seekers.

(7.5) NRI **agrees** that in determining the availability of efficiencies that may be considered and which may reduce the cost of the transmission capacity service, NICTA may take into account: (a) relevant information provided by the access provider in relation to its own costs and potential efficiencies; (b) relevant information provided by other operator licensees in relation to their costs and potential efficiencies in Papua New Guinea (PNG); and (c) benchmarked information from countries that, in NICTA's opinion, are reasonably similar to PNG for this purpose.

(7.6) NRI **agrees** that NICTA may determine the economic life of the assets employed in the supply of the transmission capacity service based on its consideration of any of the following: (a) the practice of the access provider in the use and replacement of similar assets in PNG; (b) the economic lives accorded to similar assets by other national regulatory authorities in other countries; and (c) the practices of other mobile network operators in the use and replacement of similar assets in PNG and other countries.

(7.7) NRI **notes** that NICTA may determine a reasonable return on the access provider's investment over the economic life of the assets employed in the supply of the transmission capacity service based on NICTA's consideration of: (a) the actual risks and returns accepted by providers of debt and equity capital to the access provider; and (b) the actual risks and returns accepted by providers of debt and equity capital to other mobile network operators providing such services in PNG or in other countries that, in NICTA's opinion, are reasonably similar to PNG.

## 2.2 Issues Arising

The key issues which need consideration regarding the International Submarine Cable Transmission Capacity Service's pricing principles are:

- (i) Whether NICTA should determine the price (both interim and in final determination) alone or should other national agencies such as the ICCC be consulted in specifying the prices? Given the ICCC's experience in promoting competition and protecting consumer welfare, it should be consulted.
- (ii) Prices, as per the Determination, will be set by NICTA based largely on the cost of production, in this case, the cost of transmission prepared by NICTA, access providers and access seekers. However, could specification/setting of prices be incentivised to encourage efficiency and cost-reduction which will ultimately reduce prices and result in increased consumer welfare?
- (iii) In line with (ii) above, could NICTA specify how efficiency be achieved and "incentivised" and for what type of costs incurred could result in efficiency and the International Submarine Cable Capacity Services' provider be rewarded for? For example, should NICTA "reward" the wholesale provider for costs incurred as a result of its operational costs, or capital expenditure which actually should lead to transmission efficiency and lower prices?

- (iv) Should the costs of return of assets be entirely passed onto consumers which will lead to high prices, or should a mechanism be set up for the wholesaler to bear some of the costs, as well as other stakeholders such as the government, and retailers? Given the monopolistic market in which the wholesaler will operate, the return on asset should just be for the wholesaler to break-even.
- (v) Could the wholesale prices be also a declared item as per ICCC Act and be therefore monitored by ICCC in consultation with NICTA?

### 3. International Submarine Cable Gateway Access Services

This section presents our responses to the pricing principles relating to the International Submarine Cable Gateway Access Services. Subsection 3.1 presents our responses/comments of the draft determination. As in subsection 2.1 (above), the numbers in brackets preceding each sentence correspond to the specific number of each section of NICTA's draft Determination. Subsection 3.2 discusses some issues arising from the Draft Determination.

#### 3.1 Pricing Principles in the Draft Determination.

(9.1) NRI **notes** that subject to the availability of suitable accommodation and supporting facilities, the choice between actual co-location and virtual co-location as part of the gateway access service shall be determined by the access seeker.

(9.2) NRI **notes** that the 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. *However, NRI feels that the access provider should not charge access seekers to recover the cost of such separation, but should be borne by the provider through innovation.*

(10.1) This section applies if the price of the gateway access service is to be specified by NICTA in an interim determination or a final determination. *NRI is of the view that ICCC could be consulted also to specify the price of the gateway access both in the interim and in the final determination.*

(10.2) NRI also **notes** that NICTA will determine the price of the gateway access service based on a consideration of one or more cost models that have been prepared by or for: (a) NICTA; (b) the access provider; and/or (c) the access seeker; and which have been made available to, and accepted by, NICTA for this purpose.

(10.3) The **cost** standard that shall be applied shall be: (a) total service long run average incremental cost (TSLRIC), to which shall be added an equi-proportionate mark-up to reflect a reasonable contribution to common costs that are accepted by NICTA as reasonably needed and appropriate for the provision of the gateway access service; or (b) fully allocated cost (FAC); or (c) a hybrid of TSLRIC and FAC. *NRI suggests (c) could be applied.*

(10.4) NRI **notes** that in determining the efficient costs of providing the gateway access service under the cost recovery principle, NICTA may make adjustments to the actual costs claimed by an access provider or access seeker to reflect: (a) productive efficiencies available in the operations of the access provider; (b) scale and scope efficiencies available to the access provider; and (c) other efficiencies available to the access provider, that should, in NICTA's opinion, be shared with access seekers.

(10.5) NRI **notes** that in determining the availability of efficiencies that may be considered and which may reduce the cost of the gateway access service, NICTA may

take into account: (a) relevant information provided by the access provider in relation to its own costs and potential efficiencies; (b) relevant information provided by other operator licensees in relation to their costs and potential efficiencies in PNG; and (c) benchmarked information from countries that, in NICTA's opinion, are reasonably similar to PNG for this purpose.

(10.6) NRI **notes** that NICTA may determine the economic life of the assets employed in the supply of the gateway access service based on its consideration of any of the following: (a) the practice of the access provider in the use and replacement of similar assets in PNG; (b) the economic lives accorded to similar assets by other national regulatory authorities in other countries; and (c) the practices of other mobile network operators in the use and replacement of similar assets in PNG and other countries.

(10.7) NRI **notes** that NICTA may determine a reasonable return on the access provider's investment over the economic life of the assets employed in the supply of the gateway access service based on NICTA's consideration of: (a) the actual risks and returns accepted by providers of debt and equity capital to the access provider; and (b) the actual risks and returns accepted by providers of debt and equity capital to other mobile network operators providing such services in PNG or in other countries that, in NICTA's opinion, are reasonably similar to PNG.

### 3.2 Issues and Considerations

The key issues which need consideration regarding the International Submarine Gateway Access Service's pricing principles are:

- (i) Whether NICTA should determine the price (both interim and in final determination) alone or should other national agencies such as the ICCC be consulted in specifying the prices?
- (ii) Prices, as per the Determination, will be set by NICTA based largely on the cost of production. However, could specification/setting of prices be incentivised to encourage efficiency and cost-reduction which will ultimately reduce prices and result in increased consumer welfare?
- (iii) In line with (ii) above, could NICTA specify how efficiency be achieved and "incentivised" and for what type of costs incurred could result in efficiency and the International Submarine Cable Capacity Services' assess-seekers be rewarded for. For example, should NICTA "reward" the wholesale provider for costs incurred as a result of its operational costs, or capital expenditure which actually should lead to transmission efficiency and lower prices?
- (iv) Should the costs of return of assets be entirely passed onto consumers which may lead to high prices, or should a mechanism be set up for the wholesaler/provider to bear some of the costs, as well as other stakeholders such as the government, and retailers? Given the monopolistic market in which the wholesaler/ access-provider will operate, should the return on asset be just for it to break-even?

## 4. Governance and Ownership of Wholesale Sector

In terms of the governance and ownership of the wholesale services of the International Submarine Cables, a separate, independent commercial entity should be established to engage in the provision of wholesale telecommunication services. This is because, theoretically, the



access-provider/wholesaler will operate in a natural monopolistic market, as there is scope for only one provider to provide telecommunication services through the International Submarine Cables which enter PNG through Port Moresby and Madang. There are also huge sunk costs involved for competition to exist in this particular market. By allowing ideally an independent PNG-owned company to operate the wholesale aspect of the International Submarine gateway will eradicate any conflict of interest which normally arises if the wholesale aspect of the telecommunication services of the International Submarine Cables is also controlled and owed by another telecommunication company, such as Telikom PNG, which is also engaged in the retail sector of the telecommunication industry.

The pricing principles discussed and the associated issues, if taken into consideration, should result in low, reasonable wholesale prices for the telecommunication services provided by the International Submarine Cable. These lower wholesale prices can then be transferred to the retail sector, where high competition is envisaged which could then result in efficiency, low prices, and provision of value-for-money telecommunication services such as low-priced, high-speed internet services for consumers.

## **5. Conclusion**

NRI welcomes the declaration by the Minister, of the wholesale telecommunication services of the International Submarine Cable as this will have transformational impacts on the welfare of the consumers and the economy of PNG.

NRI is of the strongest view that a separate independent commercial entity should be established, which ideally is PNG-owned, to engage in the wholesale aspect of the telecommunications services provided by the International Submarine Cables. This will eradicate any conflict of interest which normally arises if the wholesale business of the telecommunication services of the International Submarine Cables is controlled and owned by a telecommunication company which is also involved in the retail sector of the telecommunication industry of PNG.

NRI notes and supports in principle the pricing principles proposed by NICTA for both the international submarine cable transmission capacity service and the international submarine cable gateway access service. However, NRI is also of the view that relevant agencies that deal with competition and consumer welfare be consulted as well for a better, informed outcome.

Finally, NRI strongly proposes that the setting of prices, as outlined in the Draft Determination, could be incentivised to encourage efficiency and cost-reduction for lower prices and better value and increased consumer welfare. Any price changes must be reflective of efficiency and innovation, as lack of innovation and will ultimately result in sustained high consumer prices, which is very detrimental to consumer welfare.