13 November 2020

Mr. Kila Gulo-Vui
Chief Executive Officer
National Information and Communications Technology Authority
P. O Box 8222
BOROKO 111
National Capital District

Dear Mr. Gulo-Vui,

RE: SECOND ROUND OF COMMENTS INVITED IN RELATION TO PNG DATACO REFERENCE INTERCONNECTION OFFER (RIO)

We appreciate the progress being made on the consultation process and hereby submit our response on the above subject matter. This response is a cross- submission on the submission made in the first round of comments.

Digicel PNG Limited's ("**Digicel**") submission dated 16 October 2020 acknowledges that it received a letter from the National Information and Communication Technology Authority ("**NICTA**") on the same date 16th October, 2020 being the final day that submissions on the proposed Reference Interconnection Offer ("**RIO**") were due. It is our respectful view that Digicel ought to have revised its RIO submission as NICTA's letter made it quite clear that the draft amended Service Specific Pricing Principles ("**SSPP**") would be dealt with before the RIO.

Further to the above, Digicel alleges that at the workshop PNG DataCo Limited ("**DataCo**") has some 'understanding' with NICTA about the order of dealing with the consultation process for the SSPP and the RIO to which Digicel says is unlawful. We are concerned at this allegation (and NICTA should too) as it assumes there is collusion between the NICTA and DataCo in this matter. We would strongly urge NICTA to caution Digicel on such matters.

In any event, we wish to clarify for the record that DataCo is treating each consultation process separately and submitting its responses accordingly. However, it should not come as a surprise either that the subject matters in both consultations are inter-related and therefore submissions would/are expected to make reference to areas which support a party's proposition. NICTA is dealing with the discussions papers and has made it quite plain that the SSPP consultation will be addressed prior to the RIO consultation. Further, the basis of the pricing offer under the RIO for the commercial services as well as the proposed maximum average prices in the SSPP are the one and the same Cost Models that have being submitted to NICTA and also presented to relevant parties in the Workshop referred to above.

We have considered the points put forward by Digicel in their submission and our responses are summarized to capture the essence of the points of contention raised through Digicel's submission.

A. The consultation on the SSPPs

Note 1 to Schedule 1 of the December 2019 Determination ("**2019 Determination**") states that if DataCo charges higher prices it would have to provide justification. This is what the consultation around the draft revised Determination for the SSPPs is for. The draft "*maximum average prices*" in the discussion paper for this consultation show that NICTA is now satisfied that the prices set in 2019 Determination were too low.

The 2019 Determination prices were expressed as "*maximum*" prices which are now proposed to be "*maximum average*" or better still "*average*" prices per Mbps. This permits the industry to have a rate card such that larger players enjoy a lower price per Mbps for buying higher capacity.

B. The RIO consultation

To improve clarity given (a) the draft revised SSPPs and (b) the fact that the declared domestic and international fibre transmission services are not the same as the commercial services, DataCo offered a rate card which accompanied its proposed RIO. This rate card offered is consistent with the draft revised SSPPs. The proposed RIO and its current rate card do not pre-empt the amendment of the SSPPs.

Digicel set out three areas of concern it had with the RIO. Each reason is set out below and explanation or clarification is provided against each.

1. Digicel claims the RIO is inconsistent with non-discriminatory obligations that are applicable to DataCo

Digicel claims the RIO is not consistent with non-discrimination obligations because of the existing SSPP or 2019 Determination which in their view is effective. Our version of the RIO makes it plain that DataCo will abide by non-discrimination principles ensuring that it treats all its customers (including itself) on the same basis.

There are various scattered sections (sections 142 to 155) of the *National Information and Communication Technology Act* 2009 ("**NICT Act**") which empower NICTA to review the RIO or its terms or any disputes related thereto. In our view there is adequate protection afforded to Digicel on this aspect. Even the submission from the Independent Consumer Competition Commission ("**ICCC**") on the RIO makes it clear that the ICCC intends to *"step in"* and investigate any potential discriminatory or uncompetitive conduct. We do not believe there is any plausible reason for Digicel to be worried or concerned about this aspect as there is adequate protection in the existing legislations.

Digicel should understand that the SSPP is also undergoing the consultation process with NICTA. Both the RIO consultation and the SSPP consultation are inter-related which is why NICTA is dealing with both, preferring though to deal firstly with the SSPP and then the RIO. Hence, we do not consider that the RIO is in conflict with the 2019 Determination as the determination itself (i.e. the SSPP) is also undergoing the consultative process with NICTA.

DataCo's RIO submissions are being drafted in line with its SSPP submissions to ensure uniformity and consistency in both its submissions. Although they are separate consultative processes on different subject matters, they are inter-related and therefore this aspect should be recognized by Digicel.

2. Digicel asserts that the RIO contains terms and conditions that are not reasonable in accordance with Section 126 of the NICT Act

Digicel asserts that the RIO contains terms and conditions that are not reasonable within the context of section 126 of the NICT Act. Each of the non-pricing terms raised by Digicel are set out below and explanation or clarification provided against each.

(a) ***Requirement to pay a service bond*** – Digicel was concerned that DataCo was imposing a service bond to its services and intimated that we should apply same to all access seekers.

The RIO contains standard terms and conditions which will be applicable to all access seekers because the services are expected to be provided on a non-discriminatory basis. The upfront service bond is a one-time requirement usually charged at the commencement of the service. It is a practice that is applied by many service providers which acts as a sort of insurance in the event of non-payment. A service bond usually represents the equivalent of one-month service fee and is not a practice that is unusual. The advantages for both the access seeker and the access provider is that the service bond can in some instances act as the buffer for any delayed payment to DataCo in future or otherwise used as the exit payments when terminating a service.

Whilst it is not encouraged to utilise a bond during the term of the service, it should give DataCo and the access seeker some comfort that there is security being held against any non-payment of an invoice. Utilisation of a bond does not prohibit DataCo from pursuing other legal remedies from recovering any outstanding monies owed to it by the access seeker, but it does provide some insurance in the event of non-payment.

(b) ***Treatment of taxes*** – Digicel was concerned that this provision would entitle DataCo to shift its UAS levy payments to Digicel to settle. The spirit of the clause is not meant to cover tax liabilities which are the obligation of DataCo as imposed by NICTA. Therefore, UAS levies are not considered as part of this clause.

(c) ***DataCo's right to amend prices*** – Digicel raised issues about DataCo's unilateral right to amend (increase) prices at any time to reflect DataCo's increased costs in providing the service. Whilst the practice to increase prices without consent is not unpopular in other industries, DataCo wishes to emphasize that there can and in some instances be situations which warrant a review and increase. It can certainly consider reviewing the prices on notification to the access seeker and to some extent with NICTA, but DataCo should not be prohibited to capture the real cost of providing the service if there is really an increase in cost.

(d) ***Billing disputes*** – Digicel held strong views against paying a disputed invoice in full. DataCo's proposition on this is that any credits owed to Digicel on that resolved disputed invoice can be carried in the next billing period or invoice. Hence, adjustments can be made on the next invoice by way of a credit.

(e) ***Dispute resolution*** – Digicel proposed that arbitration should also be included as a mandatory dispute resolution mechanism. Given the nature of the industry, DataCo can consider including provisions around arbitration.

(f) ***Suspension and termination of services*** – Digicel was of the view that the suspension and termination provisions in the RIO were one sided, unfair and inappropriate in the context of a declared service. The practice of suspending or terminating a service due to breach or persistent breaches is not uncommon. DataCo can consider providing advance notice of a breach to the MSA or a Service Agreement but in the event the period in that notice is not adhered to or addressed, then it is not unreasonable to expect that DataCo will exercise its rights to terminate or restrict or suspend the provision of a service to an access seeker.

(g) ***Use of Personal Data*** – Digicel expressed reservations about the use of personal data for market research purposes or for marketing of DataCo services. DataCo will consider this aspect in line with any legislation that may be in existence on this aspect.

(h) ***Mutuality of terms*** – Digicel expressed dissatisfaction about non-mutuality of terms relating to indemnity, liability and assignment. DataCo as the access provider seeks to ensure that its risks on contracting aspects are mitigated. Provisions relating to indemnity and liability and assignment are occasionally drafted in favour of the service provider however, DataCo may consider including mutual responsibilities or obligations where necessarily required.

(i) ***Decisions in respect of which fibre optic cable facilities DataCo may use to provide its services*** – Digicel contended that the RIO failed to mention the use of cable systems that will be used to provide the services. DataCo's provision of services utilizes multiple mediums on its network to achieve the access seeker's requirements for the service it obtains.

One way to look at this is in terms of the access seeker and its customer. Digicel does not specify to the end user what mediums on its network are being used to bring the service to it. All the end-user is really interested in is getting the service it has requested for. Similarly, DataCo approaches this in the same way by utilizing in some cases a multiple of mediums within the confines of its network bearing in mind the service, cost and pricing to ensure the customer's needs for the service are met.

(j) ***Service quality commitments*** – Digicel expressed dissatisfaction of DataCo's SLA requirements of 98.9% comparing it against other regional players whose SLA requirements represented 99.9%. As is generally known, DataCo is still patching the gaps in the transmission network across the country to ensure it can guarantee a higher SLA then what it can safely and reliably maintain.

The Service availability of 98.9% is what DataCo can confidently provide end-to-end (delivered to the access seeker premises) as a standard service requirement to all access seekers. DataCo would be able to provide a higher SLA only in the core network which will be delivered at DataCo PoP. Anything higher at this stage for an end-to-end service (including the unprotected local tail) would be misrepresenting the current technical capabilities and could put DataCo in breach of its agreements. However, having said that, this does not prohibit an access seeker from requesting a higher SLA commitment which DataCo will treat as a premium service and will charge at a premium cost.

3. The pricing terms of the RIO are not consistent of the General Pricing Principles and the SSPP

Digicel says the prices in the RIO are not consistent with the <u>current</u> General Pricing Principles ("**GPP**") and SSPPs. As noted above, both the RIO consultation and SSPP are being considered by NICTA. Whilst they are separate consultations, they are inter-related. Hypothetically, if NICTA contemplates revising the pricing schedule in the draft amended SSPPs, DataCo would take the opportunity to revise the demand forecasts in the model as part of such a re-set.

At the workshop on 6th October 2020, DataCo invited Digicel and others to put in writing what further assistance they needed in relation to understanding the models.
Digicel's retained independent expert economist CEG-Asia Pacific ("**CEG**") provided such a note to Digicel on 13th October 2020 which was not shared with DataCo until it was posted on the NICTA site on 5th November 2020 as part of Digicel's RIO submission.

DataCo does not believe its current or proposed pricing is inconsistent with the current requirements of the SSPP. As indicated earlier, Note 1 of the current SSPP allows for prices to be charged at rates which are higher than those stated in the SSPP. Even then, the SSPP is also subject to consultation which is an opportunity for DataCo's cost estimates to be tested.

C. The cost models

DataCo and CEG refer to APNG2 and to satellite (refer to Digicel points 62, CEG points 3e and 5). The FAC Cost Models do not have any APNG-2 costs included because this cable is fully depreciated and is undergoing shutdown. Satellite costs are part of FAC model but are NOT included into the calculation of the NICTA declared transmission services.

DataCo acknowledges that the introduction of new fibre systems has increased its cost base, but prices have come down and will continue coming down.
Digicel queries whether modelled costs are efficient as required under Section 134(1)(a) of the Act:

(*a*) that declared service should –
- (i) be set so as to generate expected revenue from that declared service that is sufficient to meet the efficient costs of providing access to that declared service; and
- (ii) include a reasonable return on investment, over the economic life of the assets employed, commensurate with the regulatory and commercial risks involved, this principle is known as the "cost recovery principle"; and

In particular, Digicel claims incorrectly that "*DataCo's cost modelling approach has been to load all of its legacy costs for various cable and satellite infrastructure into the price of services to access seekers regardless of whether that legacy infrastructure is actually being used to provide the services*" (refer Digicel point 62b).

Neither satellite nor APNG2 costs are included in the costs of the WIS and IPLCs. Two of the three fibre services used to provide international connectivity (Coral Sea and part of Kumul Cable) are new, not legacy, and the third leg of the current international ring (PPC1) is treated as OPEX since it is not owned by DataCo. This was all explained in the workshop and at point 9 of the 10 point note that followed it:

9. *There is no difference between the replacement cost and book value of submarine cables because CS2 and Kumul are new. APNG2 costs are excluded from the BBM model. PPC1 is not on DataCo's books as an asset and payments to Telikom for the right to use it are treated as O&M in both models. In both models only 25% of the costs of Kumul are included as part of the international service. The models are explicit about what percentage of current (and future) fibre cables are used to carry international capacity services.*

Digicel simply asserts that the cost modelling does not meet the broad efficiency objectives under Section 2 of the Act (refer to Digicel point 64). It makes no attempt to make a case for this. It is not DataCo's "*intent that the service pricing will remain in effect for the full three-year term of the RIO*" (refer to Digicel point 65).

DataCo has made it clear that unit costs and prices will fall as demand grows. This has been the case for some years now and will continue to be the case. DataCo has also indicated that it may reduce prices ahead of the annual regulatory review to ensure it meets regulated prices.

D. Comments from CEG

CEG provides the following "*in the form of an information request*".

1. *Provide a **map of the internal products** (A1, B1, C1, etc) to the regulated products.*
   (a) *Details on the allocation method used between international and domestic services.*
   (b) *Details on the allocation of 'add ons' including the Kumul cable to the regulated products.*

CEG knows from the workshop that DataCo's international commercial services are not the same as the declared service. This was "*mapped*" and explained in section G of DataCo's August 2020 submission on the SSPP:

Currently, no wholesale customer purchases on any of the following declared services:

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

Current commercial international transmission services (WIS and IPLCs) combine all three of the above and more:

- In the case of the wholesale internet service (WIS), this includes access to the global internet (IP Transit) and domestic transmission services (delivering access to the internet at the same price across PNG).
- In the case of IPLCs the commercial service may include MPLS, domestic tails and international extensions beyond Sydney or Guam. But, as NICTA says at 3.11 in its 19th August Discussion Paper on the RIO, it is very close to the declared service.

Since neither commercial international transmission service is exactly like the regulated international submarine cable transmission service, NICTA can either:

(a) Try and make the commercial service look more the like regulated service. But stripping, say, IP Transit and domestic transmission from WIS leaves no service worth having; or

(b) Use commercial services to monitor compliance with the regulated service. This is a more suitable approach. The top-down model allocates some domestic transmission costs to both WIS and IPLC costs (e.g. to link POM to MDG through the Kumul cable to deliver international transmission services). Since the maximum average revenue per Mbps in the revised draft Determination for declared international transmission services (subject to H below) is based on the top-down model, this provides a sound basis for testing whether commercial international revenue (i.e. WIS plus IPLCs) per Mbps are cost-based prices consistent with the revised Final Determination.

The second option is the one being used.

2. *The **direct allocation** of costs appears very low at less than 3%. Further detail is needed to confirm this allocation.*

   This is a result of almost all DataCo's networks/platforms, systems and organization supporting more than one product. As a result, most GL entries cannot be directly attributed to a single product.

3. *Please provide **allocation keys** for the most significant cost items including for the following:*

   (a) The basis of allocating Satellite costs ($23 million kina) - "As per actuals"

The costs are allocated based on actual network usage, in DataCo's network monitoring systems, for the applicable period, by type of traffic.

(b) *The basis of allocating RTU costs ($21 million kina) - this was referred to as the "RTU calc"*

The costs are allocated based on actual network usage, in DataCo's network monitoring systems, for the applicable period, by type of traffic.

The right to use (RTU) costs are mainly for DataCo's use of PPC1.

(c) *The basis of allocating depreciations ($23 million kina) -this was referred to as "DPRE -Daniel's file."*

Depreciation costs are allocated based on DataCo's depreciation schedule, by identifying depreciated assets by product or platform using each asset. The costs per product and/or asset are then allocated based on actual network/platform usage, in DataCo's network monitoring systems, for the applicable period, by type of traffic.

(d) *Submarine -PIPE -there is a range of traffic measures that may be used for allocating the costs of this cable1 -please provide detail on "platforms" allocation*

CEG seems to imply costs are allocated to PPC1 (PIPE). That is incorrect. PPC1 is not a product.

The costs are allocated based on actual network usage, in DataCo's network monitoring systems, for the applicable period, by type of traffic.

(e) *Submarine -APNG 2 as for PIPE*

APNG 2 is not included in costs – as noted in point 9 of the 10 points provided.

4. *Please provide details on the cost **uplift between 2019 and 2020**:*

(a) *The cost uplift to international was 23 million kina or over 65% -this is a very significant incremental increase in costs (it was stated that the CS cable was not significant, however there was and 11 million incremental increase in international costs.*

The cost uplift includes depreciation and maintenance of DataCo's proportion of the Coral Seal Cable which was not incurred until in 2020. In addition, proportional cost components of other network elements are increased in line with traffic forecasts.

5. *The basis of the **allocation** of internal products between **international and domestic**, including:*

(a) *Provide details on the allocation of 80% of satellite costs to international (which we understand to not include satellite services)*
(b) *Provide details on the 90% allocation of dark fibre costs to international*
(c) *Provide details on the 80% allocation of domestic lease line satellite services to international*
(d) *Provide details on the 100% allocation of colocation services to international (are there no domestic colocation services)*

DataCo does not recognise any of these % numbers from our modelling. Satellite costs are not included at all. Dark Fibre costs are not included at all (Dark fibre is a domestic point to point service). Domestic leased line satellite services are not included at all (This is a domestic point to point service). Colocation services are not included at all.

6. *The basis of the calculation of the **RAB** and the details of the calculation including written down value of assets and adjustments made to this value:*

   (a) *The presentation indicated that this element added around 18 million kina to the 92 million total revenue in 2020 - so it appears significant.*

   These numbers seem to refer to 2021. Projected revenue was K90.7m and FAC costs of international transmission were K81.4m. Excluding interest expenses (to avoid double counting) brings this to K75m and adding K17.m for the return to capital (includes interest) brings costs to K92.3m.

   The return to capital comes from the RAB and the WACC. The FAC model itself does not have a RAB. The return on capital is taken from the BBM model which does use a RAB; as explained in note 8 of the 10-point note which also explains the RAB:

   DataCo's estimation of the unit costs of international capacity are based on a hybrid of the FAC and BBM cost models. The FAC model uses only costs defined in the GL. It does not include the return to capital; the WACC. The return to capital is taken from the bottom-up model and added to the FAC, after deducting interest costs in the FAC model (the actual payments for debt). This is the same approach used by Ofcom; as explained in DataCo's August 2020 submission.

7. *The **K255 per Mbps** appears to be an average cost for international across a range of internal products:*

   K255 per Mbps is the average across the commercial (not internal) WIS and IPLC services.

   (a) *Please provide the basis on which this cost has been allocated to each bandwidth in the RIO.*

   Costs are not allocated to bandwidth as note explicitly in note 4 of the 10 points:

   The rate cards in the RIO show that purchase of higher capacity have lower costs per Mbps than smaller purchases. This is standard industry practice for the structure of pricing. There is no allocation of costs to different bandwidths.

   (b) *The expected demand for each product in the RIO to confirm it sums to K255 per mbps*

   The K255 comes from the cost modelling based on the demand that was expected. As explained in point 6 of the 10 point note:
   The determined price is forward looking. Nobody will know if the rate card complies with the "max average price" until the end of the period because the average will depend upon the mix of purchases during the period.

   (c) *The costs per Mbps fall from 255 kina/Mbps to 201 kina/Mbps -it is not clear how this is reflected in prices from July 2020 (which will apply in 2021)*

8. ***Potential errors:***
   (a) *There appeared to be discrepancies in the total revenue reported in parts of the model (e.g., in the WACC and declared service calculation)*

The only reported revenues would be historical. Revenue does not appear in the calculation of the WACC; as can be seen in the WACC spreadsheet provided on 7th October.

(b) *There appears to be a mismatch between depreciation in the RAB model and the depreciation in the cost allocation.*

The FAC model includes domestic fibre used as part of commercial international services. There are no differences between the FAC and BBM (RAB) models in the depreciation of the 3 fibre systems because the depreciation rates are the same and as noted in point 9 of the 10-point note: There is no difference between the replacement cost and book value of submarine cables because CS2 and Kumul are new. APNG2 costs are excluded from the BBM model. PPC1 is not on DataCo's books as an asset and payments to Telikom for the right to use it are treated as O&M in both models. In both models only 25% of the costs of Kumul are included as part of the international service. The models are explicit about what percentage of current (and future) fibre cables are used to carry international capacity services.

CEG claims also that there are "*fundamental issues with the model, including*

- *the choice of modelling method which does not appear to accord with the legislative principles in PNG.*

This is not correct. In PNG The General Pricing Principles set under section 134 of the NICT Act (2009) say that the objective is to recover efficient costs (the Cost Recovery Principle). The efficient costs *"include the direct and indirectly attributable capital, operating and maintenance costs actually incurred by the access provider in providing the declared service to itself and access seekers (including a reasonable contribution to any common costs), unless NICTA determines that such costs are inefficient having regards to the efficiency objective and any evidence before it*" (S134(2)).

The Service Specific Pricing Principles for Submarine Cable Services say "*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"* [Part II, Division 1, Clause 5(1))

The General and Specific Pricing Principles allow for "*a reasonable return on investment, commensurate with the regulatory and commercial risks involved*" ((S134(1)). The costs in a FAC model include the actual cost of debt but do not include a return to equity.

- *In addition, the proposal in the RIO for access seekers to insulate DataCo from all volume risk is highly unconventional in regulatory decisions*

DataCo bears the risk with any under/over-recovery of the costs dealt with in the compliance process. This process is yet to be settled but a proposal was made in Section D of DataCo's August 2020 submission on the SSPPs based on international precedents.

- *and no detail is provide(d) as to how this will be independently assessed, and price adjustments made"*

DataCo repeats that CEG's comments were made to Digicel on 16th October and not passed on despite being asked at the 6th October to provide DataCo with any written "*information request*".

DataCo bears the risk with any under/over-recovery of the costs dealt with in the compliance process. This process is yet to be settled but a proposal was made in Section D of DataCo's August 2020 submission on the SSPPs based on international precedents.

- *and no detail is provide(d) as to how this will be independently assessed, and price adjustments made"*

DataCo repeats that CEG's comments were made to Digicel on 16th October and not passed on despite being asked at the 6th October to provide DataCo with any written "*information request*".

E. Department of Pacific Affairs, ANU

Most of this submission is about the retail market and matters beyond DataCo's responsibility. On page 4 there are four paragraphs that concern the RIO:

- the price review process – which has been discussed above;
- demand is the most important factor driving unit costs. Among the "*other external factors"* will be the variables that influence the WACC. Other factors are not known;
- The reference to end users in Clause 15(a) subsection (iii) should be removed; and,
- Section 13 of the Service Level Terms and Conditions could include a reference to the Cybercrime Code Act 2016

The submissions from Telikom PNG Limited and the ICCC raise no new issues. DataCo believes that Digicel has not raised any issues that have not already been dealt with in NICTA's Letter of 16th October 2020 and in the materials provided by DataCo and its consultants.

Please do contact the undersign on email at pkomboi@pngdataco.com or mobile 76997579 for further information regarding the same.

Sincerely,

PAUL KOMBOI, OBE
Chief Executive Officer

Encl….

DATACO'SCROSS SUBMISSION ON COMMENTS SUBMITTED

Part	Industry Comments	DataCo's Responses
A. The Consultation on the SSPPs		Note 1 to Schedule 1 of the December 2019 Determination ("**2019 Determination**") states that if DataCo charges higher prices it would have to provide justification. This is what the consultation around the draft revised Determination for the SSPPs is for. The draft "*maximum average prices*" in the discussion paper for this consultation show that NICTA is now satisfied that the prices set in 2019 Determination were too low. The 2019 Determination prices were expressed as "*maximum*" prices which are now proposed to be "*maximum average*" or better still "*average*" prices per Mbps. This permits the industry to have a rate card such that larger players enjoy a lower price per Mbps for buying higher capacity.
B. The RIO Consultation	1. Digicel claims the RIO is inconsistent with non-discriminatory obligations that are applicable to DataCo.	There are various scattered sections (sections 142 to 155) of the National Information and Communication Technology Act ("**NICT Act**") which empower NICTA to review the RIO or its terms or any disputes related thereto. In our view there is adequate protection afforded to Digicel on this aspect. Even the submission from the Independent Consumer Competition Commission ("**ICCC**") on the RIO makes it clear that the ICCC intends to *"step in"* and investigate any potential discriminatory or uncompetitive conduct. We do not believe there is any plausible reason for Digicel to be worried or concerned about this aspect as there is adequate protection in the existing legislations. Digicel should understand that the SSPP is also undergoing the consultation process with NICTA. Both the RIO consultation and the SSPP consultation are inter-related which is why NICTA is dealing with both, preferring though to deal firstly with the SSPP and then the RIO. Hence, we do not consider that the RIO is in conflict with the 2019 Determination as the determination itself (i.e. the SSPP) is also undergoing the consultative process with NICTA. DataCo's RIO submissions are being drafted in line with its SSPP submissions to ensure uniformity and consistency in both its submissions. Although they are separate consultative processes on different subject matters, they are inter-related and therefore this aspect should be recognized by Digicel.
	2. Digicel asserts that the RIO contains terms and conditions that are not reasonable in	Digicel asserts that the RIO contains terms and conditions that are not reasonable within the context of section 126 of the NICT Act. Each of the non-pricing terms raised by Digicel are set out below and explanation or clarification provided against each.

accordance with Section 126 of the NICT Act.	(a) ***Requirement to pay a service bond*** – Digicel was concerned that DataCo was imposing a service bond to its services and intimated that we should apply same to all access seekers. The RIO contains standard terms and conditions which will be applicable to all access seekers because the services are expected to be provided on a non-discriminatory basis. The upfront service bond is a one-time requirement usually charged at the commencement of the service. It is a practice that is applied by many service providers which acts as a sort of insurance in the event of non-payment. A service bond usually represents the equivalent of one-month service fee and is not a practice that is unusual. The advantages for both the access seeker and the access provider is that the service bond can in some instances act as the buffer for any delayed payment to DataCo in future or otherwise used as the exit payments when terminating a service. Whilst it is not encouraged to utilise a bond during the term of the service, it should give DataCo and the access seeker some comfort that there is security being held against any non-payment of an invoice. Utilisation of a bond does not prohibit DataCo from pursuing other legal remedies from recovering any outstanding monies owed to it by the access seeker, but it does provide some insurance in the event of non-payment. (b) ***Treatment of taxes*** – Digicel was concerned that this provision would entitle DataCo to shift its UAS levy payments to Digicel to settle. The spirit of the clause is not meant to cover tax liabilities which are the obligation of DataCo as imposed by NICTA. Therefore, UAS levies are not considered as part of this clause. (c) ***DataCo's right to amend prices*** – Digicel raised issues about DataCo's unilateral right to amend (increase) prices at any time to reflect DataCo's increased costs in providing the service. Whilst the practice to increase prices without consent is not unpopular in other industries, DataCo wishes to emphasize that there can and in some instances be situations which warrant a review and increase. It can certainly consider reviewing the prices on notification to the access seeker and to some extent with NICTA, but DataCo should not be prohibited to capture the real cost of providing the service if there is really an increase in cost.

	(d) ***Billing disputes*** – Digicel held strong views against paying a disputed invoice in full. DataCo's proposition on this is that any credits owed to Digicel on that resolved disputed invoice can be carried in the next billing period or invoice. Hence, adjustments can be made on the next invoice by way of a credit. (e) ***Dispute resolution*** – Digicel proposed that arbitration should also be included as a mandatory dispute resolution mechanism. Given the nature of the industry, DataCo can consider including provisions around arbitration. (f) ***Suspension and termination of services*** – Digicel was of the view that the suspension and termination provisions in the RIO were one sided, unfair and inappropriate in the context of a declared service. The practice of suspending or terminating a service due to breach or persistent breaches is not uncommon. DataCo can consider providing advance notice of a breach to the MSA or a Service Agreement but in the event the period in that notice is not adhered to or addressed, then it is not unreasonable to expect that DataCo will exercise its rights to terminate or restrict or suspend the provision of a service to an access seeker. (g) ***Use of Personal Data*** – Digicel expressed reservations about the use of personal data for market research purposes or for marketing of DataCo services. DataCo will consider this aspect in line with any legislation that may be in existence on this aspect. (h) ***Mutuality of terms*** – Digicel expressed dissatisfaction about non-mutuality of terms relating to indemnity, liability and assignment. DataCo as the access provider seeks to ensure that its risks on contracting aspects are mitigated. Provisions relating to indemnity and liability and assignment are occasionally drafted in favour of the service provider however, DataCo may consider including mutual responsibilities or obligations where necessarily required. (i) ***Decisions in respect of which fibre optic cable facilities DataCo may use to provide its services*** – Digicel contended that the RIO failed to mention the use of cable systems that will be used to provide the services. DataCo's provision of services utilizes multiple mediums on its network to achieve the access seeker's requirements for the service it obtains.

		One way to look at this is in terms of the access seeker and its customer. Digicel does not specify to the end user what mediums on its network are being used to bring the service to it. All the end-user is really interested in is getting the service it has requested for. Similarly, DataCo approaches this in the same way by utilizing in some cases a multiple of mediums within the confines of its network bearing in mind the service, cost and pricing to ensure the customer's needs for the service are met. (j) ***Service quality commitments*** – Digicel expressed dissatisfaction of DataCo's SLA requirements of 98.9% comparing it against other regional players whose SLA requirements represented 99.9%. As is generally known, DataCo is still patching the gaps in the transmission network across the country to ensure it can guarantee a higher SLA then what it can safely and reliably maintain. The Service availability of 98.9% is what DataCo can confidently provide end-to-end (delivered to the access seeker premises) as a standard service requirement to all access seekers. DataCo would be able to provide a higher SLA only in the core network which will be delivered at DataCo PoP. Anything higher at this stage for an end-to-end service (including the unprotected local tail) would be misrepresenting the current technical capabilities and could put DataCo in breach of its agreements. However, having said that, this does not prohibit an access seeker from requesting a higher SLA commitment which DataCo will treat as a premium service and will charge at a premium cost.
	3. The pricing terms of the RIO are not consistent of the General Pricing Principles and the SSPP.	Digicel says the prices in the RIO are not consistent with the current General Pricing Principles ("**GPP**") and SSPPs. As noted above, both the RIO consultation and SSPP are being considered by NICTA. Whilst they are separate consultations, they are inter-related. Hypothetically, if NICTA contemplates revising the pricing schedule in the draft amended SSPPs, DataCo would take the opportunity to revise the demand forecasts in the model as part of such a re-set. At the workshop on 6th October 2020, DataCo invited Digicel and others to put in writing what further assistance they needed in relation to understanding the models. Digicel's retained independent expert economist CEG-Asia Pacific ("**CEG**") provided such a note to Digicel on 13th October 2020 which was not shared with DataCo until it was posted on the NICTA site on 5th November 2020 as part of Digicel's RIO submission.

		DataCo does not believe its current or proposed pricing is inconsistent with the current requirements of the SSPP. As indicated earlier, Note 1 of the current SSPP allows for prices to be charged at rates which are higher than those stated in the SSPP. Even then, the SSPP is also subject to consultation which is an opportunity for DataCo's cost estimates to be tested.
C. The Cost Models	*There is no difference between the replacement cost and book value of submarine cables because CS2 and Kumul are new. APNG2 costs are excluded from the BBM model. PPC1 is not on DataCo's books as an asset and payments to Telikom for the right to use it are treated as O&M in both models. In both models only 25% of the costs of Kumul are included as part of the international service. The models are explicit about what percentage of current (and future) fibre cables are used to carry international capacity services.*	Digicel simply asserts that the cost modelling does not meet the broad efficiency objectives under Section 2 of the Act (refer to Digicel point 64). It makes no attempt to make a case for this. It is not DataCo's "*intent that the service pricing will remain in effect for the full three-year term of the RIO*" (refer to Digicel point 65). DataCo has made it clear that unit costs and prices will fall as demand grows. This has been the case for some years now and will continue to be the case. DataCo has also indicated that it may reduce prices ahead of the annual regulatory review to ensure it meets regulated prices.
D. Comments from CEG	*1. Provide a **map of the internal products** (A1, B1, C1, etc) to the regulated products.* *(a) Details on the allocation method used between international and domestic services.* *(b) Details on the allocation of 'add ons' including the Kumul cable to the regulated products.*	CEG knows from the workshop that DataCo's international commercial services are not the same as the declared service. This was "*mapped*" and explained in section G of DataCo's August 2020 submission on the SSPP: Currently, no wholesale customer purchases on any of the following declared services: (a) the international submarine cable transmission capacity service; (b) the international submarine cable gateway access service; and, (c) the international submarine cable duct access service. Current commercial international transmission services (WIS and IPLCs) combine all three of the above and more: • In the case of the wholesale internet service (WIS), this includes access to the global internet (IP Transit) and domestic transmission services (delivering access to the internet at the same price across PNG).

		• In the case of IPLCs the commercial service may include MPLS, domestic tails and international extensions beyond Sydney or Guam. But, as NICTA says at 3.11 in its 19th August Discussion Paper on the RIO, it is very close to the declared service. Since neither commercial international transmission service is exactly like the regulated international submarine cable transmission service, NICTA can either: (a) Try and make the commercial service look more the like regulated service. But stripping, say, IP Transit and domestic transmission from WIS leaves no service worth having; or (b) Use commercial services to monitor compliance with the regulated service. This is a more suitable approach. The top-down model allocates some domestic transmission costs to both WIS and IPLC costs (e.g. to link POM to MDG through the Kumul cable to deliver international transmission services). Since the maximum average revenue per Mbps in the revised draft Determination for declared international transmission services (subject to H below) is based on the top-down model, this provides a sound basis for testing whether commercial international revenue (i.e. WIS plus IPLCs) per Mbps are cost-based prices consistent with the revised Final Determination.
	*2. The **direct allocation** of costs appears very low at less than 3%. Further detail is needed to confirm this allocation.*	This is a result of almost all DataCo's networks/platforms, systems and organization supporting more than one product. As a result, most GL entries cannot be directly attributed to a single product.
	*3. Please provide **allocation keys** for the most significant cost items including for the following:* *(a) The basis of allocating Satellite costs ($23 million kina) - "As per actuals"*	a) The costs are allocated based on actual network usage, in DataCo's network monitoring systems, for the applicable period, by type of traffic.

(b) The basis of allocating RTU costs ($21 million kina) - this was referred to as the "RTU calc" *(c) The basis of allocating depreciations ($23 million kina) -this was referred to as "DPRE -Daniel's file."* *(d) Submarine -PIPE -there is a range of traffic measures that may be used for allocating the costs of this cable1 - please provide detail on "platforms" allocation* *(e) Submarine -APNG 2 as for PIPE*	b) The costs are allocated based on actual network usage, in DataCo's network monitoring systems, for the applicable period, by type of traffic. The right to use (RTU) costs are mainly for DataCo's use of PPC1. c) Depreciation costs are allocated based on DataCo's depreciation schedule, by identifying depreciated assets by product or platform using each asset. The costs per product and/or asset are then allocated based on actual network/platform usage, in DataCo's network monitoring systems, for the applicable period, by type of traffic. (d) CEG seems to imply costs are allocated to PPC1 (PIPE). That is incorrect. PPC1 is not a product. The costs are allocated based on actual network usage, in DataCo's network monitoring systems, for the applicable period, by type of traffic. (e) APNG 2 is not included in costs – as noted in point 9 of the 10 points provided.
*4. Please provide details on the cost **uplift between 2019 and 2020**:* *(a) The cost uplift to international was 23 million kina or over 65% -this is a very significant incremental increase in costs (it was stated that the CS cable was not significant, however there was and 11 million incremental increase in international costs.*	 The cost uplift includes depreciation and maintenance of DataCo's proportion of the Coral Seal Cable which was not incurred until in 2020. In addition, proportional cost components of other network elements are increased in line with traffic forecasts.

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5. *The basis of the **allocation** of internal products between **international and domestic**, including:* *(a) Provide details on the allocation of 80% of satellite costs to international (which we understand to not include satellite services)* *(b) Provide details on the 90% allocation of dark fibre costs to international* *(c) Provide details on the 80% allocation of domestic lease line satellite services to international* *(d) Provide details on the 100% allocation of colocation services to international (are there no domestic colocation services)*	DataCo does not recognise any of these % numbers from our modelling. Satellite costs are not included at all. Dark Fibre costs are not included at all (Dark fibre is a domestic point to point service). Domestic leased line satellite services are not included at all (This is a domestic point to point service). Colocation services are not included at all.
6. *The basis of the calculation of the **RAB** and the details of the calculation including written down value of assets and adjustments made to this value:* *(a) The presentation indicated that this element added around 18 million kina to the 92 million total revenue in*	These numbers seem to refer to 2021. Projected revenue was K90.7m and FAC costs of international transmission were K81.4m. Excluding interest expenses (to avoid double counting) brings this to K75m and adding K17.m for the return to capital (includes interest) brings costs to K92.3m. The return to capital comes from the RAB and the WACC. The FAC model itself does not have a RAB. The return on capital is taken from the BBM model which does use a RAB; as explained in note 8 of the 10-point note which also explains the RAB:

	2020 - so it appears significant.	DataCo's estimation of the unit costs of international capacity are based on a hybrid of the FAC and BBM cost models. The FAC model uses only costs defined in the GL. It does not include the return to capital; the WACC. The return to capital is taken from the bottom-up model and added to the FAC, after deducting interest costs in the FAC model (the actual payments for debt). This is the same approach used by Ofcom; as explained in DataCo's August 2020 submission.
	7. The ***K255 per Mbps*** *appears to be an average cost for international across a range of internal products:* *(a) Please provide the basis on which this cost has been allocated to each bandwidth in the RIO.* *(b) The expected demand for each product in the RIO to confirm it sums to K255 per mbps* *(c) The costs per Mbps fall from 255 kina/Mbps to 201 kina/Mbps -it is not clear how this is reflected in prices from July 2020 (which will apply in 2021)*	K255 per Mbps is the average across the commercial (not internal) WIS and IPLC services. (a) Costs are not allocated to bandwidth as note explicitly in note 4 of the 10 points: The rate cards in the RIO show that purchase of higher capacity have lower costs per Mbps than smaller purchases. This is standard industry practice for the structure of pricing. There is no allocation of costs to different bandwidths (b) The K255 comes from the cost modelling based on the demand that was expected. As explained in point 6 of the 10 point note: The determined price is forward looking. Nobody will know if the rate card <u>complies</u> with the "max average price" until the end of the period because the average will depend upon the mix of purchases during the period.
	8. Potential errors: *(a) There appeared to be discrepancies in the total revenue reported in parts of the model (e.g., in the WACC and declared service calculation)*	(a) The only reported revenues would be historical. Revenue does not appear in the calculation of the WACC; as can be seen in the WACC spreadsheet provided on 7th October.

	(b) There appears to be a mismatch between depreciation in the RAB model and the depreciation in the cost allocation.	(b) The FAC model includes domestic fibre used as part of commercial international services. There are no differences between the FAC and BBM (RAB) models in the depreciation of the 3 fibre systems because the depreciation rates are the same and as noted in point 9 of the 10-point note: There is no difference between the replacement cost and book value of submarine cables because CS2 and Kumul are new. APNG2 costs are excluded from the BBM model. PPC1 is not on DataCo's books as an asset and payments to Telikom for the right to use it are treated as O&M in both models. In both models only 25% of the costs of Kumul are included as part of the international service. The models are explicit about what percentage of current (and future) fibre cables are used to carry international capacity services. CEG claims also that there are "*fundamental issues with the model, including* • *the choice of modelling method which does not appear to accord with the legislative principles in PNG.* This is not correct. In PNG The General Pricing Principles set under section 134 of the NICT Act (2009) say that the objective is to recover efficient costs (the Cost Recovery Principle). The efficient costs *"include the direct and indirectly attributable capital, operating and maintenance costs actually incurred by the access provider in providing the declared service to itself and access seekers (including a reasonable contribution to any common costs), unless NICTA determines that such costs are inefficient having regards to the efficiency objective and any evidence before it*" (S134(2)). The Service Specific Pricing Principles for Submarine Cable Services say "*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"* [Part II, Division 1, Clause 5(1)) The General and Specific Pricing Principles allow for "*a reasonable return on investment, commensurate with the regulatory and commercial risks involved*" ((S134(1)). The costs in a FAC model include the actual cost of debt but do not include a return to equity.

		• *In addition, the proposal in the RIO for access seekers to insulate DataCo from all volume risk is highly unconventional in regulatory decisions* DataCo bears the risk with any under/over-recovery of the costs dealt with in the compliance process. This process is yet to be settled but a proposal was made in Section D of DataCo's August 2020 submission on the SSPPs based on international precedents. • *and no detail is provide(d) as to how this will be independently assessed, and price adjustments made"* DataCo repeats that CEG's comments were made to Digicel on 16th October and not passed on despite being asked at the 6th October to provide DataCo with any written "*information request*".
E. Department of Pacific Affairs, ANU		Most of this submission is about the retail market and matters beyond DataCo's responsibility. On page 4 there are four paragraphs that concern the RIO: • the price review process – which has been discussed above; • demand is the most important factor driving unit costs. Among the "*other external factors"* will be the variables that influence the WACC. Other factors are not known; • The reference to end users in Clause 15(a) subsection (iii) should be removed; and, • Section 13 of the Service Level Terms and Conditions could include a reference to the Cybercrime Code Act 2016