TELIKOM PNG LIMITED

"our communication company"

Submission to NICTA on:

(1) Public Consultation Document on Draft Rules under Section 218 of the National ICT Act; and

(2) Consultation Paper on Guideline on Annual Variable Spectrum Fee ('T' & 'L' factors)

25th March 2011

Summary

Public Consultation Paper: Draft Rules under Section 218 of the National ICT Act 2009 setting out standard and special terms and conditions for Individual Licenses.

- Telikom welcomes NICTA's efforts in reducing duplicity of particularly standard terms and conditions as well as removing terms that no longer are appropriate in the new telecommunications framework in PNG. The obvious result is the shorter license terms applicable to all licensees.

- Insofar as Telikom retaining its license conditions to provide NRS and NMRSS, it has always been Telikom's view that these services offer no commercial incentive or benefit for Telikom but are purely community services performed by Telikom for the people of Papua New Guinea. Whilst Telikom recognizes the importance of these community services to the public and will continue to provide them, it is also Telikom's view that it must be compensated for offering these services especially when it is expected by law to commercially compete with the other operators in PNG's ICT market, whom are not imposed these community services obligations.

Consultation Paper: Guideline on Annual Variable Spectrum Fee ('T' & 'L')

- Telikom is of the view that in this present PNG ICT market, the demand for spectrum has not and is not likely to exceed the supply of spectrum, which is a valuable State Resource. This is attributed to the relatively small size of the PNG economy. In the circumstances, Telikom recommends that NICTA adopt values for both 'T' and 'L' that is not greater than 1. Any higher values for 'T' and 'L' would be unjustifiable in the present PNG ICT market.

- Telikom also recommends that the 'T' & 'L' values that is not more than 1 should be applicable to both Spectrum and Apparatus Licenses.

- The '*cost-recovery*' basis of licensing fees under the NICTA Act 2009 supports our recommendation for 'T' and 'L' values that are not greater than 1 hence, fees are appropriately minimized in accordance with the Act.

- Further, our interpretation of the Act suggests that excessive spectrum fees, after accounting for NICTA's costs, are intended to be distributed to the UAS Fund and National Provident Fund, which is detrimental to the industry because revenues of operators are already set to be levied as contribution to the UAS Fund and monies kept in the National Provident Fund is not guaranteed to be used specifically for the benefit

the ICT industry. In the circumstances, spectrum fees, in the absence of high demand for spectrum, should be minimized as much as possible.

- Spectrum fees that are unreasonably high are ultimately detrimental to customers as the costs of spectrum would be passed onto customers who pay for the ICT services. This is contradictory to the objective of competition where consumers are to ultimately benefit from reduced prices for ICT services.

Discussions

Consultation Paper: Guideline on Annual Variable Spectrum Fee ('T' & 'L')

CLAUSE 4.2.3 – Bandwidth ("B")

- In regard to the definition of bandwidth as identified in the stated clause, it is our view that the definition is not clear or easily understood as to what the term '*continuous*' in the definition means. For instance, it is not clear whether it refers to both the lower and upper bands or one part only. Therefore, we request NICTA to express the stated definition in clear terms.

- We are also of the view that NICTA should not charge spectrum fees for Guard bands.

- We also wish to point out that there are presently circumstances whereby Telikom only use 1 or 2 channels within a "Bandwidth" comprising of 8 channels in total and the rest of the channels are 'shared' and used by other operators. In this circumstance, the Consultation Paper does not address how this 'shared bandwidth' is to be calculated[1]. This is a concern for Telikom because if NICTA does not recognise 'shared bandwidth' and calculate spectrum fees in a manner that justifies each operator's use of that 'shared bandwidth', then an operator may be forced to pay for bandwidth that is also being used by other operators or worse, every operator paying for the entire shared bandwidth irrespective of its limited use of channels.

CLAUSE 3.2 – Radio Spectrum Management

- It is our view that NICTA, as the regulator should encourage thru reward systems such as reducing the 'T' value for operators who apply spectrum efficiently in the PNG ICT market. For instance, Telikom applies TDD on the Wimax System instead of

[1] 'Shared bandwidth' in this context is different to exclusive spectrum allocation as it the case with GSM and CDMA spectrum allocated to mobile operators in PNG.

FDD and in this manner, Telikom is reducing its usage to only half of the given bandwidth.

CLAUSE 4.2.6 – The Arbitrary Nature of 'T' & 'L'

- In regard to the stated clause, we make particular mention of paragraph 2 where it reads, *"However, this would require the dedication of expensive engineering and economics resources within NICTA and would greatly add to the administrative cost of licensing."*

- Our view is that NICTA by now should have all the required statistics for spectrum usage and the list of operators in PNG, their locality, and current demands based on new applications filed with NICTA. The "cursory examination" stated in this clause should not be considered at all because it is a one off exercise.

- The WRC allocation of spectrum for individual type of service will effectively render this assertion inaccurate or not completely factual. For instance, the worldwide allocation of various UMTS spectrum band will effectively prevent any use of PTP services by default and that, by no means "denies spectrum re-use" by definition. In the circumstance, we would recommend for NICTA to adopt a value range of 'T' between 0 and 1.

CLAUSE 3.2. – *Refer to Example* in Table 1a: Values of 'T' & 'L' Factors for Apparatus Licenses excluding Satellite and Broadcast Stations

EXAMPLE ONLY

Service Type	Apparatus	Fixed K	Band	Band Limits MHz	Band Limits MHz	F MHz	B MHz	T	L	AVLF K
Fixed	Point to Point	1000	7 GHz	7425	7725	7575	14	1	1	2182
	Point to MP	1100	1.5 GHz	1428	1524	1476	2	4	1	6398
Mobile	Corporate(V)	700	VHF High	148	174	161	0.05	4	1	1466

- The values for 'B' or bandwidth in the given example, which is replicated and highlighted in red above are inaccurate according to the band range definition stated in clause 4.2.3. For instance, the 'B' value for 7 GHz, 1.5 GHz and 700 MHz should be 300MHz, 96MHz and 22MHz, respectively and not 14MHz, 2MHz and 22M, respectively. It is our view that the inaccuracies will invariably and grossly inflate the AVSF value.

- The 14MHz stated in the Example is assumed to be the "Channel Bandwidth". If so, then NICTA must revisit the 'B' value and correct it. This applies also to other *Examples* stated in the Consultation Paper except for the CDMA band.

CLAUSE 3.2. – *Refer to Example* in Table 1b: Values of 'T' & 'L' Factors for Broadcast Apparatus

EXAMPLE ONLY

Band	Band Limits		F	B	T	L	AVLF
	MHz	MHz	MHz	MHz			K
HF B/c	0.03	30	30	0.003	4	1	472
FM Sound (<100W, Remote)	88	108	98	0.2	0.8	0.3	578

- In regard to this stated clause and given *Example,* which is again replicated above, we repeat that the WRC allocation of spectrum for individual type of service effectively renders this assertion inaccurate or not completely factual. Again, the worldwide allocation of various UMTS spectrum band effectively prevents any use of PTP services by default and that, by no means "denies spectrum re-use" by definition. We therefore recommend for NICTA to adopt a value range of 'T' between 0 and 1.

- The 'B' value should be 29.7MHz and not 0.003MHz. 0.003MHz is actually channel bandwidth and also does not meet the definition specified in Clause 4.2.3 in the Consultation Paper. Similarly, the AVSF value of K472 is misleading. Since it is predominantly Rural-based services (i.e.: T=4 & L=1), the stated AVSF value is estimated at K4.6million based on the B value of 29.7MHz.

CLAUSE 4.2. – *Refer to Example* in Table 2: Values of 'T' & 'L' Factors for Calculation of Fees for spectrum license issued under Administrative Basis.

Band	Band Limits		F	B	T	L	AVLF
	MHz	MHz	MHz	MHz			K
850 - CDMA	800	880	840	22	4	7	865627
GSM - 900	880	960	920	26.667	4	7	958006
GSM - 1800	1710	1880	1795	20	4	7	368258

- We repeat that the WRC allocation of spectrum for individual type of service effectively renders this assertion inaccurate or not completely factual. Again, the worldwide allocation of various UMTS spectrum band effectively prevents any use of PTP services by default and that, by no means "denies spectrum re-use" by definition. We therefore recommend for NICTA to adopt a value range of 'T' between 0 and 1.
- The 'B' value for 850 CDMA complies with the 'B' definition specified in section 4.2.3, but the AVSF value of K865,627 is based on L=7. In the case of L=7, we do not understand the manner by which the number '7' was calculated. In our view, L=7 does not reflect the reality or the actual conditions of the market that is PNG ICT market and is in fact grossly arbitrary. By our calculations, Telikom would be subjected to an excessive spectrum fee of more than [redacted] using T=4 and L=9 as stated in clause 4.2.8 for exclusive Nationwide coverage, which is very excessive and a disincentive to investment in the CDMA network and services.

CLAUSE 5. – Categories of Locations

Category	Location
Major Towns	Port Moresby Lae Mt. Hagen
Minor Town	All other provincial capitals excluding the ones mentioned above
Rural/Remote	All other locations not specified above

- In regard to this stated categories and locations in the given table, which is replicated above, it is our view that the *Rural/Remote category* be further divided to cater for areas where it is uneconomical to provide ICT services. For instance, Telikom continues to provide services in uneconomical rural/remote areas as a result of its status as a Stated-Owned Entity (SOE) and also in instances where politicians provide funding for Telikom to deploy services to that politician's constituents. In this circumstance, we recommend that NICTA adopt a range for the value of 'L' between 0 and 1.
- Further, it is also our view that unless NICTA actually investigates and assesses the congestion, population and economic activities in an area or town, it cannot accurately classify or determine the values for 'T' and 'L' for that area or town.
- In addition, any values for 'T' and 'L' that is obtained thru investigation and assessment must be subjected to periodical review to accurately calculate the values for 'T' and 'L'.