

NEW T&T HONG KONG LIMITED

**Submission in relation to the
Third Round Consultation on Third Generation Licensing Framework**

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1 INTRODUCTION

- 1.1 We appreciate the TA's initiative and efforts for conducting an industry workshop in relation to "Open Network" Requirements held on 5 January 2001.
- 1.2 We further welcome the TA's invitation for further feedback from the industry on the subject.
- 1.3 We note that there are conflicting views given by both the participants and the TA in relation to practical and technical feasibility of the Open Network Requirements and the difficulties associated with the practical implementation.
- 1.4 This submission sets out New T&T's view on the TA's preliminary proposal on the Open Network Requirements and other licensing regulatory framework elements.
- Treatment of New Entrants (section 2)
 - Open Network Requirements and Technical Issues (section 3)
 - Other issues in the TA Discussion Paper for Industry Workshop "Open Network" Regulatory Framework Third Generation PMRS in Hong Kong (section 4)
 - Licensing Timeframe (section 5)

2 TREATMENT OF NEW ENTRANTS

- 2.1 We reiterate that the participation of new entrants as MNO to the 3G market will be beneficial to the market. New entrants should be encouraged to enter the market so as to minimise the effect of market dominance and anti-competitive conduct by incumbent operators.
- 2.2 We maintain that the incumbent operators will enjoy economies of scale and efficient migration paths between 2G and 3G mobile networks. Further the incumbent 2G operators will have inherent advantages over the new entrants in many aspects including established cell sites in physically constrained space, established customers, network, operation, customer servicing and superior information. This immediately creates an unlevelled playing field for new entrants.

- 2.3 New entrants will likely construct a completely new full-layer network and offer full range of 3G services including high speed multi-media services at 2 Mbps in an indoor environment. Unlike the incumbent operators who are, to a certain extent, constrained by their legacy networks, the new entrants will be free to develop a full range of innovative 3G services that will not be constrained by any legacy network problems. This allows flexibility in developing their networks for new service applications that would bring benefits to the industry and the consumers as a whole.
- 2.4 We have already argued in our second submission and will again take this opportunity to encourage the TA to consider the following possible options to provide incentives to the new entrants:

Introduction of "Premium Discount" in Auction Process

- 2.5 We propose that all the new entrants should have the benefits of receiving a "premium discount" on the bidding price in the Auction process. The "premium discount" reflects the difference between what the new entrants are required to pay over to the Government and what they have bid for. It will likely take into account of:
- 2.5.1 The estimated difference in the amount of capital expenditure on rolling out a completely new 3G network and the migration of 2G to 3G network.
- 2.5.2 The estimated cost of "luring" the existing 2G subscribers from the incumbent 2G operators, taking the present industry "churn rate" into account.
- 2.5.3 The estimated unavoidable set up cost, such as billing and switching center costs.

Adoption of Royalties Auction Mechanism

- 2.6 We reiterate that the Royalties auction is the fairest to all bidders, yet it will give a vast incentive to new entrants to bid for the 3G licence. Under this approach the higher perceived business risk confronted by the new entrants resulting from a lack of existing 2G network and subscriber base will be reduced thus making the bidding process more competitive, which we believe, will eventually drive up the bidding revenues for the Government.
- 2.7 We believe the Royalties auction approach will enable the 3G licensees, in particular the new entrants, to further finance the 3G network infrastructure investment and rollout. We have witnessed the experience in Europe where the negative financial impact of the cost of 3G licence that have had on the winning bidders and the financial constraints that the winning bidders have been put under. We do not agree that the licence fee under the lump sum and deferred payment approach is a sunk cost which will not be passed onto the public through retail pricing. The licence fee under the Royalties approach will not be an additional retail pricing increment being imposed onto the public.

- 2.8 We believe that the Royalties approach will enable the Government to share the upside and downside of the 3G opportunity and the business risks with the 3G licensees, given the uncertainty surrounding the future of 3G.

Adoption of Descending Auction mechanism coupled with an assessment of financial and technical capabilities in pre-qualified stage

- 2.9 We suggest that the hybrid approach that the TA proposes could take the form of imposing a descending auction mechanism coupled with a more stringent selection criteria in the pre-qualified stage. In a situation where two bidders have met with the highest price the selection criteria for the licence will be based on the assessment of the financial and technical capabilities of the bidders submitted in the pre-qualified stage. We believe this approach will enjoy the best of both worlds, by taking the financial rewards for 3G yet enable the most capable operator to obtain the licence. The maximum cap could be set at a higher than perceived level to reduce the possibility of having more bidders reaching the cap price.

More spectrum allocation

- 2.10 We maintain that a new 3G operator will need 2 x 25 MHz paired spectrum in order to allow the implementation of three-layer hierarchical cell structure and the provision of full range of 3G services including high speed multimedia services at 2 Mbps in an indoor environment. For incumbent operators, less spectrum would be required because they can upgrade their 2G systems and use them to provide the macro layer. In this case, the minimum spectrum per existing operator is 2 x 10 MHz.

The TA's proposal for 4 licences with equal spectrum to be granted will give no advantage to the new entrants as compared with the incumbent 2G operators and has provided no incentive to new entrants. The U.K. experience has also suggested that new entrants should be given more spectrum allocation to compete with the 2G incumbents.

Mandatory roaming among 3G networks and for 3G to 2G networks

- 2.11 We reiterate our support for the TA's view that mandatory roaming from 3G to 2G networks would promote effective competition between the new entrants and the incumbents 2G/3G operators during the initial period when the 3G networks of the new entrants are still being rolled out. We also welcome the TA's intention to include this domestic roaming requirement as an obligation under the 3G licences issued to incumbent operators.¹ We further argue that the domestic mandatory roaming from 2 G to 3 G networks should be extended to those existing 2G operators who offer 3 G services using their assigned 2G spectrums during the term of their existing licences. Their position should not be any different from the incumbents who obtain the 3G licences.

¹ Consultation Paper dated 3 October 2000 paragraph 4.7.3.

3 OPEN NETWORK REQUIREMENTS AND TECHNICAL ISSUES

3.1 We reiterate our support for the TA's proposed requirement of a mandatory provision of 3G network capacity to MVNO operators. This will promote competition amongst the 3G operators, content and service providers and provides opportunities for growth in other service sectors and the Hong Kong economy as a whole.

3.2 We are concerned that if "Open Network Requirements" is not made mandatory from the outset of the term of licences there would be uncertainty in respect to each party's rights and obligations. In order to promote effective competition the regulatory framework should be certain and clear. Our experience in the fixed lines regulatory environment suggests that a clear and firm framework is necessary for any commercial agreements to be conducted expeditely and fairly to both parties. Given the infancy of 3G services the TA should carefully consider whether incumbent(s) will prolong and make the commercial negotiation difficult for NSPs in order that the 3G incumbents will establish and seize a sizable market share which will eventually make the 3G market less competitive. A clear and firm framework for open network requirements will also work in favour of MNOs as they will have a clear knowledge of when the TA would interfere and on what circumstances the TA would interfere. This can eliminate any frivolous request for determination by MVNOs who fail to negotiate terms of supply acceptable to it.

3.3 In the discussion paper the TA sets out his views in relation to the measurement of network capacity. We have the following concerns over a number of technical aspects:

- Cell Identify information in CDR is not specified in 3GPP standard.
- CDR does not reflect the "Actual NSP Occupancy". For instance, CDR for unsuccessful calls may not be recorded.
- RAT measurement is not accurate as it is service dependent. Moreover, the accuracy of RAT measurements can affect the actual loading and could be different for different equipment vendors.
- Downlink load measurement is still unresolved given the proposed solutions cannot reflect the actual loading. Therefore, further study on this is required.
- In light of the proposed non-discriminatory treatment, the measurement may be distorted due to the unforeseen traffic created by ad hoc business decisions.
- Selection of Measurement Area and Measurement Time could be affected by 3G applications. Moreover, different NSPs may have different requirements for these parameters.

- Network capacity and design is a functionality of the quality requirements of 3G applications and currently most of 3G applications are still unknown.
- If the measurement is not defined in International Standards such as UMTS R99 or R00, it may not be supported by all equipment vendors. This can limit the selection choice of vendor made available to a new entrant.
- Customized reporting will incur development time and cost.
- OFTA mentioned that the measurement will be required only when there is a need for the open network capacity. As the capacity will be shared among NSPs, what will be the criteria to trigger such a measurement?

4 OTHER ISSUES IN THE TA DISCUSSION PAPER FOR INDUSTRY WORKSHOP "OPEN NETWORK" REGULATORY FRAMEWORK THIRD GENERATION PMRS IN HONG KONG

We note that the TA's intention is to leave the market to work out commercially the "open network" requirements. In paragraph 7 of the Discussion Paper it states that "*if commercial arrangements could not be reached between the parties within a reasonable period of time, it would be in the public interest for the TA to intervene to facilitate the efficient and effective interconnection between the 3G network operators and the NSPs.*"

We urge the TA to define what a reasonable period of time should be and how he is to intervene should the commercial negotiation fails. This must be considered against the background of promoting an effective and expeditious 3G competition at the content and service application level in Hong Kong. Further this must be considered against the background of providing clarity and certainty to participants in the industry.

5 LICENSING TIMEFRAME

We understand that the TA intends to give his statement on the licensing framework by early February 2001. Given that there is still a number of contentious issues to be resolved we suggest to the TA that he should consult further with the industry on the unresolved regulatory, operational and technical issues before he issues his final statement.

6 CONCLUSION

- 6.1 We urge the TA to consider our various options that encourage the participation of new entrants as MNO into the 3G market. New entrants will bring substantial benefits in the form of innovative services and introduce more competition to the 3G market at both application and content levels. New entrant's participation as a MNO will minimise the market dominance and potential anti-competitive conduct by incumbent operators.
- 6.2 We support the Open Network Requirements and believe this will serve the interest of a more competitive 3G market and will ultimately benefit the Hong Kong economy as a whole. A clear and firm regulatory framework is critical to ensure a level playing field for all operators, whether be MNO or NSP, in the 3G market and provides clarity and certainty to all. This will surely benefit the public and serve the Government's long term policy objective.
- 6.3 As the proposed network capacity measurement is only one "possible" approach, which clearly carries a lot of unresolved technical issues, we urge the TA to consider other measurement methodologies and conduct more consultation workshops in order to reach an industry consensus on a technical feasible measurement.
- 6.4 We urge the TA to spell out clearly other various non-technical elements in the Discussion Paper, in particular in relation to the TA's definition of a reasonable time and the form of its intervention for the purpose of commercial negotiation. Given that there is still a number of technical and regulatory issues to be resolved we believe the TA could consult further with the industry before finalisation of the 3G licensing framework in Hong Kong.

Submitted by
New T&T Hong Kong Limited

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