

29th November, 2010.

**The Director General of Telecommunications,
Telecommunications Regulatory Commission
of Sri Lanka,
276, Elvitigala Mawatha,
Colombo 8.**

Dear Sir,

PUBLIC CONSULTATION DOCUMENT ON NGN

Please find enclosed our comments on the questionnaire pertaining to the above document. We would appreciate if you could maintain the confidentiality of this document.

Thanking you,

**Yours faithfully,
TRITEL SERVICES (PVT) LTD.,**


**Lalith Mendis
DIRECTOR**

TRCSL Public Consultation Paper on NGN
Answers to questionnaire
by
Tritel Services (Pvt.) Ltd

Note: A few questions to which we have no informed answers to offer have been left unanswered.

Question 1 : Do you think that you or your company could benefit from the services that will be made possible by the implementation of NGN networks? If yes, please explain by means of examples.

Ans : Yes. Tritel like any other mainstream operator could expect to benefit from the implementation of NGN networks by being able to offer a diversified product portfolio in keeping with fast evolving global and local trends in telecommunication services to wider market segments and thereby derive benefits out of efficient delivery of novel services at drastically reduced costs.

This requires an extensive change in its business model from public access payphone based operations to one capable of offering converged services and thereby expand its business. NGN will enable Tritel to provide data and multimedia services which are becoming increasingly important. NGN will also help Tritel to take such services to the rural and underserved sectors as well.

We consider that Voice will still continue to be the more important service for Tritel during the transitional period and for some years to come, NGN will make possible to provide VOIP in place of circuit switched, and thus provide great benefit to customers.

Question 2: Do you think that the incentives available in the private sector for operators to begin to migrate to NGN are sufficient to promote adoption, or do you believe that the broader social benefits warrant additional steps being taken by the government to promote this migration? If so, what steps would you recommend the TRCSL investigate to promote such migration?

Ans: We consider that there are hardly any incentives available at present for migration. At a time when the industry is once again trying to get back on its feet with three decade long conflict becoming a thing of the past and recent decline seen in the industry, we strongly feel that there should be positive measures and incentives to encourage operators to work towards migration. At policy level much could be done by giving fiscal incentives (tax breaks and holidays), assurance of spectrum availability at affordable prices, and targeted subsidies, for NGNs to go to less lucrative areas. Such incentives are particularly relevant to smaller operators such as Tritel with less market power and being exposed to bigger investment risks of having to under take sizable fresh investments even before making any ROI on the investments made to date on the legacy network.

The government can also facilitate migration by creating opportunities to develop ICT and a knowledge based economy countrywide. Initiatives such as e-government, e-health, e-learning are also useful

Question 3: Do you foresee any negative consequences of the migration to NGN for the telecoms sector or broader society? If so, please describe them, along with any steps that the TRCSL could investigate to mitigate or avoid those consequences.

Ans: Potentially NGN has the danger of consolidating market power and technology strength within a small cartel of dominant operators which would stifle healthy competition, create asymmetries and replicate similar problems as experienced under PSTN. That could only happen in the absence of strong regulation and effective enforcement.

TRCSL should execute policy measures to ensure that a level playing field is created in the NGN environment for all operators irrespective their size and market share to equally participate in the delivery of service. This process would have to address the concerns of underdogs such as Tritel who are more vulnerable.

TRCSL should be guided by an independent expert professional body that will undertake a comprehensive study of the industry paying attention to the needs and concerns of all operators whilst continually monitoring the transition to NGN. TRCSL should also internally strengthen its resources to implement an effective policy framework to achieve this end.

Licensing of third party service providers if not done in a carefully controlled manner, could result in negative consequences.

Question 4: Do you see any issues or opportunities relating to access to, and use of spectrum now? Will issues and opportunities potentially emerge from telecommunications and broadcast convergence?

Ans: The main regulatory consideration is ensuring equitable access to spectrum required by new NGN operators and services and ensuring that competition is not hampered through legacy spectrum assignments to incumbent operators for the provision of fixed and mobile services.

Equitable access would also mean fair pricing of spectrum based on best international practices.

Question 5: Do you believe that innovative voice services such as Skype and Google represent a threat or an opportunity for the Sri Lankan telecoms market? What are the roadblocks to realising benefits from such services?

Ans: No. They represent an opportunity as such services will make use of broadband, and the marketing of broadband capacity more attractive. Potential roadblocks in the

future could be: inappropriate regulatory actions, or actions by dominant operators who may see them as threats eating into their revenues.

Question 6: Do you believe that the range of TV content available is an important or primary basis for customers' decision to purchase telecoms services? Do you believe that a merger between the media regulator and the TRCSL would provide an environment which promotes competition and increases user choice?

Ans: There is no evidence for such an assertion, and no further comment in our current environment can be made due to technical limitations in the last mile for successful IPTV. Situation could however change if there are future developments such as fibre to the home.

Question 7: Please describe your planned migration to NGN. (a) What is your technical strategy to migrate to NGN, if any? (b) What will be the key phases in your migration to NGN, and what phase are you currently in? (c) What is your anticipated timescale for each of these phases? What technical issues need to be resolved to allow you to offer the services you would like to be able to offer today, and over the next four years?

Ans: Tritel has not commenced any migration to NGN yet. At this stage we could only say that migration will take place in stages. Investment will first be made in the core network, and the access network in the transitional stage could be a hybrid network, before full migration to NGN. Tritel will remain as a wireless operator, and the legacy network may eventually be replaced probably by WiMAX. Migration will not be difficult as it has no significant investments in legacy switches and transmission media.

As for the time scale, it is difficult to indicate at this stage in time.

Last but not least Tritel expects a level playing field to be in place during the migratory process whilst measures intended to create an environment conducive for migration such as implementation of beneficial fiscal measures in terms of tax rebates etc and low cost funding mechanisms/credit lines to assist operators in meeting investment needs should precede any concrete steps being initiated towards migrating to NGN.

Quest 8 : What is the impact of NGN on existing telecommunications networks and services revenues, in light of the overall benefit that may be derived from the introduction of NGN? Do you think the TRCSL should play an active role in the migration to NGN? If yes, what measures should the TRCSL take during the migration and in the course of the long-term adoption of NGN technologies and services?

Ans: The overall benefits will be the savings in costs and new revenue streams to operators that are expected in an NGN environment.

The most effective role TRCSL could play in the migration process is to develop and implement an effective regulatory framework with clearly laid down technical standards

for migration backed by strict enforcement. TRCSL should directly intervene and supervise interconnection to ensure a level playing field. This could even come in the form of a national interconnection hub for NGN supervised by the TRCSL, or by an independent body as a part of the public domain.

Question 9: What are your preferred protocols, architecture and interfaces for interconnection with the PSTN, other NGNs, and with international networks (voice and Internet)? Please describe Public Consultation on Policy & Regulatory Framework for Next Generation Networks (NGN) [in detail the associated timeframe for each of your choices, in relation to your overall migration roadmap described above.

Ans: The specific options are still under consideration and no firm answers can be given at this stage.

Question 10: Do you envisage any general issues in relation to NGN interconnect? In particular, do you envisage any issues in relation to current peering arrangements?

Ans: Yes. We see issues relating to interconnect settlements, and in particular technical and commercial issues in interconnecting PSTN and VoIP

Question 11: Please describe any experiences that your company has of an Internet exchange point in Sri Lanka or elsewhere. Do you foresee that your company will have an increased reliance on an IXP in the future, for Internet applications including voice? If so, are there any roadblocks to such usage in Sri Lanka today? If so, please describe those roadblocks and the means to overcome them.

Ans: We do not have any current experience but we do see a need for these facilities in the future.

Question 12: Do you believe that the establishment of a national body to standardise interconnection between NGNs is required in Sri Lanka? If so, what do you think would be the best governance model for it?

Ans: Yes, we see a need. It should be an independent body comprising of professionals in the field. It should be an expert group to advise TRCSL on all technical and other issues and with powers of its own. But the TRCSL will be the legally empowered body to take the final decisions

Question 13: Do you believe that the TRCSL should mandate that operator should put in place equipment to monitor its network performance in terms of delay, jitter, packet loss and bit error rate for different classes of service?

Ans: Yes

Question 14: Do you believe that other network performance parameters such as network availability should also be monitored by the TRCSL? Please use examples to illustrate your answer.

Ans: Yes

Question 15: If you answered yes to the previous questions, do you believe that the national standardisation body should take responsibility for specifying what should be monitored?

Ans: Yes

Question 17: Please comment on the need for revisions to numbering plans for new services, and the need or otherwise for non-geographic codes recognizing increasing user nomadicity?

Ans: To ensure access to numbering resources and ensure that numbering, naming and/or addressing schemes encompass legacy, transitional and NGN services and associated directory services.

Question 20: How important is it for you that a subscriber can keep their current phone number when migrating from PSTN to NGN? Do you think that a change in phone number may be a barrier for the adoption of NGN services?

Ans: This could cause issues to some subscribers. We consider that number portability is important under NGN

Question 25: Do you see value in maintaining a two-tier regulatory structure (facilities based and service-based licensing) to accelerate growth of the Sri Lankan telecoms industry particularly in light of NGN? What do you see as the most significant advantages and disadvantages of such an approach in Sri Lanka, and what roadblocks do you see to its implementation?

Ans: Yes we see a value. It will better utilise NGN resources, avoid replicating networks, improve value addition to products, and offer lower prices to consumers. In a two-tier structure there is likelihood that facility based network operators may lose a part of their revenues to service based operators who would invest little in NGN networks. However this could be obviated by the execution of policy measures to offset any potential adverse impact this may create to mainstream operators.

Question 29: Please comment on whether a new set of interconnection rules should be promulgated, or whether the existing Interconnection Rules 2003 should be amended to provide for interconnection in IP based networks.

Ans: A new set of interconnection rules must be promulgated. It should ensure no discriminatory behavior, define parameters of interconnection in a multi-service environment, and revision of charging principles.

It is also our view that NGN technology offers a huge opportunity to set up a central interconnection hub where each operator could interconnect via a single access point, as against multi-lateral interconnection. This has many advantages.

Question 31: Do you think that further regulatory measures should be taken to promote competition in the core network in Sri Lanka? If so, which parts of the core network are most important to promote entry and competition in retail markets? Will these measures have an impact on NGN network investments?

Ans: Yes. The regulatory measures should be to ensure that open access environment in the core network is not hindered by any anti competitive practices. The most important part in the core network to promote competition in the retail market is the service layer.

If there is level playing field and no distortions in the competition model, we feel that these measures will not adversely affect NGN investments.

Question 34: Do you believe that new charging arrangements should be imposed for NGN interconnection? Do you believe that interoperability standards need to be imposed for NGN networks? Should these new regulations be imposed on all operators, or only dominant operators?

Ans: Yes. New charging arrangements for NGN interconnection will be necessary. We think that standards should be imposed on all operators. Regulatory considerations include mandating standards and interoperability between operators and new entrants to ensure no delays in the introduction of new services and providers in retail markets and to coordinate standardization activity.

Question 35: Would it be appropriate to apply tariff control only to dominant operators? Please explain, and provide relevant examples where tariff review may be needed, or where it is not needed and imposes unnecessary regulatory burdens.

Ans: Tariff control is appropriate to the dominant operator only. An effective set of anti-competitive rules enforceable by law should be put in place to regulate the entire sector, so that undue day to day tariff regulation can be avoided.

Question 38: Do you agree that a change in the current licensing regime needs to be introduced to realise the full benefits of NGN? If so, what licence changes need to be introduced in the transitional period to NGN? Do you have a view as to what changes in licences you would favour at each milestone of the transformation to NGN?

Ans: A change is definitely required. The move should be finally towards a converged license, which is technology and service neutral to all facility based operators (including

Tritel). Accordingly a step by step process should be implemented in designing licensing conditions during the transitional period as well with ultimate goal of evolving a fully fledged NGN License. If it happens that way, we do not see adverse impacts in such a move.

Question 39: Do you agree that the TRCSL should take the lead in requiring all licensees in the NGN to adopt compatible/similar technical standards? Or should this be left to the determination of market forces?

Ans: We favour compatible /similar standards. Market forces are not very developed in this country and therefore cannot always be relied upon.

Question 39: Do you agree that the TRCSL should take the lead in requiring all licensees in the NGN to adopt compatible/similar technical standards? Or should this be left to the determination of market forces?

Ans: We favour compatible /similar standards. Market forces are not very developed in this country and therefore cannot always be relied upon.

Question 40: What consumer protection measures do you consider to be important for the migration period from PSTN to NGN?

Ans: Protection Issues that require attention include but are not limited to, quality of service, priority access to emergency services; the provision of location information; number portability, operators' liability; privacy and security. Regulators around the world have started industry wide consultations of the consumer aspects of NGN migration to ensure that consumers are in no way adversely affected.

Confidential

Additional Issues not covered in the questionnaire

Tritel wishes to place on record the following, being the only facility based licensed payphone operator in Sri Lanka, and as an operator with a social obligations to serve unserved and underserved segments of the population.

i) Voice-centric payphone service alone will not be viable under NGN

NGN will change Tritel's entire business model, as voice-centric payphone business alone will not justify or support its investments in NGN migration. For a viable business model under NGN, it therefore has in its plans a multi-service portfolio for a wider customer base that includes not only payphones, but other fixed and mobile services, including data and multimedia in a converged service scenario. It also has plans of serving niche markets such as corporates, enterprises, knowledge hubs, hot spots, telecentres etc. equipped with such services.

ii) Tritel has future plans in taking NGNs to rural and under-served areas

Tritel will also focus in future on taking NGN services to rural sectors and unserved areas, as it did with payphones in the past. In this manner Tritel wishes to be an important player in meeting USO and UA obligations as goals set out by the ITU, and the Millennium Goals in a knowledge based economy, and especially in promoting public access to broadband facilities.

iii) Tritel has interest in full fledged Facility based NGN license, and required spectrums to carry out upgrades

Tritel also requests that it be issued with a service and technology neutral facility based NGN license at an appropriate future date, when NGN migrations are mandated, to offer converged services by migrating from a purely a payphone operator to a full fledged NGN operator. It also requests access to future requirements of spectrum to carry out the necessary upgrades to NGN in the access network.

(iv) Tritel has also interest in Service Specific license conditions to enable re-sell others products to deliver payphone related social obligations

Under the NGN environment, Tritel still wishes to retain and fulfill its social responsibilities in providing public access to un-served and under-served sectors, and for this purpose, in addition to a facility based license, it also requires the license flexibility to provide specific NGN services selectively in an Open Access environment, and even to selectively re-sell , others' facilities, in order to fulfill its public access responsibilities.

Finally, we wish to highlight that , Tritel could not make any ROI from its investment on establishing the CDMA network due to many issues that were beyond its control such as lack of interconnection and a numbering plan which hampered its business plan on the execution of an island wide roll out. This led to colossal losses in terms of loss of revenue and market share in addition to meeting many other unforeseen costs which Tritel had to incur in implementing stop gap measures in the interim period to deploy its services through another operator over the years. Therefore Tritel's case assumes unique significance and should be viewed in the context where it is placed in a comparatively disadvantageous position vis-à-vis the other operators who have been able to reap attractive commercial returns on their capital investments. Tritel requests TRCSL to take this position into special consideration in executing its overall plan to ensure that Tritel's future investment risks in NGN scenario are substantially mitigated through adequate measures and subsidies.