

Q1	Question	Comments
1	Do you think that 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	<p>Yes. Some of the benefits are ;</p> <p>Reduction in CAPEX due to integrated and efficient IP based technology (packet- based network)</p> <p>Reduction in OPEX due to transmission cost savings, due to less power consumption and less space occupation in new NGN MSC (R4) relative to old MSCs and due to less operational and maintenance cost.</p> <p>Ability to offer increased range of services.</p> <p>More flexibility, increasing market penetration by offering personal service customization and management.</p> <p>Single network layer for management.</p>
2	Do you think that 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?	<p>Suggest the following additional steps related to development of</p> <p>Open Access Network development and sharing platform among operators</p> <p>Power capacity requirement for access network in some rural areas.</p> <p>Need additional effort to spectrum Management.</p>
3	Do you foresee any negative consequences of the migration to NGN for the Telecom sector or broader society? If so, please describe them, along with any steps that the TRCSL could investigate to mitigate or avoid those consequences.	<p>QoS related issues may arise</p> <p>Quality of service (QOS)</p>
4	Do you see any issues or opportunities relating to access to, and use of spectrum now? Will issues and opportunities potentially	<p>Much efficient and proper usage of spectrum management may be required than handled currently.</p>

	emerge from telecommunications and broadcast convergence?	
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 realizing benefits from such services	These are opportunities. GOS service levels must be defined in the case of voice quality to restrict the poor quality of interconnection levels. Mainly there should be acceptable limitation levels for data compression.
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?	Yes. Merger will be particularly required in case of handling multimedia services
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	Hutch has installed and commissioned 2 new high capacity NGN MSCS of R4. It is possible to convert to NGN R5 by hardware and software upgrade. These MSCs will cover the Colombo and greater Colombo areas currently supporting EDGE service and easily be upgraded to 3G by upgrading the access network (AN) part. Part of the base station (BTS) hardware needed to be replaced with new version of NGN-R4.
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	We expect positive impact on revenues and high quality service offering. TRCSL should play a role of a facilitator to ensure smooth and effective migration to NGN. We would recommend to have standard operating procedures and industry standards..

	adoption of NGN technologies and services	
9	<p>What are your preferred protocols, architecture and interfaces for inter-connection 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) 55</p> <p>in detail the associated timeframe for each of your choices, in relation to your overall migration roadmap described above.</p>	The preferred protocols are SS7 & IP
10	<p>Do you envisage any general issues in relation to NGN interconnect? In particular, do you envisage any issues in relation to current peering arrangements</p>	Unable to comment without studying NGN architecture of other Operators. However secondary issues may arise.
11	<p>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.</p>	Difficult to comment at this stage.
12	<p>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?</p>	No requirement for a national body to standardize interconnection between NGN Operators. Should be able to operate on mutual consensus among operators.
13	<p>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</p>	As it is in the best interest of the operator to provide a reliable effective and secure service the operator will definitely monitor their network quality in terms of delay, jitter, packet loss and bit error rate for different classes service. therefore it is not required for TRCSL to mandate that operator should

	rate for different classes of service?	put on place to monitor its network performance in terms of the same. However it is advisable to ITU define standards in levels.
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.	No. Each network should be able to perform based on their business plans.
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?	Not Applicable
16	What are your views on security in NGN networks? In your view does current technology, such as firewalls, provide adequate security to NGNs	Security standards need to be reviewed periodically as there can be new threats and security levels require to be analyzed accordingly.
	Do you believe that there needs to be national NGN security policies and standards	The responsibility of NGN security should be with the respective operators.
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 nomadcity	Revision of numbering may require. depending on the services offered on NGN.
18	How do you think the harmonization of naming and numbering of different networks should be addressed? At what stage of your migration plan will the harmonisation of naming and numbering be required? Do you think a national standardisation authority (mentioned in Section 3.5.2) should be in charge of implementing the harmonisation of the naming and numbering across the country? Do you see a future need for international	Same as above. Depends on the services offered by operators on NGN.

	coordination for any or all of Sri Lanka's naming and numbering schemes	
19	Do you see ENUM as a fundamental stepping stone to true VoIP services? If yes, do you believe that ENUM should be implemented centrally by a third party (e.g. a government agency)? If no, what are your alternative plans to provide IP address look-up services (e.g. implementation of individual databases)?	Yes. We do not believe that ENUM should be implemented centrally by a third party.
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?	It is important to maintain the current phone number to a certain extent while facilitating technology transformation.
21	Do you plan to adopt IPv6 in your network? If so, when will you do so in relation to the milestones describe in your transition to NGN? What are the key transformation phases involved in migrating your IP network to IPv6?	Yes. This should be a gradual process with the collective support of Other Operators and the suppliers to the NGN operators
22	Please describe your views on the competitiveness of the markets for voice and data services today, including both domestic and international leased lines. What are the current roadblocks to increasing the competitiveness of these markets, if any? What regulations, if any, would you recommend to overcome these roadblocks	Free market policy to allow operators to operate on market dynamics and customer requirements.
23	Please describe your current network architecture. What are your current plans to implement NGN networks and/or offer VoIP or other IP services? What are the roadblocks that	Hutch has installed and commission 2 new high capacity NGN MSCS of R4.It is possible to convert to NGN R5 by hardware and software upgrade. Theses MSCs will cover the Colombo and greater Colombo areas currently supporting

	<p>you perceive to that migration? What regulations, if any, would you recommend to overcome these roadblocks?</p>	<p>EDGE service and easily be upgraded to 3G by upgrading the access network (AN) part.</p> <p>Part of the base station (BTS) hardware needed to be replaced with new version of NGN-R4 .At the moment there are no plans for NGN-R5</p>
24	<p>Do you see asymmetric regulation as appropriate for regulating NGN in Sri Lanka? If so, what obligations should be imposed on the dominant operator(s) and the non-dominant operators? 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</p>	<p>We are not in favor of asymmetric regulation (1) Regulations may be imposed only to the extent of addressing corrective measure or failures.</p>
25	<p>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</p>	<p>We do not see the necessity in having a two tier regulatory structure assessing the current telecom environment.</p>
26	<p>Please propose any other specific amendments to the licensing framework to promote the growth of service-based competition for NGN. In particular, please identify any regulatory obligations that ought to be excluded from a service-based licence (i.e. Class Licence), citing detailed justifications.</p>	<p>The amendments may require to the existing License conditions to the extent of additional facilities and services under NGN.</p>
27	<p>Do you agree with the above proposal to sub-divide service-based licences into two</p>	<p>Too early to comment.</p>

	<p>tiers, i.e. 'standard' and 'simplified' Class Licences, based on the service offered? If so, which services should be subject to the light-touch 'simplified' licence, and why?</p>	
28	<p>What are your views on how USO should be implemented for NGN technologies. How should the funds be raised, and how should they be disbursed? Should they target basic voice services or advanced data services?</p>	<p>Indepth research and study should be done before the application of USO</p>
29	<p>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.</p>	<p>Rules may require amendments according to the new data traffic requirements.</p>
30	<p>Is there a need for a RIO to be offered by a dominant operator? Please identify the terms and conditions you would require in a dominant operator's RIO. Is there any need to change the regulatory approval process for RIOs</p>	<p>We don't perceive any need for such requirement.</p>
31	<p>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</p>	<p>No.</p>
32	<p>Do you think the introduction of wholesale access to the access network would benefit the consumer? What type of wholesale access would be most beneficial for Sri Lanka? Will these measures have an impact on NGN investments?</p>	<p>Unable to comment at this stage without proper frame work of the subject.</p>
33	<p>Do you agree with the</p>	<p>Yes. It is essential to maintain ITU standards.</p>

	<p>principles of net neutrality and technology neutrality for promoting service-based competition under NGN? If so, please provide suggestions for how to implement each principle. If not, please explain and provide any alternative or supplemental principles to consider. What impact, if any, will your suggestions have on incentives to invest and the ability to compete using NGN networks?</p>	
34	<p>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?</p>	<p>At the moment we don't see any requirement for change in charges for NGN interconnection.</p>
35	<p>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</p>	<p>This has no relevance to NGN.</p>
36	<p>What kinds of consumer protection do you see being necessary to serve the needs of consumers in the NGN environment? For instance, are there any limitations to the provision of emergency services by IP-based telecom services provided over the NGN? Please list these, providing details and examples where possible. Do you foresee any specific difficulties/challenges in complying with consumer protection requirements in the NGN environment? From the</p>	<p>Advance security measures may require to protect consumers.</p>

	consumer protection perspective, what additional obligations should be imposed on a dominant operator in the NGN environment	
37	Do you foresee any particular competition issues arising between NGN networks and services and legacy telecommunications networks and service? Are current regulations sufficient to restrain merger/acquisitions activities which may have an anti-competitive impact?	We do not foresee any competition.
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	A change in the License may require to accommodate new services.
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?	TRCSL may intervene to set only minimum standards in accordance with the ITU regulations
40	What consumer protection measures do you consider to be imported for the migration period from PSTN to NGN?	To conduct public awareness campaigns thorough media, enlightening the benefits of NGN.