



**Department of Telecommunications
Ministry of Communications & IT**

**ITU Forum of the Regional Working Group for
Asia & Pacific Region
“PROMOTING LOW COST ACCESS TO THE UNCONNECTED”
InterContinental The Grand Hotel, Barakhamba Avenue
New Delhi, on 3-5 April 2007**

RECOMMENDATIONS OF THE WORKING GROUPS

ON

- 1) ENHANCING LOW COST ACCESS,**
- 2) KEY CHALLENGES IN GROWTH OF SEAMLESS SERVICES,**
- 3) WIRELESS BROADBAND AND NGN – PLANNING, TECHNOLOGY AND MIGRATION**

Recommendations on Issues on Enhancing Low Cost Access

Working Group on Enhancing Low Cost Access
ITU Forum of the Regional Working Group (RWG) on Private Sector
Issues, Asia and the Pacific Region
3-5 April 2007, New Delhi, India

1. Technology neutrality is the right approach. Adoption of globally harmonized standards will help operators achieve inter-operability, economies of scale, etc.
2. Every technology has a role, let the market/operator decide.
3. Disassociating the USO regime from the access regime should be considered over time. USO is a subsidy and it should be administered in an independent and transparent manner.
4. Governments/ Regulators must consider ways & means of utilizing the unspent funds in the USO account.
5. Infrastructure sharing is extremely desirable to enhance low cost access to rural areas.
6. In addition to passive, active infrastructure should also be shared to the extent that it is technically possible. This will reduce costs further.
7. There was no clear view on whether infrastructure sharing be mandated or not. While some felt that it should be mandated, others felt only critical aspects be mandated & still others felt that it should only be encouraged & incentivised.
8. Independent infrastructure providers should be encouraged.
9. There should also be efforts to leverage existing infrastructure available with utilities. Right of way regime may be liberalized.
10. Lacunae in other infrastructure like power may be addressed by looking at alternative power sources like solar, bio-fuels, etc.
11. Regulation should encourage new ways of service provisioning such as MVNO models, managed services, etc.
12. Different technologies can be used for promoting broadband in rural areas.
13. Available infrastructure should be used to the maximum.

14. Content development, local language applications are essential for proper utilization of broadband connectivity. Availability of this would help in augmenting growth of broadband in rural areas.
15. Mobility is desirable; however nomadic usage is the key.
16. Wireless is necessary and often the only practical way to reach out to rural areas in a cost effective & expeditious manner.
17. An anchor user which could also be the Government or a large company can play a key role in aggregating demand by creating a point of presence in the rural areas, from where local entrepreneurs can extend service.
18. Shared access to voice / data is extremely relevant & desirable for rural communities.
19. For enhancing rural access, mere connectivity is not enough. There has to be an application at the other end. For the success of the rural business model, it is important for the service provider to consider what the customer wants in terms of local content, local language, voice/data, etc.
20. On the issue of whether coverage / service should be directed or market driven, the Group recommends that service providers should be incentivised rather than obligated to enhance coverage in rural areas.
21. While it may be desirable to consider new entrants and niche operators, these would necessarily entail a review of licensing and regulatory regimes.
22. Interconnection is a crucial element for enhancing rural access. But the IUC charges need to be reviewed periodically in light of changing costs, traffic patterns, etc.
23. Use of an asymmetric interconnect regime can have regulatory, administrative & practical implications & any efforts to introduce this must be preceded by a thorough analysis.
24. Technological developments have gone a long way in bringing down the cost of handsets, which has improved penetration in the rural areas.
25. Cost of entry is one of the biggest barriers for the rural consumer. Operators need to breach this barrier by introducing innovative bundling schemes to enhance rural access. Further, the taxation regime should not constrain bundling of handsets.
26. While cost of handset is important, it is also necessary to consider total cost of ownership.
27. Taxation regime should not stymie growth.

Recommendations on Issues on Key Challenges in Growth of Seamless Services

Working Group on Key Challenges in Growth of Seamless Services
ITU Forum of the Regional Working Group (RWG) on Private Sector
Issues, Asia and the Pacific Region
3-5 April 2007, New Delhi, India

Health Effects

1. Extensive international research till date has shown no conclusive evidence of any adverse health consequences as a result of EMF exposures upto the limits specified in ITU Recommendation K.52.
2. The meeting however recognizes that public concern exists about EMF exposures. In view of large amount of scientific evidence (existing today) indicating an absence of significant adverse health effects, the Working Group recommends a cooperative approach lead by national authorities, with the support of international bodies (such as the ITU, WHO), national health organizations, industry and representatives of the public in educating stakeholder groups, including consumers. ITU also should take an active role in this process.
3. In line with ITU Recommendation K.52 and the WHO International EMF project:
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 - 3.1 Countries should adopt the ICNIRP limits for handsets, base stations and other RF sources.
 - 3.2 Countries should adopt ICNIRP based national guidelines for EMF exposures, as written and shall not include additional measures that are inconsistent with ITU and WHO recommendations.
 - 3.3 Guidelines should reflect the generally accepted global and regional approaches of other countries, in particular:
 - Guidelines should avoid using any kind of “alarmist” language, which could create unwarranted concern/fear amongst consumers and general public.
 - Authorities in all countries should recommend manufacturers to use generally accepted safety language and SAR disclosure procedures used globally.
 - The Mobile handset manufacturers should declare SAR value for each handset model.

4. EMF exposure guidelines and base station siting policies should be applied in a non-discriminatory manner to all radio-communications facilities.
5. The guidelines for base station location, construction and operation should be transparent to all stakeholders.
6. The compliance of wireless communications base stations can be determined in many situations prior to installation through calculation procedures, such as those in K.52. Conditions requiring post-installation measurement or routine surveys are of limited value, but may assist in confidence building.

Disaster Management

1. Pre Disaster Management
 - Regional cooperation called for at the December 2006 ITU-ESCAP workshop on disaster communications should be implemented to help countries prepare for disasters.
2. During Disaster
 - All existing radio/telecom networks designed for emergency communications should be well established for immediate implementation/use in response to a disaster, without any additional approvals required.
3. Post Disaster Management:
 - ITU is requested to help the regions to understand the benefits of TAMPERE convention to their disaster response capabilities.

Recommendations on Issues on Wireless Broadband & NGN – Planning, Technology and Migration

Working Group on Wireless Broadband &
NGN – Planning, Technology and Migration
ITU Forum of the Regional Working Group (RWG) on Private Sector
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1. There is an urgent need for an enabling and conducive environment to promote migration to NGN. A coordination forum for knowledge sharing and capacity building needs to be established to resolve the regional issues and focus on regional needs like bringing awareness, conducting pilot projects, interconnection, interoperability, etc.
2. Policy and regulation should evolve to facilitate large scale NGN deployment to bring the benefits of emerging technologies to consumers.
3. It is desirable to have a unified National standardization agency that formulates standards within the framework of international standards for NGN of the ITU.
4. Need for nationally centralized Lawful interception and security monitoring for all services offered by NGN should be considered.
5. Provision of emergency communication services in NGN environment must be studied and relevant proposals should be passed to the relevant ITU Study Groups.
6. Numbering and portability issues for NGN should be studied further.
7. Time frame for migration to NGN being a commercial issue should be left to the market forces, without intervention by the Licensor/ Regulator.
8. Appropriate QoS standards for end-to-end services should be established as well as monitored by the Regulator/ Licensor.
9. Under the co-ordination forum suggested at item 1, there should be sub regional working group under RWG to study NGN planning tools and selection guidelines. The conclusions and results from these should be submitted to the relevant ITU Study Groups.
10. Technological neutrality should be maintained in access and core networks keeping in mind the ground realities of the rural environment (difficult terrain, lack of reliable power availability, etc).

11. There is an urgent need for facilitating Infrastructure sharing to make rural communication affordable.
12. Governments in the Asia Pac regions should formulate firm plans for rural communication taking into account the outcome of WSIS to facilitate early deployment of NGN in rural areas.
13. In addition, Authorities should consider giving free right of way for optical fibres and liberalized permission for installing towers. Duties and levies should be rationalized in line with international practices especially for the Asia Pac regions.
14. For faster roll out and penetration of Wireless Broadband adequate availability of spectrum should be ensured in a timely manner; spectrum should be globally harmonized to provide economies of scale.
15. Low cost standardized, user-friendly devices at customer premises need to be developed.
16. Operational issues like network management in NGN scenarios and integration of networks should be addressed well in advance with contribution to relevant international standardization bodies.
17. Consumers should be made aware of the security issues and related QoS of NGN networks.
18. Training related to NGN should be carried out under ITU HRD program and Asia Pac Centre of Excellence. In addition, contribution to the development of handbook on relevant NGN related information should be provided by the Sector Members in a time bound manner.