Contribution from Pakistan Telecommunication Authority

ESSENTIAL REGULATORY PRINCIPLES FOR PROMOTION OF UNIVERSAL ACESS TO INFORMATION AND COMMUNICATION TECHNOLOGIES

BACKGROUND The development of comprehensive mechanism for provision of telecommunication services to under-served areas has been considered by many countries in terms of overall benefits to the society. Countries of the World have used various funding approaches for fulfilling universal service obligation (USO). The underlying objective has been to open economic activity for the remote regions through provisioning of basic telecommunications services. There are still great inequities in the distribution of telecommunications access throughout the World. One-fourth of all countries have a teledensity below one, with more than half of Asia falling in this category. While privatization and competition are frequently cited as triggers of increased access, some form of universal service policy is an underlying requirement to ensure significant and effective improvement in overall service expansion. Universal Service is commonly understood to be a concept that places obligations on governments, operators and service providers to implement policies supporting the delivery of some level of basic telecommunications services throughout the territory of their countries. While in many countries this is more appropriately termed "Universal Access" attempting to define broadly a policy leading to widespread provision of access to the telephony network at affordable rates with a certain degree of uniformity.

The Government of Pakistan has designed the market liberalization policy to maximize the commercial availability and coverage of telecommunications networks and services in Pakistan. The following are the major principles of Pakistan's Universal Service Access to Information and Communication Technology:

1. <u>UNIVERSITALITY</u>

Everyone everywhere should have the opportunity to participate in the global information society and no one should be excluded from the benefits it offers. Access to ICT infrastructure and services constitute one of the basic objectives of our telecommunication policy. The provision of universal and affordable access to ICTs and the development of ICT applications and services especially in underserved urban rural and remote areas remain one of the biggest challenges for bridging the digital divide.

This can be defined in terms of distance or travel time to a telephone, or availability of a telephone in every population center or political unit or a specified size, or in key community facilities such as health centers. Telecom should be used as a mean to reduce social and economic differences but respecting individualism and cultural multiplicity. This divide is increasingly shaping the foreign policy. The strategy shall be consist to full

coverage and access to telecom services despite their location and resources by integrating telecom systems.

2. <u>INFRASTRUCTURE DEVELOPMENT AND AFFORDABLE ACCESS TO</u> <u>ICT SERVICES:</u>

Telecommunication infrastructure development includes urban trunk and long distance networks. Priority and emphasis must be given to rural networks and those serving remote and isolated areas. In this respect wireless communication including radio and satellite services could offer opportunities and economical solutions. The development and integration of the Internet is another key element, which in conjunction with telecommunications forms the dual basis for the integration and development of the infrastructure for the information society. Affordable and accessible terminal equipment for the end user is an essential part of the infrastructure of the information society and is essential in overcoming the digital divide; widespread adoption of international standards would favour broader deployment of ICT infrastructure.

The affordability addresses the costs of installation and service as a percentage of household income, although for community-based services a broader definition must be used. While prices in general should be based on the underlying costs of providing service, in defining universal service policy goals it is important to define how to cover the higher costs of service to more remote or difficult to reach customers without unduly disadvantaging them through higher prices.

3. <u>SUSTAINABILTY & TRANSPARENCY</u>

The Government recognizes, however, that even with market liberalization, and under strictly commercial considerations, there may exist certain population or geographical areas that would remain un-served or relatively underserved. The Government's universal service policy is designed to ensure that these designated populations and geographic areas receive adequate service in a sustainable manner as resource permits. Such USO model be selected and implemented which may help in sustaining capital expenditure incurred by the operator (licensee) as well as economically viable for the customers. Ensure transparent selection of priority areas for qualifying USO funding.

4. <u>CONFIDENCE AND SECUTRITY IN THE USE OF ICT</u>

The information society must be developed in an environment of trust for all stakeholders. The development of technical standards can contribute to this goal. The potential of ICTs to empower people is enormous. ICT can help to build capacities and skills, create more employment opportunities, assist small and medium sized enterprises and increase participation and informed decision making at all levels particularly in case of disabled peoples, women and youth and indigenous people. It is considered necessary to prevent the use of information resources or technologies for criminal or terrorist purposes. In order to raise awareness of the importance of information and

communication network security and of the resources available to the international community on the subject, appropriate mechanism must be set up. Proper assessment of information security including harmful interference with or misuse of information and telecommunications systems and information resource. Improving the exchange of technical information and international cooperation in information and communication network security. In order to bridge the digital divide there is a need for more participation of developing countries in research and development in the field of ICTs for developing technical and scientific self-reliance.

5. ICT AS A TOOL FOR ECNOMIC AND SOCIAL DEVEOPMENT

In order to increase awareness access and use of ICTs specific long term capacity building and training programmes need to be established. Human resource development, education, training, knowledge and expertise transfer are essential in order to assist developing countries in strengthening their human institutional and organizational capacity. Many developing countries need to establish more competitive ICT markets, therefore they need to mobilize investment both from home and abroad to meet the rising demand for services. Developing countries should focus on establish sustainable Telecommunity centers.

5. <u>STANDARDIZED SERVICE QUALITY</u>. Service quality is multidimensional in nature. It depends on the availability and reliability of the network. Other areas that impact strongly on service quality are operator services, billing, repair and the handling of complaints. The QoS for USO shall be devised in terms of dial tone access, fault frequency and repair time. Further it is added that standard shall be maintained up to the desirable level where the service shall not be deteriorated.