



# INTERNATIONAL TELECOMMUNICATION UNION TELECOMMUNICATION DEVELOPMENT BUREAU

**WORLD TELECOMMUNICATION DEVELOPMENT  
CONFERENCE (WTDC-98)**

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*For action*

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**Agenda item: 3.1**

**COMMITTEE B**

## **Pakistan (Islamic Republic of)**

### **DRAFT NEW QUESTION**

#### **1 Statement of the problem or situation**

The telecommunication industry is growing and developing at a rapid pace with a number of wireline and wireless telecommunication systems being in operation and available all over the world. The telecommunication technology at hand is envisaged to span all forms of communication and has completely altered the modes and means of information exchange. The wireless-based services have now started competing with the fixed-wireline services. Modern technology in radio-based systems has enhanced the capabilities and functions of the mobile communication systems. The wireless in local loop technology is helping in developing telecommunication systems at much lower cost at comparable distances to fixed-wireline services. The satellite-based terminals are getting cheaper and lighter. The ever increasing capacity requirement for data communication networks and the Internet has helped in the development of the information superhighway. The world has seen the emergence of new technologies in the last decade such as global mobile communication systems by satellite (GMPCS) systems (e.g. Iridium, Globalstar, ICO, etc.), global broadband communication satellite systems (e.g. Teledesic, Skybridge, Celestri, etc.), wireless in local loop technology/systems, Internet and Internet-based services, cellular systems/standards (such as GSM, CDMA, WCDMA, etc.), micro-cellular systems (PCS), WDM/EDFA based networks, and many other new technologies and systems.

In view of flowering of technology, the world is lucky to have so many choices and different technologies can serve the different geographical and topographical distribution of different economic layers. Nonetheless the sustainability of technology is closely linked with the building up of know-how and maintainability, such objectives can best be served by some sort of standardization. So out of the diversity, the policy-makers, regulators and operators should be able to make a selection for the appropriate technology meeting their needs after accounting for all the variables. It is understood that market forces also help in bringing particular systems in the lead just like the survivor of the fittest but such a development occurs only after trials and experimentation. With careful analysis and planning exercises, it may be possible to avoid any unnecessary investment which even if made by a private operator is at the cost of the subscriber.

Therefore it has become cumbersome for developing countries to select, in view of the already in operation telecommunication systems and the amount of investment needed on development of such infrastructure, which technology will serve the long-term needs of the country. Notwithstanding financial constraints, the developing countries at the same time, do not need to adopt these technological advancements to keep pace with the developed world. The developing countries are thus faced with the dilemma of choosing, from amongst the different wireless-based communication technologies, the one which fulfils at least the following additional requirements:

- cost-effectiveness and affordability;
- spectrum availability and requirement;
- system capacity and scalability;
- roaming facilities;
- security and monitoring;
- technology and know-how transfer.

In view of the preceding paragraphs, it has become essential to focus on the core issue of selecting appropriate strategy for developing countries. The strategy should act as a catalyst towards growth and development of the country in general and the telecommunication sector in particular. Such a study should primarily focus on the economic and technical consideration for adopting a preferred approach within the available resources.

## **2 Question proposed for study**

**PAK/138/1  
ADD**

### **DRAFT NEW QUESTION [PAK-1]**

#### **THE FORMULATION OF A STRATEGY FOR DEVELOPMENT OF TELECOMMUNICATION NETWORK IN DEVELOPING COUNTRIES**

The World Telecommunication Development Conference (Valletta, 1998),

*considering*

- a) that the number of options for provision of basic and mobile telecom services have multiplied in number in view of the rapid evolution of telecommunication technology in general and wireless-based services in particular;
- b) that the investment in development of telecommunication infrastructure in developing countries is a costly process;
- c) that such a strategic study will be useful for the regulators, policy-makers and telecom operators of the developing countries,

*recognizing*

that the advantage of the explosion of technology is for the benefit of subscribers in developing countries,

*taking into account*

- a) the position of the developing world regarding its capability to standardize, maintain and sustain so many new systems and technologies;
- b) the fact that wireless-based services are now competing with the fixed-wireline services, e.g. telephony;
- c) the situation that evolution of new services is still continuing particularly the emergence of Internet Telephony as an alternate to the basic service;
- d) the ever increasing demand for frequency spectrum from both already in operation and new wireless-based systems/services,

*noting*

- a) that ITU and its various sectors are playing a leading role in the study and standardization of various new services;
- b) that ITU is already working on the development of new emerging technologies such as future public land mobile telecommunication systems (IMT-2000), global mobile personal communication by satellite (GMPCS) systems, Internet and related services, etc.,

*resolves*

that it has become essential to focus urgently on the core issue of selecting appropriate strategy for developing countries in light of the above,

*further resolves*

that such a study should focus on the economic and technical consideration for adopting a preferred approach within the resources available including those offered by new environments.

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### **3 Description of the expected output**

It is proposed that a study be undertaken focusing on the economic and technical consideration for adopting a preferred approach by the developing countries and a report be prepared in this respect.

### **4 Required timing of the expected output**

By the end of the year 1999.

### **5 Proposers/sponsors**

The Islamic Republic of Pakistan.

### **6 Sources of input required in carrying out the study**

The study will require input and contributions from administrations, regulators, policy-makers, operators/service providers and industry, particularly from the developing countries.

**7 Target audience for the output**

**a) Indicate expected types of target audience, by noting all relevant points on the matrix**

	<b>Developed countries</b>	<b>Developing countries</b>	<b>LDCs</b>
Telecom policy-makers		*	*
Telecom regulators		*	*
Service providers (operators)		*	*
Manufacturers	*	*	*

**b) Target audience**

The output will be useful for the regulators, policy-makers and operators particularly in the developing countries.

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