Question 19/2: Strategy for migration from circuit-switched networks to packet-switched networks

1 Statement of the situation

Most of the existing switching networks especially in developing countries are circuit switched based type. Convergence of voice, data and video requires packet based switched networks.

Lack of resources in developing countries could lead to the delay in implementing packet based switched networks.

ITU-D can play an important role in assisting Member States and Sector Members in developing countries for the smooth migration from existing networks into next generation networks.

2 Question or issues for study

- 2-1 Trends of technological development in telecommunication networks.
- 2-2 The role of connection oriented networks and connectionless networks in backbone networks.
- 2-3 Procedures for dimensioning networks with taking into account the behaviors of different networks
- 2-4 Considering the Operation Administration and Maintenance (OA&M) parameters.
- 2-5 Study and identification of following items:
 - 2-5-1 network topology.
 - 2-5-2 signaling adaptation.
 - 2-5-3 required interfaces.

3 Expected Output

A guideline for smooth migration from circuit switched networks to packet switched network and introduction of recommendations in this regards.

4 Timing

The course of the next ITU-D study period with a mid-term guide by mid-2004.

5 Proposes/Sponsors

All developing countries, in particular their telecom operators.

6 Sources of input

- 6-1 Results of studies carried out by ITU-T study groups and other relevant organizations.
- 6-2 Visions of national/regional organizations in developed countries.
- 6-3 Experiences from administration of developed and developing countries.
- 6-4 Experiences from telecommunications manufacturers.

7 Target audience for the output

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

	Developed countries	Developing countries	LDCs
Telecom policy makers	Yes	Yes	Yes
Telecom regulators	Yes	Yes	Yes
Service providers (operators)	Yes	Yes	Yes
Manufacturers	Yes	Yes	Yes

b) Target audience

The main beneficiaries of this study will be the operators, regulators and manufactures from developing and LDC countries.

The strategy of migration will be the tools for senior and middle management personal of Members States and Sector members.

c) Proposed methods for implementing the results

The strategy will be presented and discussed during meetings, at regional or national conferences. The achieved results should be a basis for preparing lectures and presentations for workshops and seminars organized by ITU in developing countries.

8 Proposed method of handling this Question or issue

The outputs of the Question will be prepared as results of experiences communicated in the form of practical documents submitted in a convenient format.

a) How? Indicate the suggested handling of the proposed Question or issue

1) Within a **study group**

2) In other ways by an **expert group**

b) Why? Explain why you selected the alternative under a) above

The study of this Question involves the review, analysis and assessment of the experience of many countries with regard to the strategy towards Next generation Networks - NGN.

Work of this nature, involving as it does the careful collection of experiences and opinions from many countries, can be carried out most effectively and promptly by a group of experts. As an alternative, if the formation of a group proves to be impractical with regard to a particular issue, some of the work could be carried out by outside consultants.

9 Coordination requirements of the study

Close coordination is required with the programmes and the study groups of ITU.

10. Other relevant information

To be determined.
