Question 12-3/1 — Tariff policies, tariff models and methods of determining the costs of services on national telecommunication networks, including next-generation networks

1 Statement of the situation

Traditional networks have increasingly been replaced, or are in the process of being replaced, by so-called next-generation networks (NGN). According to analysts, NGN networks, on account of their specific architecture, do not present the same cost structure as traditional networks. In particular, the majority of the costs are fixed costs that are independent from usage; furthermore, in core networks, costs have virtually nothing to do with distance, and IP tariffs will of necessity have to take account of these characteristics.

Traditional regulation of telecommunication service tariffs focuses on the wholesale prices of each service, with fixed voice, mobile voice and data being handled separately. Where NGN networks are concerned, service offers are based around the cohabitation on one and the same infrastructure of fixed, mobile and high-speed flows, whence the need for the regulator to reason in terms of a global service offer.

By adopting NGNs, developing countries can derive considerable economic and social advantages, particularly in terms of universal service access for the poorest segments of the population.

The low level of data communication in the developing countries can likewise be remedied by leveraging the potential of NGNs, making it important to envisage solutions that will enable those countries to expand significantly the volumes of data exchanged at the national level.

Lastly, it seems urgent for site-sharing strategies to be developed to allow operators to bring their networks into service at low costs, which should allow users in developing countries to access the services at lower prices.

2 Question for study

On the basis of the results from ITU-T Study Group 3 and in collaboration with other groups specializing in NGNs, the Rapporteur Group should pursue all work on cost models and continue work on the regulation of dominance undertaken during the period 2006-2009. In addition, given the importance of this subject, and in the interests of elaborating new methods for determining telecommunication service charges and developing guidelines for effective tariff regulation tailored to the new NGN environment, it is important to press ahead with work relating to the economic and tariff aspects of NGN, including their effects on consumers, and the following questions should be studied:

- a) Effects or benefits of NGN migration for all stakeholders, including consumers.
- b) The cost structure of NGN services compared to that of services provided over traditional networks.
- c) New charging methods for services provided over NGN networks and practical case studies.
- d) Regulating the tariffs for telecommunication/ICT services provided over NGN networks.
- e) Ongoing studies on the economic investment plan models used by countries experienced in the transition to NGN, in the interests of providing guidance to developing countries.
- f) Ongoing study on the financial and tariff impacts of site sharing for mobile terrestrial services, broadening the study to embrace all telecommunication infrastructures.

3 Expected output

The results obtained from study of the issue should enable developing country regulators and operators to obtain accurate information on the subject of existing networks and NGNs, in particular infrastructure costs, the different services that may be provided over such networks and methods for determining the corresponding charges. The study will, moreover, result in the elaboration of clear and precise guidelines designed to enable developing country regulators and operators to make a successful transition to NGN.

With this in mind, the following are to be produced:

- guidelines for making the transition from existing service offerings in developing countries to service offerings that combine voice and data, and economic investment plan models used by countries experienced in the transition to NGN, for the purpose of providing guidance to developing countries;
- 2) a set of guidelines for promoting growth in data communications in developing countries.

4 Timing

An interim report should be available at the end of the second year of the study period. A final report containing the aforementioned guidelines should be submitted at the end of the third year of the study period.

This final report should be submitted at the end of the study period.

5 Proposers

This Question was proposed by the Rapporteur Group for Question 12-2/1.

6 Sources of input

- Member States
- Sector Members
- regional organizations
- ITU Sectors
- focal points in BDT, specifically from the BDT Regulatory and Market Environment Division.

7 Target audience

Target audience	Developed countries	Developing countries ¹
Telecommunication policy and decision-makers	Yes	Yes
Telecommunication/ICT regulators	Yes	Yes
Service providers/operators	Yes	Yes
Builders/component manufacturers	Yes	Yes
Consumers	Yes	Yes

a) Target audience

The results of the study will be particularly useful for operators and service providers in developing countries and LDCs, as well as telecommunication regulators and telecommunication policy-makers.

Use should be made of the outputs by various means: dissemination of the information, holding of colloquiums, seminars, workshops, conferences and so on.

b) Proposed methods for the implementation of the results

For the implementation of the results of this Question, the main source of information will be the contributions from countries as well as the results from the Annual Survey on Tariff Policies, which track and show trends in the application of tariff policies related to pricing, cost/tariff models, interconnection rates, price control of regulated services as well as the economic aspects of investment projects of next generation networks and site sharing issues from different countries. The output of the study would be distributed as the output results of the ITU-D study groups and shared with ITU-T Study Group 3. Given the importance of the issue, however, BDT Programme 4 could also conduct regional seminars and meetings, perhaps in conjunction with regional telecommunication organizations, to discuss and disseminate the results of the study on the Question.

8 Proposed methods of handling the Question

Within Study Group 1 and in the framework of the activities of Programme 4 Economics and Finance including costs and tariffs.

9 Coordination

To assure the necessary coordination, there should be close cooperation with ITU-T Study Group 3 and its regional groups (SG3RG-AFR/AO/LAC), ITU-D Study Groups 1 and 2 and other international and regional organizations concerned with issues relating to tariffs for telecommunication services and tariff strategies for migration from conventional to next-generation networks.

¹ This includes least developed countries (LDCs), small island developing states (SIDS), landlocked developing countries (LLDCs) and countries with economies in transition.

10 Other relevant information

Any other information that may become available during the period of validity of this Question.
