PROPOSAL ON CONTINUATION OF QUESTION 25/2 ON ACCESS TECHNOLOGIES FOR BROADBAND TELECOMMUNICATIONS, INCLUDING IMT, FOR DEVELOPING COUNTRIES

MOD   DIAP/12

Support:

United States of America, Guatemala (Republic of), Peru

[Antigua and Barbuda], [Argentine Republic], [Bahamas (Commonwealth of the)], [Barbados], [Belize], [Bolivia (Plurinational State of)], [Brazil (Federative Republic of)], [Canada], [Chile], [Colombia (Republic of)], [Costa Rica], [Dominica (Commonwealth of)], [Dominican Republic], [Ecuador], [El Salvador (Republic of)],   [Grenada],   [Guyana], [Haiti (Republic of)], [Honduras (Republic of)], [Jamaica], [Mexico], [Nicaragua], [Panama (Republic of)], [Paraguay (Republic of)],   [Saint Lucia], [Saint Vincent and the Grenadines], [Saint Kitts and Nevis (Federation of)], [Suriname (Republic of)], [Trinidad and Tobago], [Uruguay (Eastern Republic of)], [Venezuela (Bolivarian Republic of)]

BACKGROUND:

The Hyderabad Declaration of WTDC-2010 affirmed in its declaration that "broadband access and usage are increasingly considered as essential services, that need to be universally available to all citizens in order to develop networked economies and information societies" (Hyderabad Declaration, WTDC-10,§7). The need of assisting the ITU membership in maximizing the use and access to broadband infrastructure was also identified in the 2010 Hyderabad Action Plan as a priority, and WTDC-10 adopted the following as part of its work program:

- **Programme 1:** "Information and communication infrastructure and technology development, in which the priority areas include mobile, broadband, communications, and rural communications;

- **Regional Initiatives**:
    - "Development of a broadband infrastructure and achievement of regional interconnectivity and universal access" in Africa;
    - "Broadband access and uptake in urban and rural areas" in the Americas and Asia-Pacific;
    - "Broadband access networks" in the Arab States; and
    - "ICT applications, including e-health" in Europe.

- **Study Questions**:
    - Question 7-3/1 on "Implementation of universal access to broadband services;"
    - Question 10-3/2 on "Telecommunications/ICTs for rural and remote areas;"
    - Question 14-3/2 on "Information and telecommunications/ICTs for e-health;"
    - Question 17-3/2 on "Progress on e-government activities and identification of areas of application of e-government for the benefit of developing countries"
    - Question 22-1/2 on "Utilization of telecommunications/ICTs for disaster preparedness, mitigation and response;" and
    - Question 25/2 on "Access Technology for Broadband Telecommunications, including IMT, for developing countries."
    - Question 26/2 on "Migration from existing networks to next-generation networks for developing countries: technical, regulatory and policy aspects"

DISCUSSION:

Increasing access to broadband infrastructure, services, and applications has been among the Americas Region highest priorities. In highlighting the importance of continuing the work of the ITU-D in this area, the Region also recently agreed at the Regional Preparatory Meeting for the Americas (RPM-AMS) in preparation for the World Telecommunication Development Conference (WTDC-14) to continue supporting a Regional Initiative focused on Broadband Access and Uptake.

In fact, many Member States have developed or are developing broadband plans and strategies to increase access and demand to broadband services. These broadband plans generally promote strategies to increase investment in the deployment of different broadband networks and technologies, including wired and wireless, terrestrial and satellite. They also focus on specific demand stimulation strategies that drive broadband demand, such as through the development of local ICT and mobile applications (e.g., e-health, e-learning, e-banking, etc.).

When developing and updating national broadband plan and strategies, Member States can directly benefit from the output of the work and output of Question 25/2 on "Access Technology for Broadband Telecommunications, including IMT, for developing countries" that identify the factors influencing the effective deployment of (i) broadband wireline, wireless and satellite access technologies and (ii) broadband applications, with a focus on technologies and/or standards recognized or under study by the other two ITU Sectors.

Among the considerations that are important in the context of broadband deployment is the role of the open Internet and policies that may apply to modalities such as land-based or wired telecommunications infrastructures. Broadband in this context elicits important questions including how frameworks for specialized services such as are enabled for wireless by standards such as IMT should coexist with the varied offerings of competing providers who rely on the open Internet and policy frameworks affording competitive access to shared physical public right-of-way facilities. These providers rely on general purpose communications protocols to support a flexible platform for independent innovation that enables them to compete even as it assures interoperability and global connectivity for their own services and those of innovating end users.

While Study Question 25/2 has already prepared many useful outputs, broadband access and technologies continues to be a priority for Members and more work need to be done in this area. The work of Study Question 25/2, in coordination with the activity under Questions 7-3/1; 10-3/2; 14-3/2; 17-3/2, and 221/2; as well as with linkage with the relevant BDT Programme 1 and Regional Initiatives related to Broadband, is of great relevance for Member States developing and updating their national broadband plans and strategies to increase access and demand to broadband.

One of the key questions raised in the United States Federal Communications Commission's National Broadband Plan and Open Internet Orders was how the Open Internet should coexist with specialized services. As we proceed to an emphasis on broadband access and uptake, questions become important regarding how standards such as IMT, which offers incentives for wireless providers, should relate to open Internet as well as issues of competition, the enabling environment, infrastructure development and empowerment of end users and independent providers in the context of other modalities such as land-based or wired facilities over which policies affording competitive access to the physical layer may apply.

PROPOSAL:

CITEL Member States propose that:

1. Study Question 25/2 on "Access Technology for Broadband Telecommunications including IMT, for developing countries" continue its work under the framework of the ITU-D, with revisions as proposed in the Annex.

2. Study Question 25/2 output be greater coordinated with other Study Questions related to ICT applications.

3. Greater linkage be established between the relevant BDT Programme 1 and Regional Initiatives related to Broadband.

Proposed Revisions to Question 25/2

Question 25/2: ~~Broadband A~~access technolog~~iesy for broadband telecommunications~~, including IMT, for developing countries

1   Statement of the situation

ITU-D Study Group 2 will provide developing countries with an understanding of the different technologies available for broadband access using both wired and wireless technologies for terrestrial and satellite telecommunications, including International Mobile Telecommunications (IMT). Study Group 2 will continue to cover the technical issues involved in deploying broadband access technologies, including the integration of such access network solutions in existing and future network infrastructures, taking note of infrastructures subject to policies, such as common carriage, that provide competitive access at the physical layer to independent providers who may rely on general-purpose connectivity through the Internet Protocol to interoperate among themselves even as they autonomously develop services within their own networks, provide guidelines for broadband access development, taking into account the fact that the standardization of broadband access technologies is a priority in the strategic plan of ITU, and respond to the initiatives of all developing countries (as proposed by the six WTDC regional preparatory meetings (RPMs).

2   Question for study

Identify the factors influencing the effective deployment of broadband wireline, wireless and satellite access technologies and their applications~~, with a focus on technologies and/or standards recognized or under study by the other two ITU Sectors.~~.

  a. Examine ~~wired and wireless~~ broadband access technologies and their future trends;

  b. Identify methodologies for migration planning and implementation of broadband ~~wired and wireless~~ technologies, taking into account existing networks, as appropriate given considerations such as how specialized service networks should coexist with general purpose interoperation between competing networks;

  c. Consider trends of the various broadband access technologies; deployments, services offered and regulatory considerations;

d. Continue to identify ways and means of implementing IMT, using terrestrial links and satellites;

e. Identify key elements to be studied in order to facilitate the possible deployment of systems integrating satellite and the terrestrial component of IMT ~~(see Recommendation 206 (WRC-07)~~;

f. Articulate various modes by which specialized service network frameworks such as IMT should coexist with networks of independent networks interoperating through general-purpose connectivity such as by the Internet Protocol.

g. Identify implications for ICT applications (including e-government and e-health) of the distinction between specialized service network frameworks such as IMT and networks of independent networks interoperating through general-purpose connectivity such as by the Internet Protocol, referencing various modes by which they might coexist.

h. Provide information on the specific impact of the ~~implementation~~ deployment of all broadband ~~wired and wireless means~~ access technologies, ~~including IMT,~~ on underserved populations, including persons with disabilities, including in relation to impacts on characteristics of general purpose internetworking of importance to developing countries and underserved or disadvantaged populations, such as their support for independent innovation by end users and competing network providers;

i. Provide information on IMT-Advanced systems based on the advice of Working Party 5D of ITU-R Study Group 5.

3   Expected output

a. Yearly progress report on the above study items ~~includinga matrix of different broadband access technologies, both wired and wireless, terrestrial and satellite, with yearly updates~~;

b. A final Report for the Questions that includes:

1. Analysis of the factors influencing the effective deployment of all broadband access ~~core~~ technologies; and

~~e~~2. ~~G~~guidelines for broadband access deployment that could be delivered *inter alia* through training seminars in accordance with the BDT Programme [4];

~~d~~c. A handbook on IMT deployment in developing countries to replace the Handbook on Deployment of IMT-2000 systems (2003). This handbook will be the result of study group collaboration between ITU-R Study Groups 4 and 5, ITU-T Study Group 13 and the Rapporteur's Group dealing with this Question as part of ITU-D Study Group 2;

~~d~~e. Draft Recommendation(s), as appropriate and if justified.

4   Timing

The interim report on this Question is expected by ~~2012~~2016. The final report is expected in ~~2013~~ 2017 at the end of the ITU-D study period.

5   Proposers

~~Arab States, United States.~~ Member States of CITEL.

6   Sources of input

1)   Results of related technical progress in relevant ITU-R and ITU-T Study Groups, in particular Working Parties 5D (Question 77) and 5A of Study Group 5 and Working Parties 4A, 4B and 4C of Study Group 4, and in ITU-T in particular Study Group 15 (Question 1) and Study Group 13 (Question 15).

2)   ITU publications, reports and recommendations, on ~~both~~ broadband access technologies. ~~and IMT~~.

3)   Relevant reports of national and/or regional organizations in developing and developed countries.

4)   Contributions on experiences with the implementation of relevant networks in developed and developing countries.

4*bis*)   Contributions of Sector Members on the development of broadband access technologies for wired, wireless and satellite.

5)   Relevant inputs from service providers and manufacturers.

6)   Relevant inputs from BDT Programmes related to broadband and the different broadband access technologies.

7)   Relevant output from Study Questions related to ICT applications

7   Target audience

a. Target audience

Target audience	Developed countries	Developing countries
Telecom policy-makers	Yes	Yes
Telecom regulators	Yes	Yes
Service providers/operators	Yes	Yes
Manufacturers	Yes	Yes

b. Proposed methods for implementation of the results

The work of the Rapporteur's Group will be conducted and publicized through the ITU-D website as well as through the publication of documents and appropriate liaison statements. The results of the work will also be used by relevant BDT Programmes that are components of the toolkit that BDT uses when solicited by Member States and Sector Members to support their efforts to build out broadband access networks.

8   Proposed methods for handling the Question

The Question will be handled by a Rapporteur's Group of ITU-D Study Group 2.

9   Coordination

In order to coordinate effectively and avoid duplication of activities, the study should take into consideration:

– outputs from the relevant ITU-T and ITU-R Study Groups;
– the relevant outputs from ITU-D Questions;
– inputs from the relevant BDT programme(s);

– inputs from those involved in the implementation of the study of IMT systems, and other broadband access technologies, including satellite.

10 Relevant programme

Programme 1 will be the relevant programme.

11 Other relevant information

Resolution 43 as revised by WTDC-10 should be taken into consideration.