# Question 14-3/2 – Information and Telecommunications for e-Health

#### **1** Statement of the situation

e-Health is an integrated system of healthcare delivery that employs information and telecommunications technology as a substitute for face-to-face contact between medical staff and patient. It includes many applications such as telemedicine, electronic medical records, medical consultation at a distance, medical consultation between rural medical centres and urban hospitals, etc. e-Health provides transmission, storage and retrieval of medical information in the digital form between doctors, nurses, other medical staff and patients for clinical, educational and administrative purposes, both at the local site (your workplace) and at a distance (remote workplaces). In some developing countries the number of mobile phones has overtook the number of fixed phone and mobile telecommunication network could be considered as more attractive platform for the introduction of e-Health services.

e-Health is playing a very important role in healthcare delivery in developing countries, where the acute shortage of doctors, nurses and paramedics is directly proportional to the enormous unsatisfied demand for health services. Some developing countries have already successfully implemented small pilot telemedicine projects and they are looking forward to proceed further by considering the development of e-Health Master Plan as it was recommended by the World Health Organization in its Resolution WHA58.28 in May 2005. In particular, it aims at reducing disparities with regard to medical services between urban and rural areas and pays special attention to the least developing countries<sup>1</sup>.

# 2 Question for study

The Question shall:

- 1) Take further steps to assist in raising the awareness of decision-makers, regulators, telecommunication operators, donors and customers about the role of information and telecommunication technologies in improving healthcare delivery in developing countries.
- 2) Encourage collaboration and commitment between the telecommunication sector and the health sector in developing countries<sup>1</sup>, in order to maximize the utilization of limited resources on both sides for implementing e-Health services.
- 3) Continue to disseminate experiences and best practices with the use of information and telecommunication technologies in e-Health in developing countries<sup>1</sup>.
- 4) Encourage cooperation among developing and developed countries in the field of mobile e-Health solutions and services.
- 5) Promote development of technical standards for e-Health application in conjunction with ITU-T. In particular, develop guidelines for developing countries on how to use such standards.
- 6) Introduce and disseminate ITU technical standards related to e-Health for developing countries<sup>1</sup>.

<sup>&</sup>lt;sup>1</sup> This includes least developed countries (LDCs), small island developing states (SIDS), landlocked developing countries (LLDCs) and countries with economies in transition.

### 3 Expected output

The output expected from this Question will include:

- Guidelines on how to draft the telecommunication/ICT part of e-Health Master Plan.
- Guidelines with regard to the use of mobile telecommunications for e-Health solutions in developing countries<sup>1</sup>.
- Collect and summarize the requirements and effectiveness of telecommunication/ infrastructure for the successful implementation of e-Health applications, taking into account the environment of developing countries<sup>1</sup>.
- Disseminate the technical standard related to the introduction of e-Health services in developing countries<sup>1</sup>.
- Collaborate with ITU-T Study Group 16 in order to accelerate building up technical standards for e-Health applications.
- Collaborate with BDT Programme 3, if so requested, to support the implementation of the telecommunication/ICT component of e-Health project(s) in developing countries, including advice on best practices on how to train developing countries in the use of telecommunication/ICT component of e-Health projects.
- Share and disseminate best practice on e-Health applications in developing countries using ITU/BDT website in close collaboration with BDT Programme [3].

#### 4 Timing

The work undertaken by the study group can be phased over the next study period. The participation of experts from the group for the assistance in the development of e-Health projects in developing countries<sup>1</sup> will be encouraged.

#### 5 Proposers

The Question was originally approved by WTDC-98, and then revised by WTDC-02, WTDC-06 and WTDC-10.

#### 6 Sources of input

Inputs will be expected from Member States and Sector Members, experts in e-Health applications, etc. Contributors to and contacts have already been established during the study periods 2002-2006 and 2006-2010, and new contacts will be invited as well. Question 14-2/2 supported the mobile e-Health initiative for developing countries<sup>1</sup> launched in 2009.

#### 7 Target audience

Target audience	Developing countries	Developed countries <sup>1</sup>
Telecom operators	Yes	Yes
Telecom regulators	Yes	Yes
Manufacturers	Yes	Yes
Ministries of Health	Yes	Yes
Medical organizations	Yes	Yes
NGO in health	Yes	Yes

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This Question aims at stimulating collaboration between the telecommunication/ICT and health communities, between developed and developing countries<sup>1</sup>, and among developing countries<sup>1</sup> as well. The experience gained from telecommunications/ICT for e-Health applications in developing countries will also be expected to benefit equipment suppliers and service providers in developed countries<sup>1</sup>.

# 8 Proposed method of handling the Question

Within Study Group 2. The outputs of this Question will be made available via the ITU-D website.

#### 9 Coordination

See section 7 above.

# **10** Other relevant information

The activity for the next study cycle can be based on the final report, and on other initiatives which resulted from Question 14-2/2 of the last study period, namely mobile telecommunications for mobile e-Health.

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