

## QUESTION 1/2

### **Creating the smart society: Social and economic development through ICT applications**

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

All areas of society – culture, education, health, transport and trade – will depend for their development on the advances made through ICT systems and services in their activities. ICTs can play a key role in the protection of property and persons; smart management of motor vehicle traffic; saving electrical energy; measuring the effects of environmental pollution; improving agricultural yield; management of healthcare and education; management and control of drinking water supplies; and solving the problems facing cities and rural areas. This is the smart society.

Delivering the promise of the smart society relies on three technological pillars – connectivity, smart devices and software – and on sustainable development principles.

Connectivity encompasses and includes existing and traditional networks (mobile, broadband, and cable) as well as new technologies most often reliant on radio spectrum. Connectivity is a key enabler and component of machine-to-machine (M2M) and resulting applications and services such as e-government, traffic management and road safety.

Smart devices are the things that are connected that create smart societies. Cars, traffic lights and cameras, water pumps, electricity grids, home appliances, street lights and health monitors are all examples of things that need to become smart, connected devices so that they can deliver significant advancements in sustainability and economic and social developments. This is especially important in developing countries.

Software development connects and enables the first two pillars that, all working together, support new services that would never have been possible before. These new services are transforming everything from energy efficiency to environmental improvements, road safety, food and water safety, manufacturing and basic government services.

#### **2 Question or issue for study**

- 1) Discussion of and assistance in raising awareness of methods of improving connectivity to support the smart society, including connectivity to support smart grids, smart cities and e-environment and e-health applications.
- 2) Examination of best practices for fostering and enabling deployment and use of smart devices, including mobile devices, the importance of the application of such devices having been highlighted by BDT's m-Powering Development initiative, launched at ITU TELECOM World 2012 in Dubai, with an emphasis on successful examples from rural areas in developing countries.
- 3) Survey of methods and examples of how software, both open-source and/or proprietary, enables connectivity of smart devices, thereby supporting smart services and smart societies.
- 4) Definition of a measurement and performance benchmark for quality-of-life indicators in smart cities, and possible regulation and communication mechanisms that can be followed for good urban governance.
- 5) The experiences of developed countries that have built smart cities.
- 6) Creation of a national ecosystem that will include all stakeholders involved in defining national road-safety policy.

- 7) Definition of a regional cooperation and coordination framework in the area of intelligent transport on cross-border networks.

### **3 Expected output**

The output expected from this Question will include:

- a) Case studies on how to enable use of telecommunications and other means of connectivity, including M2M communications, and access to ICT applications to support sustainable development and foster smart societies in developing countries.
- b) Increasing awareness among relevant participants regarding the adoption of open-source strategies for enabling access to telecommunications, and studying the drivers for increasing the degree of preparedness to use and develop open-source software to support telecommunications in developing countries, as well as creating opportunities for cooperation between ITU members by reviewing successful partnerships.
- c) Analysis of factors affecting the efficient roll-out of connectivity to support ICT applications that enable e-government applications in smart cities and rural areas.
- d) Sharing of best practices in the use of ICT networks to enable road safety.
- e) Annual progress reports and detailed final report containing analysis, information and best practices, as well as any practical experience acquired in the areas of use of telecommunications and other means of enabling ICT applications and connecting devices for development of the smart society.

### **4 Timing**

A preliminary report should be submitted to the study group in 2016. The studies should be concluded in 2017, by which time a final report will be submitted.

### **5 Proposers/sponsors**

The Question was approved by WTDC-14, on the basis of Question 17-3/2 and proposals from the Asia-Pacific Telecommunity, Arab States, Member States of the African Telecommunications Union, the United States, Algérie Télécom Spa, Intervale (Russian Federation) and the A.S. Popov Odessa National Academy of Telecommunications (Ukraine).

### **6 Sources of input**

- a) Progress on study of the Questions relevant to this issue in ITU-T and ITU-R study groups.
- b) Contributions from Member States, Sector Members, Associates other United Nations agencies, regional groups, and BDT coordinators.
- c) Progress of BDT initiatives with other United Nations organizations and the private sector on using ICT applications for development of the smart society.
- d) Progress on any other relevant activity carried out by the ITU General Secretariat or BDT.

## 7 Target audience

Target audience	Developed countries	Developing countries <sup>1</sup>
Telecom policy-makers	Yes	Yes
Telecom regulators	Yes	Yes
Service providers/operators	Yes	Yes
Manufacturers (telecommunication/ICT equipment manufacturers, automobile industry, etc.)	Yes	Yes
BDT programmes	Yes	Yes

### a) Target audience – Who specifically will use the output

Relevant policy-makers, regulators and participants in the telecommunication/ICT and multimedia sectors.

### b) Proposed methods for the implementation of the results

In guidelines for implementing BDT regional initiatives.

## 8 Proposed methods of handling the Question or issue

Within Study Group 2.

## 9 Coordination and collaboration

- The relevant BDT unit dealing with these issues
- Relevant work in progress in the other two ITU Sectors.

## 10 BDT programme link

All BDT programmes are concerned by the Question as regards, in particular, aspects relating to information and communication infrastructure and technology development, ICT applications, enabling environment, digital inclusion and emergency telecommunications.

## 11 Other relevant information

To be identified later during the life of this new Question.

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<sup>1</sup> These include the least developed countries, small island developing states, landlocked developing countries and countries with economies in transition.