



INTERNATIONAL TELECOMMUNICATION UNION

# ITU-T

TELECOMMUNICATION  
STANDARDIZATION SECTOR  
OF ITU

WORLD TELECOMMUNICATION STANDARDIZATION  
ASSEMBLY  
Dubai, 20-29 November 2012

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## **Resolution 77 – Standardization work in ITU-T for software-defined networking**

### ***CAUTION !***

### ***PREPUBLISHED RESOLUTION***

This prepublication is an unedited version of a recently approved Resolution. It will be replaced by the published version after editing. Therefore, there will be differences between this prepublication and the published version.

## FOREWORD

The International Telecommunication Union (ITU) is the United Nations specialized agency in the field of telecommunications, information and communication technologies (ICTs). The ITU Telecommunication Standardization Sector (ITU-T) is a permanent organ of ITU. ITU-T is responsible for studying technical, operating and tariff questions and issuing Recommendations on them with a view to standardizing telecommunications on a worldwide basis.

The World Telecommunication Standardization Assembly (WTSA), which meets every four years, establishes the topics for study by the ITU-T study groups which, in turn, produce Recommendations on these topics.

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## RESOLUTION 77

### **Standardization work in ITU-T for software-defined networking**

*(Dubai, 2012)*

The World Telecommunication Standardization Assembly (Dubai, 2012),

*considering*

- a) the fact that software-defined networking (SDN) will profoundly change the telecommunication and information and communication technology (ICT) industry's landscape in the decades to come;
- b) the multiple benefits that SDN can bring for the telecommunication/ICT industry;
- c) the rapidly growing interest in the use of SDN in the telecommunication/ICT industry by a significant number of companies;
- d) that a broad application of SDN will require a system of deployable standards which are not yet in place,

*noting*

- a) that the ITU Telecommunication Standardization Sector (ITU-T) should play a leading role in the development of the above-mentioned system of deployable SDN standards;
- b) that a standards ecosystem should be created with ITU-T at its centre,

*recognizing*

- a) that ITU-T has unmatched advantages when it comes to requirements and architecture standards;
- b) that a solid foundation is required first in SDN requirements and architecture standards so that the whole set of standards may be built through an industry-wide synergy;
- c) that ITU-T Study Group 13 has been involved in the study of SDN in the development of future networks and is collaborating with relevant standards development organizations (SDOs),

*resolves to instruct ITU-T Study Group 13*

- 1 to organize the necessary structures within Study Group 13 to expand and accelerate the work on SDN architecture and requirements starting with its first meeting in the next study period;
- 2 to make recommendations to the Telecommunication Standardization Advisory Group on how to address the topics that are outside the mandate of Study Group 13,

*instructs the Telecommunication Standardization Advisory Group*

to examine the matter, consider the input of Study Group 13 and other relevant study groups and take the necessary actions, as appropriate, with a view to deciding on the necessary SDN standardization activities in ITU-T, with the following actions:

- identify the relevant study group(s) in which to follow up actions and establish a suitable organizational arrangement on SDN;
- coordinate the work on technical issues of SDN across the study groups according to their area of expertise;

- promote collaboration with other SDN-related standards bodies and forums;
- define a clear strategic vision for SDN standardization and an important active role that ITU-T should play,

*instructs the Director of the Telecommunication Standardization Bureau*

1 to provide the necessary assistance with a view to expediting such efforts, in particular using any opportunity within the allocated budget to exchange opinions with the telecommunication/ICT industry including through the CTO meetings (according to Resolution 68 of the World Telecommunication Standardization Assembly) and in particular to promote the participation of the industry in SDN standardization work in ITU-T;

2 to organize a workshop on SDN in 2013 in order to promote SDN within ITU-T,

*invites Member States, Sector Members, Associates and academia*

to submit contributions for developing SDN standardization in ITU-T.