

Question 3/11 – Signalling requirements and protocols for emergency telecommunications

(Continuation of Question 3/11)

1 Motivation

In the emerging network environment, impacts of new emerging technologies, capabilities, and application services (e.g., IMT-2020 network and beyond, terrestrial and satellite network convergence, video and voice over LTE (VoLTE/ViLTE), machine to-machine (M2M) communication, Internet of things (IoT), Distributed Ledger Technology, Machine Learning/Artificial Intelligence, QKDN and related technologies) on emergency telecommunications, including emergency telecommunication service (ETS), will need to be studied. In addition, it is needed to be studied how some of the emerging technologies and application services can be leveraged for the benefit of emergency telecommunications.

There is also a need to continue development of emergency telecommunications applications, e.g., voice, video, data signalling requirements and protocol enhancements.

The Question is responsible to ensuring the maintenance of existing ETS capabilities in SG11 Supplements and Recommendations, e.g., Q.931, Q.761, Q.762, Q.763, Q.764, Q.1902.1, Q.1902.3, Q.1902.4, Q.1950, Q.2630.3, Q.2931, Q-series Supplement 47, Q-series Supplement 49 for ETS specific information, Q-series Supplement 53, Q-series Supplement 57, Q-series Supplement 61, Q-series Supplement 62, Q-series Supplement 63, Q-series Supplement 68, Q-series Supplement 69 and Q-series Supplement 70.

The Question will liaise with regional SDOs dealing with emergency telecommunications or capabilities required for their implementation. For example, 3GPP developments with respect to priority communications; IETF technical solution developments of congestion control techniques, all of which facilitate the implementations of priority communications for emergency telecommunication users; IEEE developments with respect to IEEE 802.11-series which apply to emergency telecommunication users.

2 Question

Study items to be considered include, but are not limited to:

- What signalling requirements and protocol enhancements need to be defined in support of emergency telecommunications and disaster relief in IMT-2020 network and beyond?
- What signalling requirements and protocol need to be defined in support of emergency telecommunications and disaster relief for terrestrial and satellite network convergence?
- What Recommendations must be created in response to these requirements because the work is not covered by other SG Questions?
- What changes should be proposed to the overall plans maintained by the respective lead study groups, to provide for new capabilities, to provide better realization of capabilities already being standardized, or to remove obsolete content?

3 Tasks

Tasks include, but are not limited to:

- analyse emergency telecommunication capabilities to which priority has been assigned by their respective lead study group to determine the specific study tasks that must be added to the work plans of individual SG Questions;
- ensure that the necessary communications take place at the technical level between the Questions of the study group, so that their work of realization of emergency telecommunication capabilities is effective, consistent, and complete;

- ensure that the necessary communications take place at the technical level between the Questions of the study group, Questions of other study groups, and other groups defining standards relating to emergency telecommunications, as identified by the plans maintained by the respective lead study groups;
- review capabilities associated with ETS and disaster relief specified in Recommendations within the area of responsibility of the study group, to ensure that they are still relevant and effective;
- contribute to the development and maintenance of the plans which are the responsibility of the respective lead study groups for emergency telecommunications, including the proposal of new content when this seems appropriate;
- create Supplements and Recommendations defining signalling requirements and protocols in support of emergency telecommunications and disaster relief in IMT-2020 network and beyond;
- create Supplements and Recommendations defining signalling requirements and protocols in support of emergency telecommunications and disaster relief for terrestrial and satellite network convergence.

An up-to-date status of work under Q3/11 is contained in the SG11 work programme (https://www.itu.int/ITU-T/workprog/wp_search.aspx?sp=17&q=3/11).

4 Relationships

Recommendations:

- The work that the Question oversees operates within the framework defined by Recommendation ITU-T Y.1271 and Recommendation ITU-T Y.2205

Questions:

- All Questions of SG11

Study Groups:

The Question will relate to the following Study Groups, especially with Questions specifically related to emergency telecommunications:

- ITU-T SG2
- ITU-T SG9
- ITU-T SG13
- ITU-T SG16
- ITU-T SG17
- ITU-T SG20

Other bodies:

- ARIB
- ATIS
- IETF
- IEEE
- ETSI
- TIA
- TTA
- TTC

WSIS action lines:

- C2, C5

Sustainable Development Goals:

- 9, 11, 13, 16