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| ITU logo | INTERNATIONAL TELECOMMUNICATION UNION  **TELECOMMUNICATION STANDARDIZATION SECTOR**  STUDY PERIOD 2017-2020 | | TSAG-TD682 |
| **TSAG** |
| **Original: English** |
| **Question(s):** | | N/A | Geneva, 23-27 September 2019 |
| **TD** | | | |
| **Source:** | | ITU-T SG13 Chairman, ITU-T SG17 Chairman | |
| **Title:** | | Follow-up activities on Quantum work consolidation | |
| **Purpose:** | | Proposal | |

An approach where the FG-QIT4N would serve as the consolidation platform of global QIT standardization efforts, posted by two SG chairmen in [TD 579](https://www.itu.int/md/T17-TSAG-190923-TD-GEN-0579/en) was presented. In the report of the September 2019 TSAG meeting in [TD 451](https://www.itu.int/md/T17-TSAG-190923-TD-GEN-0451/en), the following is noted as part of the text on FG-QIT4N:

* TSAG agreed the creation of the ITU-T Focus Group on "Quantum Information Technology for Networks" (FG-QIT4N) with terms of reference as in [Annex C](https://mail.sch.ac.kr/mail/list.do#_Annex_C_Terms_1), with TSAG as parent. FG-QIT4N will report to the second TSAG meeting in 2020. TSAG also asked the Chairmen of SG13 and SG17 to update [TD579](https://www.itu.int/md/T17-TSAG-190923-TD-GEN-0579) on "Quantum Work Consolidation" accordingly.

This TD is to follow up on Quantum work consolidation. Since establishment of the FG on QIT4N, the activities of two study groups are summarized as follows:

**ITU-T SG13**

**Progress of QKD related activities in Q16/13 after the previous TSAG.**

-          SG13 meeting (October, Geneva)

o   Approved Y.3800 (overview on networks supporting QKD)

o   Newly started two more work items on QKD (Y.QKDN\_BM, Y.QKDN\_req)

o   NOTE: Q6/13 started to develop two documents (Y.QKDN-qos-gen, Y.QKDN-qos-req)

-          1st interim meeting (December, Seoul)

o   Make progress of all QKDN documents based on 15 input contributions

-          2nd interim meeting (January, Tokyo)

o   Make progress of 4 QKD documents based on 19 input contributions

-          Two more e-meetings planned before the March meeting

o   Mainly discuss Y.QKDN\_req and Y.QKDN\_arch

§  3 February 2020 (Monday) 10:00-13:00

§  10 February 2020 (Monday) 13:00-16:00

**Presented Q16/13 activities at the 1st FG-QIT4N meeting**

-          The liaison officer (Zhangchao Ma) of Q16/13 on behalf of Q16/13 Rapporteur presented the Q16/13 activities (QIT4N-I-046)

**Progress of the CQ meeting**

-          1st CQ meeting after the FG-QIT4N meeting (December, Jinan, China)

o   Exchanged ideas to encourage the collaboration between Q16/13 and Q4/17

o   Decided to arrange sessions for the CQ meeting during each Q meeting and exchange the progress of current work through liaison.

-          Invited SG17 experts for discussion on requirements at the Tokyo interim meeting

o   Shared different views to develop requirements on security

-          Intended to hold the 2nd CQ meeting during the March SG13 meeting

**ITU-T SG17**

**Progress of Quantum related activities in Q4/17 after the previous TSAG.**

-   X.1702 ‘Quantum noise random number generator architecture’ was gone through AAP and approved at Nov 15.

- Q4 RGM for Quantum related WIs (December 11-13, Jinan, China)

o   Co-located with FG-QIT4N and make progress of 4 recommendations and 1 TR

-          Two more e-meetings planned before the March meeting

o   Mainly will discuss X.sec-QLDN-ov, X.cf-QKDN and TR.sec-qkd

§  6 February 2020 09:00-12:00

§  7 February 2020 09:00-12:00

**Presented Q4/17 activities at the 1st FG-QIT4N meeting**

-          Associate Rapporteur (Dong-Hi SIM) of Q4/17 presented the Q4/17 activities (QIT4N-I-045)

**Progress of the CQ meeting**

-          1st CQ meeting after the FG-QIT4N meeting (December 11, Jinan, China)

o   Invited SG13 experts for discussion on CQ meeting arrangement

o Decided to arrange sessions for the CQ meeting during each Q4/Q16 meeting and exchange the progress of current works through liaison.

-          Scheduled to have another CQ meeting during the March SG17 meeting

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