Executive summary of the third meeting of the Joint Coordination Activity on Quantum Key Distribution Network (E-meeting, 14 December 2023)

JCA-QKDN held its third meeting as an E-meeting on 14 December 2023 from 14:30 to 16:30 (CET). The detailed meeting report is available in QKDN-052.

1   Standardization efforts in ITU-T Study Groups, other SDOs and Forums

Call to action: JCA-QKDN invites other ITU-T Study Groups, other SDOs and Forums working on QKDN-related standardization to provide presentations in future meetings and contribute to future discussions.

2   Country experiences

Call to action: JCA-QKDN invites other Member States to share their state of affairs/progress on quantum information technologies in future meetings.

3   Coordination matters

Call to action: JCA-QKDN invites ITU-T Study Groups, other SDOs and Forums working on QKDN-related standardization to provide their feedback/responses to this list of open issues:

- What is the current progress on and plans for the development of QKD-related specifications or standards within ITU-T and in other SDOs?
- What are the priorities for QKD standardization and how can cohesion be ensured in QKD standards development?
- Is there a need for harmonization and/or consolidation of existing QKD specifications or standards?
- Is there duplication/overlap of QKD specifications or standards?
- Where is coordination already taking place (bi/multilaterally) and how could this JCA help to overcome coordination barriers?
- What are the possible opportunities for joint work between standards organizations on QKDN?
- What are the requirements of coordination exactly in QKD standardization? What and who needs coordination/to be coordinated and how to proceed?
- Are there concrete steps or actions for coordination between the stakeholders that the JCA recommends or could recommend?
- What is the QKD eco-system and who are the stakeholders relevant for standardization?
- How can industry engagement be enhanced in QKD standardization?
- What are the lessons learnt from the development and utilization of current international QKD standards?
- How can the JCA best present and solicit information for the ITU-T standard database on QKD (or QIT-related) work?
- What kind of liaison and communication role can the JCA play in quantum technology topics beyond QKD?

4   QKDN standardization roadmap

JCA-QKDN maintains a QKDN standardization roadmap using a two-part format:

- **Part 1:** *A database of Quantum Information Technology (QIT) standards*

An initial version of the standards database containing only ITU-T documents is available here: https://www.itu.int/itu-t/landscape/?topic=tx467&group=g&search_text=.

Call to action: JCA-QKDN invites relevant SDOs and groups outside ITU-T to consider agreeing to the inclusion of their QKDN standards related work in the database (this invitation was sent via liaison) and to provide suggestions to the list of proposed keywords in QKDN-038 to be associated with the documents included in the database.

- **Part 2:** *A document providing insights and analysis on the QKDN standards landscape*

To complement the standards database, JCA-QKDN also provides a descriptive narrative of the standards landscape capturing trends in the QKDN standards community with insights/analysis on QKDN standards development. An updated version of Part 2 of the roadmap was discussed in the meeting with feedback given on potential areas of improvement for the next version.

Call to action: JCA-QKDN invites ITU-T Study Groups, other SDOs and Forums working on QKDN-related standardization to share their feedback/contributions to the development of this document.

5   Representatives to JCA-QKDN

Call to action: JCA-QKDN invites relevant ITU-T Study Groups, other SDOs and Forums to consider appointing a representative to serve as a contact point between this JCA and their group and to inform either the Secretariat via email (quantum@itu.int) or JCA-QKDN via liaison of appointed their representative.

6   Fourth JCA-QKDN meeting

Call to action: JCA-QKDN invites the participation of representatives from CEN/CENELEC FG QT and JTC 22, CCSA-ST7, ETSI ISG QKD and TC CYBER, IEC SEG 14 and TC 86, IEEE P1913, IRTF QIRG, ISO/IEC JTC 1 SC27 and WG14, ITU-T SG11, SG13, SG15 and SG17, QED-C and any other relevant ITU-T Study Groups, other SDOs and Forums to the third JCA-QKDN meeting. Meeting details will be available on the JCA-QKDN homepage.

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