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| **Title:** | | Executive summary of the first meeting of the Joint Coordination Activity on Quantum Key Distribution Network (JCA-QKDN), Geneva, 22 March 2023 | | | |
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| **Abstract:** | This document provides the executive summary from the first JCA-QKDN meeting that took place in Geneva on 22 March 2023 in line with Clause 6 of the JCA-QKDN ToR, “*An executive summary will be sent to TSAG after each JCA-QKDN meeting.*”  Action for TSAG: TSAG is invited to take note of this executive summary. |

**Executive summary of the first meeting of the Joint Coordination Activity on**

**Quantum Key Distribution Network (Geneva, 22 March 2023)**

JCA-QKDN held its first meeting in Geneva on 22 March 2023 from 13:00 to 14:30 (CET) in colocation with the meeting of ITU-T Study Group 13 that took place from 13 to 24 March 2023.

The detailed meeting report of the first JCA-QKDN meeting is available in [QKDN-018](https://extranet.itu.int/sites/itu-t/jca/qkdn/meetingdocs/JCA-QKDN-018.docx).

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

The meeting received 9 documents from IEC TC 86, ISO/IEC JTC 1 SC and WG14, ITU-T Study Groups 13 and 17, CEN/CENELEC, CCSA and TEC, covering their activities related to quantum information technology (QIT) and QKDN standardization.

Presentations from IEC TC 86 and ISO/IEC JTC 1 SC 27 were deferred for review at a future meeting. All other documents were reviewed with great interest and their content agreed to be used as a reference for the coordination work on QKDN standardization and the development of a standards database.

**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.

## Coordination matters

The following initial list of potential matters requiring coordination was introduced:

* 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?

**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.

## QKDN standardization roadmap

After discussion, JCA-QKDN agreed to maintain a QKDN standardization roadmap in two parts:

* **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, see [JCA-QKDN-LS1](https://www.itu.int/net/itu-t/ls/ls.aspx?isn=29162)).

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

To complement the standards database, JCA-QKDN agreed to also provide a descriptive narrative of the standards landscape capturing trends in the QKDN standards community and providing insight/analysis on QKDN standards development. A first draft would be prepared for discussion at the next JCA-QKDN meeting.

**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.

## 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](mailto:quantum@itu.int)) or JCA-QKDN via liaison of appointed their representative.

## Second JCA-QKDN meeting

The second JCA-QKDN meeting was agreed to take place **virtually on 8 June 2023 | 15:00-16:30 Geneva time**. The agenda would be prepared by the JCA-QKDN management team in close collaboration with the Rapporteurs of relevant Questions in ITU-T Study Groups, ETSI ISG QKD and the leadership of any other interested groups.

**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 second JCA-QKDN meeting. Meeting details will be available on the [JCA-QKDN homepage](https://www.itu.int/en/ITU-T/jca/qkdn/Pages/default.aspx).

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