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| The International Teleocmmunication Union - Connecting the World. | **International telecommunication union****Telecommunication Standardization Bureau** |  |
|  | Geneva, 7 October 2022 |
| **Ref:**  | **TSB Circular 46**TSB Events/XY | **To:**- Administrations of Member States of the Union;- ITU-T Sector Members;- ITU-T Associates;- ITU Academia.**Copy to:**- The Chairmen and Vice-Chairmen of Study Groups;- The Director of the Telecommunication Development Bureau;- The Director of the Radiocommunication Bureau;- The Director of the ITU Regional Office for Asia and the Pacific, Bangkok, Thailand |
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| **Subject:** | **ITU Workshop on “****Quantum key distribution protocols, security and certification”(Singapore, 8 November 2022)** |

Dear Sir/Madam,

1 I am pleased to inform you that the International Telecommunication Union (ITU) is organizing a workshop on “**Quantum key distribution protocols, security and certification”,** which will take place on 8 November 2022, in Singapore. The workshop will be hosted by the Infocomm Media Development Authority (IMDA) in partnership with the National Quantum-Safe Network (NQSN) and National University of Singapore (NUS).

The workshop will befollowed by a [Question 15/17 Rapporteur Group Meeting](https://www.itu.int/net/itu-t/lists/rgmdetails.aspx?id=13330&Group=17) on “Security for/by emerging technologies including quantum-based security” from 9 to 10 November 2022.

2 Quantum key distribution (QKD) is the core technology in the quantum layer of QKD network (QKDN). Since the invention of the first QKD protocol in 1984, there have been numerous efforts and great progress made by the QKD research community and by the industry to advance the development of QKD protocols. In recent years, several standardization activities on QKDN have also been undertaken within ITU‑T and other standards developing organizations. Despite these efforts, standards offering guidance on QKD protocols have not yet been established.

3 This workshop will focus on the quantum layer in QKDN and, in particular, the QKD protocol. Its objectives include, but are not limited to;

* identifying gaps, challenges and fundamental requirements for QKD protocol standardization in QKDNs;
* obtaining a better understanding the relationship between the security features, security threats & requirements, testing & evaluation and certification of the QKD protocol;
* developing a common understanding on the need for QKD protocol standardization;
* providing a forum for knowledge sharing on QKDN activities in ITU-T Study Groups 11, 13 and 17, the deliverables relevant to QKDN protocols from the ITU-T Focus Group on Quantum Information Technologies for Networks (FG-QIT4N), as well as activities in other SDOs such as ISO/IEC JTC 1/SC27/WG3, ETSI ISG QKD, with a focus on QKD protocols and certification; and
* exploring opportunities for collaboration and harmonization of standardization activities on the QKD protocol, and its security and certification.

4 Participation in the workshop is open to ITU Member States, Sector Members, Associates and Academic Institutions and to any individual from a country that is a member of ITU who wishes to contribute to the work. This includes individuals who are also members of international, regional and national organizations. Participation in the workshop is free of charge but no fellowships will be granted for the workshop.

5 All relevant information pertaining to the event (draft programme, speakers, registration link, remote connection details) will be made available on the event webpage here: <https://www.itu.int/en/ITU-T/Workshops-and-Seminars/2022/1108/Pages/default.aspx>.

The event webpage will be updated regularly as more information becomes available. Participants are encouraged to check the webpage periodically for updates.

6 General information for participants, including hotel accommodation, transportation and visa requirements, is available on the ITU website mentioned above.

Registration is mandatory for all participants planning to attend the workshop. You are invited to complete the online registration form at: <https://www.itu.int/net4/CRM/xreg/web/registration.aspx?Event=C-00011972> as soon as possible.

Please note that pre-registration of participants for our events is carried out exclusively online.

7 I would like to remind you that citizens of some countries are required to obtain a visa in order to enter and spend any time in Singapore. The visa must be obtained from the office (embassy or consulate) representing Singapore in your country or, if there is no such office in your country, from the one that is closest to the country of departure. Additional information on visa requirements is available on the event website under the section “[**Practical Information**](https://www.itu.int/en/ITU-T/Workshops-and-Seminars/2022/1108/Documents/Practical%20information%20-%20QKD%20workshop%2C%20Singapore%20Nov%202022.pdf)**”**.

Yours faithfully,

Chaesub Lee
Director of the Telecommunication
Standardization Bureau