

Welcoming remark by Heung Youl Youm, Chairman of ITU-T SG17

ITU Secretary General Ms Doreen Bogdan-Martin,
Excellency Deputy Minister, Ministry of Science and ICT, Republic of Korea, Dr Jin-bae Hong,
Distinguished colleagues and friends,

Good morning, good afternoon, and good evening,

I sincerely thank Ms Doreen Bogdan-Martin for giving us her comprehensive, insightful pre-recorded opening remarks. In addition, I also appreciate Dr Jin-bae Hong for giving us his impressive congratulatory remarks introducing the 23 years of Korea's experience of using X.509 and future perspective.

It is my pleasure and honor to add my welcome remark to this 2nd ITU-T X.509 Day, celebrating the 34th anniversary of the approval of X.509 standard in 1988.

As you may know, ITU-T SG17 is responsible for building confidence and security in the use of ICTs by producing a set of high-quality technical standards in the area of security and data protection. Providing security by ICTs and ensuring security for ICTs are two major study areas for Study Group 17.

ITU-T X.509 is the ground-breaking standard that SG17 has produced in collaboration with ISO. It has been used as a common global language for a digital public key certificate, which provides a ground for establishing public key infrastructure (PKI). It is being used as the foundation for secure transactions in business-to-business (B2B), business-to-customer (B2C) and government-to-citizen (G2C) environments.

The basic data structures defined in ITU-T X.509 for digital certificates and certificate revocation lists (CRLs) provide interoperability in a wide variety of use cases across industry, business, and consumer sectors, such as finance, energy, entertainment, health, manufacturing, transport, and utilities.

The first version of X.509 was approved November 1988. The third version of ITU-T X.509 (v3), approved August 1997, adds the extensions field to certificate and CRL. This version has been used by other SDOs, such as IETF. Especially, I take this opportunity to thank IETF and other SDOs for promoting and utilizing the X.509 standard for their Internet application area.

I understand the X.509 standard has played a key role in building trust and confidence in the

global cyberspace for the past 34 years by providing the trust of entity's identity and will continue to play an increasingly important role in the future.

In particular, the advent of commercial quantum computers within the next decade presents new challenges and opportunities for this international standard.

Following the 1st event last year, this 2nd event provides another opportunity to reflect the past and envision the future of X.509. I am pleased that the Steering Committee agreed with the objectives of this event as follows:

- promoting the applications of ITU-T X.509,
- reviewing the cutting-edge progress in X.509 activities from leading organizations worldwide, featuring an analysis of the impact of quantum information technologies on ITU-T X.509,
- identifying future directions for ITU-T X.509 including trust governance, decentralized PKI and decentralized identity based on distributed ledger technologies, and
- identifying potential directions for future developments of ITU-T X.509 standardization and discussing how relevant SDOs could enhance collaboration on future work on ITU-T X.509.

I strongly believe that ITU-T Study Group 17 continues to strengthen its collaboration with the other organizations to promote and extend its usage of this ITU-T X.509.

I thank the Steering Committee members including TSB event teams for their excellent support to this event.

I thank in advance the masters of ceremony, Dr Bilel Jamoussi and Ms Xiaoya Yang, two session moderators, Dr Zhiyuan Hu and Ms Afnan Alromi, seven speakers, and five panelists for presenting and expressing their views for this event.

I also thank the many participants online from all over the world, and I hope you will find the event insightful and useful.

This concludes my remarks. Thank you very much.