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| The International Teleocmmunication Union - Connecting the World. | **International telecommunication union****Telecommunication Standardization Bureau** |  |
|  | Geneva, 29 November 2019 |
| **Ref:** | **TSB Circular 195**SG17/XY | **To:**- Administrations of Member States ofthe Union;- ITU-T Sector Members;- ITU-T Associates of Study Group 17;- ITU Academia |
| **Tel:** | +41 22 730 6206 |
| **Fax:** | +41 22 730 5853 |
| **E-mail:** | tsbsg17@itu.int | **Copy to:**- The Chairman and Vice-Chairmen of ITU-T Study Group 17;- The Director of the Telecommunication Development Bureau;- The Director of the Radiocommunication Bureau |
| **Subject:** | **Member State consultation on Determined draft new Recommendations ITU-T X.1332 (X.sgsec-3), X.1365 (X.ibc-iot), X.1372 (X.itssec-2), X.1604 (X.SRNaaS), and X.1605 (X.SRIaaS), proposed for approval at the ITU-T Study Group 17 meeting (Geneva, 17-26 March 2020)** |

Dear Sir/Madam,

1 ITU-T Study Group 17 (Security) intends to apply the Traditional Approval Procedure as described in Section 9 of WTSA Resolution 1 (Rev. Hammamet, 2016) for the approval of the above‑mentioned draft Recommendations at its next meeting in Geneva, 17-26 March 2020. The agenda and all relevant information concerning the ITU-T Study Group 17 meeting will be available in Collective letter 7/17.

2 The titles, summaries and locations of draft new Recommendations ITU-T X.1332 (X.sgsec‑3), X.1365 (X.ibc-iot), X.1372 (X.itssec-2), X.1604 (X.SRNaaS), and X.1605 (X.SRIaaS), proposed for approval can be found in **Annex 1**.

TSB NOTE 1 – As of the date of this Circular, no IPR statements had been received by TSB regarding any of these draft texts. For up-to-date information, members are invited to consult the IPR database at [www.itu.int/ipr/](http://www.itu.int/ipr/).

TSB NOTE 2 – Except draft X.1365 (X.ibc-iot), no ITU-T A.5 justification document has been prepared for other determined draft texts.

3 This Circular initiates the formal consultation with ITU Member States on whether these texts may be considered for approval at the upcoming meeting, in accordance with clause 9.4 of Resolution 1. Member States are kindly requested to complete and return the form in **Annex 2** by 2359 hours UTC on **29 February 2020**.

4 If 70% or more of the replies from Member States support consideration for approval, one Plenary session will be devoted to apply the approval procedure. Member States that do not assign authority to proceed should inform the Director of TSB of the reasons for this opinion and indicate the possible changes that would enable the work to progress.

Yours faithfully,

Chaesub Lee
Director of the Telecommunication
Standardization Bureau

**Annexes:** 2

ANNEX 1

Summary and location of Determined draft Recommendations ITU-T X1332 (X.sgsec-3), X.1365 (X.ibc‑iot), X.1372 (X.itssec-2), X.1604 (X.SRNaaS), and X1605 (X.SRIaaS)

# 1 Draft new Recommendation ITU-T X.1332 (X.sgsec-3) [[R046](https://www.itu.int/md/T17-SG17-R-0046)]

## Security guidelines for smart metering services in smart grids

## Summary

Smart metering services have been widely deployed worldwide to make electricity grids more efficient and reliable by gathering/providing electricity usage information from/to customers, respectively. This information can be used to estimate customers’ electricity demands, and the estimation can be used to shift demand or to change customers’ electricity consumption behavior by providing electricity usage information to them. However, smart metering services can malfunction because of various threats. For example, invalid metering information can lead to erroneous demand management decision, and abusing load control functions can cause economic and physical damage to customers. The Recommendation provides security guidelines for smart metering services to enable service providers to implement appropriate security measures to ensure security of their service. This Recommendation identifies security threats and attack methods against smart metering services, and specifies security requirements and capabilities to mitigate these threats and attacks accordingly.

# 2 Draft new Recommendation ITU-T X.1365 (X.ibc-iot) [[R043](https://www.itu.int/md/T17-SG17-R-0043)]

## Security methodology for the use of identity-based cryptography in support of Internet of things services over telecommunication networks

## Summary

Traditional certificate-based security methodology involves heavyweight key management operations including certificate issue, querying and revocation. Such systems face great difficulty in keeping up with the increasing numbers of devices connected to Internet of things (IoT) while maintaining decent performance.

Identity-based cryptography (IBC) technology is another security methodology that uses an entity's identity as a public key. An essential feature of IoT is that everything has a unique identifier (ID). Using such IDs as public keys, no certificates are required. Consequently, an IBC security solution utilizes simpler key management, enables distributed authorities to control their own devices and scales well to both a high number of endpoints and diverse devices.

This Recommendation provides a security methodology for the use of IBC public key technology in support of IoT services over telecommunications networks including mechanisms of identity management, key management architecture, key management operations and authentication.

This determined draft text includes normative references that require an ITU-T A.5 justification, which can be found in [SG17-TD2366](https://www.itu.int/md/T17-SG17-190827-TD-PLEN-2366).

# 3 Draft new Recommendation ITU-T X.1372 (X.itssec-2) [[R049](https://www.itu.int/md/T17-SG17-R-0049)]

## Security guidelines for Vehicle-to-Everything (V2X) communication

## Summary

This Recommendation provides security guidelines for Vehicle-to-Everything (V2X) communication. V2X is a generic term for the communication modes termed as vehicle-to-vehicle (V2V), vehicle-to-infrastructure (V2I), vehicle-to-nomadic devices (V2D) and vehicle-to-pedestrian (V2P) discussed in this Recommendation.

Significant developments have taken place over the past few years in the area of vehicular communication in the intelligent transportation system (ITS) environment. The V2X communication significantly improves road safety, decreases traffic congestion and increases convenience. However, V2X communication also makes relevant entities in the ITS environment vulnerable to various forms of cyber-attack.

To address this security problem, this Recommendation identifies threats in V2X communication environments and specifies security requirements for V2X communication to mitigate these threats. This Recommendation also provides description of possible implementation of V2X communication with security.

# 4 Draft new Recommendation ITU-T X.1604 (X.SRNaaS) [[R048](https://www.itu.int/md/T17-SG17-R-0048)]

## Security requirements of network as a service (NaaS) in cloud computing

## Summary

This Recommendation analyses security threats and challenges on network as a service (NaaS) in cloud computing and specifies security requirements of NaaS in NaaS application, NaaS platform and NaaS connectivity aspects based on corresponding cloud capability types.

# 5 Draft new Recommendation ITU-T X.1605 (X.SRIaaS) [[R047](https://www.itu.int/md/T17-SG17-R-0047)]

## Security requirements of public infrastructure as a service (IaaS) in cloud computing

## Summary

Infrastructure as a service (IaaS)platforms and virtualized services face different, and perhaps more, challenges and threats than traditional information technology infrastructure and application. IaaS platforms that share computing, storage and networking services need protections specific to threats in IaaS environment. This Recommendation aims to document security requirements of public IaaS in order to help IaaS providers to improve security of IaaS platform throughout the planning, building and operating stages.

ANNEX 2

Subject: Member State response to TSB Circular 195:
Consultation on Determined draft Recommendations ITU-T X1332 (X.sgsec-3), X.1365 (X.ibc‑iot), X.1604 (X.SRNaaS), and X1605 (X.SRIaaS)

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| --- | --- | --- | --- |
| **To**: | Director of the Telecommunication Standardization Bureau,International Telecommunication UnionPlace des NationsCH 1211 Geneva 20, Switzerland | **From**: | [Name][Official role/title][Address] |
| **Fax**:**E-mail**: | +41-22-730-5853tsbdir@itu.int  | **Fax**:**E-mail**: |  |

Dear Sir/Madam,

With respect to the Member State consultation on the Determined draft texts listed in TSB Circular 195, I would like to advise you of the opinion of this Administration, which is set out in the table below.

|  |  |
| --- | --- |
|  | **Select one of the two boxes** |
| **Draft****Recommendation ITU-T X1332 (X.sgsec-3)** | [ ]  **assigns authority** to Study Group 17 to consider this text for approval (in which case, select one of the two options ⃝):⃝ No comments or suggested changes⃝ Comments and suggested changes are attached |
| [ ]  **does not assign authority** to Study Group 17 to consider this text for approval (reasons for this opinion and an outline of possible changes that would enable the work to progress are attached) |
| **Draft Recommendation ITU-T X.1365 (X.ibc-iot)** | [ ]  **assigns authority** to Study Group 17 to consider this text for approval (in which case, select one of the two options ⃝):⃝ No comments or suggested changes⃝ Comments and suggested changes are attached |
| [ ]  **does not assign authority** to Study Group 17 to consider this text for approval (reasons for this opinion and an outline of possible changes that would enable the work to progress are attached) |
| **Draft****Recommendation ITU-T X1372****(X.itssec-2)** | [ ]  **assigns authority** to Study Group 17 to consider this text for approval (in which case, select one of the two options ⃝):⃝ No comments or suggested changes⃝ Comments and suggested changes are attached |
| [ ]  **does not assign authority** to Study Group 17 to consider this text for approval (reasons for this opinion and an outline of possible changes that would enable the work to progress are attached) |
| **Draft****Recommendation ITU-T X.1604 (X.SRNaaS)** | [ ]  **assigns authority** to Study Group 17 to consider this text for approval (in which case, select one of the two options ⃝):⃝ No comments or suggested changes⃝ Comments and suggested changes are attached |
| [ ]  **does not assign authority** to Study Group 17 to consider this text for approval (reasons for this opinion and an outline of possible changes that would enable the work to progress are attached) |
| **Draft****Recommendation ITU-T X1605****(X.SRIaaS)** | **[ ]  assigns authority** to Study Group 17 to consider this text for approval (in which case, select one of the two options ⃝):⃝ No comments or suggested changes⃝ Comments and suggested changes are attached |
| [ ]  **does not assign authority** to Study Group 17 to consider this text for approval (reasons for this opinion and an outline of possible changes that would enable the work to progress are attached) |

Yours faithfully,

[Name]

[Official role/title]

Administration of [Member State]

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