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| The International Teleocmmunication Union - Connecting the World. | | **International telecommunication union**  **Telecommunication Standardization Bureau** | |  |
|  | | | Geneva, 22 April 2020 | |
| **Ref:** | | **TSB Circular 246**  SG17/XY | | **To:**  - Administrations of Member States of the Union;  **Copy to:**  - ITU-T Sector Members;  - ITU-T Associates of Study Group 17;  - ITU Academia  - The Chairman and Vice-Chairmen of ITU-T Study Group 17;  - The Director of the Telecommunication Development Bureau;  - The Director of the Radiocommunication Bureau | |
| **Tel:** | | +41 22 730 6206 | |
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| **E-mail:** | | [tsbsg17@itu.int](mailto:tsbsg17@itu.int) | |
| **Subject:** | | **Member State consultation on Determined draft revised Recommendation ITU-T X.1054, X.1254 and draft new Recommendations ITU-T X.1148 (X.fdip), X.1216 (X.gcpie), X.1279 (X.eaasd), X.1366 (X.amas-iot), X.1367 (X.elf-iot), X.1403 (X.dlt-sec), X.1606 (X.SRCaaS), X.1750 (X.GSBDaaS) and X.1751 (X.sgtBD) proposed for approval at the ITU-T Study Group 17 meeting (Virtual, Aug/Sept 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 11 draft Recommendations at its next virtual meeting planned in August – September 2020 time frame. The agenda and all relevant information concerning the ITU‑T Study Group 17 meeting will be available in Collective letter 9/17.

2 The titles, summaries and locations of draft revised and new Recommendations ITU-T X.1054, X.1148 (X.fdip), X.1216 (X.gcpie), X.1254, X.1279 (X.eaasd), X.1366 (X.amas-iot), X.1367 (X.elf-iot), X.1403 (X.dlt-sec), X.1606 (X.SRCaaS), X.1750 (X.GSBDaaS) and X.1751 (X.sgtBD) proposed for approval can be found in **Annex 1**.

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 **13 August 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.

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 – No ITU-T A.5 justification document has been prepared for any of these determined draft texts before their determination.

Yours faithfully,

Chaesub Lee  
Director of the Telecommunication  
Standardization Bureau

**Annexes:** 2

ANNEX 1

Summary and location of Determined draft Recommendations   
X.1054, X.1148 (X.fdip), X.1216 (X.gcpie), X.1254, X.1279 (X.eaasd), X.1366 (X.amas-iot), X.1367 (X.elf-iot), X.1403 (X.dlt-sec), X.1606 (X.SRCaaS), X.1750 (X.GSBDaaS) and X.1751 (X.sgtBD)

# Draft revised Recommendation ITU-T X.1054 [[R056](https://www.itu.int/md/T17-SG17-R-0056)]

**Information security, cybersecurity and privacy protection - Governance of information security**

**Summary**

Information security is a key issue for organizations, amplified by rapid advances in attack methodologies and technologies, and corresponding increased regulatory pressures.

The failure of an organization’s information security controls can have many adverse impacts on an organization and its interested parties including but not limited to the undermining of trust.

Governance of information security is the use of resources to ensure effective implementation of information security, and provides assurance that:

• directives concerning information security will be followed; and

• the governing body will receive reliable and relevant reporting about information security related activities.

This assists the governing body to make decisions concerning the strategic objectives for the organization by providing information about information security that may affect these objectives. It also ensures that information security strategy aligns with the overall objectives of the entity.

Managers and others working in organizations need to understand:

• the governance requirements that affect their work; and

• how to meet governance requirements that require them to take action.

# Draft new Recommendation ITU-T X.1148 (X.fdip) [[R060](https://www.itu.int/md/T17-SG17-R-0060)]

**Framework of de-identification process for telecommunication service providers**

Summary

Telecommunication organizations collect, manage, use, and share data about individuals, including personally identifiable information. As a result, they utilize data de-identification techniques to protect individuals’ data. This Recommendation describes a framework of de-identification process with operational steps and specifies data release models and data stages in a de-identification process for telecommunication service providers based on data lifecycle model and roles of stakeholders.

# Draft new Recommendation X.1216 (X.gcpie) [[R057](https://www.itu.int/md/T17-SG17-R-0057)]

**Requirements for collection and preservation of cybersecurity incident evidence**

**Summary**

Recommendation ITU-T X.1216 describes a general procedure for cybersecurity incident response and investigation, analyses sources of cybersecurity incident evidence and specifies capability requirements for tools used for collection and preservation of such evidence an investigative process. This Recommendation also specifies reliability assurance requirements for these tools as guidelines to developers who design tools for such purpose.

# Draft revised Recommendation ITU-T X.1254 [[R064](https://www.itu.int/md/T17-SG17-R-0064)]

**Entity authentication assurance framework**

**Summary**

Recommendation ITU-T X.1254 defines three entity authentication assurance levels (i.e., AAL1 – AAL3), and the criteria and threats for each of the three levels of entity authentication assurance.

Additionally, it:

• specifies a framework for managing the assurance levels;

• provides guidance concerning control technologies that are to be used to mitigate authentication threats, based on a risk assessment;

• provides guidance for mapping the three levels of assurance to other authentication assurance schemas; and

• provides guidance for exchanging the results of authentication that are based on the three levels of assurance.

# Draft new Recommendation ITU-T X.1279 (X.eaasd) [[R065](https://www.itu.int/md/T17-SG17-R-0065)]

**Framework of enhanced authentication using telebiometrics with anti-spoofing detection mechanisms**

**Summary**

This Recommendation provides an architectural framework of enhanced authentication using telebiometrics with anti-spoofing detection. This Recommendation analyses threats to traditional telebiometric authentication solutions and specifies an architectural framework, authentication process flows and security considerations for enhanced authentication using telebiometrics with anti-spoofing detection mechanisms.

# Draft new Recommendation ITU-T X.1366 (X.amas-iot) [[R058](https://www.itu.int/md/T17-SG17-R-0058)]

**Aggregate message authentication schemes for Internet of things (IoT) (X.amas-iot)**

**Summary**

The number of Internet of things (IoT) devices is increasing, and in the near future there will be an enormous number of devices connected to the IoT network including 5G. This Recommendation specifies two message authentication schemes. One is an aggregate message authentication (AMA) scheme for IoT as basic mechanism. The other is an interactive aggregate message authentication (IAMA) scheme with interactive protocol in a lightweight and secure manner to additionally identify invalid message in the process of message authentication. Both aggregate message authentication schemes can be applied for ensuring "entity (identity) authentication" as well as for ensuring "message authentication". These schemes may not be applicable in all use cases for utilizing IoT devices, but it is quite effective and suitable for use cases in the following conditions where:

• Message authentication is required from tens to tens of thousands of IoT devices.

• Data/message being handled for an authentication process that occurs frequently and intermittently.

For example, "surveillance applications for use of image data" and "remote telemetry" such as monitoring of plant/factory operations and health monitoring are the typical candidates of use cases for these schemes.

# Draft new Recommendation ITU-T X.1367 (X.elf-iot) [[R059](https://www.itu.int/md/T17-SG17-R-0059)]

**Standard format for Internet of things error logs for security incident operations**

**Summary**

There are two issues to handle security incidents from the Internet of things (IoT) ecosystem: The first is the incompatibility of protocols between computer networks using transmission control protocol/Internet protocol (TCP/IP) and IoT edge devices. The second is the lack of compatibility of error codes among edge device manufacturers.

Recommendation X.1367 specifies a standardized error log format that can be placed in a protocol payload, such as syslog [b-IETF RFC 5424], to be used for converting error log information issued by an edge device to the standard error log format.

Recommendation X.1367 also specifies a standardized error code table to solve the second issue. As a result, security incidents across computer networks and networks for IoT edge devices can be integrally managed.

# Draft new Recommendation ITU-T X.1403 (X.dlt-sec) [[R066](https://www.itu.int/md/T17-SG17-R-0066)]

**Security guidelines for using DLT for decentralized identity management**

**Summary**

Distributed Ledger Technology and its specific implementations such as Blockchain offer a unique opportunity for utilizing a trust infrastructure and a platform that could be useful in enabling trusted federation for exchanging identity attributes and identity information. This Recommendation provides a telecom-specific privacy and security considerations for using DLT data in identity management.

# Draft new Recommendation ITU-T X.1606 (X.SRCaaS) [[R062](https://www.itu.int/md/T17-SG17-R-0062)]

**Security requirements for communications as a service application environments**

**Summary**

Recommendation ITU-T Y.3525 identifies security threats and recommends security requirements for communications as a service (CaaS) application environments. This Recommendation describes scenarios and features of CaaS containing multi-communication capabilities. Then it identifies specific threats arising from unique CaaS features and recommends appropriate CaaS security requirements.

# Draft new Recommendation ITU-T X.1750 (X.GSBDaaS) [[R061](https://www.itu.int/md/T17-SG17-R-0061)]

**Guidelines on security of big data as a service for Big Data Service Providers**

**Summary**

Big data as a service (BDaaS) is a cloud service category that provides cloud service customers with capabilities to collect, store, analyse, visualize and manage big data, as specified in ITU-T Y.3600. With remarkable growth of data volumes and rapid development of big data business, big data infrastructure has become the central facility to provide BDaaS. As a consequence, significant security issues arise for BDaaS. For example, open source big data software design sometimes fails to take security into consideration from the beginning. New technologies introduced by big data analytics can also result in failure of traditional security protection measures. Recommendation X.1750 analyses security challenges BDaaS faces, identifies security roles and responsibilities for provision of BDaaS, as well as a security framework for a big data infrastructure. It also specifies security protection measures that should be satisfied for services and components related to BDaaS.

# Draft new Recommendation ITU-T X.1751 (X.sgtBD) [[R063](https://www.itu.int/md/T17-SG17-R-0063)]

**Security guidelines on big data lifecycle management for telecommunication operators**

**Summary**

This Recommendation analyses security vulnerabilities and provides security guidelines on the big data lifecycle management for telecommunication operators.

With rapid development of big data technology, the value of data has substantially increased. Big data bring new opportunities to telecommunication services. Previously, data were siloed and managed independently in different telecommunication service systems. Data aggregation and fusion trends are inevitable with the construction of big data services. In the process of data fusion convergence, data flow on platforms and in service processes. Data face various security vulnerabilities at different stages of its lifecycle.

This Recommendation introduces specific characteristics of telecommunication big data services and data categories, analyses security vulnerabilities of big data lifecycle management, specifies security guidelines for telecommunication operators.

ANNEX 2

Subject: Member State response to TSB Circular 246:  
Consultation on Determined draft Recommendations   
ITU-T X.1054, X.1148 (X.fdip), X.1216 (X.gcpie), X.1254, X.1279 (X.eaasd), X.1366 (X.amas-iot), X.1367 (X.elf-iot), X.1403 (X.dlt-sec), X.1606 (X.SRCaaS), X.1750 (X.GSBDaaS) and X.1751 (X.sgtBD)

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

Dear Sir/Madam,

With respect to the Member State consultation on the Determined draft texts listed in TSB Circular 246, 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 revised**  **Recommendation ITU-T X.1054** | **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 changes  ⃝ 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 new Recommendation ITU-T X.1148 (X.fdip)** | **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 changes  ⃝ 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 new**  **Recommendation ITU-T X.1216 (X.gcpie)** | **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 changes  ⃝ 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 revised**  **Recommendation ITU-T X.1254** | **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 changes  ⃝ 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 new**  **Recommendation ITU-T X.1279 (X.eaasd)** | **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 changes  ⃝ 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 new**  **Recommendation ITU-T X.1366 (X.amas-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 changes  ⃝ 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 new**  **Recommendation ITU-T X.1367 (X.elf-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 changes  ⃝ 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 new**  **Recommendation ITU-T X.1403 (X.dlt-sec)** | **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 changes  ⃝ 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 new**  **Recommendation ITU-T X.1606 (X.SRCaaS)** | **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 changes  ⃝ 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 new**  **Recommendation ITU-T X.1750 (X.GSBDaaS)** | **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 changes  ⃝ 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 new**  **Recommendation ITU-T X.1751 (X.sgtBD)** | **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 changes  ⃝ 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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