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SERIES Y: GLOBAL INFORMATION
INFRASTRUCTURE, INTERNET PROTOCOL ASPECTS
AND NEXT-GENERATION NETWORKS

Next Generation Networks – Security

Minimum security requirements for the interconnection of the Emergency Telecommunications Service (ETS)

Recommendation ITU-T Y.2705



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Recommendation ITU-T Y.2705

Minimum security requirements for the interconnection of the Emergency Telecommunications Service (ETS)

Summary

Emergency telecommunications service (ETS) is a national service, providing priority communications services to ETS authorized users in times of disaster and emergencies. Recommendation ITU-T Y.2705 provides minimum security requirements for the inter-network interconnection of ETS. This will allow ETS to be supported with the necessary security protection between different national networks with bilateral and/or multilateral agreements in times of disaster and emergencies.

History

Edition	Recommendation	Approval	Study Group
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Keywords

Emergency telecommunications service (ETS), NGN security, priority services and capabilities.

FOREWORD

The International Telecommunication Union (ITU) is the United Nations specialized agency in the field of telecommunications, information and communication technologies (ICTs). The ITU Telecommunication Standardization Sector (ITU-T) is a permanent organ of ITU. ITU-T is responsible for studying technical, operating and tariff questions and issuing Recommendations on them with a view to standardizing telecommunications on a worldwide basis.

The World Telecommunication Standardization Assembly (WTSA), which meets every four years, establishes the topics for study by the ITU-T study groups which, in turn, produce Recommendations on these topics.

The approval of ITU-T Recommendations is covered by the procedure laid down in WTSA Resolution 1.

In some areas of information technology which fall within ITU-T's purview, the necessary standards are prepared on a collaborative basis with ISO and IEC.

NOTE

In this Recommendation, the expression "Administration" is used for conciseness to indicate both a telecommunication administration and a recognized operating agency.

Compliance with this Recommendation is voluntary. However, the Recommendation may contain certain mandatory provisions (to ensure, e.g., interoperability or applicability) and compliance with the Recommendation is achieved when all of these mandatory provisions are met. The words "shall" or some other obligatory language such as "must" and the negative equivalents are used to express requirements. The use of such words does not suggest that compliance with the Recommendation is required of any party.

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As of the date of approval of this Recommendation, ITU had not received notice of intellectual property, protected by patents, which may be required to implement this Recommendation. However, implementers are cautioned that this may not represent the latest information and are therefore strongly urged to consult the TSB patent database at <http://www.itu.int/ITU-T/ipr/>.

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Introduction

Emergency telecommunications service (ETS) is a national service, providing priority communications services to ETS authorized users in times of disaster and emergencies. ETS implementation is a national matter. However, disasters/emergencies can transcend international geographic boundaries, and thus there is a potential that countries/administrations may enter into bilateral and/or multilateral agreements to link their respective ETS systems. This would allow priority communications services (e.g., voice, messaging, video and data) under the umbrella of ETS to be supported between different national networks with bilateral and/or multilateral agreements in times of disaster and emergencies.

The integrity, confidentiality and availability of ETS between interconnected national networks will depend on the security of each national network involved in an end-to-end communication. To allow network-provided security of end-to-end ETS between different national networks (i.e., countries/administrations), security requirements for the interconnection of ETS are needed.

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Recommendation ITU-T Y.2705

Minimum security requirements for the interconnection of the Emergency Telecommunications Service (ETS)

1 Scope

This Recommendation provides the minimum security requirements for the inter-network interconnection of ETS. The scope of the security requirements includes the integrity, confidentiality and availability protection for ETS communications across network boundaries (i.e., between different national networks).

The purpose of this Recommendation is to provide a minimum set of security requirements that can be used to facilitate the support of ETS across directly or indirectly interconnected networks.

2 References

The following ITU-T Recommendations and other references contain provisions which, through reference in this text, constitute provisions of this Recommendation. At the time of publication, the editions indicated were valid. All Recommendations and other references are subject to revision; users of this Recommendation are therefore encouraged to investigate the possibility of applying the most recent edition of the Recommendations and other references listed below. A list of the currently valid ITU-T Recommendations is regularly published. The reference to a document within this Recommendation does not give it, as a stand-alone document, the status of a Recommendation.

- [ITU-T E.106] Recommendation ITU-T E.106 (2003), *International Emergency Preference Scheme (IEPS) for disaster relief operations*.
- [ITU-T E.107] Recommendation ITU-T E.107 (2007), *Emergency Telecommunications Service (ETS) and interconnection framework for national implementations of ETS*.
- [ITU-T M.3342] Recommendation ITU-T M.3342 (2006), *Guidelines for the definition of SLA representation templates*.
- [ITU-T Y.2012] Recommendation ITU-T Y.2012 (2010), *Functional requirements and architecture of next generation networks*.
- [ITU-T Y.2205] Recommendation ITU-T Y.2205 (2011), *Next Generation Networks – Emergency telecommunications – Technical considerations*.

3 Definitions

3.1 Terms defined elsewhere

This Recommendation uses the following terms defined elsewhere:

- 3.1.1 authorization** [b-ITU-T X.800]: The granting of rights, which includes the granting of access based on access rights.
- 3.1.2 availability** [b-ITU-T X.800]: The property of being accessible and useable upon demand by an authorized entity.
- 3.1.3 confidentiality** [b-ITU-T X.800]: The property that information is not made available or disclosed to unauthorized individuals, entities, or processes.
- 3.1.4 data integrity** [b-ITU-T X.800]: The property that data has not been altered or destroyed in an unauthorized manner.

3.1.5 emergency telecommunications service (ETS) [ITU-T E.107]: A national service, providing priority telecommunications to ETS authorized users in times of disaster and emergencies.