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Technologies de l'information — Techniques de sécurité — Lignes directrices pour l'emploi et la gestion des services TTP

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1	Scope	1
2	References.....	1
2.1	Identical Recommendations International Standards.....	1
2.2	Paired Recommendations International Standards equivalent in technical content.....	1
2.3	Additional References.....	1
3	Definitions.....	2
4	General Aspects.....	3
4.1	Basis of Security Assurance and Trust.....	3
4.2	Interaction between a TTP and Entities Using its Services	4
4.2.1	In-line TTP Services	4
4.2.2	On-line TTP Services.....	4
4.2.3	Off-line TTP Services.....	5
4.3	Interworking of TTP Services	5
5	Management and Operational Aspects of a TTP	5
5.1	Legal Issues	6
5.2	Contractual Obligations.....	6
5.3	Responsibilities.....	7
5.4	Security Policy.....	7
5.4.1	Security Policy Elements	8
5.4.2	Standards.....	8
5.4.3	Directives and Procedures.....	8
5.4.4	Risk Management	8
5.4.5	Selection of Safeguards.....	9
5.4.5.1	Physical and Environmental Measures	9
5.4.5.2	Organisational and Personnel Measures	9
5.4.5.3	IT Specific Measures.....	9
5.4.6	Implementation Aspects of IT Security.....	10
5.4.6.1	Awareness and Training	10
5.4.6.2	Trustworthiness and Assurance.....	10
5.4.6.3	Accreditation of TTP Certification Bodies.....	11
5.4.7	Operational Aspects of IT Security.....	11
5.4.7.1	Audit/Assessment.....	11
5.4.7.2	Incident Handling	12
5.4.7.3	Contingency Planning.....	12
5.5	Quality of Service	12
5.6	Ethics	12
5.7	Fees.....	12
6	Interworking.....	12
6.1	TTP-Users	13
6.2	User-User	13
6.3	TTP-TTP.....	13
6.4	TTP-Law Enforcement Agency.....	14
7	Major Categories of TTP Services.....	14
7.1	Time Stamping Service	14
7.1.1	Time Stamping Authority.....	14
7.2	Non-repudiation Services	15
7.3	Key Management Services.....	16
7.3.1	Key Generation Service	16
7.3.2	Key Registration Service.....	16
7.3.3	Key Certification Service.....	16
7.3.4	Key Distribution Service.....	17
7.3.5	Key Installation Service.....	17
7.3.6	Key Storage Service.....	17
7.3.7	Key Derivation Service.....	17
7.3.8	Key Archiving Service.....	17

This is a preview of "ISO/IEC TR 14516:200...". Click here to purchase the full version from the ANSI store.

7.3.10	Key Destruction Service	17
7.4	Certificate Management Services	18
7.4.1	Public Key Certificate Service	18
7.4.2	Privilege Attribute Service	18
7.4.3	On-line Authentication Service Based on Certificates	19
7.4.4	Revocation of Certificates Service	19
7.5	Electronic Notary Public Services	19
7.5.1	Evidence Generation Service	20
7.5.2	Evidence Storage Service	20
7.5.3	Arbitration Service	20
7.5.4	Notary Authority	20
7.6	Electronic Digital Archiving Service	21
7.7	Other Services	22
7.7.1	Directory Service	22
7.7.2	Identification and Authentication Service	23
7.7.2.1	On-line Authentication Service	23
7.7.2.2	Off-line Authentication Service	25
7.7.2.3	In-line Authentication Service	25
7.7.3	In-line Translation Service	25
7.7.4	Recovery Services	25
7.7.4.1	Key Recovery Services	25
7.7.4.2	Data Recovery Services	26
7.7.5	Personalisation Service	26
7.7.6	Access Control Service	26
7.7.7	Incident Reporting and Alert Management Service	26
Annex A – Security Requirements for Management of TTPs		28
Annex B – Aspects of CA management		29
B.1	Example of Registration Process Procedures	29
B.2	An example of requirements for Certification Authorities	29
B.3	Certification Policy and Certification Practice Statement (CPS)	31
Annex C – Bibliography		32

Table of Figures

Figure 1	– In-line TTP Service Between Entities	4
Figure 2	– On-line TTP Service Between Entities	5
Figure 3	– Off-line TTP Service Between Entities	5
Figure 4	– Interworking of TTPs in Different Domains	13
Figure 5	– Example of Non-repudiation Architecture	16
Figure 6	– Link Between an Attribute Certificate and a Public Key Certificate	19
Figure 7	– Directory Service Architecture	23
Figure 8	– Example for On-line Authentication Services	24
Figure 9	– Example for In-line TTP Authentication Service	25
Figure 10	– Example of Alert Management Service	27

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Foreword

ISO (the International Organization for Standardization) and IEC (the International Electrotechnical Commission) form the specialized system for worldwide standardization. National bodies that are members of ISO or IEC participate in the development of International Standards through technical committees established by the respective organization to deal with particular fields of technical activity. ISO and IEC technical committees collaborate in fields of mutual interest. Other international organizations, governmental and non-governmental, in liaison with ISO and IEC, also take part in the work. In the field of information technology, ISO and IEC have established a joint technical committee, ISO/IEC JTC 1.

International Standards are drafted in accordance with the rules given in the ISO/IEC Directives, Part 3.

The main task of the joint technical committee is to prepare International Standards. Draft International Standards adopted by the joint technical committee are circulated to national bodies for voting. Publication as an International Standard requires approval by at least 75 % of the national bodies casting a vote.

In exceptional circumstances, the joint technical committee may propose the publication of a Technical Report of one of the following types:

- type 1, when the required support cannot be obtained for the publication of an International Standard, despite repeated efforts;
- type 2, when the subject is still under technical development or where for any other reason there is the future but not immediate possibility of an agreement on an International Standard;
- type 3, when the joint technical committee has collected data of a different kind from that which is normally published as an International Standard ("state of the art", for example).

Technical Reports of types 1 and 2 are subject to review within three years of publication, to decide whether they can be transformed into International Standards. Technical Reports of type 3 do not necessarily have to be reviewed until the data they provide are considered to be no longer valid or useful.

Attention is drawn to the possibility that some of the elements of this Technical Report may be the subject of patent rights. ISO and IEC shall not be held responsible for identifying any or all such patent rights.

ISO/IEC TR 14516, which is a Technical Report of type 3, was prepared by Joint Technical Committee ISO/IEC JTC 1, *Information technology*, Subcommittee SC 27, *IT Security techniques*, in collaboration with ITU-T. The identical text is published as ITU-T Rec. X.842.

Introduction

Achievement of adequate levels of business confidence in the operation of IT systems is underpinned by the provision of practical and appropriate legal and technical controls. Business must have confidence that IT systems will offer positive advantages and that such systems can be relied upon to sustain business obligations and create business opportunities.

An exchange of information between two entities implies an element of trust, e.g. with the recipient assuming that the identity of the sender is in fact the sender, and in turn, the sender assuming that the identity of the recipient is in fact the recipient for whom the information is intended. This "implied element of trust" may not be enough and may require the use of a Trusted Third Party (TTP) to facilitate the trusted exchange of information.

The role of TTPs includes providing assurance that business and other trustworthy (e.g. governmental activities) messages and transactions are being transferred to the intended recipient, at the correct location, that messages are received in a timely and accurate manner, and that for any business dispute that may arise, there exist appropriate methods for the creation and delivery of the required evidence for proof of what happened. Services provided by TTPs may include those necessary for key management, certificate management, identification and authentication support, privilege attribute service, non-repudiation, time stamping services, electronic public notary services, and directory services. TTPs may provide some or all of these services.

A TTP has to be designed, implemented and operated to provide assurance in the security services it provides, and to satisfy applicable legal and regulatory requirements. The types and levels of protection adopted or required will vary according to the type of service provided and the context within which the business application is operating.

The objectives of this Recommendation | Technical Report are to provide:

- a) Guidelines to TTP managers, developers and operations' personnel and to assist them in the use and management of TTPs; and
- b) Guidance to entities regarding the services performed by TTPs, and the respective roles and responsibilities of TTPs and entities using their services.

Additional aspects covered by this Recommendation | Technical Report are to provide:

- a) An overview of the description of services provided;
- b) An understanding of the role of TTPs and their functional features;
- c) To provide a basis for the mutual recognition of services provided by different TTPs; and
- d) Guidance of interworking between entities and TTPs.