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Electronic Signatures and Infrastructures (ESI); Guidance on the use of standards for trust service providers supporting digital signatures and related services

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Contents

Intell	ectual Property Rights	4
Forev	vord	4
	al verbs terminology	
Intro	duction	4
1	Scope	5
2	References	5
2.1	Normative references	
2.2	Informative references	
3	Definitions and abbreviations	7
3.1	Definitions	
3.2	Abbreviations	
4	Introduction to trust services and trust service providers	
1 4.1	What is a trust service and trust service provider	
4.2	Types of trust service provider	
4.2.1	TSP issuing certificates	
4.2.2	TSP issuing time-stamps	
4.2.3	Other potential trust services	
4.2.4	Other trust services outside scope	
5	Aspects of trust services requiring standardization	9
5.1	Policy & security requirements	9
5.2	Certificate and time-stamp profiles	
5.3	Conformity assessment.	
5.4	Testing technical conformance and interoperability	10
6	Selection process	10
6.1	Basis for selection of standards	
6.2	Business scoping parameters for TSP standards	11
7	Selecting the most appropriate standards	11
Anne	ex A: Clarification of requirements in TSP Standards	15
Histo	ry	16
	J	

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Foreword

This Technical Report (TR) has been produced by ETSI Technical Committee Electronic Signatures and Infrastructures (ESI).

Modal verbs terminology

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Introduction

ETSI TR 119 000 [i.2] ("The framework for standardization of signatures: overview") provides an overview of the general structure for digital signatures standardization outlining existing and potential standards for such signatures. It identifies six areas of standardization with a list of existing and potential future standards in each area.

The present document is one of a series guidance documents to assist readers and their suppliers in identifying the digital signature standards, as well as technical specifications, and their options relevant to their needs. Each guide addresses a particular area as identified in ETSI TR 119 000 [i.2].

This series is based on the process of selecting business scoping parameters for each area of standardization. The selection of these scoping parameters is based on process involving an analysis of the business requirements and associated risks leading to an identification of the policy and security requirements and to an analysis of the resulting business scoping parameters from which the appropriate standards and options can be selected. From the requirements expressed in terms of business scoping parameters for an area, each guidance document provides assistance in selecting the appropriate standards and their options for that area. Where standards, as well as technical specifications, and their options within one area make use of another area this is stated in terms of scoping parameters of that other area.

A trust service is a service which enhances the trust and confidence in electronic transactions between parties. They are used, for example, to certify ownership of keys used for digital signatures. The present document does not include any normative requirements but provides guidance on addressing the trust service provider (TSP) supporting digital signatures, on the selection of applicable standards and their options for a particular business implementation context and associated business requirements.

This general process of the selection of standards and options is described further in ETSI TR 119 000 [i.2], clause 4.2.6.

1 Scope

The present document provides guidance on the selection of standards and options for the trust service provider supporting digital signatures and related services (area 4) as identified in ETSI TR 119 000 [i.2].

The present document describes the business scoping parameters relevant to this area (see clause 5) and how the relevant standards and options for this area can be identified given the business scoping parameters (see clause 6).

The target audience of the present document includes:

- 1) Business managers who potentially require support from digital signatures and in particular the provision of related supporting trust services in their business will find here an explanation of how digital signatures standards can be used to meet their business needs.
- 2) Application architects who will find here material that will guide them throughout the process of designing a system that fully and properly satisfies all the business and legal/regulatory requirements specific to digital signatures and in particular the provision of related supporting trust services. They will gain a better understanding on how to select the appropriate standards to be implemented and/or used.
- 3) Developers of the systems who will find in the present document an understanding of the main reasons that lead the systems to be designed as they were, as well as a proper knowledge of the standards that exist in the field and that they need to know in detail for a proper development.

2 References

2.1 Normative references

References are either specific (identified by date of publication and/or edition number or version number) or non-specific. For specific references, only the cited version applies. For non-specific references, the latest version of the referenced document (including any amendments) applies.

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The following referenced documents are not necessary for the application of the present document but they assist the user with regard to a particular subject area.

- [i.1] Regulation (EU) No 910/2014 of the European Parliament and of the Council on electronic identification and trust services for electronic transactions in the internal market and repealing Directive 1999/93/EC.
- [i.2] ETSI TR 119 000: "Electronic Signatures and Infrastructures (ESI); The framework for standardization of signatures: overview".
- [i.3] ETSI TR 119 100: "Electronic Signatures and Infrastructures (ESI); Guidance on the use of standards for signature creation and validation".