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Electronic Signatures and Infrastructures (ESI); Certificate Profiles; Part 1: Overview and common data structures

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Foreword

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

The present document is part 1 of a multi-part deliverable covering the Certificate Profiles, as identified below:

- Part 1:** "Overview and common data structures;
- Part 2: "Certificate profile for certificates issued to natural persons";
- Part 3: "Certificate profile for certificates issued to legal persons";
- Part 4: "Certificate profile for web site certificates issued to organizations";
- Part 5: "QCStatements".

Modal verbs terminology

In the present document **"shall"**, **"shall not"**, **"should"**, **"should not"**, **"may"**, **"need not"**, **"will"**, **"will not"**, **"can"** and **"cannot"** are to be interpreted as described in clause 3.2 of the [ETSI Drafting Rules](#) (Verbal forms for the expression of provisions).

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Introduction

ITU and ISO issued standards for certification of public keys in Recommendation ITU X.509 | ISO/IEC 9594-8 [i.3] which are used for the security of communications and data for a wide range of electronic applications.

Regulation (EU) No 910/2014 [i.9] of the European Parliament and of the Council of 23 July 2014 on electronic identification and trust services for electronic transactions in the internal market and repealing Directive 1999/93/EC defines requirements on specific types of certificates named "qualified certificates". Implementation of Directive 1999/93/EC [i.1], superseded by the Regulation (EU) No 910/2014 [i.9], and deployment of certificate infrastructures throughout Europe as well as in countries outside of Europe, have resulted in a variety of certificate implementations for use in public and closed environments, where some are declared as qualified certificates while others are not.

Applications need support from standardized and interoperable identity certificates profiles, in particular when applications are used for electronic signatures, authentication and secure electronic exchange in open environments and international trust scenarios, but also when certificates are used in local application contexts.

This multi-part document aims to maximise the interoperability of systems issuing and using certificates both in the European context under the Regulation (EU) No 910/2014 [i.9] and in the wider international environment.