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**Processes, data elements and  
documents in commerce, industry  
and administration — Long term  
signature —**

**Part 2:  
Profiles for XML Advanced Electronic  
Signatures (XAdES)**



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## Foreword

ISO (the International Organization for Standardization) is a worldwide federation of national standards bodies (ISO member bodies). The work of preparing International Standards is normally carried out through ISO technical committees. Each member body interested in a subject for which a technical committee has been established has the right to be represented on that committee. International organizations, governmental and non-governmental, in liaison with ISO, also take part in the work. ISO collaborates closely with the International Electrotechnical Commission (IEC) on all matters of electrotechnical standardization.

The procedures used to develop this document and those intended for its further maintenance are described in the ISO/IEC Directives, Part 1. In particular, the different approval criteria needed for the different types of ISO documents should be noted. This document was drafted in accordance with the editorial rules of the ISO/IEC Directives, Part 2 (see [www.iso.org/directives](http://www.iso.org/directives)).

Attention is drawn to the possibility that some of the elements of this document may be the subject of patent rights. ISO shall not be held responsible for identifying any or all such patent rights. Details of any patent rights identified during the development of the document will be in the Introduction and/or on the ISO list of patent declarations received (see [www.iso.org/patents](http://www.iso.org/patents)).

Any trade name used in this document is information given for the convenience of users and does not constitute an endorsement.

For an explanation of the voluntary nature of standards, the meaning of ISO specific terms and expressions related to conformity assessment, as well as information about ISO's adherence to the World Trade Organization (WTO) principles in the Technical Barriers to Trade (TBT), see [www.iso.org/iso/foreword.html](http://www.iso.org/iso/foreword.html).

This document was prepared by Technical Committee ISO/TC 154, *Processes, data elements and documents in commerce, industry and administration*.

This second edition cancels and replaces the first edition (ISO 14533-2:2012), which has been technically revised.

The main changes compared to the previous edition are as follows:

- in first edition (ISO 14533-2:2012), XAdES was an abbreviated term for 'XML Advanced Electronic Signature'; in this edition, XAdES becomes a proper noun and is used as 'XAdES digital signature';
- this edition supports XML namespace XAdES 1.4.1 elements;
- XAdES-A profile level is divided and explained as XAdES-X-Long form level;
- this edition describes the comparison with European EN in [Annex C](#), "Differences of required level between European EN and ISO specification".

A list of all parts in the ISO 14533 series can be found on the ISO website.

Any feedback or questions on this document should be directed to the user's national standards body. A complete listing of these bodies can be found at [www.iso.org/members.html](http://www.iso.org/members.html).

## Introduction

The purpose of this document is to ensure the interoperability of implementations with respect to long term signatures that make digital signatures verifiable for a long term. Long term signature specifications referenced by each implementation cover XAdES digital signatures developed by the European Telecommunications Standards Institute (ETSI).

ETSI EN 319 132 specifies data structures and core elements for XAdES digital signature. This document profiles ETSI EN 319 132 specification for international long term signature interoperability. ETSI EN 319 132 specification provides definitions of data structures, data elements and their usage in detail. To maintain consistency with ETSI EN 319 132 specification, this document avoids quoting and redefining those components defined in ETSI EN 319 132 specification.

In the first edition (ISO 14533-2:2012), XAdES was an acronym for ‘XML Advanced Electronic Signature’. In this second edition (ISO 14533-2:2021), XAdES is used as a proper noun and ‘XML Advanced Electronic Signature’ is changed to ‘XAdES Digital Signature’ in line with the definition change of ETSI from TS to EN; but it is still used in the document title.

