International Standard

ISO 14533-3

Second edition
2025-10

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

Part 3: Profiles for PDF Advanced Electronic Signatures (PAdES)

Processus, éléments d'informations et documents dans le commerce, l'industrie et l'administration — Signature à long terme —

Partie 3: Profils pour les signatures électroniques avancées des PDF (PAdES)

Reference number
ISO 14533-3:2025(en)

ISO copyright office
CP 401 • Ch. de Blandonnet 8
CH-1214 Vernier, Geneva
Phone: +41 22 749 01 11
Email: copyright@iso.org
Website: www.iso.org

Published in Switzerland

Contents

Page

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).

ISO draws attention to the possibility that the implementation of this document may involve the use of (a) patent(s). ISO takes no position concerning the evidence, validity or applicability of any claimed patent rights in respect thereof. As of the date of publication of this document, ISO had not received notice of (a) patent(s) which may be required to implement this document. However, implementers are cautioned that this may not represent the latest information, which may be obtained from the patent database available at www.iso.org/patents. ISO shall not be held responsible for identifying any or all such patent rights.

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.

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 14533-3:2017), which has been technically revised.

The main changes are as follows:

— terms and definitions have been added in the Clause 3 for clarity;

— the description and the title of tables have been changed in 6.4.2 for clarity.

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.

Introduction

The purpose of this document is to ensure the interoperability of implementations with respect to long-term signatures that make electronic signatures verifiable in the long term. Long-term signature specifications referenced by each implementation cover CAdES signatures as used in PDF described in ISO 32000-2 (PDF2.0).

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

Part 3: Profiles for PDF Advanced Electronic Signatures (PAdES)

1 Scope

This document specifies the elements, among those defined in PDF digital signatures (PAdES), that enable verification of a digital signature over a long period of time.

It does not give new technical specifications about the digital signature itself, nor new restrictions of usage of the technical specifications about the digital signatures which already exist.

2 Normative references

The following documents are referred to in the text in such a way that some or all of their content constitutes requirements of this document. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

ISO 32000-2, *Document management — Portable document format — Part 2: PDF 2.0*

3 Terms and definitions

ISO and IEC maintain terminology databases for use in standardization at the following addresses:

— ISO Online browsing platform: available at https://www.iso.org/obp

— IEC Electropedia: available at https://www.electropedia.org/

3.1
long-term signature
signature that is made verifiable having the ability to maintain its validity status and to get a proof of existence of the associated signed data for a long term by implementing measures to enable the detection of illegal alterations of signature information, including the identification of signing time, the subject of said signature, and validation data

[SOURCE: ISO 14533-1:2022, 3.1]

3.2
profile
rule used to ensure interoperability, related to the optional elements of referenced specifications, the range of values, etc.

3.3
required level
level of requirement for implementing each element constituting a *profile* (3.2)