



BSI Standards Publication

Transaction assurance in E-commerce — Principles and framework

National foreword

This British Standard is the UK implementation of [ISO 32111:2023](#).

The UK participation in its preparation was entrusted to Technical Committee IST/47/-/3, eBusiness.

A list of organizations represented on this committee can be obtained on request to its committee manager.

Contractual and legal considerations

This publication has been prepared in good faith, however no representation, warranty, assurance or undertaking (express or implied) is or will be made, and no responsibility or liability is or will be accepted by BSI in relation to the adequacy, accuracy, completeness or reasonableness of this publication. All and any such responsibility and liability is expressly disclaimed to the full extent permitted by the law.

This publication is provided as is, and is to be used at the recipient's own risk.

The recipient is advised to consider seeking professional guidance with respect to its use of this publication.

This publication is not intended to constitute a contract. Users are responsible for its correct application.

© The British Standards Institution 2023
Published by BSI Standards Limited 2023

ISBN 978 0 539 14418 5

ICS 03.080.30; 35.240.63

Compliance with a British Standard cannot confer immunity from legal obligations.

This British Standard was published under the authority of the Standards Policy and Strategy Committee on 31 October 2023.

Amendments/corrigenda issued since publication

Date	Text affected
------	---------------

INTERNATIONAL STANDARD

ISO
32111

First edition
2023-09-29

Transaction assurance in E-commerce — Principles and framework

*Assurance des transactions de commerce électronique —
Principes et cadre*



Reference number
ISO 32111:2023(E)
Documents
Document Sharing Hub
© ISO 2023



COPYRIGHT PROTECTED DOCUMENT

© ISO 2023, Published in Switzerland

All rights reserved. Unless otherwise specified, no part of this publication may be reproduced or utilized otherwise in any form or by any means, electronic or mechanical, including photocopying, or posting on the internet or an intranet, without prior written permission. Permission can be requested from either ISO at the address below or ISO's member body in the country of the requester.

ISO copyright office
Ch. de Blandonnet 8 • CP 401
CH-1214 Vernier, Geneva, Switzerland
Tel. +41 22 749 01 11
Fax +41 22 749 09 47
copyright@iso.org
www.iso.org

Contents

Page

Foreword	v
Introduction	vi
1 Scope	1
2 Normative references	1
3 Terms and definitions	1
4 Framework of e-commerce transaction assurance	1
5 Principles	2
5.1 General	2
5.2 Authenticity	2
5.3 Accountability	3
5.4 Accessibility	3
5.5 Security	3
5.6 Privacy	3
6 Participants in e-commerce transactions	3
7 Activities during the transaction process	4
7.1 General	4
7.2 Activities during pre-transaction phase	5
7.2.1 General	5
7.2.2 Account registration	5
7.2.3 Verification of registered information	6
7.2.4 Preparation of third-party service	6
7.2.5 Releasing transaction-related information	6
7.3 Activities during in-transaction phase	7
7.3.1 General	7
7.3.2 Placement of electronic order	7
7.3.3 Confirmation of electronic order	7
7.3.4 Choice of payment method	7
7.3.5 Payment for purchased products	8
7.3.6 Delivery of purchased products	8
7.3.7 Customs clearance	8
7.3.8 Receipt with confirmation	8
7.4 Activities during post-transaction phase	9
7.4.1 General	9
7.4.2 Performance evaluation	9
7.4.3 Resolving disputes	9
7.4.4 Return of products	10
7.4.5 Refund of payment	10
7.4.6 Compensation for transaction loss	10
7.4.7 Maintenance and technical support	10
8 Assurance elements	11
8.1 General	11
8.2 Identity information	12
8.3 Qualification information	12
8.4 Terms of use	12
8.5 Third-party service rule	12
8.6 Online reputation information	13
8.7 Product information	13
8.8 Transaction document	14
8.9 Multiple payment methods	14
8.10 Payment security rule	14
8.11 Delivery rule	14

8.12 Customs clearance rule..... 15

8.13 Performance evaluation rule 15

8.14 Dispute resolution rule..... 15

8.15 Return and refund rules..... 15

8.16 Compensation rules..... 16

8.17 Maintenance and technical support rule..... 16

Annex A (informative) List of principles in e-commerce and equivalent activities..... 17

Annex B (informative) List of principles in e-commerce and equivalent assurance elements..... 19

Annex C (informative) Correlation between transaction activities and assurance elements..... 21

Bibliography 22

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 321, *Transaction assurance in E-commerce*.

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 rapid development and wide use of e-commerce has increased awareness of the importance of fostering a trustworthy, reliable, and secure e-commerce transaction environment to ensure e-commerce transaction activities.

The characteristics of e-commerce transactions, e.g. highly digital, non-face-to-face and cross-regional, can bring challenges. The following are some of the challenges:

- more unknowns in the process of purchasing products;
- issues such as product quality, intellectual property, personal information protection, after-sale services, and transaction security;
- risks in product delivery, e.g. damage, delay and failure.

The challenges of e-commerce transactions come from different elements in upstream/downstream processes of e-commerce transactions, and eliminating those challenges necessitates the attention and efforts of all stakeholders.

This document specifies the principles and framework of e-commerce transaction assurance to support all parties in better understanding e-commerce transaction assurance activities.

It can assist in the following:

- identifying key elements to improve the assurance of the e-commerce transaction process;
- contributing to e-commerce transaction assurance programs;
- informing government or non-governmental organizations or individuals engaged in the e-commerce industry;
- promoting sustainable development of the e-commerce industry.

This document can also facilitate future e-commerce assurance standards development by putting forward key e-commerce assurance principles, identifying key stakeholders and elements and demonstrating the e-commerce transaction process.

Transaction assurance in E-commerce — Principles and framework

1 Scope

This document specifies the principles and framework for e-commerce transaction assurance, including participants, activities and assurance elements. It does not describe specific e-commerce transaction assurance requirements or methodologies in detail. It is intended to be used by organizations and individuals engaged in e-commerce transactions.

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 32110](#),¹⁾ *Transaction assurance in E-commerce — Vocabulary*

3 Terms and definitions

For the purposes of this document, the terms and definitions given in [ISO 32110](#) apply.

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/>

4 Framework of e-commerce transaction assurance

The framework of e-commerce transaction assurance (see [Figure 1](#)) includes principles (see [Clause 5](#)), participants in e-commerce transactions (see [Clause 6](#)), activities during the transaction process (see [Clause 7](#)) and assurance elements (see [Clause 8](#)), as well as their inter-relationships.

Principles provide guidance for participants on how to participate in activities during the transaction process and protect their interests. They also provide guidance for the smooth operation of activities in e-commerce transactions.

Assurance elements associated with activities during the transaction process are the main content of e-commerce transaction assurance. Assurance elements can support the accomplishment and realization of the principles.

Participants engage in activities during the transaction process according to their responsibilities and demands. No matter what role participants play in e-commerce transactions, they should identify and consider the assurance elements associated with their role as much as possible and take effective assurance measures.

1) Under preparation. Stage at the time of publication: ISO/FDIS 32110:2023.

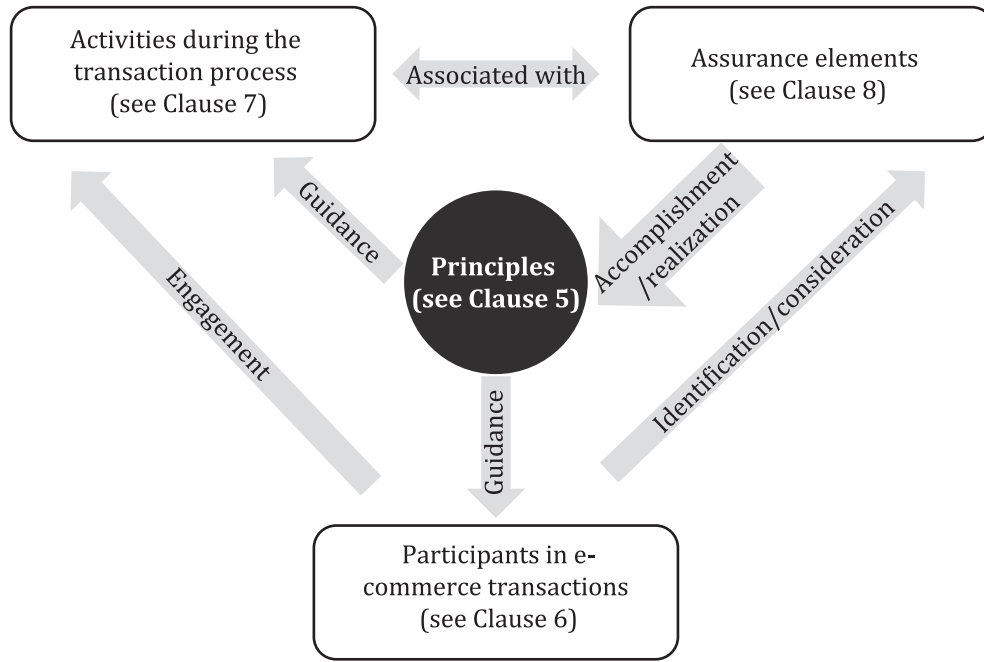


Figure 1 — E-commerce transaction assurance framework

5 Principles

5.1 General

The principles listed here are undertaken in accordance with all applicable requirements consistent with the protections for participants in the activities and the requirements on the assurance elements for e-commerce transactions. The principles are as follows:

- authenticity;
- accountability;
- accessibility;
- security;
- privacy.

The principles can generally support all activities during the transaction process, however, the degree of guidance of each principle towards different activities can differ. [Annex A](#) illustrates the list of e-commerce principles and the equivalent activities.

All assurance elements can support the realization or accomplishment of the principles, however, some assurance elements play a primary role in supporting the accomplishment of certain principles (see [Annex B](#)).

5.2 Authenticity

Participants, products and information generated in e-commerce transactions, should be consistent with what they claim to be.