

ISO/FDIS\_32112:2024(en)

ISO/TC\_321/WG\_4

Secretariat:\_SAC

Date: 2024-02-1709-19

2024-08-06

**Transaction assurance in E-commerce — Relevant factors of evaluation and selection of indicators**

iTeh Standards

(<https://standards.itih.ai>)

**FDIS stage**

[ISO/FDIS 32112](https://standards.itih.ai/catalog/standards/iso/f922bebe-5fab-4123-8939-413053a50419/iso-fdis-32112)

<https://standards.itih.ai/catalog/standards/iso/f922bebe-5fab-4123-8939-413053a50419/iso-fdis-32112>

© ISO 2024

All rights reserved. Unless otherwise specified, or required in the context of its implementation, 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  
CP 401 • Ch. de Blandonnet 8  
CH-1214 Vernier, Geneva  
Phone: +41 22 749 01 11  
~~Email~~E-mail: [copyright@iso.org](mailto:copyright@iso.org)  
Website: [www.iso.org](http://www.iso.org)~~www.iso.org~~

Published in Switzerland

iTeh Standards  
(<https://standards.iteh.ai>)  
Document Preview

[ISO/FDIS 32112](#)

<https://standards.iteh.ai/catalog/standards/iso/f922bebe-5fab-4123-8939-413053a50419/iso-fdis-32112>

## Contents

<b>Foreword</b> .....	<b>iii</b>
<b>Introduction</b> .....	<b>vi</b>
<b>1 Scope</b> .....	<b>1</b>
<b>2 Normative references</b> .....	<b>1</b>
<b>3 Terms and definitions</b> .....	<b>1</b>
<b>4 Conducting evaluations for E-commerce transactions</b> .....	<b>2</b>
<b>5 Relevant factors for conducting evaluations</b> .....	<b>5</b>
<b>6 Guidelines on selection of indicators in relevant factors</b> .....	<b>14</b>
<b>Annex A (informative) Examples for indicators in relevant factors of E-commerce transaction assurance</b> .....	<b>18</b>
<b>Annex B (informative) Matrix of factors and themes to be considered for evaluations</b> .....	<b>22</b>
<b>Bibliography</b> .....	<b>24</b>
<b>Foreword</b> .....	<b>5</b>
<b>Introduction</b> .....	<b>6</b>
<b>1 Scope</b> .....	<b>1</b>
<b>2 Normative references</b> .....	<b>1</b>
<b>3 Terms and definitions</b> .....	<b>1</b>
<b>4 Conducting evaluations for E-commerce transactions</b> .....	<b>2</b>
<b>4.1 Understanding the context of conducting evaluations</b> .....	<b>2</b>
<b>4.1.1 What are the purposes and features of evaluations?</b> .....	<b>2</b>
<b>4.1.2 Why are evaluations useful?</b> .....	<b>3</b>
<b>4.2 Benefits of conducting evaluations by various interested parties</b> .....	<b>3</b>
<b>4.2.1 Who should be involved when conducting evaluations?</b> .....	<b>3</b>
<b>4.2.2 Where and when can the results of evaluations be used?</b> .....	<b>4</b>
<b>4.3 Adopting the evaluation approach using indicators</b> .....	<b>4</b>
<b>5 Relevant factors for conducting evaluations</b> .....	<b>5</b>
<b>5.1 General</b> .....	<b>5</b>
<b>5.2 Quality of E-commerce transaction platforms and sites</b> .....	<b>5</b>
<b>5.2.1 Processing capacity</b> .....	<b>5</b>
<b>5.2.2 Interface</b> .....	<b>6</b>
<b>5.2.3 Information security and management measures</b> .....	<b>6</b>
<b>5.2.4 Compliance</b> .....	<b>6</b>
<b>5.2.5 Trust and brand reputation</b> .....	<b>7</b>
<b>5.3 Quality of E-commerce transaction services</b> .....	<b>7</b>
<b>5.3.1 Pre-sale services</b> .....	<b>7</b>
<b>5.3.2 Order services</b> .....	<b>8</b>
<b>5.3.3 Payment services</b> .....	<b>8</b>
<b>5.3.4 Logistic services</b> .....	<b>8</b>
<b>5.3.5 After-sales services</b> .....	<b>9</b>
<b>5.3.6 Miscellaneous services</b> .....	<b>9</b>
<b>5.4 Local external environments for E-commerce transactions</b> .....	<b>10</b>
<b>5.4.1 Business environment</b> .....	<b>10</b>

5.4.2	Initiatives and measures	10
5.4.3	Supervision	10
5.4.4	Availability of financing	11
5.5	Sustainability of E-commerce transactions	11
5.5.1	Sustainability in economy	11
5.5.2	Sustainability in society	11
5.5.3	Sustainability in environment	11
6	Guidelines on selection of indicators in relevant factors	12
6.1	Identifying the role of indicators	12
6.2	Characteristics of selected indicators	12
6.3	Steps to select indicators	13
Annex A (informative) Examples for indicators in relevant factors of E-commerce transaction assurance		15
Table A.1 – Example indicators for quality of E-commerce transaction platforms and sites		15
Table A.2 – Example Indicators for quality of E-commerce transaction services		16
Table A.3 – Example indicators for local external environments for E-commerce transactions		17
Table A.4 – Example indicators for sustainability of E-commerce transactions		18
Annex B (informative) Matrix of factors and themes to be considered for evaluations		19
Table B.1 – Matrix of factors and themes for evaluations to suit various interested parties’ needs		19
Bibliography		21

Document Preview

ISO/FDIS 32112

<https://standards.iteh.ai/catalog/standards/iso/f922bebe-5fab-4123-8939-413053a50419/iso-fdis-32112>

## 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 document 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)).

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](http://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](http://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](http://www.iso.org/members.html).

## Introduction

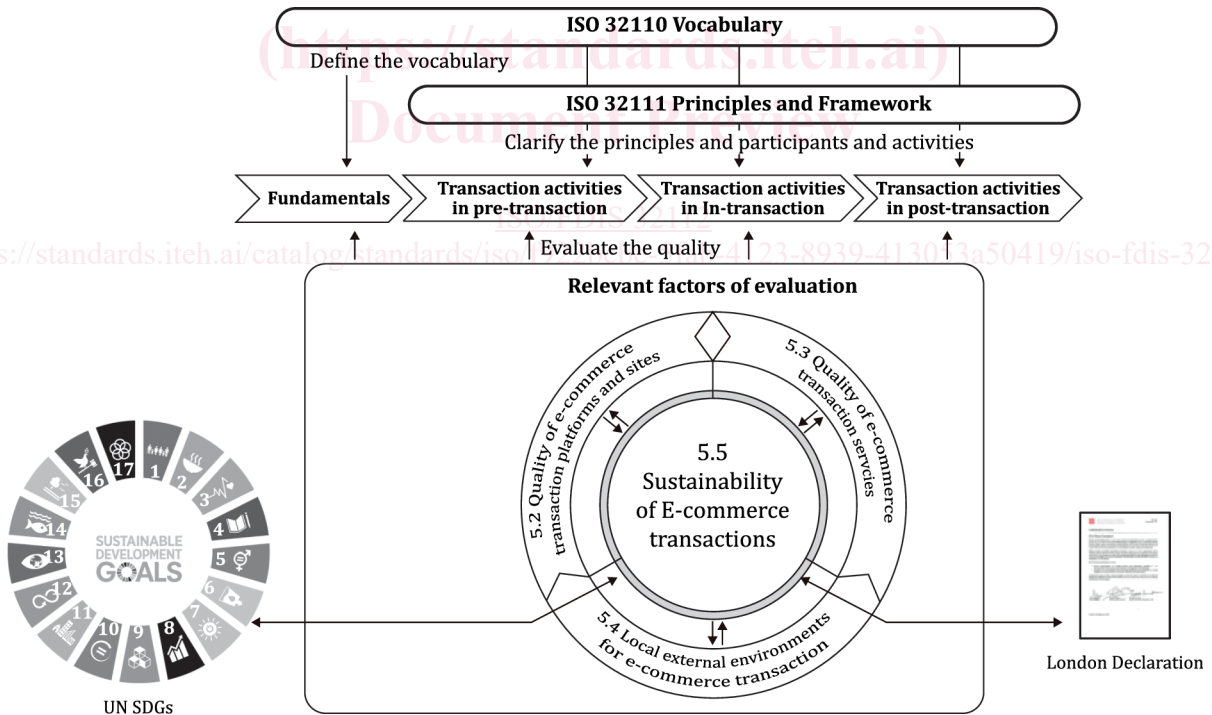
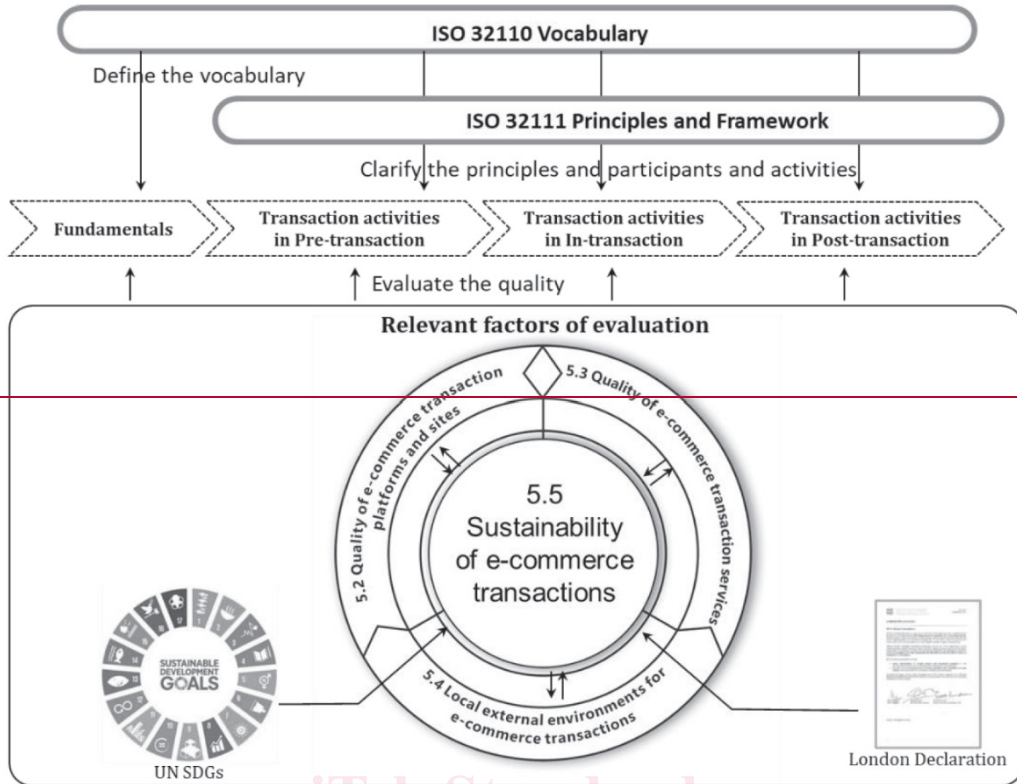
E-commerce has revolutionized the way businesses operate and has become an important driver of economic growth worldwide. The increasing number of E-commerce users has spurred growth in other digital industries, for example, mobile technology, information and communications technology (ICT), and digital advertising. Local governments view E-commerce as a new engine of economic growth, while entrepreneurs see it as an opportunity to tap into a larger market and ensure the security of their transactions.

Meanwhile, E-commerce has been a rapidly evolving field, with various emerging "new norm" digital commerce trends such as live commerce, social E-commerce, AI-driven commerce, crowdfunding E-commerce, Internet of Things (IoT) in E-commerce, and data analytics and consumer profiling. These trends also have significant impacts related to the assurance of E-commerce transactions.

E-commerce transactions offer numerous benefits for businesses and consumers, but they also come with inherent risks, for example, fraud and abuse. As such, transaction assurance has become crucial for all interested parties. To reduce legal uncertainties and mitigate risks, the approach of carrying out evaluations is necessary. The evaluation of various targets enables E-commerce platform operators, buyers and sellers to check the safety and privacy of online transaction information, ensuring that all interested parties are satisfied with the convenience, safety and confidentiality of the entire transaction process. Moreover, the evaluation also plays an important role in market vitality, policy-making, reliability of cross-border transactions, etc.

This document provides a comprehensive evaluation approach to aid selection of indicators for various factors and themes. It elaborates four relevant factors that should be considered when carrying out evaluations of E-commerce transactions, including the quality of E-commerce transaction platforms and sites, the quality of E-commerce transaction services, the local external environments for E-commerce transactions and the sustainability of E-commerce transactions.

**Figure 1** illustrates the positioning of relevant evaluation factors in the transaction process. The quality of E-commerce transaction platforms and sites is evaluated with regard to their abilities and capabilities to enhance security and privacy. The quality of E-commerce transaction services is graded by the services provided throughout the process of E-commerce transactions. The local external environment for E-commerce transactions measures the impact of external aspects. The sustainability of E-commerce transactions emphasizes the impacts on the economy, society, and environment, reflecting the United Nations Sustainable Development Goals (SDGs) and the London Declaration, which was approved by members of ISO at the ISO General Assembly 2021. The London ~~declaration~~**Declaration** represents a push from ISO to transform the approach to climate action and advance international efforts to attain net-zero goals.



**Figure 1 — Positioning for the relevant factors of evaluation**

By following the systemic approach outlined in this document, indicators can be selected by interested parties based on the framework of factors, themes defined under the factors and consideration points under the themes. This approach ensures a comprehensive evaluation of E-commerce transaction assurance, which is helpful to improve customer experience, ensure fairness and justice, and minimize negative impacts on the environment.

This document provides an assessment method for the use of indicators and relevant factors, so that it can later serve as a reference for improving quality levels throughout the entire process. The themes of the relevant factors are in accordance with the activities provided in ISO 32111, with some additional themes included to reflect the external factors that can potentially impact the E-commerce transaction process.

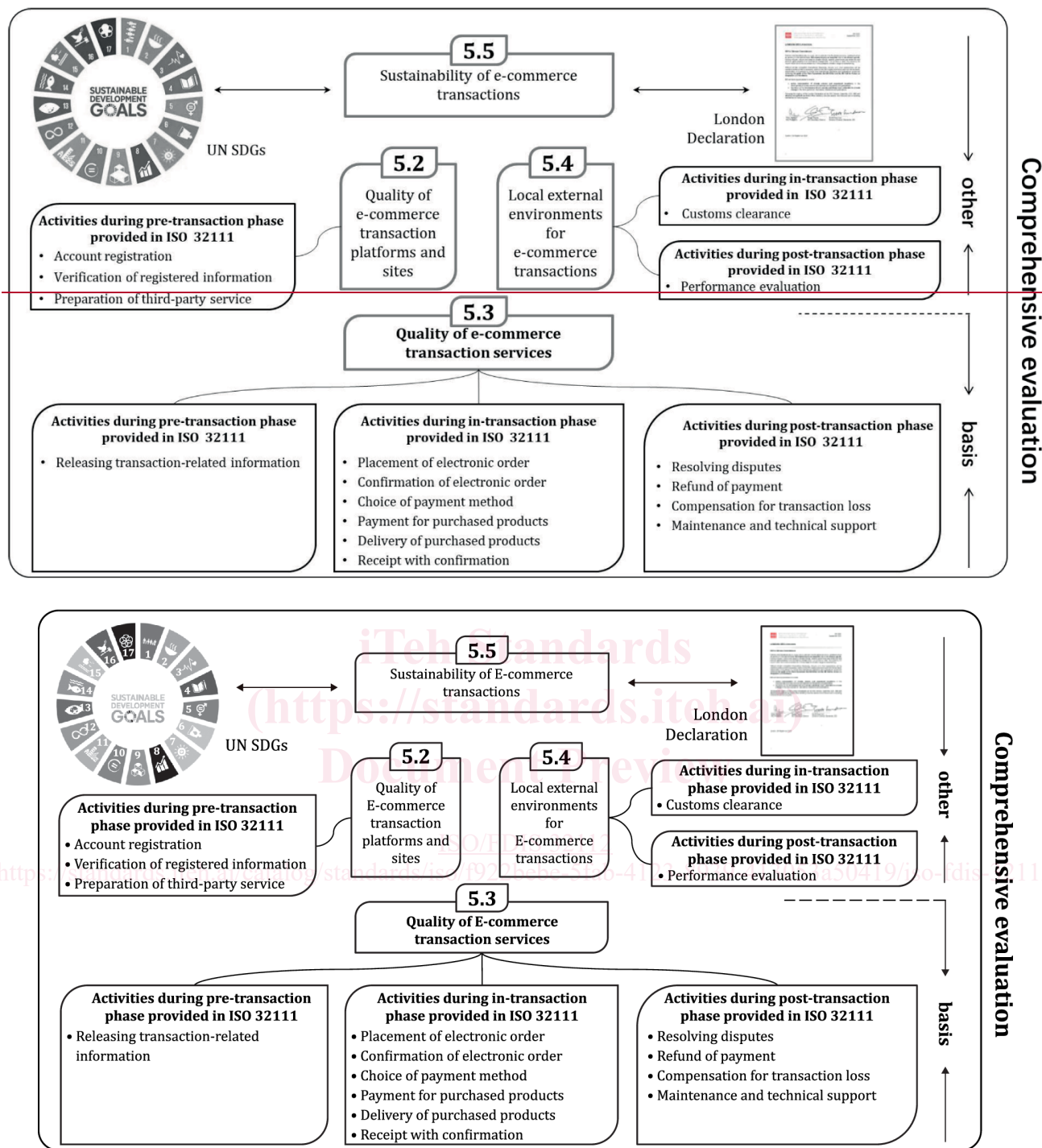
**Figure 2** illustrates the corresponding relationship between this document and the activities provided in ISO 32111. Specifically, **5.3.5.3** outlines the basic factors of transaction assurance, which correspond to the activities that occur in the pre-transaction, in-transaction, and post-transaction stages. The themes provided in **5.2.5.2** partially relate to pre-transaction activities, such as account registration defined in ISO 32111. On the other hand, the themes identified in **5.4.5.4** partially align with in-transaction and post-transaction activities, such as performance evaluation.

iTeh Standards  
(<https://standards.iteh.ai>)  
Document Preview

ISO/FDIS 32112

<https://standards.iteh.ai/catalog/standards/iso/f922bebe-5fab-4123-8939-413053a50419/iso-fdis-32112>





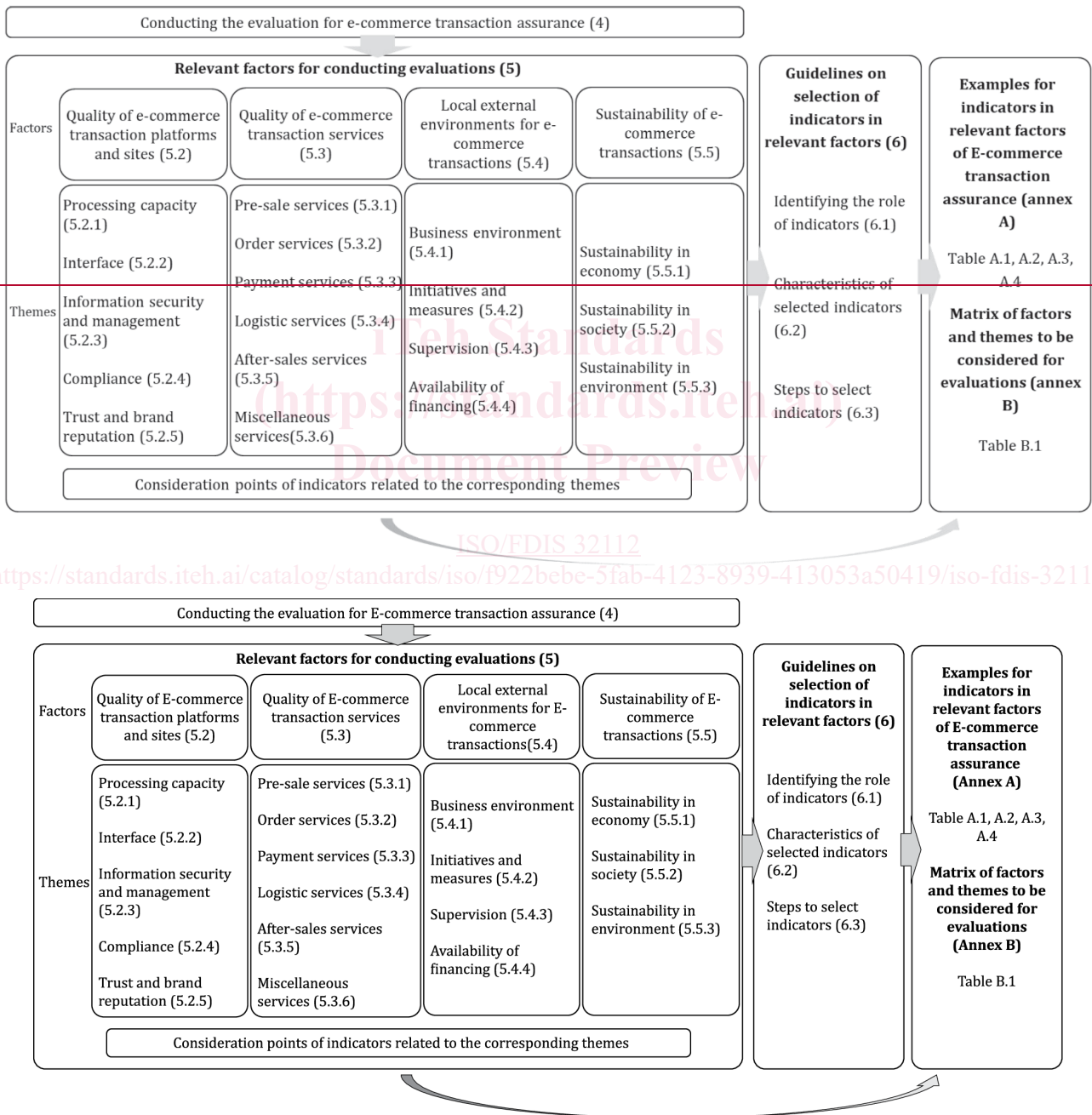
**Figure 2 — Relationship between this document and the activities provided in ISO 32111**

This document is applicable for gathering various information to evaluate E-commerce transactions. ~~It should be noted that~~The tracking of essential buyers' information is solely conducted for the purpose of evaluating the E-commerce transaction process. This is ~~required done~~ to protect buyers' personal information and to ensure cyber-security and privacy of the online transaction information for E-commerce platform operators, buyers and sellers.

This document is beneficial for a diverse range of interested parties, such as E-commerce platform operators, sellers, service providers, neutral parties, research institutions and local governments, to ensure the security and trustworthiness of transactions. This approach facilitates the identification of areas for improvement and

enables the implementation of measures to assure E-commerce transactions, ultimately improving service quality and customer satisfaction, contributing to the economy, society and the environment.

**Figure 3** provides an overview of the main contents and the logical structure of this document. **Clause 4** pertains to the evaluation of E-commerce transaction assurance, while **Clause 5** covers relevant factors, themes, and consideration points. **Clause 6** provides guidelines and procedures for selecting indicators. **Annex A** presents examples of indicators that align with the relevant factors, themes, and consideration points, and **Annex B** outlines various relevant factors and themes that interested parties can choose based on their respective context and interests.



**Figure 3 — Overview of the main contents and logic in this document**

# Transaction assurance in E-commerce — Relevant factors of evaluation and selection of indicators

## 1 Scope

This document provides the description of relevant factors for evaluating E-commerce transactions, which can help in identifying indicators, evaluation toolkits, and an approach for selection of indicators. This document focuses on E-commerce transaction assurance by providing the relevant factors of evaluations including quality of E-commerce transaction platforms and sites, quality of E-commerce transaction services, local external environments for E-commerce transactions, and sustainability of E-commerce transactions. This document also explains the way to set up a set of E-commerce transaction evaluation indicators that enables monitoring and improvement of the quality of 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 32111, *Transaction assurance in E-commerce — Principles and framework*

## 3 Terms and definitions

For the purposes of this document, the following terms and definitions 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/>

### 3.1

#### relevant factor

specific aspect that is significant or important in a particular situation or context

Note 1-to-entry:- These factors are considered to be relevant because they have a direct impact on the outcome, decision, understanding or analysis of the situation.

### 3.2

#### theme

specific or detailed topic or area under each *relevant factor* (3.1)(3.1)

Note 1-to-entry:- By identifying and exploring themes within relevant factors, users can gain more detailed information of each factor.

### 3.3

#### consideration point

specific issue that must be taken into account when making a decision on selecting an *indicator* (3.4)(3.4)