



Technical Report

ISO/TR 32123

Transaction assurance in E-commerce — After-sales services

Assurance des transactions de commerce électronique — Services après-vente

**First edition
2024-12**

STANDARDSISO.COM : Click to view the full PDF of ISO/TR 32123:2024

STANDARDSISO.COM : Click to view the full PDF of ISO/TR 32123:2024



COPYRIGHT PROTECTED DOCUMENT

© 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: copyright@iso.org
Website: www.iso.org

Published in Switzerland

Contents

	Page
Foreword	v
Introduction	vi
1 Scope	1
2 Normative references	1
3 Terms and definition	1
4 After-sales services in the E-commerce context	2
4.1 Overview.....	2
4.2 Logistics.....	2
4.2.1 Overview.....	2
4.2.2 Dispatch.....	3
4.2.3 Customs clearance.....	3
4.2.4 Transportation and last-mile delivery.....	3
4.2.5 Reverse logistics.....	4
4.2.6 Delivery of virtual goods.....	4
4.3 Maintenance and technical support.....	4
4.3.1 Overview.....	4
4.3.2 Terms and conditions.....	4
4.3.3 Process.....	5
4.4 Return of products.....	5
4.4.1 Overview.....	5
4.4.2 Terms and conditions.....	5
4.4.3 Process.....	6
4.4.4 Return for virtual goods.....	6
4.5 Refund of payment.....	6
4.5.1 Overview.....	6
4.5.2 Refund policy.....	7
4.5.3 Process.....	7
4.6 Resolving disputes.....	7
4.6.1 Overview.....	7
4.6.2 Complaint handling.....	7
4.6.3 Dispute resolution.....	8
4.7 Compensation for transaction loss.....	9
4.7.1 Overview.....	9
4.7.2 Terms and conditions.....	9
4.7.3 Process.....	10
5 Quality factors of after-sales services	10
5.1 Overview.....	10
5.2 Policy.....	10
5.3 Information.....	11
5.4 Resources.....	12
5.4.1 Human resources.....	12
5.4.2 Technical resources.....	12
5.4.3 Financial resources.....	12
6 Quality improvement measures	13
6.1 General.....	13
6.2 Applicable International Standards.....	13
6.3 Use cases.....	13
6.3.1 Logistics.....	13
6.3.2 Maintenance and technical support.....	14
6.3.3 Return of products.....	14
6.3.4 Refund of payment.....	14
6.3.5 Resolving disputes.....	15
6.3.6 Compensation for transaction loss.....	15

6.3.7 Seller rating.....	16
Bibliography.....	17

STANDARDSISO.COM : Click to view the full PDF of ISO/TR 32123:2024

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).

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 of E-commerce has significantly impacted buyers' shopping behaviours, and intensified competition in the E-commerce market. Consequently, the quality of after-sales services provided by E-commerce operators to buyers has become a critical factor in E-commerce transaction assurance. Improving the quality of after-sales services is therefore crucial for buyers as it enhances their satisfaction and trust in E-commerce transactions. It is also essential for E-commerce operators to maintain a competitive edge.

In contrast to traditional after-sales services, E-commerce after-sales services are provided not only to tangible goods but also to virtual goods. They can also compass a broader spectrum of activities, for example, continuous customer support, automated refund processes, logistics tracking, etc. They can therefore involve some new participants, such as E-commerce platform operators, logistic service providers, couriers and technical support teams.

These new elements pose challenges to E-commerce after-sales services. The diversity of E-commerce after-sales service activities can lead to inadequate policy development, causing buyers to be confused about specific terms. The involvement of numerous participants can lead to inconsistencies in service quality, including differences in delivery time, eligibility criteria for return and refund. The diversity of product types can lead to disparate policies, resulting in issues such as difficulties with virtual goods refunds. Providing sustained online support can lead to a deficit of customer service personnel, resulting in issues such as delays in handling complaints.

This document analyses the core aspects of various E-commerce after-sales service activities, the factors affecting service quality and the existing issues in after-sales services. This document also specifies International Standards and use cases to help enhance service quality for after-sales services for E-commerce operators.

STANDARDSISO.COM : Click to view the full PDF of ISO/TR 32123:2024

Transaction assurance in E-commerce — After-sales services

1 Scope

This document provides information on the nature of after-sales services unique to E-commerce transactions. It is a review of current practices across different platforms, an analysis of factors that impact quality of after-sales services in E-commerce transactions and a description of possible means to enhance after-sales services.

2 Normative references

There are no normative references in this document.

3 Terms and definition

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 tangible goods

physical products or items that can be touched and seen

EXAMPLE Books, clothes, furniture, tools, equipment, appliances, cars, jewellery and more.

3.2 virtual goods

intangible assets that are not physically available but virtually present

EXAMPLE E-books, downloadable music, films, games and apps.

3.3 service

activity, or set of activities, provided for the benefit, or to meet the needs, of a buyer

EXAMPLE Service can include offline services and online services. Offline services include those delivered in real life, such as travel services, hotel and event bookings. Online services include those delivered online, such as cloud services, social media, communication, email and Skype.

[SOURCE: ISO/IEC Guide 76:2020, 3.11, modified — “consumer” has been replaced by “buyer”. Notes 1, 2, 3 and 4 to entry has been deleted, EXAMPLE has been added.]

3.4 E-commerce platform

e-marketplace

network information system that provides one or more services to interested parties to facilitate E-commerce transactions

Note 1 to entry: Service can consist of information releasing, information delivery, data processing and transaction information matching.

Note 2 to entry: Platform means application interface to provide E-commerce transactions in forms of websites and mobile applications.

[SOURCE: ISO 32110:2023, 3.1.7]

3.5

E-commerce operator

individual or organization engaged in E-commerce

Note 1 to entry: E-commerce operator can be an E-commerce platform operator or a seller.

[SOURCE: ISO 32110:2023, 3.2.6]

3.6

E-commerce platform operator

organization that operates an E-commerce platform

[SOURCE: ISO 32110:2023, 3.2.7]

3.7

seller

individual or organization that sells products over open networks

Note 1 to entry: A seller can be a manufacturer or a retailer. When trading large volumes of goods for profit or business, a seller can be a merchant.

Note 2 to entry: The definition of seller includes both for-profit and non-profit.

[SOURCE: ISO 32110:2023, 3.2.13]

4 After-sales services in the E-commerce context

4.1 Overview

After-sales services in E-commerce refer to the services and support provided by E-commerce operators and related parties to meet the needs of buyers after purchase. Besides E-commerce operators, the involved parties can include manufacturers, logistic service providers, third-party payment service providers, etc.

Based on current global E-commerce practices, after-sales services in E-commerce can include various activities. For instance, when considered starting after product receipt, the main components of after-sales services include maintenance and technical support, return of products, refund of payment, resolving disputes and compensation for transaction loss. If they are considered to start after order placement, additional activities in after-sales services can also encompass logistics.

After-sales service activities also differ across various products. For example, after-sales services for tangible goods can encompass installation, maintenance, returns and exchanges, etc. This is in contrast to virtual goods and services, which can include consultation, upgrades, training, etc.

To enhance the quality of E-commerce after-sales services, it is crucial to analyse and understand the relevant factors that can have impacts on E-commerce activities and the quality of after-sales services.

4.2 Logistics

4.2.1 Overview

In E-commerce, timely delivery is critical for ensuring that orders are processed and fulfilled promptly and accurately. Consequently, in some practices, logistics is viewed as a key after-sales activity that is essential for buyer satisfaction. Key aspects related to logistics service quality can be found in the processes of dispatch, customs clearance, transportation and last-mile delivery, and reverse logistics.

4.2.2 Dispatch

Dispatch refers to the process whereby purchased goods are picked from inventory and packaged for shipment. The following aspects are important to the service quality:

- a. Options for logistic service providers: Whether options for specifying logistic service providers are available to buyers to select on the shopping order page or review page.
- b. Packaging: Whether E-commerce operators or logistic service providers package goods with suitable materials and label the package according to applicable rules. This can involve indicating precautions such as fragile, hazardous items and instructions for buyers to check the condition of goods prior to acceptance.
- c. Dispatch time: Whether products are dispatched within a predefined time frame set by E-commerce platform operators, sellers, or as agreed with the buyer.
- d. Cost: Whether there is a provision for free shipping, or an estimated shipping fee is applied.
- e. Notice of dispatch: Whether notification is provided by E-commerce platform operators, sellers or logistic service providers, enabling buyers to track the status of their orders, including dispatch time, the tracking number of the package, etc.

4.2.3 Customs clearance

Customs clearance refers to the process of complying with the requirements set by customs authorities for importing and exporting goods across international borders. The following aspects are important to the service quality:

- a. Information availability: Whether E-commerce operators provide clear instructions on what information is to be submitted for customs clearance (e.g. common customs clearance types, buyers ID) and how they can be submitted (e.g. "Single Window" for international trade).
- b. Customs brokerage services: Whether E-commerce operators offer the option of utilizing customs brokers who are experts in the customs clearance process to expedite the delivery of goods to buyers. Customs brokers assist in preparing the necessary documentation (commercial invoices, certificates of origin, waybills, packing lists, import contracts, any necessary certifications or permits, etc.), coordinating inspections, and facilitating communication between sellers, buyers, and customs authorities. Additionally, whether E-commerce platform operators or related entities offer customs brokerage services to buyers on their E-commerce platforms or similar platforms.
- c. Customs clearance tracking: Whether E-commerce platform operators integrate tracking capabilities that enable sellers and buyers to track the progress of shipments through the customs clearance process. Furthermore, whether E-commerce platform operators provide effective communication channels to address any customs-related inquiries or issues.

4.2.4 Transportation and last-mile delivery

Transportation and last-mile delivery involve the transportation of goods from the warehouse to the buyer. The following aspects are important to the service quality:

- a. Transportation mode selection: Whether the logistic service providers have the flexibility to select the appropriate mode (such as ground, air, or sea) and equipment (such as cold-chain transportation) of transportation based on factors like buyer location, package size and delivery requests.
- b. Shipping options: Whether a range of shipping options is offered to buyers to suit their preferences and needs. Options can include standard shipping, expedited shipping, same-day delivery or in-store pickup options.
- c. Logistics tracking: Whether logistic service providers offer real-time tracking updates to enable buyers to track the status of their shipments and predict delivery times.

- d. Communication channel: Whether E-commerce platform operators provide effective communication channels for buyers to address issues such as damaged goods, loss shipping, or discrepancies in quantities through communication with E-commerce operators.

4.2.5 Reverse logistics

Reverse logistics refers to the coordination of returned goods from buyers back to the seller, as well as the proper handling of those goods. The aspects that affect the service quality of reverse logistics include customs clearance (see 4.2.3), transportation (see 4.2.4), and additional elements as follows:

- a. Cost: Whether buyers are offered free reverse logistics service or clearly informed of any additional costs, such as freight or storage fees, and whether this information is provided before purchase transaction or at another suitable time.
- b. Reverse logistics tracking: Whether E-commerce platform operators or logistic service providers offer services that allow buyers to track the movement and status of their returned items.
- c. Packaging: Whether logistic service providers package goods with suitable materials to protect the goods from damage during transportation.

4.2.6 Delivery of virtual goods

Delivery of virtual goods differs from tangible goods, as it involves electronic transfer of digital products or services to buyers. The following aspect are important to the service quality:

- a. Delivery method: Depending on the nature of the virtual goods, virtual goods can be delivered through various methods. This can involve accessing an online platform, downloading directly through applications, or receiving license keys, activation codes, or login details.
- b. Validity: Whether the validity period of the virtual goods is clearly communicated to buyers on the product detail page, including the start and end dates. Whether buyers are given instructions on how to utilize the virtual goods, prompting them to download or use them accordingly.

4.3 Maintenance and technical support

4.3.1 Overview

Maintenance and technical support involve ongoing efforts to keep the product functioning properly. Maintenance refers to preserving or restoring a product's ability to perform its intended functions, which can involve repairing or replacing components. Technical support refers to helping buyers correctly utilize the product, including providing guidance in installation. E-commerce operators usually offer maintenance and technical support for products via warranty services.

In E-commerce, warranties can be offered by various participants involved in the online retail process. Manufacturers and sellers serve as the primary warranty providers, ensuring the quality and functionality of products. E-commerce platform operators can also extend warranty services for products sold on their platform. This can augment the warranty services provided by the manufacturer or seller, prolong the warranty period, or include additional services. The key aspects in the warranty include its terms and conditions, as well as the processes involved.

4.3.2 Terms and conditions

The terms and conditions of a warranty in E-commerce vary across the product and the warranty providers. Typically, these terms are accessible on the product detail page of the E-commerce platform, enabling buyers to review them before making a purchase. The following aspects are important to the service quality:

- a. Warranty coverage: Whether manufacturers or sellers explicitly state what is included under the warranty. This includes detailing which components or parts are covered, as well as any restrictions or exclusions.

- b. Warranty duration: Whether the warranty duration is clearly defined and if it is a fixed or a predetermined period, such as from the date of purchase or installation. Whether this information is published at a prominent place on the E-commerce platform for the ease and convenience of the buyer.
- c. Warranty cost: Whether the responsibility for costs associated with the warranty claim is clearly delineated, including shipping fees and any applicable deductions or fees for the buyer.
- d. Warranty extension and renewal: Whether E-commerce operators provide details on the process, associated costs, and additional conditions for extending or renewing the warranty.

4.3.3 Process

In E-commerce, the warranty process involves the buyer initiating a warranty claim and the E-commerce operator promptly addressing it upon receiving the necessary details. The following aspects are important to the service quality:

- a. Claim channels: Whether E-commerce operators specify the methods for initiating the warranty claim, including through the E-commerce platform's website or app, or direct communication via email or online chat.
- b. Documentation requirements: Whether sellers clearly communicate the documentation needed from the buyers, such as proof of purchase, or visual evidence of defects. Upon receiving the necessary information, sellers can evaluate and proceed with the claim.
- c. Resolution methods: Whether E-commerce operators offer solutions that adhere to warranty terms and align with the buyer's preference, such as repairing or replacing the defective product, issuing a refund, or providing alternative compensation. Furthermore, whether E-commerce operators explain the process for various warranty approaches and aim to resolve warranty claims within a reasonable time frame.
- d. Process status: Whether E-commerce operators enable buyers to track the warranty progress through tracking tools. Moreover, whether E-commerce operators promptly respond to any warranty-related inquiries or concerns from buyers.

4.4 Return of products

4.4.1 Overview

In E-commerce, product returns refer to the process of a buyer sending back a purchased item to the E-commerce operators for various reasons, such as receiving a damaged or defective item, dissatisfaction with the purchase. Depending on the buyer's preference, product returns can be categorized as direct return and exchanges. Direct returns involve the buyer sending the purchased product back to the seller, who then refunds all or part of the purchased price to the buyer. Exchange refers to the buyer's desire to replace the originally purchased item with an alternative forgoing a refund. Buyers typically initiate returns or exchanges in accordance with the applicable rules and policies of the E-commerce operators. The key aspects involved in product returns include terms and conditions, return processes, and returns for virtual goods.

4.4.2 Terms and conditions

The terms and conditions of returns and exchanges in E-commerce vary by types of goods or service. These policies are accessible on the E-commerce platform's website, enabling buyers to review them before making a purchase. By placing an order, the buyer implicitly agrees to the terms, establishing a contractual agreement with the seller. For certain types of goods, sellers explicitly state the specific conditions for returns and exchanges in a prominent position on the product detail page. The following aspects are important to the service quality:

- a. Eligibility criteria: Whether the acceptable condition for items being returned or exchanged are clearly defined. This can stipulate that the goods are in their original packaging, unused, undamaged, and in resalable condition, except in cases where specific exceptions or limitations apply, such as product recalls due to safety, quality, regulatory, or other reasons.

- b. Time frame: Whether E-commerce operators specify the deadlines for returns or exchanges.
- c. Return and exchange instruction: Whether E-commerce platform operators clearly display the detailed steps for returns and exchanges in a prominent position, enabling both sellers and buyers to follow the process, thereby facilitating the handling of returns and exchanges.

4.4.3 Process

The return or exchange process involves the buyer initiating the procedure on the E-commerce platform, with sellers promptly processing the request upon receiving necessary information and facilitating the return, exchange, or refund accordingly. The following aspects are important to the service quality:

- a. Claim initiation options: Whether E-commerce operators offer buyers clear options for initiating a return or exchange, such as through a customer service hotline, email, or online chats.
- b. Documentation requirements: Whether E-commerce operators clearly inform buyers of the necessary information to provide, including the reason for the return or exchange, order number, packaging condition and damaging condition, etc.
- c. Process status updates: Whether E-commerce operators provide buyers with timely updates on each stage of the return or exchange process, including acceptance of the claim, receipt of returned goods, and confirmation of eligibility.
- d. Logistics tracking: Whether E-commerce platform operators provide buyers with real-time logistics tracking information to trace the movement of their items.
- e. Resolution options: Whether sellers implement solutions tailored to buyer needs, such as issuing refunds to the original payment method, offering discount coupons, or facilitating an exchange with the requested or alternative goods.
- f. Methods of communication: Whether E-commerce platform operators establish effective communication channels between sellers and buyers, ensuring that sellers keep buyers informed about the claim's progress, any delays or issues, and the final resolution. Timely and transparent communication helps maintain buyer satisfaction and trust.
- g. Time frame: Whether sellers adhere to the specific timelines set by E-commerce platform policies to ensure a smooth and efficient process. Whether buyers can remind sellers to handle returns or exchanges promptly according to these timelines.

4.4.4 Return for virtual goods

In general, virtual goods and services are considered distinct products, with agreements between sellers and buyers based on their specific characteristics. In case of seller error, communication and negotiation can be pursued for return or exchange of products. The following aspects are important to the service quality:

- a. Resolution options: Whether the seller offers a range of options for buyers, including return, partial return and exchange.
- b. Documentation requirements: Whether buyers supply the seller with the necessary information for returns, partial refunds, or exchange (e.g. evidence of cancelled flights or unused virtual goods). Additionally, whether buyers can clearly communicate their specific needs for product exchanges, such as adjusting the hotel check-in dates or extending the validity of virtual goods.

4.5 Refund of payment

4.5.1 Overview

Refunds refer to the process of reimbursing or repaying the price paid by the buyers for a product. It involves fully or partially return of payment due to product returns, order cancellation, or dissatisfaction with goods

or services. The key processes involved in the refund process include the refund policy and the steps for processing refunds.

4.5.2 Refund policy

E-commerce platform operators typically establish refund policies that define the conditions under which refunds are granted, and sellers can provide additional details on the refund conditions if the policy is met. Refund policies are typically accessible on the E-commerce platform, allowing buyers to review the terms before making a purchase. The following aspects are important to the service quality:

- a. Eligibility criteria: Whether sellers articulate what conditions are deemed acceptable for a refund. This can encompass the product's condition (unused, unopened, or undamaged), the presence of original packaging, the inclusion of accessories, and the procedures for initiating a refund.
- b. Time frame: Whether sellers indicate specific timelines within which buyers can request a refund. This time frame can vary based on the product type. Whether buyers are aware of this time frame and to initiate the refund process within the designated period.

4.5.3 Process

The refund process involves the prompt response of E-commerce operators or third-party payment service providers upon receiving a buyer's refund request and ensuring the settlement of such refund within a reasonable timeframe. The following aspects are important to the service quality:

- a. Options of claim initiation: Whether E-commerce platform operators provide buyers with options to initiate a refund or describe the method by which buyers can initiate a refund. After a buyer submits a refund claim, if the seller fails to process it within the specified timeline, the E-commerce platform operator can assist the buyer with contacting the seller and can oversee the seller to ensure prompt processing.
- b. Documentation requirements: Whether sellers notify buyers of the relevant information they need to provide, such as the reason for the refund request and the order number.
- c. Refund method: Whether sellers agree to issue the refund to the buyer by agreement via methods such as credit card or bank transfer. The specific timeline for refund processing can vary based on factors like payment method and processing capacity. Whether the buyer is informed of the estimated refund time.
- d. Refund process status: Whether sellers provide timely updates to buyers on the stages of processing throughout the refund claim process. This can include the approval of the refund, any delays, and successful refunds, etc.

4.6 Resolving disputes

4.6.1 Overview

Complaints handling and dispute resolution are distinct yet interconnected processes for addressing buyer issues and resolving conflicts in E-commerce transactions. Complaints handling focuses on enabling sellers to understand and address buyers' concerns, aiming to provide immediate relief or resolution at an early stage to prevent escalations. Disputes resolution refers to a situation where the buyer's dissatisfaction remains unresolved after complaints handling by the seller, necessitating a third party to find a mutually acceptable solution.

4.6.2 Complaint handling

4.6.2.1 Overview

Complaint handling refers to the procedures and processes followed by an online seller to address and resolve buyer complaints or concerns. It involves actively listening to buyer grievances, thoroughly investigating the relevant issues, and providing appropriate solutions or remedies to ensure buyer satisfaction. Effectively

handling of complaints in E-commerce is crucial for maintaining buyer trust, loyalty, and satisfaction. The key aspects involved in complaint handling include mechanisms and processes.

4.6.2.2 Mechanism

In E-commerce, the seller establishes a mechanism for handling complaints to address buyers' dissatisfaction or demands in E-commerce transactions. The policies for handling complaints, detailed complaint process, and other relevant documents are prominently displayed for buyers to consult when they have a complaint. The following aspects are important to the service quality:

- a. Policies for handling complaints: Whether E-commerce platform operators establish uniform policies for handling complaints and publicly displays them in a prominent position. Whether the sellers on the E-commerce platform adhere to the relevant requirements during the complaint handling process.
- b. Complaint channels: Whether sellers have explained how the buyer can initiate the complaint, such as through online chat, online complaint form, email address for receiving the complaint, etc. Whether buyers are informed of any additional information they need to provide.

4.6.2.3 Process

Complaint handling process refers to seller's prompt response and resolution following the receipt of the buyer's complaint, which can be detailed in the platform's terms and conditions, a dedicated claims policy page or an online dispute resolution (ODR) platform. The following aspects are related to the service quality:

- a. Complaint acknowledgement: Whether sellers confirm the receipt of the complaint and clarify the buyer's expectation.
- b. Complaint resolution: Whether sellers offer buyers suitable remedies, including refunds, replacement, gift coupons, etc.
- c. Process status update: Whether sellers offer a tracking mechanism for buyers to track the progress, including details such as the complaint acknowledgement, the buyer's submitted materials and claims, and the projected timeline.
- d. Time frame: Whether sellers address within an acceptable time frame to prevent escalation of issues and preserve buyer satisfaction and trust.

4.6.3 Dispute resolution

4.6.3.1 Overview

Dispute resolution refers to the systematic approach to resolve conflicts or disagreements that emerge in online transactions between buyers and sellers, such as issues with undelivered or defective products, payment disputes, shipping problems, inaccurate item descriptions and miscommunication, or any disputes occurring within an E-commerce transaction. ODR is a mechanism that facilitates dispute resolution online. See ISO 32122¹⁾ for further details on ODR.

E-commerce platform operators address potential issues promptly and equitably using effective dispute resolution protocols, minimize the occurrence of disputes, ensure buyer satisfaction, and promote a secure online marketplace environment. The key aspects involved in dispute resolution include mechanisms and processes.

1) Under preparation. Stage at the time of publication: ISO/FDIS 32122.

4.6.3.2 Mechanism

E-commerce platform operators establish a dispute resolution mechanism to address disputes between buyers and sellers. The following aspects are important to the service quality:

- a. Dispute resolution policy: Whether the policies for dispute resolution are clearly defined and prominently displayed for dispute resolvers, including customer service personnel, to adhere to these policy requirements and facilitate the resolution of disputes for buyers.
- b. Dispute resolution channels: Whether E-commerce platform operators provide accessible and user-friendly dispute resolution channels for reporting disputes and supporting clear and timely communication, such as contacting customer service or utilizing the ODR platform. Whether E-commerce platform operators prioritize mediation or negotiation as the initial step in dispute resolution to prevent escalation.

4.6.3.3 Process

Dispute resolution process refers to an E-commerce platform operator's prompt response and resolution of complaints upon receipt. The following aspects are important to the service quality:

- a. Dispute acknowledgement: Whether E-commerce platform operators confirm the receipt of the complaint, clarify the buyer's requirements, and assign a dispute resolver to address the issue.
- b. Documentation requirements: Whether E-commerce platform operators specify the necessary documentation and evidence provided by the buyers, including order numbers, transaction records, communication logs, photos, and other supporting documents to validate the claims.
- c. Resolution of dispute: Whether E-commerce platform operators facilitate discussions with buyers and sellers to develop mutually acceptable solutions and ensure compliance with the agreed resolutions. If the solution includes a refund, replacement, or other compensation, whether the E-commerce platform operator ensures effective implementation.
- d. Process status updates: Whether E-commerce platform operators maintain a real-time tracking system to update the status of dispute resolutions, including information such as receipt of a dispute notice, relevant documentation and claims, and an estimated resolution timeline.
- e. Time frame: Whether E-commerce platform operators resolve disputes within an agreed-upon time frame.

4.7 Compensation for transaction loss

4.7.1 Overview

In E-commerce transactions, monetary or non-monetary compensation can be offered to mitigate the negative impact resulting from the actions or omissions of E-commerce operators, such as late delivery, damaged goods, substandard customer service, or any other issue causing a loss or inconvenience to the buyer. In addition to return of products (see 4.4) and refund of payment (see 4.5), typical forms of compensation in E-commerce include freight insurance, price protection, discount, vouchers, free items or service upgrades, etc. The key aspects involved in the compensation of transaction losses include terms and conditions, and process.

4.7.2 Terms and conditions

The terms and conditions of E-commerce compensation differ among various E-commerce operators and are contingent upon their respective compensation policies. The following aspects are important to the service quality:

- a. Eligibility for compensation: Whether E-commerce operators establish explicit criteria for determining the circumstances under which buyers are eligible for compensation, and the conditions under which compensation is not granted. Whether there are clear limitations on the compensation amount,

including caps on the reimbursement set at the product's value or exclusions of additional costs such as shipping fees.

- b. Time frame: Whether E-commerce operators define the deadlines by which buyers must report losses or damages and submit compensation claims, ensuring that buyers are informed of the time limits for initiating the process.

4.7.3 Process

The E-commerce compensation process begins with the buyer submitting a compensation request, which E-commerce operators address promptly upon receiving the necessary information. The following aspects are related to the service quality:

- a. Compensation claim channels: Clarity in the availability and use of channels for submitting compensation claims, including reaching out to online customer service or through the platform's website or app.
- b. Documentation requirements: Whether E-commerce operators clearly communicate the information required from buyers, such as the rationale for the claim, details of the loss and any supporting documents.
- c. Resolution of compensation: Whether E-commerce operators or the relevant agencies offer the buyer suitable compensation or alternative remedies, which can include returns (see 4.4), refund (see 4.5), or other mutually agreed resolutions.
- d. Status of process: Whether E-commerce operators offer a tracking feature allowing buyers to track the status of their compensation claim, including updates on progress, any delays or issues, and the outcome.

5 Quality factors of after-sales services

5.1 Overview

To enhance service quality, it is essential to identify quality factors that will enable organizations to develop an effective service quality management. The primary factors influencing the quality of after-sales services with an organization primarily include policy, information, and resources.

5.2 Policy

Robust policy formulation is crucial for organizations to overcome the challenges that can arise from policy-related factors. By creating clear, unambiguous policies with straightforward terms, organizations can significantly enhance the buyer experience and foster the holistic growth of E-commerce business. The following issues pertain to the policy aspects of after-sales services:

- a. Adequacy: Policy adequacy in E-commerce after-sales service refers to the extent to which the policies in place are sufficient, comprehensive, and appropriate to meet the needs of buyers and the operational requirements of the business. Adequate policies serve as a foundation to ensure that registered sellers are equipped with the necessary guidelines to provide reliable and effective after-sales services. Adequate policies cover all after-sales service scenarios, which can include comprehensive details about warranty coverage, clear warranty commencement dates, transparent return policies and associated fees, clearly outlined refund procedures, etc. Adequate policies address the specific characteristics of the products offered and can adapt to the buyer's expectations, the evolving E-commerce landscape and other technological advancements.
- b. Consistency: Policy consistency involves the development of harmonized policies and their uniform application by different sellers across different product categories. In the face of regulatory disparities, E-commerce platform operators proactively adapt their policies to comply with local regulations while striving to maintain a consistent service policy framework for buyers in all regions. In certain regions, E-commerce platform operators are encouraged to establish a baseline policy that includes necessary product-specific stipulations and conditions. This ensures a foundational level of service quality that is

consistent for all buyers. Encouraging sellers to adopt a unified policy framework, even when they operate across multiple E-commerce platforms, helps in providing a coherent service experience to the buyers.

- c. **Clarity:** E-commerce platform operators and sellers are encouraged to articulate their after-sales service policies in a manner that is straightforward, unambiguous and easily understood by all buyers. Possible approaches can include using clear, everyday language and avoiding jargon and complex terminology that could confuse buyers. Presenting policies in a well-structured format, such as using bullet points, numbered lists, or FAQs, can also enhance readability and make it easier for buyers to find the information they need. Providing examples or illustrations can help to clarify how policies apply in real-world scenarios, giving buyers a practical understanding of their rights and obligations.
- d. **Transparency:** Policy transparency involves providing buyers with information they need to make informed choices and to know their rights and options within the after-sales service process. It also involves the open disclosure of the criteria used by E-commerce platform operators to make decisions regarding after-sales services. This openness allows buyers to understand the basis for policy implementations. When E-commerce platform operators provide clear explanations for their decision-making processes, it offers buyers insight into the rationale behind policy decisions and fosters a sense of fairness and logical consistency. In addition, proactive communication of policy changes, updates, and their implications for buyers also enhances policy transparency.
- e. **Accessibility:** Policy accessibility involves clear display of pertinent policies on the E-commerce platform in a manner that is easily discoverable by buyers. When E-commerce platform operators provide various channels for policy communication, including the website, mobile devices, customer service, it also enhances accessibility. It is also helpful to recognize and address the cultural and linguistic diversity of E-commerce buyers and provide policies in multiple languages or adjusting the communication style to suit different cultural background.

5.3 Information

Information encompasses all the data and knowledge used in the implementation of after-sales services, including but not limited to buyer information, product details, transaction records, service request, service history, logistics details, etc. The proper provision of information is essential for building buyer trust, satisfaction and loyalty. Key aspects of information relevant to quality of E-commerce after-sales services are as follows:

- a. **Availability:** Ensuring that all necessary information is readily available to both the service team and the buyers is crucial. Buyers require details to make service request, such as return address, service staff information (qualification for maintenance and technical support, contact and availability information, etc.). The service team also needs buyer information (contact details, purchase history, preference, etc.), transaction records (order number, dates of purchase, payment methods, etc.), service request (nature of issue, requested resolution, etc.) to provide proper after-sales services.
- b. **Clarity:** Providing clear and concise explanations of the information required for after-sales services, such as customs clearance, return and refund, is vital. This includes straightforward guidelines on necessary documentation that facilitates smooth processing of buyer claims and minimises the potential for misunderstanding.
- c. **Accuracy:** The precise recording and management of buyer demands and transaction information by E-commerce operators are essential. Correctly capturing and verifying details such as delivery address and customs clearance documentation, are crucial to avoid service disruptions and safeguard the rights and interests of buyers.
- d. **Real-time visibility:** Implementing real-time tracking systems allows buyers to monitor the status of after-sales service requests. This transparency reduces anxiety and uncertainty, ensuring that buyers are informed about the progress and expected timeline of their requests.

5.4 Resources

Resources are the various input and elements which are essential for E-commerce operators to provide effective and efficient service. Human, technological and financial resources are critical to improve the service quality. The following issues are related to the resource aspects of after-sales services.

5.4.1 Human resources

The human resources aspect of after-sales services includes:

Adequate staffing: E-commerce operators employ a sufficient number of personnel to handle the high volume of after-sales services inquiries and support requests. This ensures that customer service staff can promptly address buyer issues, leading to shorter waiting time and faster responses, which in turn enhances buyer satisfaction.

Expertise: E-commerce operators establish or engage teams possessing the required expertise for managing after-sales services, including customs clearance, warranty, maintenance, and technical support, etc.

Training: After-sales service staff receive ongoing training in product knowledge, problem-solving, and effective communication, as well as cross-departmental collaboration to deliver precise and supportive assistance, increasing buyer satisfaction.

5.4.2 Technical resources

The technical resources aspect of after-sales services includes:

Automation of routine tasks: The use of automation tools, such as chatbots and virtual assistance, helps streamline routine tasks, enabling after-sales service staff to focus on more complex issues that require human intervention. This dual approach of automated and manual support ensures that buyers receive quick and accurate assistance.

Adoption of innovative technologies: E-commerce operators actively embrace new technologies to enhance customer service efficiency and effectiveness. By employing data analytics and customer relationship management (CRM) systems, E-commerce operators can gain insights into buyer behaviour and preferences. This information is invaluable for tailoring after-sales services to meet individual buyer needs.

Scalability and flexibility: Regularly updating and upgrading technology solutions ensures E-commerce after-sales services stay current with the latest technological advancements. It also helps maintaining scalable and flexible technical resources to enable E-commerce operators to adjust their service capacity according to fluctuating demand.

5.4.3 Financial resources

The financial resources aspect of after-sales services includes:

Cost-effective strategies: Achieving the right balance between offering thorough after-sales services and managing the associated costs is a critical factor in determining service quality, especially for small and medium-sized enterprises. E-commerce operators need strategic ways to allocate costs so as not to deter buyers from utilizing after-sales services. Offering digital solutions for product support or partnering with cost-effective logistic providers can help in reducing costs without compromising service quality.

Flexibility: Strategic allocation of financial resources and making them flexible to accommodate different buyer needs and situations also helps balancing service comprehensiveness with cost control. It is also important to ensure that all costs associated with after-sales services are clearly communicated to the buyer.

6 Quality improvement measures

6.1 General

To address the factors that have impact on after-sales services, organizations can adopt a systematic approach by implementing a service quality management system or by leveraging industry practices and case studies.

6.2 Applicable International Standards

Several International Standards provide guidance for service quality management system improvement. Examples of these standards include:

- a. ISO 10002 can be referred to by E-commerce platform operators, sellers, logistic service providers and other related organizations in the process of handling complaints related to products, including aspects such as planning, design, implementation, maintenance, and improvement. It offers a perspective on establishing complaint handling mechanisms from the quality management systems' perspective.
- b. ISO 10003 can be referred to by E-commerce platform operators and sellers on external dispute resolution related to products, services, and complaints. This includes processes such as planning, designing, developing, implementing, maintaining, and improving. ISO 10003 adopts a quality management approach to establishing dispute resolution mechanisms.
- c. ISO 10008:2022 can be referred to by E-commerce platform operators, sellers, logistic service providers and other related organizations in the process of E-commerce transactions, including planning, designing, developing, implementing, maintaining and improvement. For example:
 - 1) Logistics: ISO 10008:2022, 6.3.2 provides guidance for E-commerce platform operators, sellers, and logistic service providers to achieve secure delivery.
 - 2) Return and exchange: ISO 10008:2022, 6.3.4 provides guidance for E-commerce platform operators and sellers to offer return and exchange services to buyers.
- d. ISO 22059 can be referred to by E-commerce platform operators for seller registration. It also provides guidance for other E-commerce operators, including sellers, manufacturers and suppliers, to develop warranty policies for their goods and services.
- e. ISO/IEC Guide 14 can be referred to by E-commerce platform operators, sellers, logistic service providers and others for information related to E-commerce after-sales services and the methods of conveying them.
- f. ISO/IEC Guide 41 can be referred to by E-commerce platform operators, sellers, logistic service providers and others to ensure the packaging in E-commerce after-sales services such as logistics and return stage meet the needs and requirements of buyers.
- g. ISO 23592 can be referred to by E-commerce operators who wish to deliver after-sales services that exceed expectations.

6.3 Use cases

6.3.1 Logistics

The following measures are adopted in practice to improve logistics services:

- a. Address verification: To avoid delivery issues stemming from incorrect addresses, automatic order confirmation messages are sent to buyers after payment, promoting them to verify their shipping details.
- b. Dispatch reminders: To mitigate the impact of extended long delivery time due to delayed dispatches from sellers, a reminder system is offered to buyers when items are not shipped within the expected