# TECHNICAL SPECIFICATION

ISO/TS 42501

First edition 2022-10

# Sharing economy — General trustworthiness and safety requirements for digital platforms

Économie du partage — Fiabilité générale et exigences de sécurité pour les plateformes numériques

# iTeh STANDARD PREVIEW (standards.iteh.ai)

ISO/TS 42501:2022 https://standards.iteh.ai/catalog/standards/sist/06f6cf48-c797-4b9c-8bc0-0670ff4289f8/iso-ts-42501-2022



# iTeh STANDARD PREVIEW (standards.iteh.ai)

ISO/TS 42501:2022 https://standards.iteh.ai/catalog/standards/sist/06f6cf48-c797-4b9c-8bc0-0670ff4289f8/iso



# **COPYRIGHT PROTECTED DOCUMENT**

© ISO 2022

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

Co	ntent	ts	Page	
Fore	eword		v	
Intr	oductio	on	<b>v</b> i	
1	Scon	oe	1	
2	-	mative references		
3	Terms and definitions			
4		eral requirements		
	4.1	General		
	4.1	Integrity		
	4.3	Transparency		
	4.4	Accountability and authorization		
	4.5	Accessibility and inclusion		
	4.6	Respect for other affected interests		
	4.7	Competence		
5	Trar	nsaction phases of digital platform		
3	5.1	Overview		
	5.2	On-boarding		
	5.3	Information delivery/update		
	5.4	Connection		
	5.5	Transaction	5	
	5.6	Rating/review	6	
6	Pogi			
	6 1	uirements for managing operations Overview	6	
	6.2	Registration/authentication/verification		
	0.2	6.2.1 General ISO/TS 42501-2022	7	
		6.2.3 Authentication of identity and verification of credentials		
		6.2.4 Safety mechanism for minors		
	6.3	Terms of use		
		6.3.1 General	8	
		6.3.2 Developing terms of use	8	
		6.3.3 Requirements for public order and morality		
		6.3.4 Summary of terms of use		
		6.3.5 Actions in response to violation of terms of use		
		6.3.6 Changes to terms of use		
		6.3.7 Limiting/Suspending/terminating the use of digital platform		
	6.4	Complaint handling and dispute resolution		
		6.4.1 General		
		6.4.2 Rights, redress and guarantees		
		6.4.3 Supporting the resolution of issues		
		6.4.4 Preparing for incidents		
		6.4.5 Confirmation of provider identification		
		6.4.6 Response to emergency situations		
		<ul><li>6.4.7 Report of the status of services to guardians.</li><li>6.4.8 Report of the results of services to guardians.</li></ul>		
	6.5	Information for providers and users		
	0.5	6.5.1 Information on booking and transaction fees		
		6.5.2 Information on dynamic pricing		
		6.5.3 Information on changes in search function and ranking		
		6.5.4 Information on status of providers		
		6.5.5 Information on potential infringement		
		6.5.6 Deletion of false information	11	
		6.5.7 Raising awareness on unlawful behaviours		

# ISO/TS 42501:2022(E)

6.5.8	Improvement support for providers and users	11
6.5.9	Improvement support for providers and users Ensuring life security of provider and user	11
6.5.10	Ensuring timely distribution of revenues	11
6.5.11	Ethical marketing practices	12
6.6 Infor	mation security	12
6.6.1	General	
6.6.2	Procedures for handling of information	12
6.6.3	Information security roles and responsibilities	12
6.6.4	Information security roles and responsibilities	12
6.6.5	Response to information leakage	12
6.6.6	Review of information security	12
6.6.7	Awareness training to platform operator employees	13
6.6.8	Access control	13
6.6.9	Prevention of loss or theft of removable media	13
6.6.10	Deletion of information and disposal of media	13
6.6.11	Control of access to devices	13
6.6.12	Access to networks and network services	13
6.6.13	Protection against unauthorized access	13
6.6.14	Detection of unauthorized access	13
6.6.15	Protection of confidentiality	13
6.6.16	Encryption of communication	14
6.6.17	Up-to-date security information	14
	Control of outsourced processes	
Ribliography		15

(standards.iteh.ai)

ISO/TS 42501:2022

https://standards.iteh.ai/catalog/standards/sist/06f6cf48-c797-4b9c-8bc0-0670ff4289f8/isots-42501-2022

# **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 <a href="www.iso.org/directives">www.iso.org/directives</a>).

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 <a href="https://www.iso.org/patents">www.iso.org/patents</a>).

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 <a href="https://www.iso.org/iso/foreword.html">www.iso.org/iso/foreword.html</a>.

This document was prepared by Technical Committee ISO/TC 324, *Sharing economy*.

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 <a href="https://www.iso.org/members.html">www.iso.org/members.html</a>.

ts-42501-2022

# Introduction

A combination of widespread internet use, technological developments, innovation in economic models and demographic shifts has led to the emergence of a new economic model called the "sharing economy", which enables otherwise unconnected individuals and/or organizations to make transactions of products and assets.

The sharing economy creates opportunities to connect individuals and/or organizations with unused assets and skill with those who wish to utilize them. It enables services and products to reach a wider range of consumers, to support entrepreneurship, and to create new business opportunities through enabling a flexible working style. Through the new model, the possibility of sharing and accessing assets rather than owning them could better optimize their use. The sharing economy is expected to create opportunities providing products and assets and thus positively contributes to social and environmental improvement.

On the other hand, issues such as security, service quality and reliability might not be assured to the same level as with classic business and (inter)national regulation. These potential shortcomings might not just harm users but the same fair competition among providers.

This document aims to encourage more acceptable, trustworthy operations of digital platforms by supporting the management activities of platform operators, both for profit and non-profit.

# iTeh STANDARD PREVIEW (standards.iteh.ai)

ISO/TS 42501:2022 https://standards.iteh.ai/catalog/standards/sist/06f6cf48-c797-4b9c-8bc0-0670ff4289f8/iso

# Sharing economy — General trustworthiness and safety requirements for digital platforms

# 1 Scope

This document specifies general trustworthiness and safety requirements applicable to operators of digital platforms within the sharing economy. While this document does not cover system requirements for digital platforms, the document is still beneficial for system development.

## 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 42500, Sharing economy — General principles

### 3 Terms and definitions

For the purposes of this document, the terms and definitions given in ISO 42500 and the following apply.

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

- ISO Online browsing platform: available at <a href="https://www.iso.org/obp">https://www.iso.org/obp</a>
- IEC Electropedia: available at https://www.electropedia.org/

### 3.1

### authentication

provision of assurance with respect to the claimed identity of any provider or user, based on information provided by each of them

Note 1 to entry: Authentication is the responsibility of the platform operator.

#### 3.2

#### verification

confirmation by the platform operator that applicable legal and specified contractual requirements for registered users and providers have been fulfilled through the provision of objective evidence

# 4 General requirements

#### 4.1 General

Platform operators shall follow the principles below in accordance with ISO 42500:

- a) integrity;
- b) transparency;
- c) accountability and authorization;
- d) accessibility and inclusion;
- e) respect for other affected interest;

f) competence.

# 4.2 Integrity

The platform operator shall put in place and maintain a support mechanism to help providers and users understand relevant norms, which may include cultural norms in the country/region where they are operating through use of the digital platform or industry norms for the type of goods or services they are providing.

The platform operator shall demonstrate their commitment by

- treating all providers and users in an equal, fair and transparent manner,
- respecting legal and ethical obligations, and
- dealing with requests of providers and users in a helpful way.

The platform operator shall build mechanisms that ensure that these maxims are upheld during the operation and the use of the digital platform.

The platform operator should build mechanisms to promote mutually beneficial relationships between relevant parties. The purpose of such a mechanism is to promote the respect of the aforementioned norms by users and providers and enhance the quality of the digital platform and meet user's and provider's expectations.

# 4.3 Transparency iTeh STANDARD PREVIEW

When attracting providers and users to the digital platform, platform operators shall organize and present information supplied by providers and users in a way that ensures that it is findable, usable, relevant and timely and allows providers and users to make informed decisions.

The platform operator shall also make the criteria used to facilitate transactions and how they are executed between providers and users (such as ranking, pricing, ratings and reviews) findable, usable, and relevant. The platform operator shall be transparent and give clear, detailed and accessible information to providers and users on how the business model of the digital platform works.

# 4.4 Accountability and authorization

The platform operator shall establish processes or mechanisms to address any failures by providers to deliver products or assets as described to users, as well as to determine liability that could be incurred by platform participants for any such failure and any corresponding recourse. Responsibility should be determined based on a confirmed agreement between platform operators and providers or users made prior to entry into any transaction.

The platform operator should consider that they might need to make records of decisions and activities and their impacts and opportunities with respect to providers and users available for scrutiny by governing bodies, legal authorities, and other interested parties.

The platform operator should inform providers that they are responsible for

- ensuring that they do not place products that are clearly unsafe on the market,
- warning users of potential risks associated with the products they supply and their use as well as any defects, and
- making sure that their products can be traced so that they can be removed in case they turn out faulty to avoid any risks for users.

The platform operator shall

- a) treat personal information in a confidential manner, respecting the privacy of the providers and users in particular with particular regards to the collection, use, storage and disclosure of personal information, and
- b) remove products and services from the digital platform that are obviously unsafe or illegal.

The platform operator may outsource its operations. The platform operator should ensure that parties to whom it delegates any of the roles and responsibilities meet the requirements to which it is subject.

# 4.5 Accessibility and inclusion

The digital platform and the relevant information provided by the digital platform about itself should be easy to find, understand and use. The digital platform should be planned, designed, developed, implemented, maintained, and improved to address the needs of different users, including those who may be at greater risk of detriment due to consumer vulnerability, and those with special accessibility requirements.

Platform operators should establish mechanisms to investigate instances of unfair discriminatory behaviour by providers and users that are raised to them through any complaint or dispute resolution mechanisms.

Platform operators should establish a means of tracking the number of such instances by geography, of determining the impact of discriminatory conduct on platform operation, and of limiting providers and users whose conduct is found to be unfairly discriminatory after investigation from participating on the digital platform.

# 4.6 Respect for other affected interests

The platform operator shall be aware of interests of third parties that are not immediate partners of the digital platform such as providers and users but affected by the operation of the digital platform and the products or assets handled by the digital platform and the way they are produced, delivered, or transported.

This refers to such issues as the protection of

- fair competition,
- environment,
- health,
- safety of workforce, and
- public safety.

Providers, users, products, or assets that might infringe these societal interests shall be subject to check in cooperation with competent authorities or organisations.

### 4.7 Competence

In adhering to the principles of the sharing economy, platform operators should seek to encourage providers to offer products and assets on their digital platforms in a manner that allows users to make informed decisions.

The platform operator shall ensure that their personnel can deal with the requests of providers and users in an adequate manner. This refers to their qualification in technical and social skills, their number and availability to manage requests without substantial delay.

Some parts of support can be dealt with in an automatized way or with FAQs but there shall be personnel available to personally respond to requests in an adequate time frame.

At least part of the personnel shall be competent to deal with the issues described in  $\underline{4.2}$  to  $\underline{4.6}$  which go beyond the technical aspect of a transaction.

To the extent practical considering the relationship of the platform operator to the providers under applicable labour laws governing the digital platform's activities, platform operators should provide providers and users with the opportunity to acquire knowledge and skills about participation in the sharing economy.

# 5 Transaction phases of digital platform

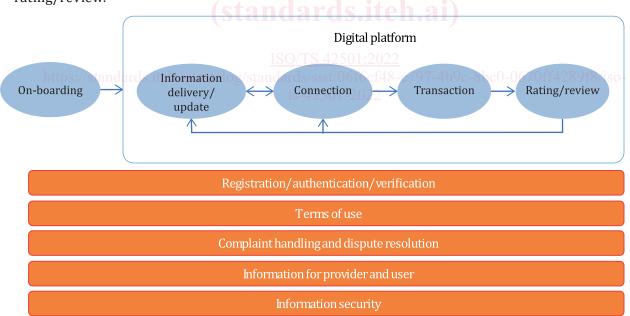
### 5.1 Overview

In the sharing economy, an exchange between providers and users typically goes through the following five distinct phases, see Figure 1:

- on-boarding;
- information delivery/update;
- connection;
- transaction;

# iTeh STANDARD PREVIEW

rating/review.



NOTE Providers and users move through different phases in the process along the arrows shown in the chart.

Figure 1 — Transaction phases and managing operations for digital platform

### 5.2 On-boarding

The onboarding phase is where platform operators undertake authentication and verification of providers and users.

The platform operator shall make sure the identification of providers and users occurs in accordance with 6.2.

NOTE ISO/TS 42502 provides guidance on provider verification.

# 5.3 Information delivery/update

The information delivery/update phase is where

- providers and users deliver or update the information about themselves on the digital platform, and
- providers deliver and update information on their products and assets provided by them.

The platform operator shall ensure that relevant information is easily accessible and well-organized to allow users to make informed decisions and to reduce misunderstanding about the quality of products or assets offered by providers. If a ranking of products, assets, providers, or users is provided by the platform operator, the platform operator shall ensure that information on the criteria for the ranking is available on the digital platform and easily accessible. If a ranking is based on a combination of multiple criteria, the platform operator shall make information available on the digital platform and easily accessible that it is aware of on what each criterion is, how much weight is placed on each criterion in percentage terms, and whether the ranking was determined using machine-learning. If a product, asset, provider, or user is given an elevated ranking or listing as a result of a payment to the platform operator, the platform operator shall clearly display the ranking or listing as "advertisement" or "promoted."

NOTE This requirement can be fulfilled by requiring input of certain information or providing answers to frequently asked questions.

The platform operator shall put in place a mechanism that allows both the users and providers to input and update information on the products and assets offered on the digital platform. The information shall be reflected promptly on the digital platform. For requirements on changes of information about providers and users themselves, see  $\underline{6.2}$ .

When products and assets provided by providers are added or changed, the platform operator shall ensure that the information on the products and assets are verified according to <u>6.2</u>.

The platform operator shall provide a list of required information to be made available by the provider about their product or asset. The platform operator should provide a list of additional suggested information that the provider may provide regarding the product or asset. Special attention shall be taken about safety, security and health information.

#### 5.4 Connection

The connection phase is where information about the supply and demand of products and assets is exchanged in an effort to reduce information asymmetry. This phase is also where providers and users communicate regarding the details of their proposed transaction.

The platform operator shall put in place a mechanism to connect users with products/assets on the digital platform based on the user's needs.

NOTE The connection phase typically includes information about the needs of users and details of the providers or their products/assets.

The platform operator shall provide the means to enable communication and inquiries between providers and users before entering into a transaction, if necessary, to complete the transaction based on the type of transaction and product or asset being provided.

# 5.5 Transaction

The transaction phase is where users apply to purchase/use products or assets based on the platform operator's processes, and providers accordingly provide the products or assets to the users.