
**Business requirements for end-to-end
visibility of logistics flow**

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

ISO 23354:2020

<https://standards.iteh.ai/catalog/standards/iso/594b885d-0a37-4b80-a85c-7fc49b9d1001/iso-23354-2020>



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

ISO 23354:2020

<https://standards.itih.ai/catalog/standards/iso/594b885d-0a37-4b80-a85c-7fc49b9d1001/iso-23354-2020>



COPYRIGHT PROTECTED DOCUMENT

© ISO 2020

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
Fax: +41 22 749 09 47
Email: copyright@iso.org
Website: www.iso.org

Published in Switzerland

Contents

Page

Foreword	iv
Introduction	v
1 Scope	1
2 Normative references	1
3 Terms and definitions	1
4 Abbreviated terms	2
5 Business requirements overview	2
6 Logistics information service system network architecture requirements	4
6.1 Network architecture requirements overview	4
6.2 LISS network entities	5
6.2.1 Logistics information service system (LISS)	5
6.2.2 Single window	6
6.2.3 Data providers	6
6.2.4 Data users	6
6.3 Network architecture requirement between different LISSs	6
6.4 Network architecture requirement between LISS and SW/SSP	6
6.5 Network architecture requirement between LISS and data providers	6
6.6 Network architecture requirement between LISS and data users from other LISSs	6
7 Visibility data interchange requirements between LISSs	7
7.1 Event data classification	7
7.2 Data control for different entities in the LISS network	8
8 Visibility data interface and process requirements for LISS network	8
8.1 Unified user management and authentication process requirements	8
8.1.1 Federation authentication among LISSs	8
8.1.2 Enable users log in to multiple LISSs and query services by single sign-on	8
8.2 Open data access	8
9 Guideline for business participants and stakeholders	8
9.1 LISS operator	8
9.2 Single window operator	9
9.3 Data providers	9
9.4 Data users	9
Annex A (informative) Use cases and gap analysis	10
Annex B (informative) Related standards and organizations	17
Bibliography	23

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).

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 www.iso.org/patents).

Any trade name used in this document is information given for the convenience of users and does not constitute an endorsement.

For an explanation of the voluntary nature of standards, the meaning of ISO specific terms and expressions related to conformity assessment, as well as information about ISO's adherence to the World Trade Organization (WTO) principles in the Technical Barriers to Trade (TBT) see www.iso.org/iso/foreword.html.

This document was prepared by Technical Committee ISO/TC 154, *Processes, data elements and documents in commerce, industry and administration*.

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.

<https://standards.iteh.ai/catalog/standards/iso/594b885d-0a37-4b80-a85c-7fc49b9d1001/iso-23354-2020>

Introduction

Visibility of logistics traffic flow and finding the precise logistics information in a simple and trusted way are very important for the logistics processes in international trade.

However, the logistics data to be obtained by the logistics operator is often provided by several logistics information service systems (LISS) and other logistics and/or trade parties. Although international standards (such as UN/EDIFACT) have existed for decades and many national and regional systems have been implemented based on such international standards, LISSs are often developed in isolation and fragmentation based on their individual business requirements; and this has led to many different and non-interoperable interpretations of standard messages. In order to realize the visibility of logistics traffic flow, data from different LISSs should be interchanged with each other by using a standardized method to establish an LISS network.

This document specifies three business requirements of a future LISS network. The purpose of including the network architecture in this document is to support the business requirements of data exchanges between different LISSs on the application layer. Existing international standards ([Annex B](#)) can be reused in a standardized way and any gaps filled by new international standards where identified. This document is an important reference and guideline to related logistics parties such as LISS providers, single window/SSP operators, logistics data providers and logistics data users.

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

ISO 23354:2020

<https://standards.iteh.ai/catalog/standards/iso/594b885d-0a37-4b80-a85c-7fc49b9d1001/iso-23354-2020>