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

端到端物流可视化业务需求

(English Translation)

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Foreword

This document complies with the provisions of GB/T 1.1-2020 "Standardization Work Guidelines Part 1: Structure and Drafting Rules of Standardization Documents".

Drafting.

This document is equivalent to ISO 23354:2020 "End-to-end logistics visualization business requirements".

The following minimal editorial changes have been made to this document.

---The reference to "Chapter 8" in the scope contains an editorial error and should be corrected to "Chapter 9" (see Chapter 1);

---Added a note to the range (see Chapter 1);

---Added notes to Table 1 (see Chapter 5);

---Added a note to Figure 1 (see 6.1);

---The "remaining 19 items" mentioned in Appendix A contains an editorial error and should be corrected to "remaining 20 items" (see A.3.1).

Please note that some content in this document may involve patents. The issuing organization of this document assumes no responsibility for identifying patents.

This document was proposed by the National Electronic Business Standardization Technical Committee (SAC/TC83).

This document was prepared by the National Technical Committee on Standardization of Electronic Business (SAC/TC83) and the National Technical Committee on Standardization of Logistics Information Management.

(SAC/TC267) jointly under the jurisdiction of the State Administration of Taxation.

Coding Center, Xi'an International Studies University.

Introduction

In international trade, obtaining accurate logistics information through logistics visualization is crucial for improving supply chain efficiency and reducing operating costs.

Significance. As one of the world's major trading nations, my country has established an international trade "single window," which plays a crucial role in continuously advancing cooperation under the "Belt and Road" initiative.

The initiative raises higher requirements for strengthening the standardization and interconnectivity of logistics information.

Currently, logistics data relied upon by logistics stakeholders typically originates from multiple Logistics Information Service (LISS) systems. Despite the United Nations' efforts...

International standards such as UN/EDIFACT (Electronic Data Interchange for Government, Commerce and Transport) have been implemented for many years and have been widely

adopted by many countries and regions.

However, different LISSs are often developed independently and in a decentralized manner based on their respective business needs, resulting in information discrepancies and making it difficult to achieve interconnection between systems.

Interoperability. To achieve end-to-end logistics visibility, data from different LISS providers needs to be exchanged using standardized methods to build a high-resolution interoperability system.

An efficient and reliable LISS network.

This document aims to promote the interconnectivity and visualization of LISS through standardization, providing a platform for logistics stakeholders such as LISS providers and single LISS vendors.

This document provides reference and practical guidelines for operators of Single Submission Portals (SW/SSP), logistics data providers, and logistics data users.

We will strive to standardize logistics information in my country and promote the efficient flow of global trade and logistics information.

End-to-end logistics visualization business requirements

1 Scope

Based on the use cases and gap analysis in Appendix A, this document proposes three business requirements for logistics visualization, including.

- 1) LISS network architecture requirements;
- 2) The need for visual data exchange between LISS;

Detailed descriptions of the three business requirements can be found in Chapters 6, 7, and 8, respectively.

In addition, Chapter 9 describes the needs of various business participants and stakeholders in the LISS network, such as the LISS operator, the SW operator, and Data providers and data users.

This document does not include the following standardization scope.

- 1) Logistics equipment level;
- 2) Ships, navigation, and marine technology;
- 3) Involves the United Nations Centre for Trade Facilitation and Electronic Business (UN/CEFACT), GS1 (Global Standards International), and the World Customs Service.

International data exchange standards such as those of the World Organization for Quality

(WCO).

Note 1: In this document, "visualization" refers to making logistics process information transparent through technical means.

Note 2: This document is in reference to the United Nations Centre for Trade Facilitation and Electronic Business (UN/CEFACT), GS1 (International Article Numbering Association), and the World Customs Organization.

The standards developed, published, and maintained by the World Organization for Quality (WCO) were appropriately referenced.

2 Normative references

The contents of the following documents, through normative references within the text, constitute essential provisions of this document. Dated citations are not included.

For references to documents, only the version corresponding to that date applies to this document; for undated references, the latest version (including all amendments) applies.

This document.

1) This higher-order BRS specifies the requirements for a common reference data model that supports trade and transportation-related processes involved in cross-border supply chains, and encompasses...

This specification covers the business areas involved, key stakeholders, and related information. It provides a framework for cross-border transport-related businesses and the government sector to define their scope.

3 Terms and Definitions

The URLs for the terminology databases maintained by ISO and IEC for standardization are as follows.