



BSI Standards Publication

**Intelligent transport systems  
— Electronic information  
exchange to facilitate the  
movement of freight and  
its intermodal transfer —  
Governance rules to sustain  
electronic information  
exchange methods**

**National foreword**

This Published Document is the UK implementation of ISO/TS 17187:2013.

The UK participation in its preparation was entrusted to Technical Committee EPL/278, Intelligent transport systems.

A list of organizations represented on this committee can be obtained on request to its secretary.

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ISBN 978 0 580 82898 0

ICS 03.220.01; 35.240.60

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This Published Document was published under the authority of the Standards Policy and Strategy Committee on 31 December 2013.

**Amendments issued since publication**

Date	Text affected
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**Intelligent transport systems —  
Electronic information exchange to  
facilitate the movement of freight and  
its intermodal transfer — Governance  
rules to sustain electronic information  
exchange methods**

*Systèmes intelligents de transport — Échange d'informations  
électroniques pour faciliter le mouvement du fret et son transfert  
intermodal — Règles de gouvernance pour soutenir les méthodes  
d'échange d'informations électroniques*





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Published in Switzerland

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## 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](http://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](http://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 on the meaning of ISO specific terms and expressions related to conformity assessment, as well as information about ISO's adherence to the WTO principles in the Technical Barriers to Trade (TBT) see the following URL: Foreword - Supplementary information

The committee responsible for this document is ISO/TC 201, *Intelligent transport systems*.

## Introduction

Electronic commerce offers new opportunities to improve the efficiency of business operations and to reduce costs associated with trade procedures, providing increased competitive advantages to the commercial actors ready to embrace new methods of work and trade. Emerging electronic commerce platforms and the use of the Internet provide users with a combination of technologies to communicate data, to contract electronically, as well as to manage new business processes leading to new business models.

Improved information sharing among supply chain partners is one of the key business objectives which enable the participants to improve their operational efficiency and optimize their enterprise resource allocations. Due to the existence of heterogeneous IT environments among supply chain partners, it is a challenge for the implementer to seamlessly integrate information from multiple data sources and in different data formats. Each data source is typically designed for a single, stand-alone purpose within an enterprise, not to be part of an integrated data collection. Thus, these disparate data repositories tend to be silos, independent of one another, and not working well together. Business entities wishing to engage with other business partners to facilitate certain standards of practice for information interchange will need to abide by certain rules, otherwise the efficiencies sought using the methodologies in this Technical Specification will be diminished.

Within this context, and within this Technical Specification, “governance” is defined as “rules, processes, and behaviour that affect the way in which powers are exercised...particularly as regards openness, participation, accountability, effectiveness, and coherence”. As discussed in 5.2.5 of ISO/TS 24533, there needs to be a governance process to tie loose ends together and allow the supply chain partners to keep their data exchange standards viable and effective. Governance is key to this process of maintaining the structures that allow for a high degree of supply chain productivity and for holding together the community partnerships that make such an arrangement economically advantageous. A governance specification is critical to making the process described here effective. There is an expectation that a Technical Specification on governance will provide the guidance that will keep the supply chain standards viable and useful for the community of users wishing to maximize their returns on investment.

Rules of governance are intended to maintain standards harmony and to be approved through international consensus by the International Standards Organization (ISO TC204) as umbrella guidance for the members who will adopt the methodologies of this Technical Specification and keep the necessary standards relevant to their purpose.

A governance model that is elevated to an International Technical Specification means those investing in the implementation of the methodologies and standards activities have some assurance of continuity, thereby promoting greater adoption and further leveraging investments, and use of the standards. The vision expressed by this Technical Specification is to allow trading business partners to operate in a seamless manner to get goods to the marketplace meeting the highest level of performance standards.

# Intelligent transport systems — Electronic information exchange to facilitate the movement of freight and its intermodal transfer — Governance rules to sustain electronic information exchange methods

## 1 Scope

This Technical Specification provides governance rules to be used for executing an organized process for business entities to connect to one another electronically for the conduct of electronic trade in a secure and open environment through a standardized framework for information exchange. This standardized framework includes the processes and process tools that will ease connections between trading partners, provide full visibility, and reduce the time goods spend in transit. Additionally, the application of these rules and attendant standards and technology applications are expected to allow business entities to engage their legacy systems without the cost of upgrades.

The processes and process tools include web services technologies to improve the operating efficiency, safety, and security of freight movement. These technologies are used for sharing information between supply chain partners in a commonly understood manner by capturing it only once and sharing it many times, and giving all partners the same view of the data.

A service-oriented architecture leverages the web services functionality and necessitates the requirement for data exchange standards. These tools hinge on the successful definition and adoption of data standards published in open and accessible forums. The advantages of using information technology tools are undeniable and their use is now widespread across industry. The freight transport and logistics industry is no exception with all businesses using e-business to some extent.

This Technical Specification does not address liability of any kind as this is considered within the domain of each participating party.

## 2 Normative references

The following documents, in whole or in part, are normatively referenced in this document and are indispensable for its application. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

ISO/TS 24533, *Intelligent transport systems — Electronic information exchange to facilitate the movement of freight and its intermodal transfer — Road transport information exchange methodology*

## 3 Terms and definitions

For the purposes of this document, the terms and definitions given in ISO/TS 24533:2012 and the following apply.

### 3.1 bill of lading

document which evidences a contract of the carriage and the taking over or loading of the goods by the carrier, and by which the carrier undertakes to deliver the goods against surrender of the document

[SOURCE: ISO/TS 24533:2012]

Note 1 to entry: A provision in the document that the goods are to be delivered to the order of a named person, or to order, or to bearer, constitutes such an undertaking. The document has the following functions: