
**Ships and marine technology —
Electronic port clearance (EPC) —**

**Part 2:
Core data elements**

*Navires et technologie maritime — Opérations portuaires assistées
par systèmes électroniques —*

Partie 2: Éléments de données principaux



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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).

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 8, *Ships and marine technology*, Subcommittee 11, *Intermodal and Short Sea Shipping*.

This second edition cancels and replaces the first edition (ISO 28005-2:2011) which has been technically revised.

The main changes compared to the previous edition are as follows:

- new data elements have been added to cover requirements from maritime declaration of health, advance electronic cargo information for customs risk assessment purposes, advanced notification form for waste delivery to port reception facilities, mandatory ship reporting system (MRS) and ETA reporting to pilot station;
- some previously defined data elements have been modified to reflect updated definitions in the IMO Reference Data Model; this applies also to some code lists;
- some data elements have been redefined and the old definitions are marked as deprecated in the respective clause titles.

A list of all parts in the ISO 28005 series can be found on the ISO website.

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.

Ships and marine technology — Electronic port clearance (EPC) —

Part 2: Core data elements

1 Scope

This document provides technical specifications to facilitate an efficient exchange of electronic information between ships and shore, for coastal transit or port calls. It specifies requirements for the safety, security and efficiency enhancement of information, related mainly to the relationships between the ship and the port and coastal state authorities.

This document provides the definition of core data elements for use in electronic port clearance (EPC) messages. It does not define any structuring of messages nor provides any guidance on what information is required for a particular purpose; it is a general data dictionary for safety, security or operation-related maritime information. Details about message formats and applications are defined in ISO 28005-1.

The data elements in this document is a superset of the data elements and the data model defined in the IMO Reference Data Model as specified in the IMO Compendium on Facilitation and Electronic Business. It also contains data elements from other IMO instruments as described in 4.1. The specifications in this document is compatible with the definitions in the IMO Reference Data Model and the mapping between ISO 28005 and the data element list in the IMO Reference Data Model is defined in [Annex B](#).

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 3166-1, *Codes for the representation of names of countries and their subdivisions — Part 1: Country code*

ISO 3166-2, *Codes for the representation of names of countries and their subdivisions — Part 2: Country subdivision code*

ISO 6346, *Freight containers — Coding, identification and marking*

ISO 6709, *Standard representation of geographic point location by coordinates*

ISO 7372, *Trade data interchange — Trade data elements directory*

ISO 9711-1, *Freight containers — Information related to containers on board vessels — Part 1: Bay plan system*

UNECE R16, (UNECE Recommendation No. 16), *Codes for Trade and Transport Locations*

UNECE R20, (UNECE Recommendation No. 20), *Codes for Units of Measure Used in International Trade*

UNECE R21, (UNECE Recommendation No. 21), *Codes for Passengers, Types of Cargo, Packages and Packaging Materials (with Complementary Codes for Package Names)*

UNECE R28, (UNECE Recommendation No. 28), *Codes for Types of Means of Transport*

UNTDD, *United Nations Directories for Electronic Data Interchange for Administration, Commerce and Transport*. This is available as Part 5 on <https://www.unece.org/cefact/edifact/welcome.html>

World Customs Organization (WCO), *Harmonized Commodity Description and Coding System (HS)*

International Maritime Organization (IMO), *International Convention for the Prevention of Pollution from Ships (MARPOL)*, 1973, as modified by the Protocol of 1978 relating thereto

International Maritime Organization (IMO), Assembly Resolution A.852(20), *Guidelines for a structure of an integrated system of contingency planning for shipboard emergencies*. Adopted November 1997

International Maritime Organization (IMO), MSC/Circ.1056, MEPC/Circ.399, *Guidelines for Ships Operating in Arctic Ice-Covered Waters*

3 Terms, definitions, and abbreviated terms

3.1 Terms and definitions

For the purposes of this document, the following terms and definitions apply.

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

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

3.1.1

core data element

data element corresponding to a specific real-world object

Note 1 to entry: The core data elements are instantiated from data types defined in [Clause 7](#) and are listed in [Annex A](#).

3.1.2

data type

definition of the structure of a data element

Note 1 to entry: All data types have a name ending with “Type”.

3.1.3

electronic port clearance

EPC

process of exchanging information between the ship and its agent and various parties on shore to allow the ship clearance to enter port and berth

Note 1 to entry: EPC does not necessarily include customs clearance of goods that are imported or exported.

3.1.4

facility

port or a part of a port that is individually secured according to the ISPS code

Note 1 to entry: This is the meaning implied in the ISPS code.

3.1.5

leg

part of a voyage ([3.1.7](#)) between a departure port and an arrival port without any intervening port calls