PUBLICLY AVAILABLE SPECIFICATION

**ISO/PAS 28005-1**

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

## Part 1: Message structures — Implementation of a maritime single window system

*Systèmes de management de la sûreté pour la chaîne d'approvisionnement — Operations portuaires assistées par systèmes électroniques —*

*Partie 1: Structure des messages — Mise en oeuvre d'un système maritime à guichet unique*

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# Contents

Page

**Foreword** ..... iv
**Introduction** ..... v
**1 Scope** ..... 1
**2 Normative references** ..... 1
**3 Terms and definitions** ..... 1
**4 Conceptual system design** ..... 3
**4.1 General single window functionality** ..... 3
**4.2 Business to administration or business to business system** ..... 3
**4.3 Alternative message sequences** ..... 4
**4.4 Information sent by ship or agent** ..... 4
**4.5 Input data once** ..... 4
**5 General transaction requirements** ..... 5
**5.1 General transaction pattern** ..... 5
**5.1.1 Unique journal number** ..... 5
**5.1.2 Request** ..... 5
**5.1.3 Receipt** ..... 6
**5.1.4 Cancellation** ..... 6
**5.1.5 Acknowledgement** ..... 6
**5.2 Multiple copy-to parties** ..... 7
**5.3 Support for other reporting requirements** ..... 7
**5.4 Support for alternative data sources** ..... 7
**5.5 Support for alternative information transfer mechanisms** ..... 7
**5.6 Electronic communication interface requirements** ..... 8
**5.6.1 Ship interface** ..... 8
**5.6.2 SW interface** ..... 8
**5.7 Operational security** ..... 8
**6 Message requirements** ..... 8
**6.1 Example of message descriptions** ..... 8
**6.2 XML Schema to be used** ..... 9
**6.2.1 File header and end** ..... 9
**6.2.2 New data type definitions** ..... 9
**6.2.3 Data block definitions** ..... 9
**6.2.4 Message definitions** ..... 10
**6.3 Structure of the EPC message** ..... 10
**6.4 Structure of request data block** ..... 11
**6.5 Structure of cancel data block** ..... 13
**6.6 Structure of receiptdata block** ..... 13
**6.7 Structure of acknowledgement data block** ..... 13
**7 New data types** ..... 14
**7.1 epc:MessageTypeContentType — New code values** ..... 14
**7.2 RequestErrorCode — request error codes** ..... 14
**7.3 EPCClearanceStatusType — Data type for clearance status** ..... 14
**Annex A** (informative) **Implementation advice for single window** ..... 16
**Annex B** (informative) **Development of a single window** ..... 22
**Bibliography** ..... 28

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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 whom 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.

International Standards are drafted in accordance with the rules given in the ISO/IEC Directives, Part 2.

The main task of technical committees is to prepare International Standards. Draft International Standards adopted by the technical committees are circulated to the member bodies for voting. Publication as an International Standard requires approval by at least 75 % of the member bodies casting a vote.

In other circumstances, particularly when there is an urgent market requirement for such documents, a technical committee may decide to publish other types of normative document:

— an ISO Publicly Available Specification (ISO/PAS) represents an agreement between technical experts in an ISO working group and is accepted for publication if it is approved by more than 50 % of the members of the parent committee casting a vote;

— an ISO Technical Specification (ISO/TS) represents an agreement between the members of a technical committee and is accepted for publication if it is approved by 2/3 of the members of the committee casting a vote.

An ISO/PAS or ISO/TS is reviewed after three years in order to decide whether it will be confirmed for a further three years, revised to become an International Standard, or withdrawn. If the ISO/PAS or ISO/TS is confirmed, it is reviewed again after a further three years, at which time it must either be transformed into an International Standard or be withdrawn.

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.

ISO/PAS 28005-1 was prepared by Technical Committee ISO/TC 8, *Ships and marine technology*.

ISO 28005 consists of the following parts, under the general title *Ships and marine technology — Electronic port clearance (EPC)*:

— *Part 1: Message structures — Implementation of a maritime single window system* [Publicly Available Specification]

— *Part 2: Core data elements*[1]

[1] ISO 28005-2, *Security management systems for the supply chain — Electronic port clearance (EPC) — Part 2: Core data elements.*

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# Introduction

This Publicly Available Specification contains technical specifications that facilitate an efficient exchange of electronic information between ships and shore for coastal transit or port calls. This Publicly Available Specification is intended to cover the exchange of safety and security information required under the IMO FAL Convention and other international specification as defined in ISO 28005-2. This Publicly Available Specification is based on XML and UN/CEFACT standards such as those specified in the FAL Compendium. Implementors of this PAS should normally also provide electronic interfaces supporting the use of UN/EDIFACT standards. Parties with economic interests related to the ship, cargo, passengers or crew, such as land transporters, receiving parties, insurers, and financial entities, may also find value in configuring their data reception capability to receive information formatted in accordance with this Publicly Available Specification. However, this is not a requirement of this Publicly Available Specification.

It should be noted that there are a number of other data exchanges related to port calls taking place that are outside the requirements of this Publicly Available Specification such as:

— Administrative and trade related data exchanges.

— Customs clearance for import and export of goods.

— Logistics arrangements for loading and discharge of cargo, including bay plans, mooring instructions, tug orders and other needs.

— Commercial exchanges related to freight costs, ownership and insurance of cargo. Ship operational exchanges related to the ordering of consumables, water, bunkers and spare parts, or the exchange of crews.

— Commercial exchanges related to port logs/statements of fact, calculations of demurrage and port fees, etc.

Other ISO Committees, e.g. ISO/TC154, provide message and data transmission standards for such data exchanges.

This Publicly Available Specification, possibly together with other international standards, can be used to implement a single window for port clearance. This single window can provide for: 1) the simplified electronic means for clearance of ships in maritime transport, 2) standardization in logisitics activities, interface, and information in overall maritime transport, 3) improved maritime logistics activities, interface, and information in overall maritime transport, 4) improved maritime logistics efficiency and strengthened maritime logistics competitiveness of IMO member states. The single window standard for maritime transport is built upon general single window concepts and characteristics and has been expanded to integrate the requirements of maritime transport.

ISO 28005 consists of two parts. Part 1 (PAS) specifies the overall configuration of electronic port clearance (EPC) and defines the message structures for use in EPC. Part 2 contains detailed definitions of core data elements used in the message structures.

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

# Part 1: Message structures — Implementation of a maritime single window system

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## 1 Scope

This Publicly Available Specification provides necessary guidance information related to electronic port clearance (EPC), such as message transmission requirements, business scenarios, message structures and software requirements. Within the context of this Publicly Available Specification, EPC includes the activities that a user, such as a ship's master, a shipping agency or a ship owner undertakes to submit electronic data to appropriate organisations to approve or reject the clearance for the ship to enter or leave a port.

This Publicly Available Specification defines XML message structures for transmission or information between a ship or its representatives and certain organisations responsible for the processing of the ship's port clearance request. The information to be transferred is that which is defined by the FAL Convention and other related international instruments as defined by ISO 28005-2. These mesage structures are primarily intended for machine to machine data transfers.

This Publicly Available Specification allows different configurations of the single window (SW), from a minimum solution to support basic clearance requirements to a more complex system to facilitate more extensive cooperation between ship and shore organisations.

Informative Annex A provides implementation advice for a SW. Informative Annex B suggests a methodology for the development of a SW.

## 2 Normative references

The following referenced documents are indispensable for the application 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 28005-2, *Security management systems for the supply chain — Electronic port clearance (EPC) — Part 2: Core data elements*

## 3 Terms and definitions

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

**3.1**
**acknowledgement**
message sent from authorities giving the final acknowledgement of a request with the result of the request as an approval or denial

**3.2**
**authority**
entity or entities acting on behalf of the port state under national legislation

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