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Ships and marine technology — Offshore wind energy — Supply chain information flow

Navires et technologie maritime — Énergie éolienne offshore — Flux d'informations dans la chaîne d'approvisionnement

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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 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 8, *Ships and marine technology*.

This International Standard is part of a series for offshore structures of the offshore wind industry. The full series consists of the following:

— ISO 29400, *Ships and marine technology — Offshore wind energy — Port and marine operations*

— ISO 29404, *Ships and marine technology — Offshore wind energy — Supply chain information flow*

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Introduction

The complexity and the number of parties involved in the offshore wind farm (OWF) supply chains, both during the construction and the operational phase with their repair and maintenance requirements, depend on IT applications to facilitate planning and control of all physical processes.

In order to minimize frictions in data communication between different business parties, content and format of data need to be standardized.

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Ships and marine technology — Offshore wind energy — Supply chain information flow

1 Scope

This International Standard specifies content and format of the messages initiating and controlling the physical movement of wind turbine generator (WTG) components from suppliers to the construction site during the construction phase as well as for repair and maintenance purposes.

This International Standard is applicable to all organizations involved in the production, transportation, storage and installation of WTG parts and related components. This International Standard is not intended to be applied to substations.

Messages described in this International Standard covers only the operational aspects of logistics and therefore this International Standard will represent only one aspect of the entire information flow.

This International Standard does not specify the technical implementation of appropriate IT products. It rather provides an approach based on the EPC Information System (EPCIS) standard and describes the usage of extension mechanisms provided by the EPCIS standard for the exchange of information in the offshore wind supply chain. It aims at standardizing the exchange of essential logistic information. This International Standard specifies elementary informational needs of involved parties in the offshore supply chain and defines mechanisms for the exchange of this information via the EPCIS. Due to the high degree of specialization along different offshore supply chains, partners exchanging information might require mechanisms for personalizing according to their individual demands. The underlying extendable EPCIS concept allows end users and industry consortiums to extend and to refine the information exchange. These extensions might go far beyond the basic information exchange described in this International Standard.

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 29400, *Ships and marine technology — Offshore wind energy — Port and marine operations*

EPC Information Services (EPCIS) Version 1.1 Specification

Core Business Vocabulary (CBV) GS1 Standard Version 1.1

3 Terms and definitions

For the purposes of this document, the terms and definitions given in ISO 29400 and the following apply.

3.1
automatic identification data capturing
AIDC
methods of automatically identifying objects, collecting data about them, and entering that data directly into computer systems

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