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**NATIONAL STANDARD OF THE
PEOPLE'S REPUBLIC OF CHINA**

GB/T 38293-2019

**Ships and marine technology - Computer applications - General
principles for the development and use of programmable
electronic systems in marine applications**

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Standardization Administration**

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Foreword

This standard was drafted in accordance with the rules given in GB/T 1.1-2009.

The translation method used in this standard is equivalent to ISO 17894..2005

General Principles of System Development and Use. "

The following editorial changes have been made to this standard.

--- The paragraphs in Chapter 6 have been numbered.

The Chinese documents that have a consistent correspondence with the international documents referenced normatively in this standard are as follows.

--- GB/T 19000-2016 Quality Management System Foundation and Terminology (ISO 9000..2015, IDT).

This standard was proposed and managed by the National Marine Ship Standardization Technical Committee (SAC/TC12).

This standard was drafted. China Shipbuilding Industry Comprehensive Technical and Economic Research Institute.

1 Scope

This standard specifies a set of mandatory principles, recommended guidelines and related guidelines for the development and use of reliable marine programmable electronic systems.

south. This standard applies to any marine equipment with programmable units that may affect the safety or efficient operation of the ship. This standard includes such

Information on the technical requirements, operation, maintenance and evaluation of the system. Most of the principles and guidelines are based on national standards and international standards

Standard requirements. See the references for source standard data and related

documents.

Note. This standard does not directly involve performance, test or test result requirements related to specific equipment types or functions. For such cases, the current effective

Or its component standards, for example, related to navigation and radio communications equipment may use IEC 60945. Responsible authorities (e.g. national authorities,

The classification society or other contract parties) will determine the applicability of this standard and special requirements when potential conflicts arise.

2 Declaration of conformity

Any organization stating that its system meets the requirements of this standard shall provide evidence that it meets the principles set out in Chapter 7. The evidence deserves independence

Approval of the evaluator. This can be achieved by meeting the criteria given in Chapter 7 or by using alternative methods approved by independent assessors.

Note. Evaluation criteria are given in detail under each principle in Chapter 7.

3 Normative references

The following documents are essential for the application of this document. For dated references, only the dated version applies to this article

Pieces. For undated references, the latest version (including all amendments) applies to this document.

ISO 9000..2000 Quality Management System Foundation and Terminology
(Qualitymanagementsystem-Fundamentalsand
vocabulary)

ISO 9241-2 Ergonomic requirements for office use of visual display terminals (VDTs) Part 2. Guidance for task requirements [Ergo-

nomicrequirementsforofficeworkwithvisualdisplayterminals (VDTs) -Part 2. Guidanceontask requirements]

ISO 9241-10 Ergonomic requirements for office use of visual display terminals (VDTs) Part 10. Dialogue principles [Ergonomic

requirementsforofficeworkwithvisualdisplayterminals (VDTs) -Part 10. Dialogueprinciples]

ISO 9241-11 Ergonomic requirements for offices using visual display terminals (VDTs) Part 11. Usability guidelines [Ergo-

nomicroquirementsforofficeworkwithvisualdisplayterminals (VDTs) -Part 11.
Guidanceonusa-

bility]

ISO 10007 Quality Management System Certification Management Guide
(Qualitymanagementsystems-Guidelinesforconfig-
urationmanagement)

ISO 13407 Human-centred design processes for interactive
systems)

ISO /IEC 2382-1 Information Technology Vocabulary Part 1. Basic Terminology
(Informationtechnology-Vocabulary-
Part 1. Fundamentalterms)

ISO /IEC 9126-1 Software Engineering Product Quality Part 1. Quality Model
(Softwareengineering-Product