For Comments Only

BUREAU OF INDIAN STANDARDS

DRAFT FOR COMMENTS ONLY
(*Not to be reproduced without the permission of BIS or used as an Indian Standard*)

भारतीय मानक **मसौदा**

अंतरिक्ष पद्धतियाँ — क्षमता आधारित सुरक्षा, निर्भरता और गुणवत्ता आश्वासन (एसडीएंडक्यूए) कार्यक्रम प्रबंधन

Draft *Indian Standard*

Space Systems — Capability-Based Safety, Dependability, and Quality Assurance (SD & QA) Programme Management

ICS: 49.140

Air and Space Vehicles Sectional Committee, TED 14 **Last date for receipt of comments is 28/08/2024**

NATIONAL FOREWORD

(Identical Clause to be added later)

This Indian Standard which is identical with ISO 18667 : 2018 'Space Systems — Capability-Based Safety, Dependability, and Quality Assurance (SD & QA) Programme Management' issued by International Organization for Standardization (ISO), was adopted by the Bureau of Indian Standards on the recommendations of Air and Space Vehicles Sectional Committee and approval of the Transport Engineering Division Council.

The text of ISO standard has been proposed as suitable for publication as an Indian Standard without deviations. Certain terminologies and conventions are, however, not identical to those used in Indian Standards. Attention is particularly drawn to the following:

a) Wherever the words 'International Standard' appear referring to this standard, they should be read as 'Indian Standard'.
b) Comma (,) has been used as a decimal marker, while in Indian Standards, the current practice is to use a point (.) as the decimal marker.

In this adopted standard, reference appears to certain International Standards for which Indian Standards also exist. The corresponding Indian Standards, which are to be substituted in their respective places, are listed below along with their degree of equivalence for the editions indicated:

International Standard	*Corresponding Indian Standard*	*Degree of Equivalence*
ISO 9000 Quality management systems — Fundamentals and vocabulary	IS/ISO 9000 : 2015 Quality management systems — Fundamentals and vocabulary (*fourth revision*)	Identical under single numbering
ISO 14300-2 Space systems — Programme management — Part 2 Product assurance	Doc (22330) / ISO 14300-2 : 2011 Space systems — Programme management — Part 2 Product assurance (*under development*)	Identical under dual numbering
ISO 14620-1 Space Systems Safety Requirements Part 1 System Safety	Doc (22331) / ISO 14300-2 : 2011 Space Systems Safety Requirements Part 1 System Safety (*under development*)	Identical under dual numbering
ISO 23460 Space systems — Programme management — Dependability requirements	Doc (22340) / ISO 23460 : 2011 Space systems — Programme management — Dependability requirements (*under development*)	Identical under dual numbering
ISO 27025 Space Systems — Programme Management — Quality Assurance Requirements	Doc (22342) / ISO 27025 : 2010 Space Systems Programme Management Quality Assurance Requirements (*under development*)	Identical under dual numbering
ISO 17666 Space systems — Risk management	Doc (22365) / ISO 17666 : 2016 Space Systems Risk Management (*under development*)	Identical under dual numbering
ISO 10795 Space systems — Programme management and quality — Vocabulary	Doc (22356) / ISO 10795 : 2019 Space systems — Programme management and quality — Vocabulary (*under development*)	Identical under dual numbering
ISO 10794 Space systems — Programme management, materials, mechanical parts and processes	Doc (22329) / ISO 10794 : 2018 Space Systems — Programme Management Material Mechanical Parts And Processes (*under development*)	Identical under dual numbering
ISO 14620-1 : 2018 Space systems — Safety requirements — Part 1 System safety	Doc (22331) /ISO 14620-1 : 2018 Space systems — Safety requirements — Part 1 System safety (*under development*)	Identical under dual numbering

Attention is drawn to the possibility that some of the elements of this standard may be the subject of patent rights. The Bureau of Indian Standards shall not be held responsible for identifying any or all such patent rights.

For the purpose of deciding whether a particular requirement of this standard is complied with, the final value, observed or calculated, expressing the result of a test or analysis, shall be rounded off in accordance with IS 2 : 2022 'Rules for rounding off numerical values (*second revision*)'. The number of significant places retained in the rounded off value should be the same as that of the specified value in this standard.

SCOPE

This document applies to the design, development, fabrication, test, and operation of commercial, civil, and military space and ground control systems, sites/facilities, services, equipment, and computer software. Criteria is provided for rating the capability of the entire SD&QA programme or an individual SD&QA process to identify, assess, and eliminate or mitigate risks that threaten safety or mission success. The predefined capability rating criteria define the sequence of activities necessary to achieve a measurable improvement in the effectiveness of

SD&QA risk management by implementing it in stages. Organizations can evaluate their existing SD&QA programme against the criteria in this document to identify the activities that need to be added, deleted, or modified to achieve the desired technical risk management effort. The phrase "desired technical risk management effort" means the activities and resources used to identify, assess, and eliminate or mitigate technical risks are commensurate with the product's unit-value/criticality and systems engineering life cycle data content/maturity.

FOR COMPLETE TEXT OF THE DOCUMENT KINDLY REFER ISO 18667: 2018 or CONTACT:

Head
Transport Engineering Department
Bureau of Indian Standards
9 Bahadur Shah Zafar Marg
New Delhi 110 002
Email: ted@bis.org.in, hted@bis.org.in
Telefax: 011- 2323 6311