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

GB/T 29073-2026

Replacing GB/T 29073-2012

**Drafting rules for the schedule network of spacecraft
development**

航天器研制计划流程编写规则

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Foreword

This document complies with the provisions of GB/T 1.1-2020 "Standardization Work Guidelines Part

1. Structure and Drafting Rules of Standardization Documents". Drafting. This document replaces GB/T 29073-2012 "Rules for Writing Spacecraft Development Plans". Compared with GB/T 29073-2012, except for... Aside from structural adjustments and editorial changes, the main technical changes are as follows:

- a) Change "Planning Process System" to "System and Classification", and change "Classification by Time" to "Classification by Stage" (see Chapter 4). Chapter 6 of the 2012 edition);
- b) Added content on the timing of writing, changing "Basis for writing" to "Timing and basis for writing" (see Chapter 6, 2012 edition, page 5). chapter);
- c) Product assurance management documents and technical safety management documents have been added to the basis for drafting (see Chapter 6);
- d) The content has been revised, adding information on quality control points, technical safety control points, and identification and response to short-term projects (see section 8). Chapter 7 (2012 edition);
- e) The "Planning Flowchart" has been modified, and instructions for drawing planning flowcharts, network diagrams, and Gantt charts have been added (see 8.2). (2012 version 7.2). Please note that some content in this document may involve patents. The issuing organization of this document assumes no responsibility for identifying patents. This document was proposed and is under the jurisdiction of the National Technical Committee on Standardization of Aerospace Technology and Its Applications (SAC/TC425). This document was drafted by: Beijing Spacecraft Overall Design Department, China Academy

of Space Technology, and Aerospace Dongfanghong Satellite Co., Ltd. The main drafters of this document are. Xia Ning, Su Ruoxi, Xie Zhaogeng, Li Liling, Ji Wei, Zhang Gao, Yao Meng, Le Qunxing, Jin Peng, Ji Long, and Zhang Xiaosong. Liu Yuan, Wang Fengbin, Fei Di, Jiao Yonghui. This document was first published in.2012, and this is its first revision. Spacecraft Development Program Writing Rules

1.Scope This document defines the system and classification, writing principles, timing, and basis for the spacecraft development program process (hereinafter referred to as the "program process"). According to the data, writing steps, and writing content. This document applies to the compilation of hierarchical planning processes for spacecraft systems, subsystems, equipment, and work items (including software). This approach is also applicable to writing plans and processes for the entire spacecraft development process, including phases and years, divided by time.

1 Scope

GB/T 29073-2026 is the Chinese national standard covering the schedule network of a spacecraft programme - the activities and their dependencies, the milestones, the float and the critical path, and the conventions by which the network is drawn and maintained. It replaces GB/T 29073-2012 and has been in force since 1 September 2026, the companion of GB/T 29072-2026. It was issued on 25 May 2026 and has been in force since 1 September 2026, replacing GB/T 29073-2012. The document is under the responsibility of the Standardization Administration of China. This page is published from the official record of the 2026 edition; the clause text of a standard this recent is not yet in circulation, and the figures, limits and tables it contains are those of the document itself, delivered in full with the English translation.

2.Shenzhou-8 prototype stage thermal vacuum test plan and flow.

8.3.3 The planned process is as follows:

- a) Objective. 1) Describe the objectives to be achieved in this plan, the main work items to achieve these objectives, and the specific requirements for meeting these objectives; 2) Explain the basis for developing this plan (document name, number); 3) Describe the production support table and document support table corresponding to the process of this plan.
- b) Key Milestones. For planned processes with numerous work items, several milestones should be established, forming several sub-goals. Generally It is the starting point or intersection of multiple projects working in parallel, and the boundary between design, manufacturing, and testing.
- c) Critical Path. Analyze and identify the critical path of the planned process, and clarify the work items on the critical path.

d) Quality control points. In accordance with the requirements of the product assurance management documents, set up quality control points such as review points and inspection points, and specify the completion time.

e) Technical security control points. In accordance with the requirements of technical security management documents, establish technical security control points such as security inspection points, and clearly define their responsibilities. time.

f) Supporting conditions. Describe the supporting conditions that have not yet been implemented or are under development. These can be detailed based on the five factors. personnel, machinery, materials, methods, and environment. illustrate.

g) Short-term projects and countermeasures. Analyze and identify short-term projects, and formulate detailed short-term plans and countermeasures.

h) Management Measures. Regulations and methods for management to ensure the implementation of the planned process, in accordance with the principles of planning, organizing, directing, coordinating, and controlling. This will be explained from various aspects.

i) Other. such as the integration and optimization of work items in planning processes, technical processes, product assurance management documents, and technical safety management documents. Adjustment instructions.

8.3.4 See Appendix B for examples of textual descriptions.

4 System and Classification

4.1 General Provisions The planning process system consists of all planning processes divided into hierarchical and phased sections according to the work breakdown structure. The top-level planning process is the system. The entire process planning workflow is defined at the provincial level, from which planning workflows at various levels, stages, and types can be derived. The planning process begins with scheme demonstration and ends with completing the user-specified tasks (e.g., launching communication satellites or remote sensing satellites into orbit). Projects delivered to users include post-delivery use, deep space exploration spacecraft completing their main missions, recoverable satellites, and payloads delivered after manned spacecraft return to Earth. (etc.). The planning process structure is shown in Table 1.

4.2 Classification by spacecraft disassembly structure hierarchy The planning process is categorized according to the spacecraft's breakdown structure as follows:

a) System-level planning process. A plan describing the development of a spacecraft system and the relationships between the system and other related systems, as well as between the system and its subsystems. process.

- b) Subsystem-level planning process. A plan describing the development of spacecraft subsystems and the relationships between subsystems and between subsystems and equipment. process.
- c) Equipment-level planning process. describes the planning process for the development of spacecraft equipment.
- d) Work Project Planning Flow. Describes the planning flow for a specific work project during spacecraft development. The work project planning flow can... Write at each of the above levels as needed.

4.3 Classification by Spacecraft Stage The planning process is categorized by spacecraft phase as follows:

- a) Development Process Planning Flow. Describes the planning flow of the entire spacecraft development process.
- b) Phase planning process. Describes a specific development phase of the spacecraft (e.g., prototype phase) or a specific work phase (e.g., final assembly, electrical testing, etc.). The planning process of the development process (including ground testing, etc.).
- c) Time-cycle planning process. Describes the planning process for the development of a spacecraft in a specific year or month. Based on the monthly planning process, it can be... Weekly and daily planning processes should be developed as needed.

5 Writing Principles

5.1 The goal is to meet user requirements while also taking into account spacecraft quality and cost control requirements.

5.2 Based on technical processes, product assurance management documents, and technical safety management documents, and taking into account project management factors such as schedule, quality, and risks, Based on the requirements of management elements and constraints such as staffing, equipment capabilities, site limitations, financial investment intensity, and outsourced components, this was compiled. Write. Provided that the risks are fully assessed and acceptable, the planning process can cover technical processes, product assurance management documents, and technical safety management. The work items in the management document have been adjusted and optimized to balance the flexibility and efficiency of the planning process.

5.3 The plans should be written in a hierarchical and phased manner, and the time limits for each level of the plan should comply with the time limits stipulated in the plan of the next higher level.

5.4 The project duration should take risks into account and be determined scientifically and reasonably while retaining a certain margin.