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

GB/T 23001-2017

**Integration of informatization and industrialization management
systems - Requirements**

信息化和工业化融合管理体系 要求

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Foreword

This standard is drafted in accordance with the rules given in GB/T 1.1-2009. This standard is proposed and centralized by the Ministry of Industry and Information Technology of the People's Republic of China. The drafting unit of this standard. Institute of Electronic Science and Technology Information, Ministry of Industry and Information Technology, China Enterprise Confederation, Ministry of Industry and Information Technology Institute of Reliability and Environmental Testing, China Institute of Information and Communication, Institute of Electronics and Industry Standardization, Ministry of Industry and Information Technology, Tsinghua University University, Beijing Machinery Industry Automation Institute, Zhejiang Province Enterprise Information Promotion Association, UF Network Technology Co., Ltd., Xuzhou Engineering Machine Machinery Group Co., Ltd., Weichai Power Co., Ltd., Hebei Iron and Steel Co., Ltd. Chengde Branch, Wuxi City, the first cotton textile mill, Wu Loyalty instrument limited liability company. The main drafters of this standard. Zhou Jian, Zhang Wenbin, Zhao Guoxiang, Zheng Yongliang, Yu Xiuming, Li Qing, Li Xiaodong, Chen Jie, Song Maoen, Liu Xiaoyin, Li Jun, Wang Zhilin, Wang Tao, Liu Rongmeng, Zhou Yi, Zhou Ping, Cao Zhiyue, Zhang Qiliang, Xiao Linlin, Guo Li, Yang Baogang, Li Zhongfu, Fu Zheng, Chen Xi, Ding Huizhen, Dou Wei, Ma Dongyan, Tao Zheng, Ling Dabing, Li Junhong, Li Liang, Sun Jiexiang, Luo Hao, Guo Wei, Qiu Junsheng,

At present, the global round of a new round of technological revolution and industrial change is breeding. China is in a comprehensive deepening of reform, speed up the change Economic development, to achieve a strategic adjustment of the economic structure of the critical period. Seize the new opportunity for major strategic opportunities and stick to it Chinese characteristics of new industrialization, information, urbanization, agricultural modernization road, firmly establish and implement innovation, coordination, green, open, a total of Enjoy the development of ideas, and vigorously promote the integration of information technology and industrialization, is related to the success of the transformation of China's development mode, is to achieve the Chinese nation Wei Great revival of the major strategic choice. Promote the integration of information technology and industrialization (hereinafter referred to as the integration of two), should grasp the digital, network, intelligent development trend, the full application New technology, new methods, new ideas, to play the creative elements of data innovation potential, to promote and realize

data, technology, business processes, organizational structure four Elements of the interactive innovation and continuous optimization, mining resources allocation potential, consolidate the new industrial base, seize the information development opportunities, to achieve innovation Development, intelligent development and green development. Two fusion not only involves the integration of technology, but also a management optimization process. China has made great progress in technological innovation, But management is still a weak link, especially in the information environment management is still in the exploratory stage. Promote industrialization by summing up the refinement Information management of the new management of the law, management methods and management mechanisms to form a set of two fusion management system standards, can effectively guide the organization to Integration and innovation of the concept of promoting the integration of two, so as to accelerate industrial upgrading and the characteristics of new industrialization process. The two-tier integration management system is a common way to systematically establish, implement, maintain and improve the two-way integration process management mechanism. The organization of all activities, can guide the organization to strengthen change management, standardize the integration process, and to continue to be controlled, and thus continue to build information The ability to achieve a sustainable competitive advantage that matches its strategy. The two integration management system based on the following work and practical experience. the development of information technology in China accumulated the application of technology Results and management innovation experience; according to GB/T 23020 in tens of thousands of enterprises to carry out two fusion assessment of the diagnosis of the work of the methods and regulations Law; in the promotion of quality, environment, information technology services, information security, energy, occupational health and safety management system, the formation of the work Basic and application environment. Two management systems propose nine management principles, including. to obtain sustainable competitive advantage for the focus of attention, strategic coherence, collar The core role of the guide, full participation, full assessment, process management, global optimization, step by step, perseverance, innovation and leadership, open collaboration. Two-tier integration management system to build a strategy - sustainable competitive advantage - the new ability of the strategic cycle, data - technology - business flow - Organizational elements of the cycle and planning - support, implementation and operation - evaluation - improved management cycle. These three cycles run through Covering the entire two integration management system, as shown in Figure 1.

Note. The numbers in parentheses indicate the corresponding chapters of this standard.
Figure

1 Two integration management system of the three cycles and the structure of this standard
The two-tier integration management system series of standards, including basic and terminology, requirements, implementation guidelines, assessment specifications, audit guidelines, etc. together constitute a A set of closely related family of standards can guide

all organizations to establish, implement, maintain and improve the two-way integration management system, but also for the relevant parties to evaluate The consistency and effectiveness of the organization 's integration management system. For the system to guide the standard application, can further develop the two integration management system key content and framework, the method and tool standards, according to According to different industries or different areas of the characteristics and needs of the development of classification standards, and given the relevant reference model. Information and industrial integration management system requirements

1 Scope

China's national requirements standard for the management system for the integration of informatization and industrialization. It specifies the general requirements covering the sustainable competitive advantage, the leadership role, the planning, the implementation and operation, the evaluation and the improvement, and it applies to organisations that need to build a capability through that integration and to have it assessed. This is the certifiable member of the series - the document an organisation is audited against - and it follows the structure that every modern management system standard uses: leadership, planning, support and operation, performance evaluation, improvement, arranged around the plan-do-check-act cycle so that it can be integrated with an existing quality or environmental system rather than run alongside it. What distinguishes it from those is the object. A quality management system is built around meeting customer requirements consistently; this one is built around identifying a sustainable competitive advantage the organisation intends to acquire, and then requiring that the technology, the organisational structure, the business processes and the data be changed together to acquire it. The requirement that the advantage be identified first, by top management, and that everything else be derived from it, is the mechanism intended to prevent the failure the series was written against: technology bought for its own sake. The standard accordingly requires the organisation to determine and document that advantage, to plan the capability needed for it, to align the four elements, to operate and control the resulting processes, to measure whether the capability was in fact obtained, and to improve. Issued and in force since 22 May 2017.

This standard stipulates the sustainable competitive advantage and the leading role in the management system of informationization and industrialization (hereinafter referred to as "two fusion") Planning, implementation and operation, evaluation, improvement of the general requirements. This standard applies to organizations that have the following requirements.

- a) through the two integrated management system of effective application and continuous improvement, to create a new environment under the information technology capacity;
- b) assess its two-tier integration management system through internal or external (including

accreditation bodies) to confirm that it has The ability to take a sustainable competitive advantage.

2 Normative reference documents

The following documents are indispensable for the application of this document. For dated references, only the dated edition applies to this article Pieces. For undated references, the latest edition (including all modifications) applies to this document. Information technology and industrial integration management system foundation and terminology

GB/T 23000-2017 Code for evaluation of integration of informationization and industrialization of industrial enterprises GB/T 23020-2013

3 Terms and definitions

GB/T 23000-2017 The terms and definitions defined apply to this document. Sustainable Competitive Advantage

4.1 General The organization shall have a profound understanding of the internal and external environmental changes that affect its sustainable development and establish, implement, maintain and improve the environment in accordance with the requirements of this standard. Two integration management system to create a new environment under the information technology capabilities, access and organizational strategy to match the sustainable competitive advantage.

4.2 Identify the organization's internal and external environment The organization should identify a variety of external and internal factors related to its strategy and sustainable competitive advantage. The organization should analyze and determine the relevant information of these external and internal factors.

Note 1. These factors may include advantages, disadvantages, opportunities and challenges, as well as the impact of digitalization, networking, and intelligence.

Note 2. External environment-related factors may include domestic and foreign culture, laws and regulations, policies, customer needs, partners, market trends, competitors, industry standards Pole, technology trends and so on.

Note 3. Internal environment-related factors may include the organization's vision, mission, values, status, and so on.

4.3 Focus on gaining a sustainable competitive advantage that matches the organizational strategy

4.3.1 Identify and identify the need for sustainable competitive advantage The organization should be two integration as a strategic throughout the important content. The organization should focus on its strategy, taking into account the changes in the internal and external