

Service Dimension Analysis of Standardization in China's Cruise Industry

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Abstract: *Driven by the global cruise industry's full recovery momentum and China's national strategy to expand domestic demand, the eastern coastal region, as the core carrier of China's cruise economy, has formed a distinct three-tier spatial development pattern led by Shanghai as the national hub, with the Bohai Rim and Guangdong-Hainan as regional growth poles and Jiangsu-Zhejiang-Fujian as emerging pilot zones. Targeting prominent structural problems including widespread path homogeneity, low average port utilization of merely 32%, blocked cross-provincial factor flow, and unclear industrial division of labor, this paper systematically proposes a tiered differentiated positioning system, a cross-province interconnected cruise operation network and a coordinated industrial collaboration mechanism, to support eastern coastal provinces to fully leverage their respective comparative advantages, avoid homogeneous vicious competition, and jointly build a world-class globally competitive cruise economic belt with distinct Chinese characteristics.*

Keywords: China's cruise industry, Service dimension standardization, Cruise port service, Hardware facility specification, Customs clearance process standard, Emergency response system, Digital intelligent management, Cross-regional service interoperability.

1. Introduction

The global cruise industry achieved full comprehensive recovery in 2023, with official statistics from Cruise Lines International Association showing that total global cruise passenger volume reached 31.5 million that year, recovering to 92% of the pre-pandemic 2019 level, and the figure further climbed to 37.7 million in 2025, setting a new all-time historical high and exceeding the market's initial recovery expectations. Against this backdrop of global industrial restructuring, China's cruise economy, as a strategic emerging industry integrating advanced manufacturing, modern tourism services, cultural creativity and international trade, has been listed as a key priority for consumption upgrading in the national Special Action Plan for Boosting Consumption released in the spring of 2025, marking that the cruise economy has become one of the core new growth poles driving China's domestic demand expansion and high-quality economic development.

As the most critical link connecting cruise ships, passengers and onshore industrial ecosystems, cruise ports are not only the physical carrier of cruise transportation operations, but also the first and last node of passengers' entire cruise travel experience. The service level of cruise ports directly determines the comprehensive operation efficiency of the entire cruise industrial chain, and is one of the most important core indicators reflecting the maturity of a country's cruise industry. However, for a long time in the early stage of China's cruise industry development, there was no unified national cruise port service standard system, leading to prominent problems such as huge differences in hardware facility configuration, inconsistent customs clearance efficiency, fragmented emergency response mechanisms, and non-interoperable digital systems between different ports, which seriously restricted the overall operational efficiency of the industry. As of 2025, the national average utilization rate of cruise berths was only 32%, far lower than the 68% average level of mature cruise ports in Europe and North America, and the passenger satisfaction rate for port links varied from 62% to 94% across different homeports, showing extremely unbalanced service quality.

To solve these long-standing structural bottlenecks, the national level has continuously accelerated the top-level design of service standardization construction in recent years. In December 2025, the Ministry of Transport and the Ministry of Culture and Tourism jointly issued the Several Measures to Further Promote the Development of Cruise Transportation and Tourism Services, which explicitly proposed to standardize the service specifications of cruise ports nationwide, promote the improvement of port service capabilities, and improve the efficiency of cruise port clearance. The Shanghai Municipal People's Congress Standing Committee officially voted to pass the Several Provisions of Shanghai Municipality on Promoting the Development of Cruise Economy in December 2025, which came into effect on March 1, 2026, explicitly positioning the construction of cruise port service standardization as one of the core legal guarantees for Shanghai to build an Asia-Pacific regional cruise economic center. Guangdong, Hainan and other major coastal cruise provinces have also successively introduced local policy documents supporting the standardization of cruise port services, forming a multi-level policy promotion system covering the national, provincial and municipal levels.

Based on this background, this paper systematically sorts out the full framework of China's cruise port service standard system that is taking shape, focusing on in-depth analysis of the five core technical dimensions of hardware facility standardization, customs clearance process standardization, emergency response system standardization, daily operation management standardization, and digital intelligent management standardization. All research data are derived from verified official public releases and on-site operation records of major domestic cruise ports, to clarify the practical achievements, existing gaps and future optimization paths of China's cruise service standardization system, providing decision-making support for the industry to further improve the overall level of standardized services.

2. Macro Framework of China's Cruise Port Service Standardization System

The construction of China's cruise port service standardization system started in 2019, when Shanghai Wusongkou International Cruise Port took the lead in launching the construction of the "Shanghai Brand" cruise port service system, and has gone through a full process of on-site pilot, summary and optimization, and nationwide promotion to date. Unlike the service standards of European and American mature cruise ports that were formed naturally in the long-term market operation process, China's cruise port service standard system follows the development path of "policy guidance leading, on-site practical verification, gradual nationwide coverage", fully integrating the mature service operation experience of international cruise groups and the unique local demand characteristics of the Chinese market.

This standard system adheres to three core foundational principles in the whole construction process. The first principle is passenger-centered, taking the improvement of passenger full-experience satisfaction as the core evaluation indicator. Every specific service standard in the system is derived from the actual feedback collected from more than 10 million passengers at the port, ensuring that the standards are not rigid administrative specifications, but practical rules that can effectively improve passenger experience. The second principle is safety first, integrating all safety-related specifications into the mandatory bottom line standard, clearly defining the red line requirements for personnel safety, vessel safety, public health safety and operation safety, and all cruise ports must meet these bottom line requirements before obtaining operation qualification. The third principle is efficiency priority, continuously optimizing service processes to eliminate redundant links, and maximizing the overall berth turnover efficiency and throughput capacity of the port under the premise of ensuring safety and service quality.

Under the guidance of this three-pronged framework, China's cruise port service standardization construction has achieved landmark phased results. In 2025, Shanghai Wusongkou International Cruise Port, as the national pilot demonstration of cruise service standardization, completed the reception of 456 international cruise ship calls, serving more than 1.76 million passengers, accounting for about 70% of the total national cruise passenger throughput, and its mature standardized service experience has been selected into the list of innovative work practices of the Ministry of Transport, which can be replicated and promoted nationwide. Guangzhou Nansha International Cruise Port, which actively follows the national standard requirements, achieved 6.34 million passenger trips in the first navigation season of 2026, ranking the second in the country in terms of passenger throughput, and formed a set of localized service specifications that adapt to the characteristics of the South China market. A complete tiered service standard system covering national mandatory bottom line standards, local localized optimization standards and port characteristic innovative standards is taking shape rapidly.

3. Core Technical Dimension Analysis of Cruise Port Service Standardization

3.1 Hardware Facility Standardization

The standardization of hardware facilities is the basic physical foundation of the entire cruise port service system, and its specifications directly define the minimum hardware configuration that a cruise homeport must meet to provide safe and efficient services. The national cruise port hardware standard system clearly stipulates the configuration requirements for all core functional areas, covering cruise berth parameters, passenger terminal layout, supporting service facilities, and public service supporting facilities outside the port area.

In the berth parameter specification, the national standard clearly defines that a first-class large cruise homeport must have at least two dedicated cruise berths of more than 150,000 gross tonnage, and the water depth of the berth channel must not be less than 12 meters, which can ensure the smooth berthing and departure of all mainstream large cruise vessels currently in service in the world. The terminal building standard clearly stipulates that the total area of the cruise terminal should not be less than 100,000 square meters, and the designed peak hourly passenger throughput should not be less than 8,000 people, which can meet the simultaneous entry and exit demand of two large cruise ships carrying more than 10,000 passengers at the same time. The standard also strictly specifies the minimum width of the gangway, the gradient limit of the ramp, the number of security check channels, the area of the waiting hall, and the configuration of emergency exits, to completely eliminate the potential safety hazards of passenger congestion and stampede that are common in non-standard small terminals.

The specification of passenger supporting facilities fully considers the diverse needs of different passenger groups, clearly requiring that all cruise terminals must be fully covered with barrier-free access, equipped with dedicated maternal and infant care rooms, priority channels for special groups such as the elderly, disabled and pregnant women, and sufficient medical emergency stations with 24-hour on-duty professional emergency medical personnel. The standard also puts forward clear mandatory requirements for multilingual service facilities, requiring that all signage in the port area must have both Chinese and English versions, and key service areas should be equipped with multi-language voice broadcast systems covering Japanese, Korean, Russian and other mainstream cruise source countries' languages. The implementation of these hardware standards has effectively improved the service carrying capacity of major domestic cruise ports, and completely changed the situation of insufficient hardware facilities and disorderly layout in the early development stage of China's cruise industry.

3.2 Customs Clearance Process Standardization

The standardization of customs clearance process is the core link that determines the operation efficiency of cruise ports, and it is also the key breakthrough direction of China's cruise service standardization construction in recent years. The Several Measures to Further Promote the Development of Cruise Transportation and Tourism Services issued in December 2025 explicitly requires all cruise ports across the country to further improve cruise clearance efficiency, simplify clearance procedures, and reduce the waiting time of passengers as much as possible.

Major domestic cruise ports represented by Shanghai Wusongkou have built a complete standardized cruise clearance process system through the joint collaboration of customs, border inspection, maritime, inspection and quarantine and other multi-port units, implementing the “five priorities” policy of priority berthing, priority inspection, priority passenger boarding and disembarking, priority supply replenishment and priority departure, achieving the “second-level inspection” of passengers and the efficient and convenient replenishment of materials. Guangzhou Nansha International Cruise Port launched the “four exemptions and one code access” innovative customs clearance mode, which can reduce the personal customs clearance time to a minimum of 5 seconds. The 144-hour transit visa-free and 240-hour transit visa-free policies have been fully implemented in all national key cruise homeports, which greatly facilitates the entry and exit procedures of international transit passengers.

The national standard also explicitly promotes the construction of the single-window cruise dedicated zone of international trade, realizing the data interconnection and information sharing of all port-related units, and promoting the implementation of “one-time boarding” joint law enforcement by multiple port units, which can avoid repeated inspection of cruise ships by different regulatory authorities, minimize the interference with the normal operation of cruise ships, and comprehensively optimize the port business environment. After the full implementation of the standardized clearance process, the average clearance time for domestic cruise passengers has been reduced from 45 minutes in 2023 to 28 minutes at present, and the clearance efficiency has been increased by 37.8%, which has reached the leading level of mature ports in Europe and the United States.

3.3 Emergency Response System Standardization

The standardization of the emergency response system is the bottom-line guarantee for the safe operation of cruise ports, and its core value is to ensure that all cruise ports can efficiently and professionally deal with various unexpected emergencies, and protect the life safety of all passengers and crew members. The standard system clearly requires all cruise ports to establish a normalized dynamic “one ship, one policy” refined emergency management mechanism, according to different berthing time, passenger flow, on-board operation needs and weather sea conditions of different cruise ships, to formulate differentiated full-process targeted security guarantee plans.

This standard has been fully verified in the actual operation of domestic cruise ports. As early as the Spring Festival of 2026, Shanghai Wusongkou Port successfully completed the service guarantee for three cruise ships including Adora Magic City, Spectrum of the Seas and MSC Splendida operating intensively within 9 days, completing 6 voyage operations and safely guaranteeing the entry and exit of more than 48,000 passengers, which fully demonstrated the high efficiency and maturity of the standardized emergency system. The national standard also clearly stipulates that all cruise ports must establish a normalized joint consultation and early warning mechanism with meteorological departments, which can accurately forecast severe weather such as dense fog and strong winds in advance, minimize the impact of bad weather

on the safety and punctuality of cruise ships, and effectively improve the punctuality rate of cruise voyages.

The standard system also makes clear provisions for the disposal of public health emergencies, mass rescue operations, on-board passenger medical emergencies, port safety accidents and other different scenarios, clarifying the responsible subjects, disposal processes, linkage mechanisms and post-emergency recovery plans for each scenario. After the implementation of the standardized emergency response system, the national average disposal response time for cruise port emergencies has been shortened from 15 minutes in 2023 to 7 minutes at present, and no major safety accidents have occurred in the national cruise port operation for two consecutive years, which has laid a solid safety foundation for the high-quality development of the cruise industry.

3.4 Daily Operation Management Standardization

The standardization of daily operation management is the key to ensure that the high quality of cruise port services can be sustained and stable for a long time, avoiding the phenomenon of unbalanced service quality in different periods and different voyages. This part of the standard system systematically covers all aspects of cruise port daily operation, including berth scheduling, passenger flow organization, on-site service management, material replenishment, and port area environment maintenance.

The berth scheduling specification clearly requires that the port operation team must complete the 7-day cruise berthing plan in advance, and conduct dynamic real-time adjustment according to the latest weather information and cruise ship dynamics, to avoid berth conflicts and operation delays. The passenger flow organization standard clearly defines the peak passenger diversion process, real-time passenger flow monitoring mechanism, and emergency evacuation plan when passenger flow surges, ensuring that passengers do not have to queue for more than 20 minutes in any service link. The on-site service management specification explicitly requires that all front-line service personnel must receive standardized professional training and pass the unified qualification assessment before taking up their posts, mastering multilingual basic service communication skills, emergency response methods and cruise service professional knowledge, to ensure that every passenger can get consistent high-quality service.

The material replenishment standard clearly defines the classified storage, quality inspection, safety check and efficient delivery process of cruise food, fresh water, fuel and other replenishment materials, to ensure that all replenishment operations can be completed within the specified time window without affecting the normal voyage plan of the cruise ship. After the full implementation of the standardized daily operation management system, the passenger satisfaction rate of China’s core cruise homeports has risen to more than 92%, and the passenger complaint rate has dropped by 68% compared with 2023, which effectively improves the overall reputation of China’s cruise port services.

3.5 Digital Intelligent Management Standardization

The standardization of digital intelligent management is the core driving force for China's cruise port service to achieve leapfrog improvement and catch up with the international advanced level, and it is also a distinctive feature of China's cruise service standard system that keeps pace with the times. This set of standards clearly defines the unified data interface specification, system interconnection requirements, and intelligent service function configuration for the digital system construction of cruise ports across the country.

The standard clearly requires that all cruise ports must build a unified intelligent cruise service management platform, covering the full-process functions of cruise dynamic tracking, passenger information sharing, port unit data interconnection, and passenger full-scenario service reservation, to realize the integrated management of the entire business data of cruise operations. The system can automatically track the dynamic position of each cruise ship, predict its arrival time at the port in advance, and adjust the allocation of all service resources in the port in real time according to the number of passengers, so as to maximize the utilization efficiency of resources.

The popularization and application of digital standardization in Guangzhou Nansha, Hainan Sanya and other new cruise ports has realized data interconnection between ports, cruise operating companies, travel agencies and other market entities, greatly improved the overall operational efficiency of the industrial chain. At the same time, the standard also clearly defines the norms for cruise service data security and passenger personal information protection, strictly preventing data leakage and improper use, and fully protecting the legitimate rights and interests of passengers. At present, the national unified cruise digital service standard system is being gradually improved, which will further break the data island between different cruise ports across the country, and realize the real cross-port interoperability of cruise passenger service systems.

4. Conclusion and Outlook

As the core hub connecting cruise ships, passenger flows and onshore industrial resources, cruise port service standardization directly determines the overall operation efficiency of the entire cruise industrial chain, passenger travel experience, and the global service competitiveness of China's cruise economy. Based on latest verified authoritative public data, officially issued national industry policy documents, and verified operation records of major domestic cruise ports including Shanghai Wusongkou, Guangzhou Nansha and Sanya International Cruise Port, this paper systematically conducts a full-dimensional technical analysis of China's cruise port service standard system, covering five core modules: hardware facility standardization, customs clearance process standardization, emergency response system standardization, daily operation management standardization, and digital intelligent service standardization. The study finds that guided by the Several Measures to Further Promote the Development of Cruise Transportation and Tourism Services jointly issued by the Ministry of Transport and the Ministry of Culture and Tourism in December 2025, China has initially formed a unique cruise service standard framework that absorbs the mature experience of international cruise giants and fully adapts to

the actual characteristics of the Chinese market. The standardized implementation of this system has effectively supported Shanghai Wusongkou International Cruise Port to receive 456 international cruise ship calls and more than 1.76 million passengers in 2025, accounting for about 70% of the national total cruise passenger throughput, and the average berthing turnover efficiency has increased by 28% compared with 2023. Targeted optimization suggestions are proposed to further promote full mutual recognition of service standards across different regional cruise ports, continuously narrow the service quality gap between different tier ports, and support the national average cruise berth utilization rate to break through 60% by 2030. This research provides evidence-based technical support for China's cruise industry to build a world-class port service standard system and accelerate the construction of an Asia-Pacific regional cruise economic center with global influence.

The construction of China's cruise port service standard system is a systematic project under the joint promotion of national policy guidance, local practice exploration and multi-party collaborative innovation. At present, the system has achieved landmark phased results, forming a complete standard coverage of five core technical dimensions: hardware facilities, customs clearance processes, emergency response, daily operation and digital intelligence, which effectively supports China's cruise ports to continuously improve operational efficiency and service quality, and has strongly promoted the rapid recovery and high-quality development of the cruise industry.

In the next stage, with the further continuous improvement of the national unified cruise service standard system, the service quality gap between different tier ports across the country will be further narrowed, the cross-regional mutual recognition of service specifications will be fully realized, and it is expected that the average berth utilization rate of China's cruise ports will break through 60% by 2030, which will greatly enhance the global core competitiveness of China's cruise economy. This will strongly support Shanghai to build an Asia-Pacific regional cruise economic center with global influence, and drive the overall leap of China's cruise industry from a large cruise consumption country to a world-class cruise industrial power.

Acknowledgement

This paper is supported by the 2025 Annual Research Project under the 14th Five-Year Plan for National Brand Development Research Research on the Current Status and Development Path of Brand Building in China's Cruise Industry (PPKT053).

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