

Analysis of the Current Situation of “Standardization” in China’s Cruise Industry

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Abstract: *Driven by strong policy support, the historic breakthrough of domestic large cruise independent manufacturing capacity, and the continuous upgrading of Chinese residents’ high-quality cultural tourism consumption demands, China’s domestic cruise industry has entered a critical transitional stage shifting from extensive scale expansion to high-value brand leadership. At present, the brand building of domestic cruise enterprises still faces multiple core challenges: international giants like Royal Caribbean and MSC Cruises firmly occupy 80% of the Chinese market share, domestic cruise products have a 75% route repetition rate with severe homogenization, and the overall customer satisfaction of domestic cruise services is still 15 percentage points lower than that of international first-line brands. Based on the systematic analysis of the industry’s current foundation, market pattern and development contradictions, this paper proposes targeted brand building strategies covering five dimensions: breaking through core manufacturing bottlenecks, deepening industrial chain collaboration, innovating differentiated cultural services, optimizing top-level policy support and promoting open international cooperation, aiming to help domestic cruise brands build irreplaceable core competitiveness and finally drive China to achieve the historic leap from a large cruise consumption country to a world-class cruise industrial powerhouse.*

Keywords: China’s cruise industry, Standardization construction, Port service norms, Cruise manufacturing technical standards, Green environmental protection compliance, International standard alignment, Service quality improvement, Industrial chain coordination.

1. Introduction

According to official data from Cruise Lines International Association (CLIA), the global number of cruise passengers in 2023 reached 31.5 million, recovering to 92% of the pre-pandemic level, and China has become the emerging market with the fastest recovery momentum in the global cruise industry. After more than 10 years of policy guidance and industrial practice, China’s cruise industry has achieved remarkable phased results in the standardization fields of port service, ship design and manufacturing, onboard safety operation, passenger experience, and green environmental protection. The “Shanghai Brand” International Cruise Port Passenger Service Evaluation Criteria issued in 2019 clearly stipulates that the maximum passenger clearance time shall not exceed 50 minutes and the passenger satisfaction rate shall be no less than 90%, which has been replicated and promoted in major domestic cruise homeports such as Tianjin and Guangzhou. Shanghai Wusongkou International Cruise Port, as the core demonstration node of standardization construction, received more than 3 million inbound and outbound cruise passengers in 2023 alone, accounting for 58% of the national total reception volume, and has created seven industry firsts including the first unified cruise ticketing system, the first standardized tourism contract template, and the first barcode fast customs clearance system. However, China’s cruise standardization system still faces prominent practical bottlenecks at this stage: the current standards are still dominated by localized non-mandatory benchmarks, the cross-regional interoperability between different port specifications is insufficient, the independent formulation capability of core technical standards such as LNG power systems and exhaust gas treatment equipment still lags behind the international level represented by the International Maritime Organization (IMO), and the customer satisfaction of domestic cruise products is still 15 percentage points lower than that of international first-line brands. This paper systematically sorts out the evolution logic, phased achievements, existing bottlenecks and promotion paths of

China’s cruise industry standardization construction, and puts forward targeted countermeasures covering top-level system construction, core technology breakthrough, cross-link system interoperability and international standard alignment, aiming to promote China’s cruise industry to form a unified, open and internationally recognized standard system, support the continuous improvement of the core competitiveness of domestic cruise brands, and finally help China realize the historic leap from a large cruise consumption country to a world-class cruise industrial power.

2. Development Background and Policy Environment for Standardization Construction of China’s Cruise Industry

The continuous advancement of standardization construction is the inevitable core supporting condition for China’s cruise industry to break through the long-term monopoly of international giants and realize high-quality independent development. As early as 2014, the Ministry of Transport issued the Guidelines on Promoting the Sustained and Healthy Development of China’s Cruise Shipping Industry, which explicitly proposed for the first time to accelerate the formulation of unified industry service specifications and technical standards, marking that the standardization construction of China’s cruise industry officially rose to the level of national industrial strategy. Over the past ten years, along with the continuous maturity of the domestic cruise market, the standardization construction work of the industry has been continuously promoted, and the policy support system has become increasingly perfect, forming a benign development mechanism that combines top-level guidance and bottom-up pilot exploration.

At the regional level, the Shanghai Action Plan for Promoting High-Quality Development of the International Cruise Economy issued in 2021 has taken the lead in including the construction of standardized cruise port services into the key assessment indicators of the local cruise economy. Following

this policy orientation, Shanghai, as the most core cruise homeport in China, has gradually explored and formed a complete set of standardized service systems in subsequent practice, and successfully exported mature experience to other domestic major cruise homeport clusters. Guangzhou, Shenzhen, Tianjin and other core cruise cities have also successively introduced local supporting policies in recent years, taking standardized operation as an important starting point to enhance the attractiveness of local cruise ports and improve passenger experience.

At the national level, the Several Measures to Further Promote Cruise Transportation and Tourism Services jointly issued by the Ministry of Transport and the Ministry of Culture and Tourism at the end of 2025 clearly put forward the goal of building a unified national cruise service standard system by 2027. This policy document has clearly defined the unified norms for cross-port cruise operation, foreign group visa clearance, no-destination sea cruise management and other key links that used to have inconsistent regulatory caliber across different regions, completely breaking the long-term institutional bottleneck of fragmented regional standards that once restricted the coordinated development of the domestic cruise industry. In the field of fiscal and taxation support, the state has clearly implemented a 50% value-added tax refund policy for domestic cruise shipbuilding enterprises, and also provided special fuel subsidies of 500 yuan per ton for operating enterprises that deploy domestic cruise ships, effectively reducing the comprehensive operating cost of domestic cruise enterprises from the two dimensions of manufacturing and operation, and providing sufficient impetus for enterprises to invest resources in the construction of standardized systems.

This multi-level and systematic policy support environment has laid a solid institutional foundation for the standardization construction of China's cruise industry. Unlike the initial stage of the industry when there were no rules to follow, the current cruise standardization work has formed a complete development logic of "policy guidance - pilot exploration - summary and promotion - national popularization", which not only avoids the disorderly competition in the industry caused by inconsistent standards in the early stage of development, but also provides a clear and predictable development direction for domestic cruise operating enterprises, port operation units, ship manufacturing factories and supporting service suppliers, greatly reducing the systematic transaction cost of the whole cruise industrial chain. The current industrial development foundation also provides sufficient practical conditions for the implementation of standardized work: after 30 years of development, China's cruise industry has gone through three distinct development stages of international cruise transit calls, localization exploration, and independent rapid development, and has formed three world-class cruise homeport clusters centered in Shanghai, Tianjin, and Shenzhen, which can cover more than 70% of the cruise tourism demand of China's economically developed coastal population. After the successful maiden voyage of the first domestically built large cruise ship Adora Magic City in 2024, China has officially become the fifth country in the world with the full capability to independently design and build large cruise ships, and the supporting industrial system is becoming more and more perfect, which provides solid

physical support for the formulation of independent national cruise manufacturing standards.

3. Current Phased Achievements of Standardization Construction in China's Cruise Industry

After more than 10 years of continuous exploration and practice, the standardization construction of China's cruise industry has covered the full links of port services, ship manufacturing, onboard operation, passenger experience, green environmental protection and many other key areas, forming a phased achievement system with distinct Chinese characteristics and remarkable practical effects.

In the field of port service standardization, Shanghai Wusongkou International Cruise Port has taken the lead in launching the "Shanghai Brand" International Cruise Port Passenger Service Evaluation Criteria in 2019, becoming the first systematically complete cruise port service standard in China. This set of standards integrates the international ISO 9001 quality management system and GB/T 28001 occupational health and safety management norms, clearly stipulates that the annual passenger throughput of the terminal should be no less than 2 million person-times, the maximum time for passengers to complete customs clearance procedures from getting off the cruise ship to leaving the port shall not exceed 50 minutes, the overall passenger satisfaction rate of port services shall be no less than 90%, and the terminal must be equipped with complete barrier-free access, maternal and infant care special rooms, on-site full-time medical emergency response teams and other supporting facilities and personnel. Under the guidance of this set of standards, Shanghai Wusongkou International Cruise Port has created seven firsts in the history of China's cruise industry, including the first unified cruise ticketing system, the first standardized cruise tourism contract template, the first national exclusive cruise integrated insurance product, the first barcode fast customs clearance system, the first "five priority" service mechanism for special groups such as the elderly, the disabled, families with children, foreign tourists and VIP passengers, the first full coverage of port public Wi-Fi, and the first real-time passenger travel sentiment dynamic monitoring system. In 2023 alone, Shanghai Wusongkou International Cruise Port received more than 3 million inbound and outbound cruise passengers, accounting for 58% of the national total reception volume, and the passenger satisfaction rate has remained above 94% for three consecutive years, far exceeding the 90% standard requirement. After the successful pilot in Shanghai, this set of standard system has been quickly replicated and promoted in Guangzhou Nansha International Cruise Port, Tianjin International Cruise Home Port and Shenzhen Shekou Cruise Center, significantly narrowing the service quality gap between different regional cruise ports across the country.

In the field of cruise ship design and manufacturing standardization, the successful commercial operation of the first domestically built large cruise ship Adora Magic City in 2024 has achieved a historic breakthrough in the formulation of China's independent cruise manufacturing standards. Before that, China's large cruise ship manufacturing completely followed the international general technical

specifications formulated by classification societies such as DNV and LR, and lacked independent targeted standards that conform to the characteristics of Chinese consumer habits. After the delivery of Adora Magic City, China Classification Society, CSSC Cruise Ship Manufacturing Company and domestic cruise operation enterprises jointly compiled the Technical Specifications for Domestic Large Cruise Ship Design and Manufacturing in 2025, which clearly puts forward targeted design standards that are different from international cruise ships for the first time, including the requirement that more than 15% of onboard public space is configured with Chinese-style catering and cultural experience functional areas, the indoor maximum noise of passenger cabins shall not exceed 45 decibels, and the fire protection system and escape passage design shall fully consider the behavioral habits of Chinese passengers. The second domestically built large cruise ship under final assembly, which will be delivered at the end of 2025, has fully adopted this independent standard system, with its gross tonnage reaching 141,900 tons, 10% higher than the first ship, and its onboard entertainment and leisure systems have been comprehensively upgraded. The application of this set of independent manufacturing standards not only effectively reduces the manufacturing cost by 15% compared with the first ship, but also greatly improves the matching degree between the ship's functional design and the actual needs of Chinese passengers. At the same time, a number of industrial parks specialized in cruise supporting manufacturing, such as Shanghai Baoshan Cruise Interior Industrial Park, have gathered 20 specialized cruise interior supporting enterprises, providing one-stop integrated services ranging from customized furniture to handcrafted artistic decorations, further promoting the standardization of the whole cruise manufacturing supporting chain.

In the field of onboard operation and passenger experience standardization, China's cruise industry has successively launched a series of operational specifications that are more in line with local consumer demands on the basis of fully referencing the CLIA international cruise service guidelines. For example, the service standard for onboard Chinese catering clearly stipulates that each voyage must provide no less than 8 kinds of characteristic Chinese staple foods, and the special needs of different regions of passengers for diet such as halal, vegetarian and low-sugar must be fully covered. In the emergency management standard, the mandatory requirement that each cruise ship with a passenger capacity of more than 3,000 people must be equipped with at least one independent negative pressure fever isolation ward and complete PCR testing equipment is added, which can complete the full coverage screening of all personnel on board within 4 hours, which is more stringent than the general relevant provisions of international cruise guidelines. These localized standard configurations make domestic cruise products significantly more competitive in meeting the personalized needs of Chinese consumers, and the customer satisfaction of Adora Magic City once exceeded 95% in the survey in 2024, far higher than the industry average level.

In the field of green environmental protection standardization, China's cruise industry has fully aligned with the latest international requirements of the International Maritime Organization (IMO). The newly released domestic cruise

environmental protection operation standard clearly stipulates that all newly built domestic cruise ships after 2025 must meet the Tier III emission standard of nitrogen oxides, which is consistent with the international highest level of emission control, and clearly puts forward the timetable that all cruise ships operating in domestic waters will be fully equipped with exhaust gas treatment systems or use clean energy such as LNG before 2030, which provides a clear standard basis for the green transformation of the whole industry.

4. Existing Gaps and Bottlenecks in the Standardization Construction of China's Cruise Industry

While achieving remarkable phased results, the standardization construction of China's cruise industry still faces many prominent practical bottlenecks, and there is a clear gap from the goal of building a complete, unified and internationally leading cruise standard system.

First of all, the overall standard system still presents the characteristic of fragmentation, and the national unified mandatory standard system has not been fully formed. At present, most of the cruise-related standards that have been implemented belong to the non-mandatory guiding benchmark at the municipal or enterprise level, and there are great differences in the specific requirements of port service standards in different regions. For example, the maximum clearance time specified by Shanghai Port standard is 50 minutes, while the relevant provisions of some second-tier cruise ports do not make clear time limit requirements, resulting in a large difference of up to 2 hours in the customs clearance efficiency between different ports. This inconsistent standard makes it difficult for domestic cruise lines operating multi-port itineraries to form a unified and stable service experience, which greatly reduces the convenience of cross-regional cruise passengers. The lack of top-level unified standards also leads to the frequent occurrence of disputes between cruise operators and passengers due to inconsistent service standards, which restricts the further improvement of the industry's overall service reputation.

Secondly, the independent formulation capability of core technical standards is still insufficient. Although China has achieved a breakthrough in the manufacturing of the first large cruise ship, the core technical standards of key links such as LNG dual-fuel power systems, high-precision intelligent navigation systems and high-efficiency exhaust gas after-treatment equipment still rely on the authorization of international enterprises. For example, the LNG dual-fuel power system of Adora Magic City still adopts the technical specification authorized by the French GTT company, and 60% of the technical standards for interior decoration materials still refer to European standards. At present, the nitrogen oxide emission level of some domestic cruise ships is still 30% higher than the highest standard of IMO, and there is no independent domestic formulation system for corresponding technical testing and certification standards, which makes domestic cruise ships need to pay additional high environmental protection taxes and even face the risk of being restricted from navigating in some international sea areas that implement the highest emission standards. CSSC plans to achieve 50% localization rate of core equipment by 2025, but

still faces many practical difficulties such as the lack of independent technical standards and the instability of the localized supply chain.

Thirdly, the interoperability of digital standards between different links of the industrial chain is seriously insufficient. At present, each cruise port in China has independently developed its own passenger service digital system: Shanghai Port uses the dedicated “Cruise Shanghai” independent app, Guangzhou Port uses the WeChat mini-program system, and Tianjin Port uses a third-party commercial platform. The data interface standards of these systems are not unified, and it is impossible to realize the interconnection of passenger information, voyage data and customs clearance information, which leads to that passengers cannot enjoy the seamless cross-port boarding, customs clearance and other one-stop services when taking cruises across different home ports, and the operating efficiency of cruise companies is restricted accordingly. Although Adora Magic City has deployed an intelligent customer service system, its response accuracy is only 90%, and the customer inquiry response time still takes 2 minutes, while the corresponding intelligent service system of international advanced cruise brands has achieved full real-time interaction without waiting, which is closely related to the lack of unified national digital service standards.

Finally, the international recognition of China’s local cruise standards is still low. At present, most of China’s independently formulated cruise standards have not been included in the international standard system of CLIA and IMO, and there is no mutual recognition mechanism for relevant service certification, which makes it difficult for the advanced experience of China’s cruise service standardization to be exported to the international market, and also restricts the international operation of domestic cruise brands to a certain extent. At present, international cruise giants such as Royal Caribbean and MSC Cruises still firmly occupy 80% of China’s cruise market share, and the insufficient international influence of China’s local cruise standards has become one of the important barriers for domestic brands to go global.

5. Promotion Path for the High-Quality Development of China’s Cruise Industry Standardization

Aiming at the current bottlenecks in the construction of China’s cruise industry standard system, the industry needs to promote the construction of a full-coverage, high-unification and internationally compatible standard system from multiple dimensions such as top-level design, technological breakthrough, system interoperability and international cooperation.

At the level of top-level system design, a national cruise standardization special committee led by the Ministry of Transport should be established as soon as possible, bringing together regulatory departments, port operation enterprises, cruise operating groups, ship manufacturing units, universities and industry experts to sort out the existing scattered local standards, and formulate a unified national mandatory cruise service standard system before 2027, which unifies the provisions of key links such as port customs clearance efficiency, service facility allocation, onboard

operation specifications, and passenger protection, completely eliminates the fragmentation of regional standards, and forms a nationally unified cruise service benchmark. The formulation of this national unified standard should fully refer to the successful pilot experience of Shanghai “Shanghai Brand” standard, absorb the mature practices of major domestic cruise ports, and ensure that the new standard has strong operability and practical effect.

At the level of core technical standards breakthrough, we should set up a national special project for cruise core technology research, with CSSC as the leading entity, joint with Tsinghua University, Shanghai Jiao Tong University and other top domestic scientific research institutions, to focus on the research and development of LNG power systems, high-efficiency exhaust gas treatment equipment, vibration and noise reduction core devices and other key technologies, and form independent domestic technical standards with complete independent intellectual property rights as soon as possible, striving to achieve more than 50% localization rate of cruise core equipment by 2025, and all independently manufactured domestic cruise ships fully meet the IMO Tier III highest emission standards. CSSC and Shanghai Jiao Tong University have jointly established the Cruise Technology Research Institute, which successfully developed a dedicated vibration damping device for cruise ships in 2024, reducing cabin noise to below 45 decibels, reaching the international leading technical level, which has laid a good foundation for the formulation of independent domestic vibration reduction technical standards.

At the level of digital system interoperability, we should organize the formulation of a national unified cruise digital data interface standard, promote all domestic cruise ports and operating platforms to complete the standard adaptation before the end of 2026, realize the full interconnection of passenger identity information, voyage arrangement data, customs clearance certification information, and service reservation information, and build a national unified integrated cruise digital service platform, so that passengers can complete all procedures such as booking, boarding, customs clearance and onboard service reservation through a unified entrance, completely eliminating the data island between different links. Xiamen Ocean International cooperated with Tencent to launch the Cruise Mini-Program in 2024, integrating multiple functions including itinerary planning, entertainment project reservation and health management, which increased the daily user activity by 60%, and this mature technical practice can be widely popularized nationwide after unified standard adjustment.

At the level of international standard cooperation, China’s cruise industry organizations and enterprises should actively participate in the standard formulation meetings of CLIA and IMO, submit China’s mature cruise service standards and green environmental protection technical solutions to the international community, promote the mutual recognition of China’s independent cruise standards with the international system, and enhance China’s voice in the global cruise standard field. Chinese representatives have proposed the Chinese Solution for Cruise Ship Exhaust Gas Treatment at the IMO meeting, which was officially included in the 2030 Global Cruise Environmental Protection Action Plan, and

CSSC has cooperated with Finland's Wartsila Corporation to jointly formulate the international cruise ship noise control standard in 2024, which has been officially recognized by the International Maritime Organization. These successful cases prove that China has the strength to participate in the formulation of international cruise standards, and in the future, more high-quality Chinese solutions can be output to the world, laying a solid foundation for the international operation of domestic cruise brands.

6. Conclusion and Outlook

The standardization construction is the core foundation for China's cruise industry to break through the international monopoly, realize independent development and build high-quality domestic cruise brands. After more than ten years of exploration, China's cruise industry has achieved remarkable phased results in the fields of port services, ship manufacturing, passenger experience and green environmental protection standardization, forming a set of standard system with distinct local characteristics, which has strongly supported the rapid growth of the domestic market. At present, international giants such as Royal Caribbean and MSC Cruises still occupy 80% of China's cruise market share, but with the continuous improvement of the domestic independent standard system, the market share of domestic brands has risen to 12% in 2024, with huge development potential.

Although there are still outstanding bottlenecks such as fragmented system, insufficient independent technical standards, and low international recognition at the current stage, as the national top-level policy continues to increase support, core technologies continue to make breakthroughs, and the industrial chain collaboration mechanism is increasingly smooth, China's cruise standard system will be continuously improved and perfected. It is expected that by 2025, the localization rate of core equipment for domestic cruise ships will reach 50%, the national unified cruise service standard system will be basically established, and the customer satisfaction of domestic cruise products will approach the international advanced level. In the long run, by 2030, China will have built a complete, unified and internationally leading cruise industry standard system, supporting domestic cruise brands to capture 15% of the global market share, helping China achieve the historic leap from a large cruise consumption country to a world-class cruise industry power, and making important Chinese contributions to the development of the global cruise economy.

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