

CHAPTER 8 CUSTOMERS FIRST





Being a leading global ports operator, the Company has always adhered to the philosophy of “customers first” and strengthens its service capabilities and promotes the development of smart ports by combining and applying innovative technologies. The Company proactively promotes the transformation and upgrading of terminals, while steadily expanding the global terminal network and working closely with customers and partners to provide services that better serve customer needs, and thereby facilitating the overall development of ports and shipping and achieving a win-win situation.

The Company’s focus areas in Customers First:

The development of smart ports	Facilitate the digitalisation, informatisation and intelligent transformation of ports, and improve the overall service standards
Promoting technological research and development	Accelerate innovation and technology upgrading and transformation, and improve terminals’ service quality
Optimising customer service	Facilitate in-depth communication with customers to understand and proactively cater customer needs
Strengthening information security	Enhance the overall security awareness and safeguard information security through rectification of cyber security risks and breaches
Boosting the development of the ports and shipping industries	Expand the global terminal network in which the Company has controlling stakes to boost synergy of the ports and shipping industries

PERFORMANCE HIGHLIGHTS IN 2022

During the year, the Company continued to proactively improve its service standards, achieving a high-quality breakthrough in its business benefiting from the synergy between the ports and shipping industries. The total throughput reached 130,107,074 TEU, representing an increase of 0.6% year-on-year. For details on the throughput for the year ended 31 December 2022, please refer to the section headed “Operational Review” in the 2022 Annual Report of the Company.

The Company achieved encouraging progress in the development of smart ports and technological innovation and application, and won a number of awards, including the Certificate of BRICS Solution for Sustainable Development Goals Award under the Category of Technological Innovation and Application and the Platinum Award for Innovative Application of Global Navigation Satellite System and Location-Based Service during the year.



The Company’s Xiamen Ocean Gate Terminal 5G Smart Ports Intelligent Cargo Loading and Unloading Demonstration Area Project was awarded the Certificate of BRICS Solution for Sustainable Development Goals Award under the Category of Technological Innovation and Application in July 2022.

MANAGEMENT APPROACH

The Company is under prudent business management and strictly complies with laws and regulations in respect of products and services in China and places where it operates. During the year, the Company was not subject to any fines or non-economic penalties due to violation of laws and regulations in respect of products and services.

The Company proactively encourages its Subsidiaries to implement sustainable operations, improve service quality management, and engage third party audit agencies to conduct evaluation with the objective to constantly enhance our service standard.

Terminals	Certifications Received
Tianjin Container Terminal	ISO 9001 Quality Management Certification GBT 19001 Quality Management Certification
Lianyungang New Oriental Terminal	ISO 9001 Quality Management Certification
Guangzhou South China Oceangate Terminal	ISO 9001 Quality Management Certification
Xiamen Ocean Gate Terminal	ISO 9001 Quality Management Certification
Dalian Container Terminal	ISO 9001 Quality Management Certification
CSP Abu Dhabi Terminal	ISO 9001 Quality Management Certification GBT 19001 Quality Management Certification ISO 22301 Business Continuity Certification
CSP Bilbao Terminal	GBT 19001 Quality Management Certification
Kumport Terminal	ISO 9001 Quality Management Certification ISO 10002 Quality Management Certification ISO 28000 Supply Chain Security Certification

THE DEVELOPMENT OF SMART PORTS

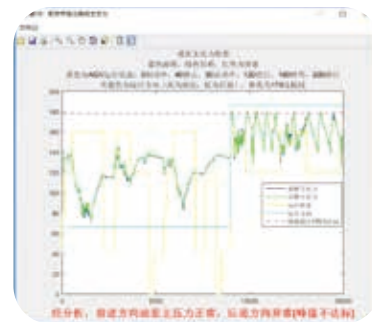
The Company upholds the development concepts of digitalisation, intelligent transformation and automation of terminals, and leverages on the technological support from the Research and Development Center of Transport Industry of Automated Terminal Technology to drive technological innovation and support the development of smart ports. Leveraging the advantages of global terminal network and solid experience in terminal operations, the Company collaborates with upstream and downstream partners along the industry chain to promote the application of innovative technology in smart ports and to improve the service capabilities of its terminals, thus delivering greater value to upstream and downstream customers.

The Company is committed to developing the 5G smart port demonstration area in Xiamen Ocean Gate Terminal and effectively enhancing terminal operations and port business by deeply integrating technologies including 5G, BeiDou, artificial intelligence, blockchain, Internet of Things, big data and cloud computing with traditional terminal operations, and developing corresponding core applications such as remote control of port machinery, driverless cars, smart stowage, smart tallying and smart gates. In addition to the automation of hardware, Xiamen Ocean Gate Terminal has built its own smart port platform through research and development, enabling electronic documents, visualised production monitoring, intelligent mobilisation of dispatching, and full-process business collaboration. Customers can access the smart port platform with their mobile phones to acquire services including pick-up reservations and self-service container delivery by "one-click", reducing the waiting time at the terminal. Leveraging the extensive interconnection of online information, the terminal could gain real-time and accurate insights of business development, to respond quickly to customer needs and thereby enhancing the digital service standard of the terminal.

The Company vigorously promotes the pace of technology breakthrough and innovation, aiming at boosting the service quality of terminals and their business sustainability. During the year, Xiamen Ocean Gate Terminal completed the user acceptance test and trial in production environment, and launched automated guided vehicles health monitoring and fault diagnosis platform in the port area. By connecting to the automatic guided vehicles in the port area through wireless communication, the software could quickly identify the failure of core components and analyse the type of fault, significantly shortening the time of fault identification and speeding up maintenance and minimising downtime to vessel operations.



Xiamen Ocean Gate Terminal adopts a 5G independent network architecture to realise a 5G private network in the port area to ensure safe and reliable information transmission.



The automated guided vehicles health monitoring and fault diagnosis platform in the port area of Xiamen Ocean Gate Terminal effectively reduces the time of locating faults.

During the year, the world’s first full-process automation upgrading project of an existing traditional container terminal was completed in Tianjin Container Terminal. On the basis of a traditional container terminal, fully automated operations are accomplished through automated remote operation of quay cranes, electric driverless container vehicles, automated rail mounted gantry cranes and smart lock stations, providing a systematic solution for automation upgrading and transformation for global ports. Compared with traditional manual operations, full-process automation improves the average operational efficiency, while lowering the average energy consumption per container and overall operating costs, further accelerating the pace of the development of smart and green ports. Currently, the four berths in the north area of Tianjin Container Terminal are all automated and are operating efficiently, making it the first and biggest automated container terminal in the world. During the year, the 5G smart port project of Tianjin Container Terminal was selected as the “Top 10 Application Cases of the Year” of the 2022 World 5G Convention, establishing a new standard for the intelligent transformation of traditional terminals.



Tianjin Container Terminal has realised full-process automation, significantly improving the convenience and safety of production and operation.

During the year, CSP Wuhan Terminal successfully replicated and implemented the driverless container vehicle project and brought that into daily operation. CSP Abu Dhabi Terminal is also the first in the Middle East to introduce driverless container vehicles which can carry out full-scale operations in real-life scenarios. The Company will continue to leverage the successful experience of Xiamen Ocean Gate Terminal and Tianjin Container Terminal in digitalisation and intelligent development, as well as study the most cost-effective proposals of automation upgrading and transformation of traditional terminals, and replicate it in other Subsidiaries as and when appropriate, so as to generate fruitful achievements in smart port development.



Tianjin Container Terminal and Piraeus Terminal held a video conference to share and exchange the current status of equipment and the planning of maintenance projects, and put forward technical solutions for mutual reference in the research and development of automation equipment and automatic positioning technology.



CSP Spain Related Companies held an online exchange meeting with Tianjin Container Terminal to carry out in-depth communication on the modes of terminal operation and automation development.

PROMOTING TECHNOLOGICAL RESEARCH AND DEVELOPMENT

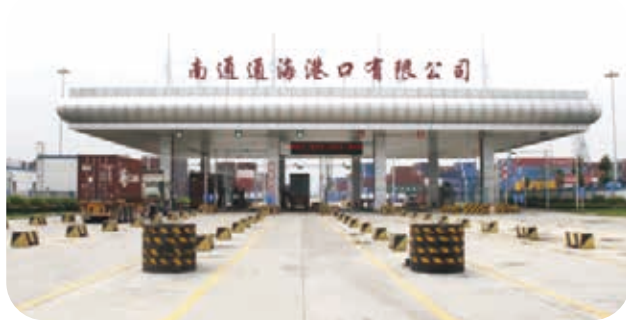
The Company proactively steps up efforts in scientific research, encourages technological transformation and innovation of its Subsidiaries, optimises terminal operations and improves service quality, with a goal of providing customers with more efficient services. In 2022, the Company and its Subsidiaries obtained 19 patents. As of the end of 2022, the Company and its Subsidiaries obtained a total of 83 patents.

In respect of terminal operation and management, the Company has developed an intelligent container vehicle on-site deployment system to include all container vehicles in service in a large container vehicle pool and to replace manual operations with an intelligent system, enabling forecast and prediction about the operations and movement of container vehicles. Taking the driving distance of container vehicles, the priority of orders and targeted efficiency of quay cranes into consideration, the system calculates using intelligent algorithm and assigns an order to the container vehicle most suitable for the occasion, which can enhance efficiency by ensuring that the container vehicles are “loaded in dual cycle”. Xiamen Ocean Gate Terminal has already implemented the intelligent container vehicle on-site deployment system, and an average of approximately 33.2% of container vehicles are “loaded in dual cycle”, achieving a higher economic efficiency. At the same time, the system shortens the travelling time of container vehicles, which lowers the number of container vehicles deployed per quay crane, and reduces the fuel consumption of each container vehicle, further accelerating the green and low-carbon transition of the Company. During the year, the Company’s intelligent container vehicle on-site deployment system for ports was awarded the Third-Class Award in the selection of Typical Case Studies for Carbon Peaking and Carbon Neutrality of the State-owned Assets Supervision and Administration Commission of the State Council (the “SASAC”).



The Company’s “intelligent container vehicle on-site deployment system for ports” can effectively reduce the fuel consumption of container vehicles and the corresponding carbon emissions. In 2022, The project was awarded the Third-Class Award in the selection of Case Studies for Carbon Peaking and Carbon Neutrality of the SASAC.

The intelligent management system for oversized cargo of Nantong Tonghai Terminal allows for smart gate management and enhanced control of oversized cargos for operating vehicles, beginning with the arrival reservation, improving the efficiency of gate operations and customer convenience, while boosting the safety standard of public transportation and road transportation. In 2022, the project obtained the National Equipment Management and Technology Innovation Achievement Award.



The intelligent management system for oversized cargo of Nantong Tonghai Terminal was awarded the National Equipment Management and Technology Innovation Achievement Award in 2022.

OPTIMISING CUSTOMER SERVICE

During the year, the Company amended the Customer Service Management Policy and the Customer Service Hotline Policy to regulate the customer management and retention, customer service guarantee and the handling of complaints and disputes of the Subsidiaries, with a view to establishing a high level of service standards and increasing customers’ trust in the Group. The Company and its Subsidiaries provide updates on latest business development to customers on a regular basis and gain an in-depth understanding of customers’ recommendations and expectations through various channels such as questionnaires, meetings, business visits, seminars and exhibitions. During the year, the Company and its Subsidiaries completed customer satisfaction surveys, 100% and 99.3% interviewed customers responded “satisfied”, respectively, showing that customers highly recognise the service quality of the Group.



Quan Zhou Pacific Terminal held a business talk to listen to valuable opinions from customers, and introduce customer service initiatives and future business plans.



Tianjin Container Terminal communicated with customers on road transportation business and listened to their recommendations to improve service process.

The Company maintains close communication with its customers and intently listens to their opinions to gain a thorough understanding of their needs, ensuring that its Subsidiaries maintain a high standard of customer service and assisting shipping companies and cargo owners in resolving problems. In the face of pandemic resurgence and logistic disruption, in addition to promoting smooth and efficient terminal operations, the Company implemented relief solutions to alleviate challenges for small, medium and micro-sized enterprises and coordinated the resources of all parties to help customers in seeking alternative services such as water and railway transportation, lowering the logistic costs of small, medium and micro-sized customers. During logistic interruptions caused by the pandemic, small, medium and micro-sized customers could apply for reduction and waiver of overdue storage fees for import and export loaded containers incurred in the Company's Subsidiaries in China, with an aim of tiding over the difficult times with customers.

STRENGTHENING INFORMATION SECURITY

The Company attaches great importance to information security and has established the Management Policy on Network Security to regulate the network security management of the Company and its Subsidiaries and prevent attacks, intrusions, interference, destruction, illegal use and accidents on the network, ensuring the stability and reliability of network operation and the integrity and confidentiality of network data. The Company developed a mature network security accountability mechanism, proactively improved technical support such as monitoring and alert, security protection and emergency response, as well as regularly organised promotion and training to strengthen employees' awareness on information security.

The Company also organises its Subsidiaries to perform network security vulnerability patching to prevent potential risks in system security and ensure that the information of the companies and customers is protected. The Company shares information with its Subsidiaries to defend against malicious attacks and manage vulnerability information. To prevent phishing attacks, the Company organised its Subsidiaries to participate in phishing training. During the year, the Company was not involved in any cases of leakage of customer information.



Lianyungang New Oriental Terminal completed the upgrade of network security system to prevent information system from being maliciously attacked, illegally accessed or connected.

BOOSTING THE DEVELOPMENT OF THE PORTS AND SHIPPING INDUSTRIES

Leveraging the advantage of its global terminal portfolio and the close partnership with shipping alliances and terminal operators, the Company is dedicated to exploring new shipping services, assisting shipping companies in building a dense service network and strengthening ports and shipping collaboration. During the year, several Subsidiaries including CSP Abu Dhabi Terminal, Tianjin Container Terminal and Jinjiang Pacific Terminal successfully added new shipping services and strived for new cargo types, offering customers with new options for import and export, and further attracting shipping companies to select as port-of-call.



During the year, Jinjiang Pacific Terminal supported new cargo types and explored new services to Europe by shipping granite products to the Netherlands and Germany for the first time.



Lianyungang New Oriental Terminal deepened the cooperation with shipping companies to carry out pulp import business.