

D. EXPERIENCE OF AN AUTHORITY MANAGING AN INTERNATIONAL MARITIME PASSAGE: PANAMA CANAL AUTHORITY

First stage of the pandemic

On 25 March 2020, the Government of Panama declared a full quarantine and lockdown in the country. At that time, the Panama Canal Authority identified 3,700 employees as a critical minimum to maintain safe and continuous operations along the waterway and efficient services for clients. Physical distancing was enforced to protect the well-being of employees, and technology played a key role in enabling critical administrative personnel to telecommute. Systems were adapted for remote access, in a secure and stable manner. One positive aspect for the Panama Canal was that, as operations relied heavily on a culture of safety first, protocols were already in place to handle infectious diseases, such as the Regulation on Sanitation and Prevention of Communicable Diseases, last updated in 2016, which noted several diseases that required a period of quarantine and procedures to handle crews, passengers and vessels under such conditions. This regulation was the basis of the initial approach of the Panama Canal Authority to dealing with the pandemic, since it established the procedures to follow prior to the arrival of a vessel and general requirements upon its arrival, as well as protocols for inspections and health measures that included procedures designed for infectious diseases.

First challenge to transit operations

With regard to the COVID-19 pandemic, the Regulation on Sanitation and Prevention of Communicable Diseases was first applied following the notice that the cruise ship *Zaandam*, owned by Holland America Line, was on its way to Panama, carrying a number of passengers and crew that had fallen ill. The vessel had been denied entry at other ports and needed to transit the Panama Canal in order to proceed to Port Everglades, United States. The transit operation was led by the Ministry of Health of Panama, which issues recommendations on whether to allow

vessels to transit based on health conditions. One key aspect in the operation was the constant communications among all parties concerned, namely, the Ministry of Health, the captain of the vessel, the local agent and head office of Holland America Line and the different offices of the Panama Canal Authority, including port captain, marine traffic control, market analysis and customer relations. Holland America Line sent a second vessel, the *Rotterdam*, and, in coordination with the Ministry of Health, COVID-19 tests were administered to the crew and passengers of the *Zaandam*; those who tested negative were transferred to the *Rotterdam*, from which oxygen tanks and medical supplies were moved to the *Zaandam*. The transfer was executed following the protocols agreed upon between the Ministry of Health, the Panama Canal Authority and Holland America Line. The transit of both vessels was approved for humanitarian reasons. Panama Canal Authority personnel only boarded the vessels after the thorough sanitation and disinfection of all of the areas to which they would have access. They wore full personal protective equipment, under the supervision of the Ministry of Health. The transit of both vessels was successfully completed on 29 March 2020. This experience raised the standards for handling similar situations in the future.

Internal protection

With the increasing number of cases in Panama, the main concern of the administration was the well-being of the workforce of the Panama Canal Authority. During the lockdown period, procedures were put in place to reduce the exposure of essential personnel. Working periods were changed to 12-hour shifts, over seven consecutive days, to help reduce contagion and secure physical distancing, and the Authority reserved hotel rooms for personnel who lived at a certain distance from working stations, to ensure their safety and availability. Private transportation was also provided, in order to maintain a group of Panama Canal Authority personnel with close contacts. At the same time, vessel arrivals were still high and putting in place such measures was key in ensuring the safety and availability of the workforce, while maintaining efficient and seamless operations for clients.

When normal operations were resumed in May 2020, all offices were cleaned and disinfected, following the recommendations of the World Health Organization and the Ministry of Health of Panama. The administration established a centre for crisis management as the official point of contact for all consultations with regard to the pandemic; the section for health, well-being and occupational safety handles questions related to health and the safety of equipment and installations. The administration issued a protocol on industrial hygiene and occupational health, a protocol on cleaning and ensuring the safety of equipment and installations and a protocol on administering COVID-19 tests. As part of the plan for a safe return to work, all employees were tested before they could return to their working stations. Employees who could telecommute were allowed to do so and, as at September 2020, there remained a number of Panama Canal Authority teams that were telecommuting.

Impact on traffic

The first impact of the COVID-19 pandemic on the Panama Canal was experienced in March 2020, when the cruise ship season was cut short. The impact with regard to commercial cargo was experienced later. In the period April–June 2020, 2,707 transits through the Panama Canal were registered, compared with 3,013 transits in 2019, a difference of 10.2 per cent. Passenger vessels, vehicle carriers, refrigerated containers, tankers and liquefied natural gas carriers were affected the most (see table 4.2).

The Panama Canal Authority, in its annual traffic projections for container ships, takes into account the blank sailings associated with the low season that generally takes place in February. In January–June 2020, the canal registered 51 blank sailings linked to the pandemic not included in the canal forecasts. With regard to container traffic, this represented a decline of around 3 per cent in April–June 2020, compared with the same period in 2019. Vehicle carriers were significantly impacted by the pandemic as car manufactures in Asia were shut down and demand in the United States soared. Similar patterns were observed in refrigerated products and the demand for oil and oil products was significantly reduced because of lockdown measures and consequent declines in the need for electricity generation. The traffic of liquefied natural gas carriers had already been affected because of the oversupplied market, but the pandemic exacerbated the situation. Of note, in the period April–June 2020, traffic through the locks for Neo-Panamax ships continued

Table 4.2 Number of oceangoing vessel transits through the Panama Canal			
Vessel type	April–June 2019	April–June 2020	Percentage change
Container	629	611	-2.9
Dry bulk	643	630	-2.0
Roll-on, roll-off vehicle carrier	217	111	-48.8
Tanker and/or chemical tanker	699	549	-21.5
Liquefied petroleum gas carrier	281	341	21.4
Liquefied natural gas carrier	95	89	-6.3
Refrigerated containers	163	126	-22.7
Passenger	35	6	-82.9
General cargo	163	160	-1.8
Other	88	84	-4.5
Total	3 013	2 707	-10.2

Source: Panama Canal Authority.

to increase slightly, while traffic through the locks for Panamax ships decreased compared with traffic in the period April–June 2019. An overall reduction of 10 per cent in transits did not have a significant impact on the operations of the canal and crew continued to work as usual, with adjustments to schedules and provisions for private transportation and shelter due to the extended lengths of shifts. The reduction in transits also helped the canal to recover the water levels necessary for operations. A drought at the start of 2020, with rain levels below historical averages, had led the Panama Canal Authority to institute water conservation measures. As traffic slowed down, water usage declined, and fewer transits were favourable for water availability purposes in the short term, while the Authority worked on implementing solutions for the long term. The Panama Canal fiscal year runs from 1 October through 30 September. It is expected that the last quarter, July–September, will behave similarly to the last quarter of 2019. However, as traffic in the first half of the fiscal year was strong, at the time of writing, performance for the full fiscal year 2020 is expected to be positive.

Lessons learned

The Panama Canal Authority maintained regular communications with customers to keep them up to date with the situation in Panama and used diverse channels to send information to employees with regard to both operational and administrative matters, to share methods and tips on preventing community transmission and to provide psychological support. Innovation also contributed to the maintenance of operations and the upkeep of morale. This involved, for example, the sharing of physical exercise routines and virtual concerts via social media, as well as the development of a number of applications, including a travel application that helped the Authority to keep track of employees using the internal transport system.

The pandemic has been anything but predictable. All procedures and measures have had to be constantly reviewed for improvement and strong and humane leadership has been necessary in order to make difficult and timely decisions with limited information. Collaboration and solidarity within as well as outside the Authority have proven helpful in decision-making processes, bringing in support and different experiences and benchmarks. Shared information and experiences have also been key for port authorities and shipping companies and communications and technology have played a key role.

The Panama Canal Authority is as resilient as its personnel, and they adapted to the new normal quickly, including the new safety protocols, the challenges related to telecommuting and, in particular, the uncertainty. One important lesson learned to date is that everything is subject to constant and ongoing improvement. A fluid situation requires frequent adjustments.

E. EXPERIENCE OF A PORT AUTHORITY: PORT AUTHORITY OF VALENCIA

The operation of ports is of vital importance in dealing with the COVID-19 crisis, as it helps to ensure that essential goods such as food, medical supplies and fuel, as well as raw materials and manufactured goods, continue to reach their intended destinations. This section provides details on the experience of a port authority in handling the crisis and the early measures applied.

The Port Authority of Valencia is a public body responsible for the management of three State-owned ports in eastern Spain, namely, Valencia, Sagunto and Gandía. To help minimize the impact of the COVID-19 pandemic, the Port Authority of Valencia applied a set of measures with regard to internal activity at the ports as well as in connection with the activity of the entire logistics chain. These measures comprised four fundamental aspects, namely, operational, sanitary, economic and social.

Operations

The Port Authority of Valencia distinguished between internal and external operations. To ensure the continuous internal operations of the ports managed by the Authority, a contingency plan was developed involving three progressive levels of emergency. Essential and non-essential jobs were clarified according to their roles in the continuity of port operations. Non-essential workers were progressively transferred to telecommuting, with over 200 employees telecommuting during the national state of alarm declared in Spain. The information technology department prepared a protocol to ensure broader, secure access to the digital resources of the Authority. Electronic data interchanges through the port community system were enhanced to ensure information management in all operating procedures (see <https://www.valenciaportpcs.com/en/>). Essential workers were expected to comply with strict measures concerning the use of personal protective equipment and other protocols when interacting with other employees and third parties while conducting their duties at ports. An appropriate frequency of disinfection of working areas was also maintained.

With regard to terminal operations, similar recommendations were made with regard to port services, including using personal protective equipment; maintaining physical distancing in the working environment, including on board vessels; disinfecting working spaces; and ensuring that more vulnerable employees could remain at home. Pilots followed protocols with regard to access to vessels and requirements when on board to help ensure protection from infection. Stevedores were encouraged to form stable groups with the same members to help limit community transmission. Port services were considered essential services; companies were therefore permitted to continue operations under national regulations in accordance with the national state of alarm. Port personnel were considered essential workers and therefore permitted to participate in daily operations. During the period of the state of alarm, ports managed by the Port Authority of Valencia remained fully operational. The adapted measures caused a reduction in productivity in the first few weeks, until the procedures and protocols had been adjusted to. Port services recovered ground, with productivity reaching the same maximum levels recorded before the pandemic. All measures were coordinated through the Ports of the State, the State-owned company responsible for the management of State-owned ports in Spain.

Sanitation

The Port Authority of Valencia applied the rules and recommendations established by the Ministry of Health when defining the protocols for both internal and external operations. A key recommendation related to the use of personal protective equipment, the maintenance of physical distancing and the disinfection of all installations, as well as the establishment of protocols for interactions between personnel.

Economy

With regard to the economic impact of the pandemic, the Port Authority of Valencia provided support to ports by facilitating around €10 million (\$11.24 million) as an urgent compensatory measure to mitigate the impact. Since such support was implemented, in March 2020, the Authority has streamlined the payment of €7.33 million (around \$8.24 million) to provide liquidity to 250 suppliers and service providers working for the ports managed by the Authority. The Authority anticipates that total advance payments to suppliers in 2020 will amount to €51 million (around

\$57.3 million). The objective was to provide weekly payments until the end of the national state of alarm period, to minimize treasury-related difficulties that suppliers might be facing. This measure required the Authority to establish internal mechanisms to process invoices as quickly as possible. The Authority also provided to port clients an advance of €2.64 million (around \$2.97 million) for rebates (that is, discounts on port taxes) pending from 2019, in order to reduce the impact of port taxes on both customers and port operators.

Social

The Port Authority of Valencia set up a solidarity campaign titled *Al pie del cañon*, an initiative launched after the declaration of the national state of alarm, which sought to shed light on the important work carried out by port personnel to guarantee the supply of goods and the smooth functioning of supply chains during the pandemic. The campaign resulted in the sharing of over 100 videos by people from all along the transport logistics chain, in Spain and worldwide, who wished to explain their work and send messages of encouragement and solidarity.²⁴

Conclusion

It is too early to determine the full impact of the pandemic on trade and the economy; returning to normal will take time and this normality will likely differ from that expected before the pandemic. The Port Authority of Valencia witnessed declines traffic as lockdown measures were instituted worldwide; in January–May 2020, total accumulated traffic by volume for the ports managed by the Authority had dropped by 7.92 per cent, compared with in the same period in 2019. With regard to operational matters, the pandemic has had an impact on the way port operations are carried out, in particular with regard to passenger ships and cruise liners. Sanitary measures continue to be applied, along with new border control procedures. These processes will shape port infrastructure and operations in the coming years. Resilience will become an even more relevant concept with regard to supply chain management and the development of business continuity plans will be critical, to help better prepare for any future disruption from events such as pandemics or those due to climate change-related factors. Digitalization has been a driving force in the sustainability of business during the pandemic. The integration of port community systems along supply chains may be a development to pursue in the future, to foster resilience and innovation based on new technologies, which is a key element of competitiveness in an environment of traffic scarcity. Ports should also be aware of new trade patterns that will emerge and prepare infrastructure and operations accordingly. In this regard, the Authority has launched a new strategy that considers such changes in order to be better prepared for a new normal centred on a more digital, more innovative, more responsible, more resilient and carbon neutral port world. With regard to contributions to achieving the Sustainable Development Goals, this crisis could provide an opportunity to achieve more sustainable and inclusive development.

F. EXPERIENCE OF A GLOBAL SHIPPING COMPANY: MEDITERRANEAN SHIPPING COMPANY

The spread of COVID-19 is an unprecedented global health issue, that has triggered unexpected shocks for societies and economies. The Mediterranean Shipping Company has continued to implement health protection measures to mitigate the risk to its crew and its employees worldwide and to help curb the spread of the virus. The Company has enacted established business continuity plans and switched to telecommuting for office-based employees in most countries, all of which has helped to limit disruptions to global supply chains.

Speed of reaction

One of the biggest lessons from the first half of 2020 was the importance of acting quickly and with conviction. As soon as reports of the outbreak were received in January 2020, the Mediterranean

²⁴ The Chair of the Authority stated as follows: “These weeks that we have been experiencing a major crisis have brought to mind various elements for reflection... There is a change in the scale of values of the professions and also an update of values. Solidarity has come to play a fundamental role in these days. The crisis has unfortunately brought about job losses and dramatic situations for many families. Solidarity is vital.” The President of the Authority highlighted that “the logistics sector has lived up to what was expected of it, has responded by contributing what it knows, bringing goods, arranging it for citizens” and conveyed a message of optimism by stating that “it is worth thinking that these lived experiences can help us plan for a better future”.

Shipping Company immediately implemented robust health protection measures across its ships, infrastructure and offices, in line with guidance from the World Health Organization and in compliance with the recommendations of national authorities. The Company was also swift to implement a global ban on business travel and to cancel visits to headquarters from colleagues, customers and suppliers from end-January 2020.

Telecommuting

According to a new instruction from headquarters, international meetings would be held via videoconferencing and this instruction has remained in place since then. Since the start of the pandemic, the Mediterranean Shipping Company has seen a record number of staff working in an agile way using technology and, in many instances, telecommuting. This began in January in offices in China, then extended to headquarters in Geneva and many locations worldwide. Shifting to telecommuting is part of the established business continuity plans, and this experience demonstrated, to some extent, that these processes worked. However, this form of staff deployment resulted in new experiences in implementing company plans. There has been some new understanding of the value of videoconferencing. For many, the crisis triggered an advancement in skills and knowledge with regard to videoconferencing and the efficient use of online workspaces. Guidance on taking care of one's health, while keeping up productivity levels, was regularly shared across all company agencies. In addition, the global intranet was used to disseminate information and news about the pandemic. The Mediterranean Shipping Company aims to emerge from the pandemic with a heightened internal awareness of the benefits of the use of digital tools and, as a result, greater resilience given any business continuity shocks in future.

Operational flexibility

Implementing existing business continuity plans ensured that operations and customer service could continue, while company staff avoided travel and practiced confinement or physical distancing. In China, for example, the Mediterranean Shipping Company maintained operations by shifting certain functions to other offices and relying on the support of shared services centres in other regions, as part of a plan determined before the pandemic. Preserving close contacts and relationships with customers was essential. The challenge of maintaining contact with customers without face-to-face meetings was easily overcome, as most customers were in the same situation in terms of telecommuting. In addition, the Company worked continuously to adapt contingency plans and regularly advise customers of the online booking platform myMSC on how to manage changes, relying on its internal information sharing system to collect data from 155 countries. Digitalization has been slow to be adopted in container shipping. Only recently have significant changes begun to take place in documentation and booking processes, the incorporation of electronic business tools and the online connectivity of equipment. The case for investing in digital platforms and processes has become clearer and more compelling, even if the availability of funds for such investments may be affected in the short term by the impact of the pandemic on trade.

Essential workers

In addition to maintaining services to support cargo flows, supporting employees that could not easily telecommute was a challenge. Seafarers were among the groups of workers most significantly affected by the pandemic, due to border closures and other restrictions on movement, which led to long shifts at sea. Among the necessary measures introduced at the height of the crisis in certain countries, ships in the Mediterranean Shipping Company fleet of 550 vessels were equipped with personal protective equipment. In addition, new company policies restricted crew from going ashore at ports. The most significant impact on seafarers were the restrictions by Governments that limited crew changes on ships in many ports worldwide. In this regard, the Company extended contracts for container shipping crew and provided social and financial support in relevant cases to help mitigate the challenges for crew at sea and to facilitate crew changes in support of seafarers and their families. Governments that took steps to designate seafarers as key workers, in line with a request from IMO, made a positive difference to the situation (see <http://www.imo.org/en/MediaCentre/HotTopics/Pages/Coronavirus.aspx>). As a company founded by a ship captain, the Company places a high value on the contribution of seafarers to its business and aims to ensure that the key role of seafarers in the economy and their contribution to well-functioning societies may be better understood. A similar label of importance and expression of gratitude should be directed, by policymakers and the general public, to employees at port terminal

depots and warehouses, as well as the drivers of trucks, trains and barges carrying containers, who have continued to work during the pandemic as and when permitted under national rules.

Adapting services

To help ensure the minimum level of disruption to customers, the Mediterranean Shipping Company adapted its shipping services networks to help companies ship goods more easily. The sudden slowdown in trade resulted in necessary reductions in the capacities of container shipping networks in order to match the lower level of demand for cargo shipments. However, subsequent rebounds in trade flows following the easing of lockdown measures underscored the importance of flexible network management. In the first half of 2020, the Company helped shippers use its short-sea shipping networks, in Europe in particular, as a reliable alternative to road transport. This helped mitigate later delays at border crossing points on land that were due to restrictions on movement. The Company also introduced a suspension of transit programme for container shipping at dedicated trans-shipment hubs, as follows: Bremerhaven, Germany; PSA Panama International Terminal; Port of Busan, Republic of Korea; King Abdullah Port, Saudi Arabia; Port of Lomé, Togo; Asyaport, Tekirdağ, Turkey. This programme provided for flexibility and substantial cost savings as it enabled shippers to better control storage costs at the point of booking, while allowing them to adapt the delivery date to their needs. It also helped minimize congestion at ports of discharge and improve efficiency, as products were placed closer to distribution networks. One of the lessons learned from the crisis is to innovate not only through the provision of new services and storage solutions, but also by employing solutions from past incidents, such as reintroducing a discontinued service to help enable the partial recovery of cargo volumes on a particular route.

Keeping the world moving

Despite the difficult operating conditions during the pandemic, the Mediterranean Shipping Company, as a major shipping and logistics services provider, has contributed to ensuring the high priority transport of essential goods such as food, agricultural products, raw materials and medical equipment. Container shipping lines and their customers have a crucial role in the global economy and in enabling well-functioning societies. In future, the Company aims to strengthen business continuity planning and the technology and processes related to telecommuting and digitalization, as well as to raise awareness of the essential role of all personnel in container supply chains, in particular at sea, to keep the blood flowing in these arteries of the global economy.