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MARITIME NAVIGATES COVID-19 CHALLENGES

How ports are advancing resilience to the current situation and to future shocks



The maritime sector, notably through existing ports and terminals that are still operating, is quickly taking essential action, fast applying know-how and learning from confronting the challenges posed by the current pandemic. The following article, informed by discussions with port clients, operators and those in the maritime supply chain, explores the responses enabling essential supplies and goods to reach destinations through this difficult interval. No doubt, emergency response plans and crisis management will never look the same as plans and companies evolve to become more resilient to future shocks.

Managing the COVID-19 Impact

Ports are investing in temporary infrastructure and other back-up provisions, many of which involve construction of temporary physical assets.

Yard planners are getting involved in efforts to increase storage capacity to safely stow cargoes that cannot be shipped, and to designate, or provide, physical sanctuaries for specific uses and users, demarcating areas where social distancing needs to take place. Some ports must install and/or develop new, responsive or demountable equipment or infrastructure. This has to be put in place quickly but safely, and with one eye towards decommissioning and repurposing, hopefully in the not-too-distant future.

For such works to be seamlessly executed, the legislative and consenting regime around emergency works needs to be well understood and practised (e.g. in training programmes). Depending on geography and proximity to tourist routes, some ports and indeed port-cities have had to accommodate the unexpected offshore anchoring, or inshore berthing, of cruise vessels under Code Blue. The provision of additional resources, and space, for medical testing, public health treatment and the transfer of an influx of sick patients, along with the logistical arrangements and the need to cope with a nonscheduled visit, have all tested terminals' procedures and safe disembarkation protocols.

Building Resilience

Forward-thinking measures taken in some facilities toward becoming more resilient (e.g. in response to risk and vulnerability assessments on threats and hazards from climate change impacts) are proving very useful for maximising all-round operational resilience in the current context. The pandemic is proving that improving overall adaptive capacity for ports is an ongoing requirement and one that will accelerate. For instance, understanding redundancy in systems and equipment such as navigation technology, and in infrastructure within the port estate, is key to allocating areas, assets and space for different purposes.

Buildings that are versatile, secure areas, storage facilities such as warehouses, access points and infrastructure interfaces are all examples of assets that might be subject to immediate change of use, or modification for COVID-19 response behaviours, such as embracing social distancing rules. Those facilities that have made provisions for access, security and additional availability of transport as well as accommodation for personnel attending to an incident (e.g. damage to a port from extreme weather event such as hurricane or flooding) are now well prepared to receive additional frontline workers, or unexpected visitors and emergency teams.

Just as important is the culture of 'readiness' and 'flexibility' in terms of the ability of management to change and modify corporate policies, frameworks and systems to contend with the changes and responses a public health crisis of this nature requires. Those management instruments and tools will need to embrace that flexibility now and in the future as conditions change rapidly. Standard operating procedures and normal working practices have needed to be altered to allow activities in yards and peripheral port areas at different times and locations. Those ports that have already moved to digital booking systems (e.g. for trucks/HGVs delivering or collecting boxes) are able to deal with new bookings, last-minute changes and uncertain timescales much more quickly than manual systems.

Similarly, for staff in operations and engineering and maintenance teams well versed in responding to climate change impacts—for instance, more frequent extreme weather events—there is already familiarity and experience in activities such as nominating safe routing, identifying diversions to transport infrastructure and deploying the requisite signposting for safety. This is necessary when receiving unplanned medical visits, additional cargo loads or special out-of-gauge equipment or supplies for temporary storage or forwarding. The ability to make signage, utilise a 3-D printer and have sufficient supplies of all materials and substances in stock is crucial if an organisation is going to proactively manufacture equipment or spare parts on site. That is truly best practice and representative of a Future ReadyTM organisation.

Cargo Transfer and Movement

A port or terminal that has already identified and exploited interconnectivity advantages through a variety of intermodal options and alternatives to maintain cargo transfer and movement is truly in control of its business continuity. This is especially so when under threat from a significant change in circumstances. For example, the ability to be able to divert emergency supplies discharged from vessels onto a mode of transport that takes it closer to the destination target will accelerate speed to delivery, and ultimately potentially save lives. Seaports, inland facilities and intermodal hubs that can utilise rivers, canals, rail, road and air tend to be logistically savvy on modal split. This ability puts these sites in the driver's seat for such tasks, so long as the sudden change in transport mode for consecutive batches of cargo does not cause unforeseen technical operational problems.

Effect on Strategic Planning

The current crisis is also a good test for the effectiveness and relevance of contingency, emergency and disaster/crisis response plans, and business continuity plans. Ports and terminals should be capturing and documenting a record of activities during the COVID-19 era so that lessons learned can be transposed into new versions of these plans. How many risk registers and response plans had, pre-COVID, a global pandemic—and its consequences—as a top-five threat to workforce and business activities? Going forward, the entire pandemic will have a significant effect on strategic planning.

The success of all these critical actions and the ability to change tack as new information comes into view are dependent on the availability of finances. Now is not the time for underfunding the contingency or disaster response pot. Ports need to have sufficient funds to enable unhindered responses.

Sharing Data and Communicating

Operators are tasked to share data quickly and in a transparent manner with third parties and new stakeholders, such as emergency services. The compatibility of IT and data systems certainly aids the speed of responses and informs recommendations on how to effectively upgrade future response plans.

The communication teams and human resources leaders in ports are finding themselves at the forefront of messaging to the workforce, stakeholders, local communities and the media. In great part, this correspondence is meant to help raise awareness and educate those suddenly thrust into frontline response actions. Transparency, speed and agility are key characteristics of successful teams in those realms. Some ports are on the front foot in terms of external communications, assuring that cargo and freight are still moving and food supplies are plentiful in the face of shortages witnessed in supermarkets, and expressing thanks to healthcare workers for their vital efforts.

Health and Safety

All of these activities must be carried out with safety for workers, visitors and the local community at the forefront of all planning and execution. Ports are busy, dangerous environments with large-scale machinery, heavy overhead loads and the presence of all modes of vehicular transport. Safety managers and supervisors need to continue to plan well, raise awareness before shifts and be vigilant and able to intervene in port activities. The last point is especially the case with non-regular vessel visits, and potentially third-party visitors that are not familiar with the port environment. Those responsible for human health and safety provision will be working closely with yard and port estate planners to require the zoning of assets, operations, cargo storage/supplies or other new activities, based on risk profiles. That vital experience gained in regularly preparing risk assessments and adapting to new situations in order to eliminate hazards and threats from the outset will be increasingly important moving forward through COVID-19.

Becoming Future Ready

Ultimately, with exemplary planning and adaptive solutions, port operations will remain efficient and the facility will become more resilient. Demonstrated experience during this time period will be useful for future <u>scenario</u> <u>planning</u>, especially with the onset of more frequent extreme weather events, such as high windspeeds, drought and flooding. Preparedness, good organisation, and robust governance with flexible future-ready systems will prove to investors and stakeholders such as insurers that each port has in-built adaptive capacity and can demonstrate tangible resilience.

PIANC's recent Working Group 178 publication, which provides technical guidance and a toolkit on planning for climate change adaptation in ports and inland waterways, signposted exactly these types of solutions. The recommendations in the guidance resonate closely with the current situation-that practical, low-cost and effective actions are the key features most likely to gain traction and management support, and catalyse a successful response to a crisis. One thing is certain: COVID-19 is going to make ports more resilient, and if the next level of planning and investment can be made while also addressing climate change concerns in a sustainable manner, ports will be making great strides toward becoming future ready.

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