Ports are a critical component of supply chains and a point of exchange between the different transport modes (sea, road, rail and inland waterways) integrated through multi- and inter-modal transport systems. There are 856 international ports, and over 2,000 ports in total in the world. They vary in size from wharves handling at most a few hundred tonnes of cargo a year to large international ports or multi-modal hubs combining a broad range of logistical services, from warehousing to total supply chain management.

Over the past five decades, one of the main challenges and opportunities in the sector has been the pace of technological change. In some cases, employment levels and varying labour demand have been addressed through mechanisms that ensure a fairer distribution of work, including hiring halls run by employers, unions, or jointly.

Ports have coped over the past year, while being caught in an avalanche of trade wars, the COVID-19 pandemic and, in some countries, shipping container shortages. They provide key infrastructure in support of international trade and the global economy, with shipping and ports estimated to handle over 80 per cent of global goods trade by volume and more than 70 per cent by value. International maritime trade volumes are estimated to have fallen by 4.1 per cent in 2020, but projections suggest that they will recover in 2021. In some countries, calls by cruise ships have come to a halt. The first section below sets outs some of the main decent work challenges in light of the pandemic. During the pandemic, ports have had to adjust to the reality of lower volumes, worker shortages, the implementation of occupational health and safety (OSH) measures for dockers and shore personnel, and the adoption of teleworking and remote operations for office workers.

The shock of the COVID-19 pandemic has left no port unaffected, while exacerbating certain existing challenges. Ports have been heavily impacted by

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7 Will Waters, “Box shortage adds to supply chain chaos at US west coast ports”, Lloyds Loading List, 2 February 2021.
10 Theo Notteboom and Pallis Thanos, IAPH-WSP Port Economic Impact Barometer, 19 February 2021.
developments in the shipping sector, where some shipping lines have gone into ‘survival mode’, affecting container and cargo markets, with knock-on effects that may be felt for years to come.\textsuperscript{11} The volatility may push some ports to reassess their business models.\textsuperscript{12} Although the pandemic has strengthened the case for further investment in digitalization and innovation,\textsuperscript{13} ports are under intense pressure to reduce costs and be more attractive to the supply chains that use their infrastructure. For example, a recent survey commissioned by the International Association of Ports and Harbors (IAPH) found that 69 per cent of surveyed ports indicated that the majority of their investment plans had been delayed or amended.\textsuperscript{14}

The structure of port governance can play a significant role in the implementation of measures to prevent the spread of and/or combat the virus. While national COVID-19 regulations and measures may vary from country to country, some global networks of container terminal operating companies are applying OSH standards for their workers on a global basis.\textsuperscript{15} The networks can play an important role in the overall efficient management of OSH.\textsuperscript{16} Yet, relationships between national authorities, port and harbour authorities and port users vary widely, and ports have had to deal with significant differences in local conditions and capacities. Moreover, many ports are not operated by such global networks. A number of these ports have remained vigilant and proactive in protecting their workforce, while following international and national recommendations on personal protective equipment (PPE), physical distancing and teleworking.\textsuperscript{17} In addition, the implementation of measures may be impacted by informal operations, that may be prevalent in some regions.\textsuperscript{18}

1. The impact of COVID-19

Business continuity has been a key objective with a view to keeping supply chains moving, despite some ports reporting that over half of their staff are working from home.\textsuperscript{19} It is too early to have a full understanding of the impact of the pandemic on ports and portworkers as the market is still adapting to the crisis, while adjusting to lower volumes of trade and a partial tele-working workforce, waving and/or adapting the cost of their services and applying international and domestic safety protocols.

Main impacts: Trade volume

The impact of the pandemic on the number of vessels calling in ports differs according to the type of market and geographical region. Most ports have been operational for cargo ships (and practically unaffected for tankers), while they have closed or severely restricted operations for passenger vessels, and particularly cruise ships.\textsuperscript{19} As a result, in some cases, the effects of the pandemic seem to have taken the form of a short-term shock of lower scale and shorter duration than initially expected,\textsuperscript{20} at least in terms of the number of containers and calls by other cargo vessels.

A survey commissioned by the IAPH and published in February 2021 found that approximately 75 per cent of ports indicate that the number of vessel calls was similar or even higher in 2020 than in the same period the previous year.\textsuperscript{21} Yet, as seen in Figure 1, some 25 per cent of the ports indicate that the number of calls by container vessels fell by over 5 per cent compared to
normal. While trends have remained generally stable for cargo vessels, the cruise/passenger market has been affected harshly by the pandemic, with almost 70 per cent of ports receiving lower numbers of calls by cruise and passenger vessel calls than normal.

“The challenge that we had during the critical part of the lockdown was the whole value chain. Because port operations were open on the one hand [...] but the warehouses where the goods where going to were not open. So that was a big issue during that period.”

Hadiza Bala Usman, Managing Director, Nigerian Ports Authority, and Vice-President of IAPH (Africa Region)

The gap between cargo business and cruise/passenger markets is likely to become much wider. It is estimated that maritime trade flows will recover by 4.8 per cent in 2021, while the outlook for the cruise/passenger market is grim, with many countries still wary of opening up cruise ports. For example, Canada recently announced a one-year ban on pleasure craft and cruise vessels, until February 2022, and the ban on international cruise ships has been extended in Australia until at least June 2021.

A range of different measures have been implemented by global networks of container terminal operators and/or authorities to combat the effects of the pandemic in ports. Figure 2 focuses on three main operational measures adopted for three categories of workers in ports: dockers and portworkers, port users (including, for example, truck drivers and warehouse workers), and seafarers. This has meant the introduction of protocols and adjustments to working conditions across ports, terminals, depots, warehouses, trucking, railways, shipping and barges.

Source: Theo Notteboom and Thanos Pallis. IAPH-WPSP Port Economic Impact Barometer. IAPH, 19 February 2021, p. 4.
**ILO Sectoral Brief:**
**COVID-19 and the port sector**

**Figure 2:** Operational measures to prevent the spread of and/or combat COVID-19 in ports: Three concomitant spheres of action

<table>
<thead>
<tr>
<th>Measures related to dockers and portworkers</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Mandatory teleworking for staff not needed in port facilities (administrative) or creating a secondary port office to minimize disruption in case of infection and quarantine</td>
</tr>
<tr>
<td>• Frontline workers operating with certain protocols on safe distancing and PPE</td>
</tr>
<tr>
<td>• Protocols for cleaning and disinfecting shared equipment and facilities, and for testing</td>
</tr>
<tr>
<td>• Vaccination campaigns for dockers or declaring dockers priority/key workers for access to vaccines</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Measures related to port users (warehouse workers, truck drivers, etc.)</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Limiting access points to the port</td>
</tr>
<tr>
<td>• Mandatory PPE and disinfection stations</td>
</tr>
<tr>
<td>• Provision of hygienic kits to port commercial visitors and port-related workers</td>
</tr>
<tr>
<td>• Establishing different regimes and procedures to mitigate the risk of infection between shore-based and other portworkers</td>
</tr>
<tr>
<td>• Supporting small and medium-sized companies close to the port to positively impact the local economy, especially those providing PPE, medical research or other items to combat COVID-19 (masks, antisepsics...)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Measures related to shipping operations</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Mandatory quarantine for seafarers</td>
</tr>
<tr>
<td>• Other short-term restrictions imposed by health or immigration authorities</td>
</tr>
<tr>
<td>• Introduction of limited exceptions to crew bans, for example for humanitarian reasons</td>
</tr>
<tr>
<td>• Introduction of specific protocols on crew changes, in accordance with IMO circulars</td>
</tr>
<tr>
<td>• Prohibition of welfare visits on board vessels by social workers and spiritual support staff</td>
</tr>
</tbody>
</table>

Main impacts: Decent work

Employment

While the pandemic has had a negative impact on employment in other sectors, the port sector is keeping the world economy moving.27 Quarantine measures, self-isolation and workers on sick leave may have resulted in workforce shortages, placing additional stress on the business continuity and exacerbating scheduling pressures while vessels remain moored. Some cargo ports have laid workers off due to lower volumes, while other container terminals have experienced cargo peaks, creating additional pressure on the pool of dockworkers.28 Young workers have been particularly vulnerable to job losses and reduced work during the pandemic.

In some cases, young workers in the ports sector have lost their jobs due to their contractual status or relatively short length of their tenure.29

The only major exception remains employment linked to cruise terminals, where the pandemic has inflicted a devastating blow on cruise-related jobs.30 In Europe, according to the Cruise Lines International Association, over 200,000 jobs that depend directly or indirectly on the industry have been lost since March 2020.31 The industry has also experienced a significant reduction of passenger ferry traffic in Europe and redundancies have followed.32 The second largest cruise homeport in the United States, Port Canaveral, has taken measures (July and September 2020) to reduce employee numbers by over 40 per cent through lay-offs, furlough and attrition.33

Box 1. The crucial role of ports for seafarers’ welfare

Port facilities have historically played a pivotal role in seafarer well-being through the provision of welfare services and facilities. These can range from port-based welfare services, including contacts with welfare workers, the use of seafarer centres and port-based facilities, communication with family and friends, shore leave and the provision of spiritual services.

During the pandemic, ports can also play an important role in the vaccination of seafarers. The first part of the Fourth Meeting of the Special Tripartite Committee of the Maritime Labour Convention, 2006, as amended (19-23 April 2021), adopted a Resolution concerning COVID-19 vaccination for seafarers, which calls on governments:

• in accordance with their national vaccination programmes, to make supplies of WHO Emergency Use List (WHO-EUL) vaccines available for seafarers on ships visiting ports in their territories, in order to facilitate necessary crew changes and minimize disruption to global supply chains;

• to consider establishing vaccination hubs for seafarers in ports where there is sufficient capacity, where significant numbers of ships call and where sufficient supplies of WHO-EUL vaccines can be made available.

The International Chamber of Shipping (ICS) has developed a roadmap proposing a framework for the establishment of vaccination centres in ‘hubs’, including places that are easily accessible to seafarers, such as certain key ports or airports.


28 Notteboom and Palls. IAPH-WPSP Port Economic Impact Barometer, 6 July 2020, op. cit., p. 8.
29 Arab Trade Union Confederation, ITF and Danish trade union, Research paper: Impact of the COVID-19 on the transport industry, December 2020, p. 34.
30 International Longshore and Warehouse Union (ILWU), Pandemic Turns Cruise Boom into Bust, 12 March 2021.
33 The Maritime Executive, “Port Canaveral Cutting 40 Percent of Staff Due to COVID-19 Impact”, 30 July 2020; and Barbara Smith, Carnival cruise lines is laying off some of its crew members, a week after announcing it’s selling some of its fleet, Business Insider, 21 September 2020.
Shortages

Overall, the pandemic has had a limited impact on the availability of port-related workers. As illustrated in Figure 3, the proportion of ports reporting shortages of workers stabilized at fewer than 10 per cent.\(^\text{34}\) Initial severe shortages were reported at all levels, as dockers and port administrative personnel stayed at home for the first weeks following the declaration of COVID-19 as a pandemic (particularly from April to June 2020).\(^\text{35}\) The most severe shortages were among port authority officials and dockworkers (around 29 and 23 per cent, respectively).

Occupational safety and health

The ILO Centenary Declaration for the Future of Work, 2019, specifies that “safe and healthy working conditions are fundamental to decent work.” In accordance with international guidance, the occupational safety and health of those working during the crisis should be assessed and addressed,\(^\text{36}\) and workers in at-risk environments should be provided with good quality PPE at no cost.\(^\text{37}\) The ILO has adopted a range of international sectoral standards relating to occupational safety and health in ports (see below).

The ILO has published international guidance on physical distancing in *A safe and healthy return to work during the COVID-19 pandemic*,\(^\text{38}\) which suggests that “physical distancing should be implemented to the greatest extent possible. A distance of 2 metres between workers is suggested as adequate, unless national guidance or the results of risk assessments determine otherwise.” While, public policy and industry agreements in some countries prescribe at least two metres of physical distancing at all times, different distancing restrictions have been adopted in others (for example, no restrictions, 1, 1.5 or 1.8 meters (6 feet)). The latest advice from the World Health Organization (WHO) suggests that wearing a non-medical mask can be a potential benefit for source control in settings where physical distancing cannot be achieved.\(^\text{39}\)

According to the relevant international guidance, port authorities or operators should provide adequate and timely information to their workers, as well as to outsourced and subcontracted workers on site.\(^\text{40}\) No one should feel forced to work in conditions that unnecessarily endanger their health because they fear losing their job or a pay cheque. Moreover, as set out in the *ILO Occupational Safety and Health Convention (No. 155)*, workers have the right to remove themselves from the workplace in case of danger.\(^\text{41}\) Management should ensure a safe working environment. Such an

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34 Notteboom and Pallis, IAPH-WPSP Port Economic Impact Barometer, 19 February 2021, p. 10.
41 ILO Convention No. 155, Article 13.
environment should include zero tolerance of any form of workplace violence and harassment.”

“There are members of ours that might not get their hours to qualify for their pension or health and welfare. [...] One of the issues that we hear constantly is about the PPE. We know that all over the country people are having a hard time [...] getting PPE. [...] Our membership must have PPE so they can go to work. Safety must be our first priority. Even if it means standing-by; our lives are more important.”

In some cases, the sourcing and purchase of PPE and cleaning or health supplies may be affected by cost, overall shortages of equipment or the absence of an employment relationship. PPE and health supplies have been limited in some countries or for some categories of transport workers. For example, in June 2020, dockworkers at APM Terminals Callao in Peru reached an agreement with the company and the authorities for testing and additional payments after five dockers died and over 35 tested positive for the virus.

Vaccination

In some member States, the crucial role of dockers and other port workers in avoiding disruptions and keeping supply chains moving has been taken into consideration in setting priorities for vaccination. They have been declared essential or key workers and have been given priority for vaccines in a number of countries, including Brazil, Chile, New Zealand, Singapore and the United States (particularly Los Angeles and Long Beach). Conversely, the lack of vaccines has led to strikes by dockworkers in certain ports.

42 ILO (2016), Code of practice on safety and health in ports, See section 2.1.5 paragraph 22.
47 Maia Hart and Morgane Solignac, “Port workers first to be vaccinated in top of the south”, Stuff, 1 March 2021.
Social dialogue

Social dialogue and strong collaboration between stakeholder groups can be crucial in taking bold action on the future of employment and financial investment in the sector. Cooperation between management and workers and/or their representatives in the undertaking should be an essential element of workplace prevention measures, including the provision of PPE and the implementation of OSH protocols for dockers and portworkers. Social dialogue can also prevent the outbreak of strikes that could hamper the smooth operation of ports and their overall productivity.

Education and training

Education and training are essential to enhance safety at work. However, due to the pandemic, ports have had to postpone or cancel training activities. While most cancelled training has been non-critical, it may be worth monitoring whether this trend continues and how it affects the port labour pool.

2. Responses by constituents and partners

Tripartite dialogue, involving workers, employers and governments, as well as social dialogue between employers’ and workers’ organizations, are key to developing responses to the pandemic. The action taken by ILO constituents has generally focused on the immediate goal of protecting workers, including through the adoption of regulations and protocols for ports.

International sectoral responses and resources

Some of the most relevant international guidance documents and databases include:

United Nations bodies:

- A joint statement by the ILO, IMO and ICAO on the designation of key workers, including service provider personnel at ports, and the facilitation of crew changes in ports and airports in the context of the pandemic. The joint statement encourages governments and relevant national and local authorities to:
  - designate service provider personnel at airports and ports as well as seafarers, etc., regardless of nationality when in their jurisdiction, as ‘key workers’ providing an essential service; and
  - grant them any necessary and appropriate exemptions from national travel-related, health-related or movement restrictions in order to facilitate their joining or leaving ships, aircraft, airports and cargo facilities.

- An IMO COVID-19 portal hub containing circulars and resources relating to ports, including a joint statement by the IMO and the United Nations Conference on Trade and Development (UNCTAD) on keeping ships moving, ports open and cross-border trade flowing during the pandemic. IMO has also issued Circular Letter No. 4204/Add.16 containing COVID-19-related guidelines for ensuring a safe shipboard interface between ship and shore-based personnel.

- UNCTAD has called on governments to keep ports open and allow crew changes. It has also established a COVID-19 portal, which contains a Technical note on Port Responsiveness in the fight against the “invisible” threat: COVID-19.

52 ILO Convention No. 155, Article 20.
57 ICAO-ILO-IMO: A joint statement on designation of seafarers, marine personnel, fishing vessel personnel, offshore energy sector personnel, aviation personnel, air cargo supply chain personnel, and service provider personnel at airports and ports as key workers, and on facilitation of crew changes in ports and airports in the context of the COVID-19 pandemic, 22 May 2020.
UNCTAD and the five United Nations regional commissions have launched a project for transport and trade connectivity in the age of pandemics. The main purpose of the project is to implement United Nations solutions, including standards, guidelines, metrics, tools and methodologies, to help governments and the business community keep transport networks and borders operational, while containing the further spread of the virus.

The United Nations Economic and Social Commission for Asia and the Pacific has issued a policy brief on COVID-19 and its impact on shipping and port sector in Asia and the Pacific.

Other intergovernmental organizations:

- The Inter-American Committee on Ports of the Organization of American States has established a COVID-19 portal and conducted a survey of Ports and Cities during the COVID19 Pandemic in Latin America and the Caribbean.

Sectoral social partners

Sectoral employers’ and workers’ organizations at the regional level have worked together using social dialogue to address COVID-19 issues efficiently and effectively through two joint statements. For example, in March 2020 the ETF, the International Dockworkers Council, the European Sea Ports Organisation and the Federation of European Private Port Operators signed a Call on workers and employers to strictly respect health and safety measures during the COVID-19 pandemic. In February 2021, the same partners issued and signed a joint statement about the social dialogue for ports.

International Association of Ports and Harbors (IAPH)

In 2017, the IAPH decided to set up a World Ports Sustainability Program (WPSP), which in 2020 established a Task Force to inform and guide port authorities and users through the pandemic with the following tools:

- A COVID-19 Information Portal.
- The launch of the IAPH-WPSP Port Economic Impact Barometer to gather information on the short-term impacts of COVID-19 on ports in the areas of vessel calls, hinterland transport, distribution activities, procedures and staff availability.
- An IAPH portal with COVID-19 related updates on IAPH Member Ports, including an extensive archive with news and updates, and the COVID-19 Guidance document for ports.

Port Authorities Roundtable

The Port Authorities Roundtable has adopted a Declaration supported by 57 port authorities across the world committing to collaborate closely, through the sharing of best practices and measures implemented, so that ports can remain open to seaborne trade to help sustain the world and support the fight against COVID-19.

International Transport Workers’ Federation (ITF)

The ITF has emphasized that existing international labour standards and the protection of labour rights are crucial to efforts to contain COVID-19. Broad cross-sectoral ITF responses include its COVID-19 information hub and a call for action: Covid-19: ITF global demands for governments and employers. In addition, the ITF has called for access to sanitation facilities for transport workers, for which it has provided a checklist. A document detailing the differential impacts of the pandemic on women has been issued as a statement on women workers’ rights and COVID-19. Moreover, an ITF informal workers charter outlines the basic rights of informal workers, including the right to health and safety.

For the ports sector, the ITF has published:

- The Dockers COVID-19 Universal Work Site Protocols, which contain minimum steps that employers should implement to protect all workers in ports relating to hygiene and the cleaning of equipment, PPE, social distancing, vendor/outside access, leave and temporary homeworking arrangements, access to vessels, communication and training.
- The Dockers Charter for Change, which sets out key demands for the sector and for building back better after the pandemic.
Countries in action: National responses

**China**
In China, the Ministry of Transport has developed “Guidance on the Prevention and Control of COVID-19 for Ports and Its Front Line Staff”, containing detailed preventive and sanitation requirements for terminal operators relating to portworkers, especially those on the front line, to prevent and control the spread of COVID-19.58

**Germany**
During times of crises, some schemes may reduce working hours to mitigate job loss.59 This is the case of Germany’s short-time work scheme (Kurzarbeit) allows workers under certain circumstances to claim part compensation in the form of a state benefit for any hours they are unable to work.60 In 2020, as a result of social dialogue, a new collective agreement on short-time work was reached for the port sector, including a benefits top-up to 80 per cent of net usual earnings for all port workers, and of up to 87 per cent for port workers with dependent children.61

**New Zealand**
In New Zealand, portworkers are included among “border and managed isolation and quarantine (MIQ) workers”, who are the first group to receive vaccines.62 Vaccinations for border workers started on 20 February in Auckland, with other regions following soon after.63

**Singapore**
The Singapore Government has put in place various relief measures for the maritime sector, including a waiver of public licence fees for passenger terminal operators and port dues concessions for passenger vessels.64 Singapore is also one of the first countries to prioritize vaccinations for front-line maritime personnel. Over 10,000 front-line maritime personnel, including portworkers, cargo officers, marine surveyors and marine superintendents, were expected to be vaccinated by the end of January 2021 under the Sea–Air Vaccination Exercise (SAVE), part of the national COVID-19 vaccination strategy, to protect front-line personnel and their family members.65

**United States**
The United States Maritime Administration (MARAD) shares updated and reliable information on COVID-19 from different sources as guidance for ships originating from, or stopping in the United States, to help prevent, detect and manage suspected COVID-19 infections.66 In response to the recent congestion and transit delays in several major ports, due to a shortage of skilled manpower caused by the pandemic, the governors of 11 coastal states have been urged by the federal authorities to prioritize portworkers for vaccinations to protect the nation’s supply chain.67

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59 ILO, Non-standard employment around the world - Understanding challenges, shaping prospects, 2016, p. 311.
60 Thorsten Schulten and the WSI-Tarifarchiv, Collective bargaining in Germany 2020 - Annual report of the WSI collective agreement archive, March 2021, pp. 15-16.
61 Ibid.
63 Ibid.
64 Maritime and Port Authority of Singapore, MaritimeSG Together Package.
66 U.S. Department of Transportation Maritime Administration, Coronavirus guidance.
3. ILO tools and responses

International labour standards and tools

International labour standards offer a tried and trusted basis for policy responses and a sustainable and equitable recovery.\textsuperscript{68} International labour standards and the ILO Decent Work Agenda with its four pillars of employment, social protection, social dialogue and rights at work, are important cornerstones of the 2030 Agenda.\textsuperscript{69} In addition to the ILO’s OSH and other standards, referred to above, the following instruments provide further guidance.

In 2015, the Conference adopted the Transition from the Informal to the Formal Economy Recommendation, 2015 (No. 204), much of which applies to informal portworkers. In addition, the Social Security (Minimum Standards) Convention, 1952 (No. 102), and the Social Protection Floors Recommendation, 2012 (No. 202), provide guidance on the establishment and maintenance of comprehensive social protection systems, including social protection floors for subcontracted workers, in order to prevent crises, enable recovery and build resilience.

The ILO has identified eight “fundamental” Conventions covering fundamental principles and rights at work. These are freedom of association and the effective recognition of the right to collective bargaining; the elimination of all forms of forced or compulsory labour; the effective abolition of child labour; and the elimination of discrimination in respect of employment and occupation. In addition, ILO Standards and COVID-19 (coronavirus) contains answers to the most frequently asked questions related to international labour standards.

The Employment and Decent Work for Peace and Resilience Recommendation, 2017 (No. 205), applies to all sectors and recognizes the role of accessible and quality public services in economic recovery. The ILO has also issued guidance and a range of technical and sectoral notes on the COVID-19 pandemic, based on four key pillars, on which further advice and explanations are available in the brief A policy framework for tackling the economic and social impact of the COVID-19 crisis.

ILO sectoral standards and tools

The ILO has also adopted a range of sectoral instruments related to dockworkers, which can provide guidance in the current situation. The following ILO instruments may be taken into account in the design of sustainable responses to the pandemic.

While the Protection against Accidents (Dockers) Convention (Revised), 1932 (No. 32), and its corresponding Recommendation No. 40, have been classified as “outdated instruments” by the Governing Body, in accordance with the recommendations of the Standards Review Mechanism Tripartite Working Group, Convention No. 32 remains in force for 32 member States.\textsuperscript{70} These instruments relate to OSH in the port sector and have been revised by the Occupational Safety and Health (Dock Work) Convention (No. 152) and Recommendation (No. 160), 1979.

The Dock Work Convention, 1973 (No. 137), and its corresponding Recommendation No. 145, deal with methods of work in docks and their impact on employment and the organization of the profession. Convention No. 137 has two main objectives: first, to afford protection to portworkers in their professional life through measures relating to the conditions of their access to and performance of work; and second, to foresee and manage in the best possible manner, through appropriate measures, fluctuations in the work and the workforce required for it.

The Occupational Safety and Health (Dock Work) Convention, 1979 (No. 152), and its corresponding Recommendation No. 160, set out measures to provide and maintain workplaces, equipment and methods of work that are safe and without risk of injury to health.

The Code of Practice on safety and health in ports (revised in 2016) covers all aspects of work in ports.
where goods or passengers are loaded onto or unloaded from ships, including related work in the port area. The Code of Practice is not limited to international trade and is also applicable to domestic operations, including those on inland waterways. It provides practical guidance for governments, ILO constituents and all those responsible for or involved in the management, operation, maintenance and development of ports, and helps to raise the profile of OSH issues in ports around the world. The Code includes chapters on communicable diseases and PPE.

Further information

The ILO webpage, *COVID-19 and the world of work: Sectoral impact, responses and recommendations*, provides links to key resources, including:

- [ILO sectoral tools and instruments](#)
- [Joint statements and calls for action to fight COVID-19](#)
- [ILO partnerships to fight COVID-19 sector by sector](#)
Annex I: Additional tools and resources for the port sector

The IMO/ILO Code of Practice on security in ports (2004) provides a guidance framework for the development and implementation of a port security strategy appropriate to identified threats to security. The practical recommendations contained in the Code are designed to provide guidance for all those responsible for addressing the issue of security in ports.

The Guidelines on Training in the Port Sector (2011) present a competency-based framework for portworker training designed to protect and promote OSH and promote decent work and sustainable jobs in ports.

The IMO/ILO/UNECE Code of Practice for Packing of Cargo Transport Units (the CTU Code) (2014) provides advice on the safe packing of cargo transport units (CTUs) for those responsible for the packing and securing of cargo and for training people to pack such units. The aim is also to outline theoretical details for packing and securing, as well as practical measures to ensure the safe packing of cargo onto or into CTUs.

The Portworker Development Programme in Container Terminals (PDP I, 1994) includes centrally prepared training materials for portworkers in container terminals, which have been properly tested and validated, for the use of specially trained instructors working in a carefully established organizational framework.

The Portworker Development Programme in Bulk Terminals (PDP II, 2019) has been developed with the long-term global goal of ensuring the safety, health, welfare and vocational training of portworkers. It targets portworkers working in bulk terminals dealing with five major dry bulk cargoes, namely iron ore, coal, bulk fertilizer, grain and bauxite/alumina.

The Inspection of Occupational Safety and Health in Ports (2008) is a report that reviews international and national guidance and practice for OSH inspection in the ports sector.

A practical guidance manual on Social dialogue in the process of structural adjustment and private sector participation in ports aims to strengthen the capacity and institutions for social dialogue in the process of structural adjustment and private sector participation in ports in many countries.