

During the COVID-19 pandemic, ports and intermodal transport systems were unprepared for the surge in demand and this, combined with restrictions, on products and personnel, increased clearance times. These delays, and the congestion and the ongoing supply chain crisis, can be mitigated by better trade facilitation – which is very much the domain of the public sector, albeit often developed and implemented in public-private partnerships.

The pandemic highlighted the importance of electronic and digital solutions, including customs automation, and greater trade transparency. In response, UNCTAD and other international agencies have increased their support for trade facilitation, both for the required technology and for multilateral agreements.

This chapter has five sections:

Section A – Trade facilitation can lessen the supply chain crisis linked to port congestion.

Section B – Fast passage of medical supplies and other emergency goods requires specific trade facilitation measures at ports and at border crossings.

Section C – An ever-more digitalized economy depends on electronic solutions, including automation and creating visibility of logistics operations.

Section D – Complex maritime logistics systems depend on close cooperation between all stakeholders, users and providers, public and private, national and foreign.

Section E – Summary and policy recommendations.

5

MARITIME TRADE FACILITATION

A. TRADE FACILITATION HELPS DECONGEST THE SUPPLY CHAIN

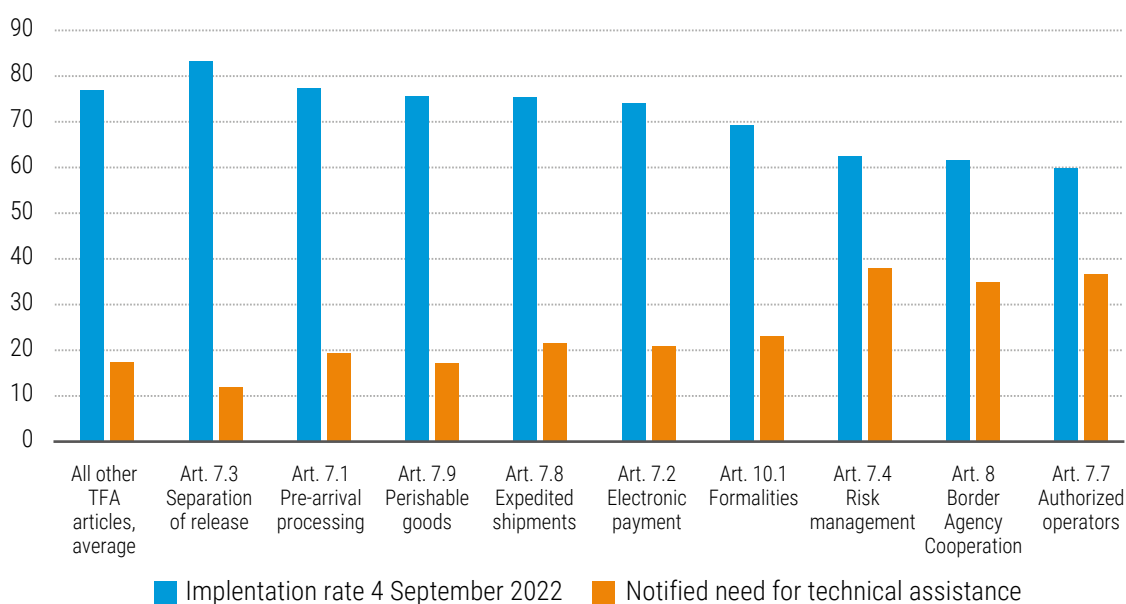
1. Port congestion is often the result of inefficient procedures

Faster and more efficient clearance depends on better trade facilitation. The WTO's Trade Facilitation Agreement (TFA) covers the following in the numbered articles:

- **Pre-arrival processing (7.1).** Under this article, to expedite the release of goods, documents and information are to be provided to customs and other authorities prior to arrival.
- **Electronic payments (7.2).** Traders and operators must have the option to make payments of duties, taxes, fees and charges electronically.
- **Rapid release** – Release should be separate from clearance (**article 7.3**). Goods should be released as rapidly as possible, leaving the determination of payments of duties to a later stage.
- **Risk management (7.4).** Customs and other agencies should focus on high-risk consignments and expedite the release of low-risk ones.
- **Authorized operators (7.7).** Trusted and operators can obtain facilitated clearance, with the option of fast release and clearance at their premises, provided they give access to their internal IT systems and warehouses for subsequent audits.
- **Expedited shipments (7.8).** Solutions include providing adequate infrastructure, paying customs expenses for expedited shipments, advance information processing and fee assessment, and the use of technology for internal security, logistics and tracking.
- **Perishable goods (7.9).** Prioritized clearance for perishable goods that are particularly sensitive to delays.
- **Border agency cooperation (8).** Authorities and agencies responsible for border controls and customs procedures should cooperate and coordinate their activities.
- **Formalities and documentation (10.1).** Trade, technologies and requirements change over time, so it is important to regularly review and update all procedures. Authorities should always apply the least trade-restrictive measure available, and discontinue procedures no longer required.

These measures involve close cooperation among agencies and the private sector, often using the technology. Many countries have notified that they need technical assistance to implement the above mentioned WTO TFA obligations (figure 5.1).

Figure 5.1 Implementation of selected TFA articles that may help ease port congestion, percentage of members



Source: UNCTAD calculations, based on data from WTO TFA data base, <https://tfadatabase.org/>.

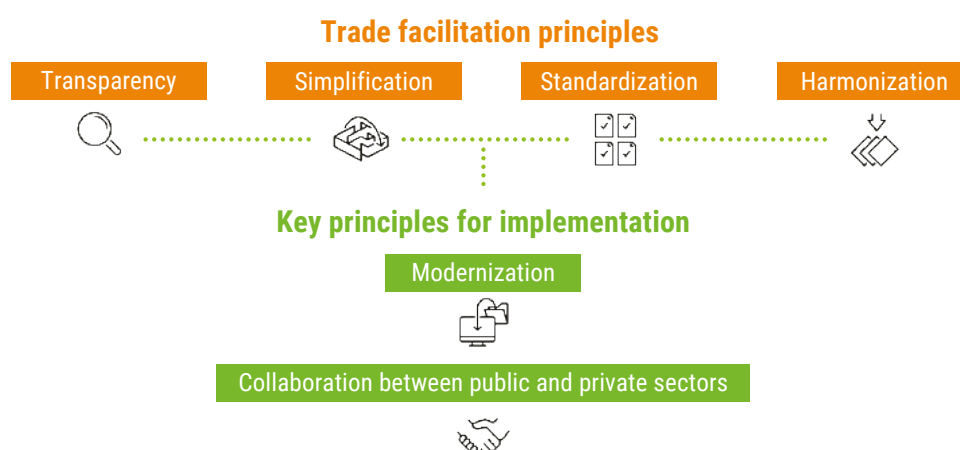
During COVID-19, there was a significant increase in median vessel turnaround time in ports, especially for container ships, which increased overall shipping times globally.¹ From 2020 to 2021, delays averaged more than one day (table 4.1). Delays are costly: the estimated additional days in transit for the average shipment in December 2021 can be compared to an ad-valorem tariff of 0.9 to 3.1 per cent, roughly equivalent tariff reductions achieved over the period 2003 to 2017. The crisis thus temporarily wiped out the benefits of the reducing or eliminating tariffs through a number of WTO negotiating rounds.²

For maritime companies, transit operators and traders, the delays in ports and in the related hinterland operations had multiple consequences. These included higher delay fees for berth and container storage, and longer idle times for vessels, port cranes, containers and transit vehicles. Moreover, shipping companies increasingly required cargo to be reloaded at ports from containers to transit vehicles, especially in developing countries – which not only added to trans-shipment costs but also risked cargo deterioration, especially for perishable goods.

2. Suggested solutions

Good trade facilitation operates on four fundamental principles: harmonization, standardization, simplification, and transparency (figure 5.2). Applying these principles to ports and hinterland transport procedures can reduce delays along supply chains, particularly in developing countries where ports have low handling capacities. The benefits are greatest in developing countries, and in low-income countries where they can reduce trade costs by 14 per cent.³

Figure 5.2 Four principles of trade facilitation



Source: UNCTAD Empowerment Program for the NTFCs.

The COVID-19 pandemic would have caused even worse delays and congestion in customs and seaports without advances in digital technologies. A good example of the benefits of such solutions is the UNCTAD ASYHUB⁴ maritime platform which can help maritime transport and governments clear goods prior to arrival (box 5.1).

Box 5.1 The ASYHUB maritime initiative

The ASYHUB maritime initiative connects customs and cross-border regulatory authorities to global maritime systems. ASYHUB maritime piloting started in 2021 and the benefits to the trading community and ports have started to materialize.

- Simplified and automated processes for submitting sea-cargo manifest information through system-to-system interfaces.
- Re-use of data and automatic reconciliation, for seamless flow of information.
- Improved coordination of ports and border agencies for controls and information exchange.
- Real-time harmonized and streamlined information exchange between ship data providers and customs authorities.
- Capacity to process in advance sea-cargo data, pre-arrival or pre-departure.
- Advance risk analysis on cargoes.

Source: UNCTAD.

Cargo tracking systems that use real-time data provide transparency, predictability and certainty for traders while assuring regulatory agencies of customs compliance. With access to instant information, traders and border agencies can reduce bottlenecks, particularly for cargoes that involve hinterland multimodal transport where delays add to port congestion. Landlocked countries are particularly exposed, with transit routes that require passage through ports and one or more borders.

A recent advance has been the development of an electronic version of the Transports Internationaux Routiers (TIR) carnet (box 5.2). This speeds up trade procedures at ports by providing advance cargo information and allows for real-time exchange of data for multimodal transport.

Box 5.2 Multimodal aspects of eTIR

The Customs Convention on the International Transport of Goods under Cover of TIR Carnets (TIR Convention, 1975) allows goods to be carried under the cover of a TIR carnet as long as part of the journey has taken place by road. Intermodal transport could involve a subcontractor, and an authorized consignor-consignee.

A subcontractor is crucial in the following circumstances: a) intermodal transport to enhance the efficiency of the transport operation; b) new TIR contracting parties such as India; c) for technically complex transport operations such as the transport of live animals.

Using authorized consignors and consignees provides practical benefits both for customs and trade: (a) formalities can be done outside the working hours of customs offices; (b) controls at the start and end of TIR operations are further minimized; (c) customs procedures are faster and more focused on high-risk consignments; (d) the workload of the customs authorities is reduced; and (e) shorter waiting times for transport operators.

In various countries, ro-ro lines have demonstrated that TIR carnets can be used for intermodal transport. However, the use of paper TIR carnets still raises concerns, particularly when containers are transported by ship. The shipping industry and ports around the world have efficient computerized systems but these do not easily integrate paper documents.

The eTIR system helps resolve these issues. A seamless TIR information flow allows all actors along the route to obtain the information they require, not only in electronic form but also, in most cases, prior to arrival. Submitting the declaration in electronic form allows TIR carnet holders to submit declarations at distance.

Source: UNECE.

B. EMERGENCY RESPONSES: TRADE FACILITATION FOR CRITICAL GOODS

1. Policies for pandemics

During the COVID-19 pandemic, containers and trucks delivering masks and vaccines were often stuck at ports. These blockages can be avoided by trade facilitation that ensures effective control while also reducing the time and cost of checks for delivering medical and other urgent supplies.

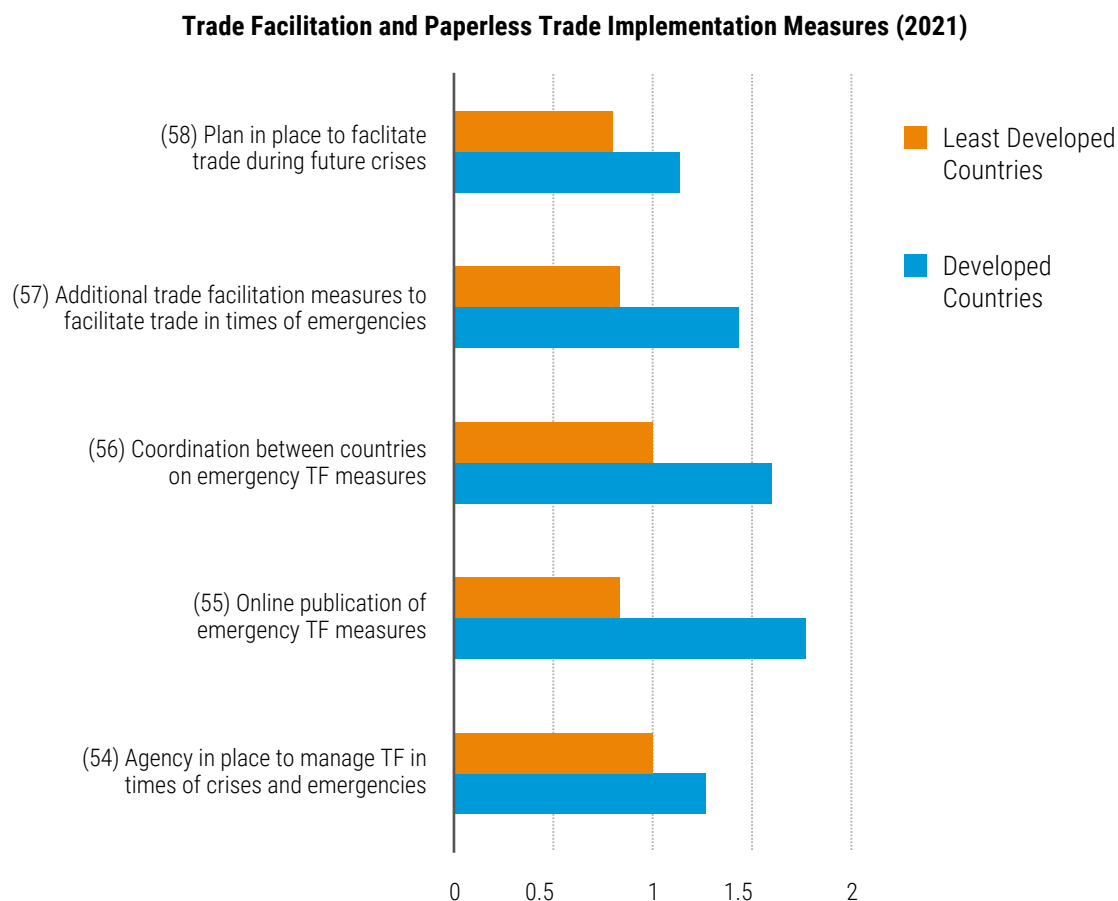
Border agencies can better prepare for any crisis by implementing the relevant international and regional frameworks. These include the Trade Facilitation Agreement (TFA), the Agreement on Technical Barriers to Trade (TBT), and the Agreement on Sanitary and Phytosanitary Measures (SPS), all governed by the World Trade Organization. In addition, there is the Convention on Facilitation of International Maritime Traffic (FAL) of the International Maritime Organization, and the International Convention on the simplification and harmonization of Customs procedures (Kyoto Convention).

2. Unprepared and un-coordinated policy responses

Countries that were more advanced in the digitalization of their trade procedures were able to react faster.⁵ A recent report by UNESCAP identified five trade facilitation measures that smooth the flow of goods at times of crisis.⁶ These include planning to facilitate trade during future crises, and online publication of emergency measures. The extent to which such measures are implemented varies greatly between countries, and is notably lower in Least Developed economies which responded more slowly to the crisis (figure 5. 3).⁷

During the COVID-19 pandemic, many people have been deprived of medical goods and other urgent supplies. This has happened for a number of reasons.

Figure 5.3 Degree of implementation of trade facilitation measures related to crisis, by the developed economies and the least developed countries



Source: UN Global Survey on Digital and Sustainable Trade Facilitation.

a. No regulations for emergency responses

Many countries do not have regulations or procedures to fast-track clearance for emergency supplies. Vaccines and medical equipment often face administrative hurdles such as VAT charges on humanitarian consignments or requirements for certificates of origin.

Countries frameworks should comply with the regional and national regulations and with international standards such as Recommendation No. 44, adopted by the UN/CEFACT in 2021, on Cross-Border Facilitation Measures for Disaster Relief.⁸ Implementation should be coordinated by National Trade Facilitation Committees (NTFCs), with the primary implementing agency being the customs authority working with the ministry of health and the relevant non-government organizations.

National committees will need to monitor changes in international agreements. The relevant policies and international legal frameworks for import and customs clearance of relief items during natural disasters are currently being reviewed by the IMPACCT Working Group, led by OCHA. The WCO Kyoto Convention is also under review and one proposal is for fast-tracking of the relief consignments.

b. Restrictive trade policies

In times of crisis, countries sometimes limit the export of medical supplies. In March 2022, as reported by WTO, there were 98 measures that prohibited or restricted exports of medical and emergency goods.⁹

World Customs Organization nomenclature provides six-digit codes for classifying traded goods on a common basis. But this does not define the list of essential goods, which makes it difficult for national authorities to apply special customs treatment. However, there is some agreement on food supplies: in June 2022, the WTO agreed not to impose export prohibitions or restrictions on food purchased by the World Food Programme.¹⁰

c. Lack of preparedness

All countries need crisis-response plans for trade facilitation. To assist in this endeavour, UNCTAD has developed the methodology for a 'Rapid Scan of Trade Facilitation preparedness in times of crisis'. This allows developing countries and LDCs to assess national emergency regulations on cross-border trade and supply chains. It also covers compliance with trade-related regulations, coordination structures and partnerships, and information availability and transparency, as well as potential solutions. For these scans, UNCTAD can assist through ICT tools such as the ASYCUDA customs management system, the trade Information portals, and Reform Tracker – a web-based project management and monitoring tool. By late 2022, five countries had undertaken a Rapid Scan – Bolivia (Plurinational State of), Ecuador, Honduras, Mongolia, and Peru. All the recommendations and work plans are approved by the NTFCs and will be accessible on their Reform Trackers.

d. Inadequate infrastructure

Swift crisis response needs reliable infrastructure to deliver emergency goods on time and in good condition. Vaccines and other medicines may require a cold chain and while they may start their journeys on vessels with refrigerated containers, the chain may be broken in destination quays and hinterland transport in vulnerable regions – in the Pacific Islands, for example, or in zones affected by earthquakes or floods that are remote from ports.

3. Automated customs solutions for emergency goods

UNCTAD and OCHA have developed the Automated System for Relief Emergency Consignments (ASYREC). ASYREC¹¹ provides for coordinated, efficient and facilitated imports of humanitarian relief, and medical supplies (box 5.3). This is an inclusive and dedicated solution that is compatible with international standards and is compliant with automated customs systems.

Other initiatives include the Safe Trade Emergency Facility, launched by TradeMark East Africa. During COVID-19, this supports trade by making ports, border and critical supply chains safe for trade and ensuring food security and access to critical medicines. Safe Trade includes harmonization of safety and hygiene protocols, and rapid COVID-19 tests at ports, airports, and borders along with quarantine facilities and health offices and joint border committees. It can also track truck drivers, through the East African Community' Regional Electronic Cargo Tracking System. To ensure coordination and transparency, data collection on trade flows is centralized.

Box 5.3 UNCTAD Automated System for Relief Emergency Consignments

The Automated System for Relief Emergency Consignments (ASYREC) builds on existing international standards to provide automated and coordinated support to all key stakeholders, including port authorities, in the humanitarian supply chain – before, during and after emergencies. The first pilot was launched in May 2022 and is expected to be completed by the end of 2022.

ASYREC's expected benefits include:

- Automatic activation by the affected country's request or acceptance of international assistance.
- Eligible actors and humanitarian donors are registered in the system, prior to emergencies.
- Identification by customs administrations of humanitarian consignments, and distinction from non-humanitarian shipments.
- Shipments of eligible operators and registered ASYREC end-users are processed with priority, minimizing delays and reducing congestion in ports.
- Prioritized humanitarian consignments based on identified priority needs.
- Post-clearance audit controls and assessments of humanitarian operators' compliance, performed by customs and disaster management agencies.
- Configurable for implementation, independent of the operational customs or port IT systems, as online or standalone systems.

Source: UNCTAD.

The World Customs Organisation has taken initiative to facilitate the flows of emergency good and has compiled a list of Members' practices.¹²

C. TRADE FACILITATION FOR BETTER PORT PERFORMANCE

1. Adapting to re-shaped global value chains and new maritime business models

Responses to the supply chain crisis increasingly involve digitalization and smart technologies. Generally, this means embracing the ‘fourth industrial revolution’ through advances in interconnectivity, automation, machine-learning and the use of real-time data. As logistic companies have turned to digitalization, this has encouraged governments to install automate clearance and compliance processes. In turn, digital solutions help boost trade efficiency and competitiveness, and make countries more attractive to inward investment.

Coordinating digital solutions requires major changes in the organizational structure of government agencies which are more used to working in silos. Often, for example, there can be discrepancies between the need for speed and agility of the shipping and logistics industries and the administrative requirements for the clearance of goods. Governments should ensure that the laws and regulations for maritime and hinterland transport are consistent and adapted to the latest requirements.

India, for instance, has been under pressure from the business community to upgrade its ports. In response, the Government has instituted a national single-window system, with a unified portal for all clearances, enabling the country to remove 25,000 processes.¹³ Other countries, often the least developed with less maritime trade traffic, still face major hurdles in implementing automated solutions as they lack the required financial support and technical assistance.

2. Digital solutions

The WTO TFA, which entered into force in 2017, has stimulated the introduction of digital solutions based on e-services and paperless systems using international standards and harmonized processes. Such reforms are part of overall national development plans that include e-governance and e-commerce, national ICT development, and customs and fiscal management. Carried out in a collaborative manner through public-private dialogues, such initiatives can significantly boost efficiency and sustainability. Such changes received a further impetus during the COVID-19 crisis and the war in Ukraine.

Research from UNESCAP on Cross-Border Paperless Trade shows that the full digital trade facilitation implementation beyond the WTO TFA could cut the average trade cost in the region by more than 13 per cent, seven percentage points more than that could be expected from implementation of the WTO TFA measures.¹⁴

In the current context of GVCs volatility, trade facilitation ensures speed, agility, resilience, and predictability in the trade processes by accelerating the automation. To achieve these improvements, governments are automating customs and trade procedures based on real-time data and centralized technology while also improving procedures for risk assessment. This is being done mainly in three areas, namely customs management, port communities, and transparency.

a. Customs management

For customs processes, the ASYCUDA management system is now being implemented in more than 100 States and territories, ASYCUDA improves efficiency and optimizes the use of government resources, and has reduced clearance times, and improved compliance while boosting public revenues. For instance:

- **Angola** – Revenue increased by 44 per cent.¹⁵
- **Bangladesh** – Revenue increased by 50 per cent.¹⁶
- **Jamaica** – In 2019, average application processing reduced to 28 hours and overall clearance times to an average of 32 hours.¹⁷ In 2018 there was a 40 per cent improvement in submissions of manifests to the Jamaica Customs Agency.¹⁸
- **Timor-Leste** – The ASYCUDA-based Timor-Leste Electronic Single Window has reduced the average release time for commercial imports to four days. In 2020, 53 per cent of declarations were assessed and paid on the day of submission, compared to 6.5 per cent in 2015.¹⁹
- **ECOWAS** – The SIGMAT ASYCUDA Regional Transit system has facilitated trade, and acceptance by the trade community. Between 2019 and 2020, this system helped double the number of transit documents processed in the Abidjan-Ouagadougou corridor.²⁰

Digital trade facilitation solutions, including the increasing use of the Electronic Data Interchange (EDI) and electronic single windows, respond to the needs for fast-tracking documentary requirements – breaking the silos among border agencies and maritime stakeholders and increasing general preparedness. This allows for better risk management of shipments and vessels prior to their arrival at ports and real time tracking increasing the level of preparedness of government agencies. Nevertheless, access to and sharing of data remain a challenge in many business communities. Companies can be reluctant to share confidential commercial information. This relates to a more general concern for security in the use of ICT and the need for protection from cyber-attacks on government networks and public websites.

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Ultimately, governments have little choice but to adapt to the new global context. They are facing increasing demands from shipping companies for tracking systems and the integration of smart technologies in port management, as well greater expectations for online services and e-commerce. They also have to respond to changing global value chains and logistics routes, combined with a series of crises. If developing countries and LDCs are to invest in these technologies, however, they will need increased official development assistance, technical cooperation, and capacity building.

b. Port community systems and management

Digitalization and data interchange are reshaping port operations and organizational structures. This is leading to the creation of more port community systems (PCS). A PCS is an electronic platform connecting all the systems of a port or airport. It is a community system established, organized and shared by a group of organizations and agencies. A PCS can further connect the agencies in several ports, creating a community of ports.

To help ports adopt PCSs, UNCTAD offers its TRAINFORTRADE Port Management Programme. Since its inception over 20 years ago, TRAINFORTRADE has been working in more than sixty coastal and island countries across Africa, Asia, Latin America, and the Caribbean. The programme involves national steering committees with many stakeholders, including the port authority, the chamber of trade and commerce, the shippers' council, the shipping council, customs representatives and shipping lines (box 5.4). In partnership with TRAINFORTRADE, the Valencia Port Foundation, for example, has adopted technology-based crisis preparedness, and has improved sustainability and the continuity of cargo flows.²¹

Port community systems depend on close collaboration among stakeholders. Viet Nam's successful management of the pandemic has involved a comprehensive national digital transformation, in coordination with the business community, to develop a digital economy, including the digital infrastructure for Viet Nam as a logistics hub.²² Another successful example is Ghana which uses digital solutions in government processes, such as a national ID system and digitalization of fiscal revenue collection.²³

c. Transparency and visibility in the maritime supply chain

Smart technology has enabled data sharing and information flows over the trade facilitation ecosystem, allowing traders to better prepare, and plan for and address potential bottlenecks. Government agencies should offer correspondingly visible and transparent processes with trade portals and enquiry points for one-stop government desks, and have clear, coordinated approaches to trade facilitation measures, national or regional.

At the regional level, government can cooperate on maritime indices and regional freight observatories to collect data, monitor key performance indicators, and increase the visibility of freight handled at ports. In East Africa, for example, pandemic-induced measures and controls had caused bottlenecks in the hinterland connections. The East African Community responded with a trade portal built upon the UNCTAD step-by step methodology and published COVID-19 emergency guidelines and related procedures, allowing traders to prepare for requirements at border crossing points.²⁴

In the maritime transport sector, governments and the shipping industry are closely interdependent, so reforms must be based on public-private collaborations.

Box 5.4 The port community of Canal Tamengo, Bolivia (Plurinational State of)

Canal Tamengo in Bolivia (Plurinational State of) is a partly artificial waterway which connects the town of Puerto Suárez and Caceres Lake with the Paraguay river in Brazil. The Port Community of Canal Tamengo was created in 2019 when Bolivia (Plurinational State of) granted international status to three ports along the canal – Gravetal, Aguirre, and Jennefer. These offer export access to the Atlantic Ocean. The purpose of the port community was to develop foreign trade and address issues such as dredging and removing water hyacinths that hinder navigation.

The main members are ports, shipping agencies, naval organizations, customs, migration authorities, the National Agricultural Health and Food Safety Service, and others including:

- The Japan International Cooperation Agency (JICA) – Together with the Bolivian Government, JICA is defining the financing for possible dredging of the Canal and removal of water hyacinths.
- The Ministry of Defence – Helps develop new regulations adapted to the operational reality of river ports.
- The Brazilian Navy – Has carried out joint actions for contingencies such as fires and removing water hyacinths.

The port community has established links with shipping agencies, logistics operators and importers and exporters using the Paraguay-Paraná waterway which also flows through Brazil, Argentina, Paraguay, and Uruguay. This has given Bolivia (Plurinational State of) a prominent role in foreign trade operations using this waterway.

Digitalization was accelerated by the health crisis, encouraging people to adapt more quickly to digital documents and digital signatures. To implement the new regulations, training had to be given, backed up by remote support lines.

As a result of the PCS, trade operators have real-time online information, and all the entities have their responsibilities defined to create better synergy. This has reduced customs release times – now averaging two hours for imports and one hour for exports.

Source: Port Community of Canal Tamengo, Bolivia (Plurinational State of).

D. PUBLIC-PRIVATE COLLABORATION

As supply chains and the links between ports and their hinterlands become more complex, trade facilitation requires closer collaboration between public and private-sector stakeholders. Once a ship has entered, or is scheduled to depart from, a port, all relevant stakeholders need to coordinate numerous processes, including customs clearance, the issuance and verification of permits, immigration issues, and general inspections.

1. Public-private schemes facilitate maritime transport

Public-private dialogue occurs in the following settings:

- **Maritime transport facilitation committees** – Created in the IMO FAL Convention, these coordinate government departments, other agencies, port authorities and shipowners to expedite international maritime traffic and prevent unnecessary delays for cargoes and crews. In 2022, the scope of national FAL committees was enlarged to include maritime single windows, stopping the trade in illegal wildlife, the reduction of greenhouse gas emissions, and the repatriation of seafarers during the COVID-19 pandemic.²⁵
- **National trade facilitation committees (NTFCs)** – established under Article 23.2 of the WTO TFA, these facilitate domestic coordination and implementation of the TFA. Through participation in the NTFC, the private sector can monitor reform and offer positive feedback loops.
- **Port public-private partnerships** – PPSs manage port operations and develop new port infrastructure.²⁶ The private sector takes over project execution risks, while governments concentrate on other critical socioeconomic areas.²⁷ PCSs are also a form of public-private collaboration, enabling transparency and efficiency through the safe exchange of information.

Modern strategic port management implies broader coordination with other port services, logistics providers, and carriers, aiming to improve links between overseas countries and inland destinations.²⁸

2. Working together to build resilience

All components of the ports sector must work collaboratively to manage and mitigate risks. ASEAN, for example, encourages flexible and comprehensive multimodal connectivity, incorporating alternative transport modes such as railways and road transport. To alleviate high freight costs, ASEAN also recommends information exchange and sharing among stakeholders via digital platforms and PCSs.²⁹

To deal with the impact of COVID-19, ports have established dedicated task forces led by senior port officials and customs representatives. By mid-2022, Dublin Port's COVID Coordination Committee, for example, had met 115 times and issued 45 communication briefings, providing important advice and regular updates.³⁰ The port of Gothenburg similarly developed regular dialogues with the different port operators and stakeholders to keep the port operating. In Amsterdam, daily consultations in the port area addressed the impact of applied measures and the current state of play. In Antwerp, the dialogue was developed via daily meetings or with the local community.³¹

Some ports had sophisticated structures, including thematic subcommittees, to simplify cross-border trade and make the logistics chain more efficient. In Africa, regional schemes and border authorities established committees to coordinate guidelines and resolve border issues³² NTFCs also helped connect ports with inland multimodal transport (box 5.5).

Box 5.5 Paraguay's hinterland resilience

As a landlocked country, Paraguay relies on ports in neighbouring countries, entailing long journeys that can face physical, operational, logistical, and diplomatic barriers. These problems were exacerbated by the COVID-19 pandemic. To keep goods flowing, Paraguay promoted public-private partnerships and technology. The NTFC, with broad participation from the public and private sector (38 active members), continued implementing the trade facilitation agenda, enshrined in the 2021–2022 work plan elaborated with UNCTAD support.

Inland waterway corridor

In 2020, drought in Paraguay and some parts of neighbouring Argentina and Brazil, resulted in historic low water levels. To allow the passage of barges exporting and importing supplies for agricultural production, as well as fuels and other essential goods, two hydroelectric dams co-owned by Argentina (Yacyreta) and Brazil (Itaipu) released more water.

Box 5.5 Paraguay's hinterland resilience (Cont.)

This operation required coordination between the Ministry of Foreign Affairs, the Ministry of Public Works, the two hydroelectric dams, the National Shipping and Ports Authority, and the Directorate-General of the Merchant Marine. It was also essential to have political engagement from Argentina and Brazil. In addition, there was participation from private stakeholders: the Paraguayan Grains and Oilseed Exporters Association, the Paraguayan Oilseeds and Cereals Processors Chamber, the Paraguayan Ports Terminals Chamber, and the Shipbuilding Industry Chamber. Four operations were successfully organized and executed, allowing exports and imports of approximately 3.5 million tons of merchandise – soy, corn, rice, wheat – worth \$200 million.

Inland connectivity

COVID-related transport restrictions added to costs and delays especially when crossing Argentina and Uruguay. Extra checks were imposed at the border-crossing point of Puerto Falcón with Argentina. COVID-19 tests for drivers, and sanitation of freight trucks, resulted in congestion that further reduced the competitiveness of Paraguayan exports in international markets.

Upcoming transit route

The proposed Bi-Oceanic Corridor is a \$445 million project between Peru, Bolivia (Plurinational State of), Paraguay, and Brazil to connect the Pacific and Atlantic coasts and seaports. For Paraguay this corridor has a high strategic value. It will turn the Western Region into an international logistics centre by offering the shortest route between Chilean and Brazilian ports. This is a demanding project that will require a high degree of commitment and coordination among all regional countries and potential foreign investors.

Public-private partnerships

Post-COVID recovery will require alliances with the private sector. This helps governments reach necessary investment levels and allows companies to gain more market share.

Source: UNCTAD, based on Rivera (2020).

3. Tools and instruments to support cooperation

Maritime trade can benefit from a number of technology-driven innovations. One of the most important options is the maritime single window (MSW). From 2024, as agreed in the 2022 amendments to the IMO FAL convention, MSWs will be mandatory – with all information concerning the arrival, stay, and departure of ships, people, and cargo to be submitted electronically to relevant authorities via a single platform.

Establishing a MSW requires considerable collaboration between public and private stakeholders, with a clear governance structure.³³ For the MSW in the European Union, for example, in 2017 the European Commission sought input from stakeholders, including NGOs, business associations, public authorities, and citizens.³⁴ As a consequence, in 2022 the information procedures for fulfilling reporting obligations were simplified and harmonized.³⁵ Other innovative digital solutions include the UNCTAD Reform Tracker for Trade Facilitation Reforms, and the UNCTAD TRAINFORTRADE Programme.³⁶

Box 5.6 Cameroon Port Community

Port-Synthèse was created on July 7, 1994, as an association of port users and administrations in four autonomous ports: Douala, Kribi, Limbe and Garoua. In 2019, Port-Synthèse was officially extended to all ports, to be the National Port Community.

Founding members in addition to the four ports include the National Shippers' Council of Cameroon and the Chamber of Commerce, Industry, Mines, and Crafts. Permanent members include the Cameroonian Company of Maritime Operations, Aluminum of Cameroon, and Cement Factories of Cameroon. Affiliated members include the African Association of Ports and the Agro-Food Company of Cameroon.

Port-Synthèse is run by a General Secretariat, provided by the ports of Doula and Kribi, which reports to the president of the Port Community, which since 2022 has been led by the port of Kribi.

Port-Synthèse has several missions which include securing the loyalty of shipowners by developing the reputation of Cameroon's ports at the national, regional and international levels. Port-Synthèse also develops cooperation between the members of the Cameroon Port Community and promotes the attractiveness and competitiveness of national ports.

Source: UNCTAD and Cameroun Port Authority.

4. Links between ports, hinterlands and corridors

Many ports handle transit traffic to hinterland countries. For the European Union, for example, 37 per cent of exchanges involve transit through seaports.³⁷ To facilitate these, and bring additional stakeholders to the scene, governments and companies have been creating new corridors, inland ports and logistical zones. In Europe, for example, rail or barge services have dedicated inland ports. In North America, on the other hand, port authorities tend to set up logistical zones in adjacent areas.³⁸

Hinterland connections typically involve intermodal transport. For Tanger Med, Morocco, for example, securing intermodal connections has boosted import-export traffic while also attracting export-oriented industries.³⁹ Intermodal and hinterland transportation tends to be coordinated along inland corridors which together with maritime corridors form the main arteries of world trade.⁴⁰ Intermodal corridors that involve rail, barge and inland terminals require considerable coordination and cooperation. UNCTAD's Corridor Performance Programme helps countries analyse costs, times, and distances.

In East Africa during the pandemic, the EAC Ad Hoc Regional Coordination Committee coordinated partner State responses to ensure smooth and uninterrupted movement of goods and services across transit corridors.⁴¹ Another important route is the Northern Corridor which links a vast hinterland comprising Uganda, Burundi, eastern Democratic Republic of the Congo, northern Tanzania, South Sudan, Somalia and Ethiopia. This corridor has an online platform where member States were able to share experiences and exchange views during the pandemic.⁴²

To build national expertise on regional and international transit issues, UNCTAD has developed a programme for national transit coordinators in developing and least developed countries.⁴³ The programme offers in-person and remote capacity-building with practical tools to help participants understand benefits of the Conventions and international transit instruments and encourage partner country compliance.

E. SUMMARY AND POLICY CONSIDERATIONS

Recent events have brought maritime trade facilitation to the forefront of public attention. The COVID-19 pandemic required governments to take emergency measures at ports and borders, and the war in Ukraine has closed some ports and disrupted the flow of primary commodities.

At the same time, ports and hinterland transport must deal with ever-more complex supply chains and increasing demands from transport operators and their customers for fast and automated electronic systems that ensure compliance but also reduce time and costs for the business community.

With an efficient and digitalized trade facilitation ecosystem, governments, ports and logistic hubs can boost their performance, attract investors and create new opportunities. To achieve this goal, governments, ports and businesses will need to work closely together, with the following recommended actions.

1. **Seize the opportunity for reform** – During the pandemic and the supply chain crisis, maritime and customs authorities, and other border agencies have been forced to try innovative approaches that have largely proven beneficial. They should now build upon efficiency gains to drive through domestic reforms, including maritime single windows.
2. **Harmonize procedures for emergencies** – Governments with other partners should build trade facilitation frameworks based on international agreements and standards to facilitate the supply of emergency goods during pandemics and other crises.
3. **Accelerate automation** – Government systems should be digitalized to enable fully automated, paperless risk-based clearance processes, and smart customs solutions based on real-time data.
4. **Establish an integrated trade facilitation ecosystem** – Reforms undertaken collaboratively through public-private dialogue between relevant border agencies, shipping companies and traders can achieve efficiency and sustainability.
5. **Implement risk management systems** – To ensure business continuity during emergencies, ports can establish public-private task forces to coordinate actions quickly and effectively.
6. **Establish intermodal linkages** – To harmonize processes and strengthen supply chains, port authorities and inland stakeholders need to ensure seamless connections between maritime and intermodal transport corridors, hinterlands, inland ports and logistical zones.
7. **Strengthen coordination and cooperation** – All stakeholders can take advantage of different fora and mechanisms, such as maritime transport facilitation committees, national trade facilitation committees and public-private partnerships. These can encourage political buy-in and coordinate and collaborate at both national and regional levels.

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END NOTES

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| <p>¹ Table 4.1.</p> <p>² IMF (2022).</p> <p>³ World Trade Organization (2015).</p> <p>⁴ ASYHUB (2022).</p> <p>⁵ UNESCAP (2021).</p> <p>⁶ Ibid.</p> <p>⁷ Selected measures include: Agency in place to manage TF in times of crises and emergencies; Online publication of emergency TF measures; Coordination between countries on emergency TF measures; Additional trade facilitation measures to facilitate trade in times of emergencies; and Plan in place to facilitate trade during future crises.</p> <p>⁸ UNCEFACT (2021).</p> <p>⁹ WTO (2022).</p> <p>¹⁰ Ibid.</p> <p>¹¹ ASYREC (2022).</p> <p>¹² WCO (2020).</p> | <p>¹³ Agility (2022).</p> <p>¹⁴ UNESCAP (2021).</p> <p>¹⁵ ASYCUDA (2021b).</p> <p>¹⁶ Ibid.</p> <p>¹⁷ Ibid.</p> <p>¹⁸ ASYCUDA (2019).</p> <p>¹⁹ ASYCUDA (2021c).</p> <p>²⁰ ASYCUDA (2021b).</p> <p>²¹ UN (2022).</p> <p>²² Agility (2022).</p> <p>²³ Ibid.</p> <p>²⁴ EAC (2022).</p> <p>²⁵ IMO (2022).</p> <p>²⁶ Public Private Partnerships in Ports / Port Reform (2021).</p> <p>²⁷ UNESCWA (2020).</p> <p>²⁸ Notteboom et al. (2022).</p> <p>²⁹ ASEAN Secretariat (2022).</p> |
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- ³⁰ UNCTAD (2022b).
- ³¹ UNCTAD (2021a).
- ³² UNECA et al (2021).
- ³³ UNCTAD (2021b).
- ³⁴ Stakeholders such as the European Community Shipowners Associations, World Shipping Council, European Association for Forwarding, Transport, Logistics and Customs Services, and International Port Community System Association (IPCSA) all of which submitted position documents.
- ³⁵ European Maritime Single Window environment (2022).
- ³⁶ UNCTAD (2022a).
- ³⁷ European Commission (2013).
- ³⁸ Notteboom et al. (2022).
- ³⁹ Arvis et al. (2019).
- ⁴⁰ Ibid.
- ⁴¹ UNECA (2020).
- ⁴² Ibid.
- ⁴³ UNCTAD (2022c).