

Distr.: General  
30 March 2023

English only

---

## **Economic Commission for Europe**

Inland Transport Committee

**Working Party on Customs Questions affecting Transport**

**163rd session**

Geneva, 8 and 9 (a.m.) June 2023

Item 4 (b) of the provisional agenda

**International Convention on the Harmonization of Frontier**

**Controls of Goods, 1982**

**Issues in the application of the Convention**

### **Issues in the application of the Convention**

#### **Note by the secretariat**

The secretariat prepared this Informal document for comments or additional input by the Working Party. As the Informal document is in Word-format, delegates are invited to insert their comments/additions directly into the text and submit their amended version to the secretariat (roel.janssens@un.org).

-----

# Cross-Border Facilitation Guidelines

**A practical guide to cross-border facilitation**

## Chapter 2

Prepared by Dr Andrew Grainger for the  
Organization for Security and Co-operation in  
Europe (OSCE) and the United Nations Economic  
Commission for Europe (UNECE)

(Version: 6<sup>th</sup> April 2023)

# Cross-border Facilitation: themes and principles

---

## 1 Chapter overview

The environment within which cross-border trade takes place can easily be described as complex. There is much scope for improvement and the term “facilitation” is often used to describe efforts amongst and between public and private sector stakeholders to ensure the smooth and uninterrupted cross-border flow of goods and vehicles. Occasionally, “facilitation” might also be used in a negative sense, such as for the payment of “facilitation monies” – read bribes. But mostly, it is used in a positive sense where the current “As-is” transport and trade environment is reimagined as an achievable “To-be” environment that meets its stakeholder’s needs. International instruments may serve as pathways towards reform, such as: the International Convention on the Harmonization of Frontier Controls of Goods (UNECE 1982); the International Convention on the Simplifications and Harmonisation of Customs Procedures [Revised Kyoto Convention] (WCO 2006); and the WTO Agreement on Trade Facilitation (WTO 2014)<sup>1</sup>.

But, conversations about how to facilitate the cross-border flow of goods are often informed from the bottom-up, by experienced inefficiencies in cross-border transport operations, or concern for businesses that struggle to take advantage of export market opportunities and participate on competitive terms within international supply chains (e.g., see DPDHL 2022). There are multiple international organisations that play an active hand in co-ordinating cross-border facilitation focused policy activities or sharing best practice experiences – an objective that defined this publication’s preceding: “Handbook of Best Practices at Border Crossings; a trade and transport facilitation perspective” (OSCE and UNECE 2012). Several international organisations have also shaped debate by offering guidelines with focus on assessment methodologies– such as the World Bank’s practical toolkit for “Trade and Transport Facilitation Assessment” (World Bank 2010), or UNESCAP’s targeted “Business Process Analysis (BPA) Guide to Simplify Trade Procedures” (UN ESCAP 2012). But as is emphasised in the work of Batista (2012), the operational performance of border facilities and similar trade and transport infrastructure matters, too. A broad catalogue of themes about how the flow of goods across borders can be best facilitated, has evolved. Dominant themes are as follows:

1. **Transport facilitation** (see p.4) with focus on the investment, development, implementation, and maintenance of hard infrastructure (e.g., roads, railway lines, ports, etc) as well as soft infrastructure (e.g., harmonised regulatory frameworks, signage, vehicle standards, etc). This theme also touches on initiatives aimed at enabling or improving cross-border transport services, and streamlining procedures between transport operators and shippers as well as between transport operators and border agencies;
2. **Border crossings management** (see p. 11) where conversations are focused on the flow of traffic and goods through border crossing facilities, including trade gateways like sea- and

---

<sup>1</sup> Key international instruments that are reviewed in detail in Chapter 4

airports. This theme can be described as a subtheme to transport facilitation in so far that it aims to remove border related bottlenecks that make cross-border transport activity less viable. It can also be viewed as a subtheme to the facilitation of customs and trade procedures, including those associated with non-tariff measures (see below);

3. The need for **customs facilitations** (see p.11) to enable businesses to effectively participate in international trade opportunities, irrespective of national tariff barriers;
4. **Non-Tariff Measures (NTMs)** (e.g., those relating to sanitary and phytosanitary measures, amongst many others; see p.17) that can differ markedly from one country or border crossing to another, and efforts in regulatory co-ordination and alignment to reduce their impact on cross-border trade flows;
5. The facilitation of **trade and customs procedures** (see p. 20) to help reduce procedural obstacles, associated frictions, and transaction costs; and to improve the performance of border agencies in line with public control expectations, and, where necessary, create regulatory space for new control regimes (e.g., for anticipated green issues, amongst others). Underlying principles here overlap with those advocated for the facilitation of transport procedures as well as the procedures associated with NTMs;
6. The need for efficient and effective **financial services** (see p. 28) to ensure that businesses can access export finance, credit, and insurance as well as make payment;
7. **Education and training** (see p. 28), especially where this helps raise awareness about cross-border trade opportunities, improves trade and customs compliance, and gives officials the necessary foundation for their activities.

There is an extensive literature for each of the above listed themes. Underlying that literature is a body of principles. These, within the context of their framing themes, are the core focus of this chapter.

## 2 Transport facilitation

Transport services and their enabling infrastructure play a central role in global supply chain operations. Innovations in modern logistics operations, such as by shipping goods in standardised containers (Levinson 2006), using modern distribution models and handling equipment, and taking advantage of modern information and communication technology, have in recent decades (as discussed in Chapter 1) helped radically reduce the cost of global shipping. But the development and improvement of trade enabling cross-border transport systems requires effort. Multiple international organisations (Table 2-1) are involved. Efforts are placed on the development and cross-border co-ordination of transport infrastructure, improvements to applicable transport procedures (regulatory and commercial), as well as transit arrangements.

**Table 2-1: International Organisations with active transport policy portfolios**

Mode	International Organisation	URL
All	OSCE’s activities in transport, trade, and border crossing facilitation	<a href="https://www.osce.org/economic-activities">https://www.osce.org/economic-activities</a>
All	UNECE’s transport policy portfolio	<a href="https://unece.org/transport">https://unece.org/transport</a>
All	International Federation of Freight Forwarders Associations	<a href="https://fiata.org">https://fiata.org</a>
All	International Transport Forum at the OECD	<a href="https://www.itf-oecd.org">https://www.itf-oecd.org</a>
Road	International Road Transport Union	<a href="https://www.iru.org">https://www.iru.org</a>
Post	Universal Post Union	<a href="https://www.upu.int">https://www.upu.int</a>
Rail	International Organisation for the International Carriage by Rail (OTIF)	<a href="http://otif.org/en/">http://otif.org/en/</a>
Rail	Organisation for Cooperation between Railways	<a href="https://en.osjd.org">https://en.osjd.org</a>
Rail	Worldwide Railways Organisation	<a href="https://uic.org">https://uic.org</a>
Air	International Civil Aviation Association	<a href="https://www.iata.org">https://www.iata.org</a>
Air	International Civil Aviation Organization (ICAO)	<a href="https://www.icao.int">https://www.icao.int</a>
Sea	International Chamber of Shipping	<a href="https://www.ics-shipping.org">https://www.ics-shipping.org</a>
Sea	International Maritime Organization (IMO)	<a href="https://www.imo.org">https://www.imo.org</a>
Sea	United Nations Commission on International Trade Law (UNCITRAL) – International Transport of Goods	<a href="https://uncitral.un.org">https://uncitral.un.org</a>

### 3 Transport infrastructure

The main facilitation principle for the development of physical, “hard” transport infrastructure, such as road and railways, is that **development should be co-ordinated** to maximise connectivity between countries. This ensures that international, cross-border route developments connect, and are linked or integrated with domestic transport and logistics infrastructure (UNECE 2022b). The necessary co-ordination is often the outcome of international transport policy that might be informal, especially in the early stages of co-ordination (e.g. via the International Transport Forum at the OECD), or formal through treaties and international instruments such as those maintained by the UNECE (2023f). A noteworthy co-ordination example is the International Transport Infrastructure Observatory which gives access to extensive data (including mapped geographic information) that can be used for co-ordinated, initial cross-border project development (UNECE 2023c). Often, co-ordination efforts extend to an entire a region. The Three Seas Initiative (3SI) that seeks to improve connectivity between the Baltic, Adriatic, and Black seas through joined-up (largely north-south) transport, energy, and digital infrastructure (3SI 2022) is one of many examples.

A key aspect in the development of physical infrastructure – which, next to roads and railways, also includes ports, airports, terminals, and logistics facilities – is funding. This can be challenging, especially if economic returns take many decades to materialise (UNECE 2017a, 2022a) and are linked to the co-development of services and catchment areas – or in the case of ports, the economic development of hinterland. The subsequent case for transport infrastructure specific investments can thus be a challenging

---

one to make. A sometimes unappreciated facilitation principle for transport policy makers is thus to provide for the right investment conditions that favour public and private sector funding models (ICC 2005). Required conditions, invariably, differ from one transport project to the next, but are usually based on a robust business case. Moreover, private sector funding (e.g., by pension funds) is likely to be conditional on assurances and guarantees that hold for decades.

The “soft” side of transport infrastructure requires attention, too. Transport systems are subject to extensive regulation that govern access, use, and safety. The facilitation principle of **regulatory alignment and international co-ordination** applies. The UNECE, for example, applies this principle by offering an extensive body of international transport instruments and conventions to ensure that signatory countries follow:

- Standardised road traffic rules, signage, and signals
- Standardised technical conditions and regulations for road vehicles
- Standardised measures concerning the work of drivers (e.g., maximum driving hours) and the taxation of road vehicles
- Standardised operating specifications for road vehicles (e.g., concerning weight and load, employment of drivers, insurance, documentation, licensing)
- Operating rules for inland waterways
- Standardised procedures for the transport of dangerous goods (e.g., flammable, explosive, toxic, corrosive, radioactive, or otherwise hazardous)

Source: UNECE (2023f).

Similar regulatory alignment and international co-ordination efforts also apply to other modes of transport, which is co-ordinated by the relevant international organisations for rail, sea, and air (see prior Table 2-1).

By adopting shared instruments and conventions, the risk of differences in regulatory approaches that would otherwise impact negatively on transport and trade flows is significantly reduced. For example, if driving licences from one side of the border were not recognised on the other, drivers might have to take professional driving exams in both countries; perhaps operators would need to swap drivers at the border. Likewise, if road vehicle safety standards were incompatible, it may be necessary to swap cargo from one vehicle to another at the border crossing facility. A common challenge in international transport operations are permissible weight limits. This can quickly frustrate efficient cross-border transport operations where limits differ between one country and the next. Operators need to choose whether to comply with the lowest common denominator or add the expense of complex distributions models (usually involving warehousing and distribution centres) that seek to take full advantage of permissible vehicle load limits. Compatible transport system standards can reduce or eliminate such costs.

#### 4 Transport procedures

Non-standard or misaligned transport procedures governing access and use of transport infrastructure can also give rise to procedural obstacles. In many countries, for example, road freight operations are subject to: procedures and checks concerning the vehicle’s fuel levels; mandatory weighing and vehicle inspections;

---

cabotage restrictions (Box 2-1); congestion at toll payment facilities; or unnecessarily bureaucratic arrangements for foreign operating licences.

**Box 2-1: Economic regulations, cabotage and competition; something to think about**

For most shippers, international trade activity is enabled by transport and logistics service providers. Their performance matters and is dependent on the enabling transport infrastructure. But the price paid for transport services is also dependent on the level of competition between service providers and prevailing economic regulation – especially if freight rates and transport tariffs were fixed or protected in any way. Cabotage restrictions and whether foreign transport operators are permitted to compete, also have an impact on the economic environment for transport services. Thus, liberalisation or modifications to transport market rules can have significant impacts on freight rates and prevailing service levels. For example, permitting foreign trucking operators to compete and return with a full load – rather than travelling empty, as might be the case under cabotage restrictions – enables them to significantly reduce their freight rates for cross-border services.

The **principle** here is to **identify such procedural impediments and seek solutions** that help reduce or remove their impact. Evaluation toolkits and survey methodologies, such as the World Bank’s toolkit for “Trade and Transport Facilitation Assessment” (World Bank 2010), or UNESCAP’s targeted “Business Process Analysis (BPA) Guide to Simplify Trade Procedures” (UN ESCAP 2012) can be quite helpful in this regard. But equally helpful is practical policy engagement with transport operators who can quickly identify areas for improvement<sup>2</sup>. Often, such solutions can be very pragmatic and relatively easy to implement – for example by enabling trucks to pre-pay tolls (where applicable) before setting off on their journey rather than at toll booths upon crossing the border. The use of digital tachographs, mobile phone technology, and automatic licence plate recognition systems – amongst other technologies – can be explored for solutions that seek to reduce procedural delays or frictions to cross-border transport operations.

Commercial procedures between shippers and transport operators can be facilitated with standard contractual instruments. For example, most European and Central Asian countries (amongst others), provide for this in part by subscribing to the UNECE “Convention on the contract for the international carriage of goods by road (CMR)” (UN 1956) – see Box 2 for details. Another example is the International Air Transport Association’s Air Waybill, which serves as a standardised contract of carriage (and document) between the carrier and the shipper. The **principle** here is to offer uniform, universally recognised and applied **standardised documents and contractual instruments** that lend clarity and familiarity. Similar conventions apply to other modes of transport, too (Table 2-2)<sup>3</sup>.

**Box 2-2: The UNECE Convention on the contract for the international carriage of goods by road (CMR)**

---

<sup>2</sup> A topic that is discussed in greater detail in Chapter 3

<sup>3</sup> Though at the time of writing, non for multimodal transport. Shippers may also find that many contractual aspects beyond those of carriage (e.g., with regard to service and payment) are not always standards, and that the terms and conditions can vary.

The CMR applies to every commercial contract of carriage by road between two different countries where at least one of those countries is a signatory to the CMR Convention. To date<sup>4</sup> there are 55 signatories to the CMR, including the vast majority of OSCE participating States and UNECE members.

The Convention provides for:

- Legal certainty to shipments involving successive carriers
- Standardised document requirements
- Limited carriers' liability for total or partial loss of goods or damage (at 8.33 SDR<sup>5</sup> per kg)
- Time limits and procedures for liability claims

In line with the document specifications of the CMR, the International Road Transport Union developed its standardised CMR [consignment] Note which is aligned with the United Nations Document Layout Key (UNECE 2017b) and is used in the vast majority (if not all) of international road carriage involving signatory states.

Although the CMR Note serves as a commercial document between shippers and road transport operators, it is frequently relied upon by customs authorities to confirm declared details about goods and their transport arrangements.

In 2008, an additional protocol for an electronic e-CMR was introduced to support paperless versions of the CMR Note. This entered into force on 5<sup>th</sup> June 2011 to which 30 countries<sup>6</sup> have presently acceded.

In 2017, a business requirements specification, core component e-CMR message structure, and XML message standard were developed by a United Nations Centre for Trade Facilitation and Electronic Business project.

Sources: and IRU (2023); Murray et al. (2012); UN (1956); UNECE (2018b)

**Table 2.2: International Conventions concerning the Carriage of Goods**

<b>Mode of Transport</b>	<b>International Conventions Concerning the Carriage of Goods</b>
Road	<ul style="list-style-type: none"> <li>• UNECE Convention on the Contract for the International Carriage of Goods by Road (CMR), 1956</li> </ul>
Rail	<ul style="list-style-type: none"> <li>• The Convention concerning International Carriage by Rail (COTIF), 1980</li> </ul>
Air	<ul style="list-style-type: none"> <li>• Revised Warsaw Convention, 1955 (signed in The Hague)</li> <li>• Montreal Agreement, 1999</li> </ul>
Sea	<ul style="list-style-type: none"> <li>• International Convention for the Unification of Certain Rules of Law relating to Bills of Lading, "Hague Rules", 1924</li> <li>• Protocol to Amend the International Convention for the Unification of Certain Rules of Law Relating to Bills of Lading, "Hague-Visby Rules", 1968</li> </ul>

<sup>4</sup> 3 January 2023

<sup>5</sup> On 3<sup>rd</sup> January 2023 the EURO exchange rate for one Standard Drawing Right (SDR) was 1.261040; see IMF website for live exchange rates: [https://www.imf.org/external/np/fin/data/rms\\_five.aspx](https://www.imf.org/external/np/fin/data/rms_five.aspx)

<sup>6</sup> Date: 3<sup>rd</sup> January 2023



	<ul style="list-style-type: none"> <li>• United Nations International Convention on the Carriage of Goods by Sea, “Hamburg-Rules”, 1978</li> <li>• United Nations Convention on Contracts for the International Carriage of Goods Wholly or Partly by Sea, Rotterdam-Rules, 2009<sup>7</sup></li> </ul>
--	---

Noteworthy, too, is that several transport facilitation initiatives focus explicitly on the facilitation of procedures at border crossing and gateway facilities, such as ports and airports. The objective is to make sure that border specific controls do not unnecessarily disrupt traffic and subsequent freight flows (see also Customs facilitations, p.15). The main examples here are the UNECE’s International Convention on the Harmonization of Frontier Controls of Goods (UNECE 1982) – see Chapter 4 for a detailed discussion – the IMO’s FAL Convention (IMO 2018), and the ICAO’s Annex 9 to the Convention on International Civil Aviation (ICAO 2022). Although these instruments vary in scope, **principles** that can be attributed to them include the following:

- Forms and documents for the reporting of vessels, crew, and cargo must be standardised;
- Data should be shared in electronic form;
- Border agencies should co-ordinate their control activity;
- Minimum service standards apply (e.g., declarations must be processed within a specified period of time);
- Perishable goods should be prioritised;
- Simplified immigration procedures for transport workers shall be provided.

Closely related to the above is the **principle** that the “means of transport” (including trailers, equipment shipping containers, and reusable pallets) can be declared with relative ease under temporary admission arrangements; thus, exempting them from customs import duties that would otherwise be due. This principle is emphasised in various UNECE transport conventions<sup>8</sup> and also provided for in the WCO Revised Kyoto (Customs) Convention (WCO 2006).

## 5 Transit and transshipment

The potential negative impact of customs controls and customs procedures on transport costs also features strongly in conversations about transit procedures. These apply where the transport route between a buyer or seller goes through a third country. Transit procedures also apply where goods are moved under customs control between customs authorised facilities, such as between a border post and an inland customs facility (e.g., dryport, customs warehouse, freezone). Related to transit is transshipment where the most cost-effective transport option is via a hub facility (e.g., port or airport) in a third country. The underlying facilitation **principle** for such transit or transshipment operations is that the required processes and procedures **should be accommodated in the most cost-effective way**. But, to make that happen

<sup>7</sup> Although the UN Convention on Contracts for the International Carriage of Goods Wholly or Partly by Sea, known as the Rotterdam Rules, was adopted by the UN General Assembly on 1 December 2008, only 5 parties had adopted the convention by January 2023. 25 signatories are needed for it to enter into force.

<sup>8</sup> [https://unece.org/list-agreements#accordion\\_5](https://unece.org/list-agreements#accordion_5)

---

considerable regulatory co-ordination and agreement about transit control between the countries concerned is necessary.

The Freedom of Transit is provided for in Article V of the General Agreement for Tariffs and Trade (GATT 1947), and applies to all modes of transport. Standard customs measures for transit and transshipment control are outlined in the WCO Revised Kyoto (Customs) Convention (2006). Provisions for transit are defined in the UNECE's International Convention on the Harmonization of Frontier Controls of Goods (UNECE 1982). Transit specific facilitation principles are stressed in the WTO Trade Facilitation Agreement's Article 8 (WTO 2014). Detailed guidelines are published by the WCO (2017)<sup>9</sup>. Transit and transshipment, and the facilitation of applicable procedures, is also provided for in the IMO's Convention on Facilitation of International Maritime Traffic (FAL Convention) for shipments by sea (IMO 1965), and for air by ICAO's Annex 9 to the Convention on International Civil Aviation (ICAO 2022). Simplified procedures for road and multimodal transit shipments are available under the TIR system in over 77 countries<sup>10</sup> (Box 2-3).

### **Box 2-3: The TIR Systems; summary**

The TIR system is based on “the Customs Convention on the International Transport of Goods under Cover of TIR Carnets” (TIR Convention) that was drafted in 1975. It replaces the original Transport Internationaux Routier (TIR) Convention from 1959 and came into force on 20 March 1978. The objective of the TIR Convention is to facilitate international transit through a simplified customs transit procedure that is based on the TIR Carnet document and an international guarantee system. The latter ensures that goods in transit are not diverted without the appropriate payment of customs duties. A key requirement of the TIR system is that goods must be inside secured vehicle compartments or containers and be sealed under customs supervision upon loading and unsealed under customs supervision upon arrival. TIR plates must be attached to vehicles carrying goods under TIR arrangements. Road vehicles used for transiting goods must be TIR approved. TIR vehicle certification is subject to inspection by a competent authority; certification fees apply. Further details can be found in the TIR Handbook (UNECE 2018a).

The TIR systems compares favourably to national transit (or temporary admission) procedures, especially if the transport operator and shipper does not have any customs presence in the transit country. Simplified transit procedures also feature within regional trade and customs agreements. The ASEAN Customs Transit System is one such example (ACTS 2023); the New Computerised Transit System (NCTS) for transit movements amongst parties to the Convention on Common Transit Procedures (European Council 1987)<sup>11</sup> is another prominent example (European Commission 2021).

---

<sup>9</sup> These also include many helpful implementation examples.

<sup>10</sup> As of 3<sup>rd</sup> January 2023

<sup>11</sup> In 2023, the Convention applied to the member states of the European Union (EU) and European Free Trade Area (EFTA) as well as Turkey, North Macedonia, Serbia, and the United Kingdom.

---

## 6 Border crossings management

When there is a lot of scope for improving cross-border trade flows, queues and delays at border crossing facilities can be compelling visual manifestations for the need to act. The prime principle is that goods – and vehicles carrying those goods – should not be “stuck at the border”. Subsequent facilitation efforts can take two directions. The first relates to how applicable controls and procedures at the border can be managed in a co-ordinated way. Often, this theme is referred to as “Coordinated Border Management” (WCO 2015a, 2015b), “Border Agency Cooperation” (WTO 2014), or “Integrated Border Management” (European Commission 2010). The second relates to how border crossing facilities should be designed. This is a topic that features strongly in the OSCE and UNECE original “Handbook of Best Practices at Border Crossings” (2012; especially Chapter 6). Inevitably, these two themes are closely linked, and to a large part dependent on, wider trade and transport policy considerations, and the actual or anticipated (future) trade volumes at border crossing facilities.

## 7 Co-ordinated border management (international, national, internal)

The nature of border control is that there are at least two sides, each with their own regulatory requirements and border agencies. For most European and Central Asian states the provisions of the International Convention on the Harmonization of Frontier Controls of Goods (UNECE 1982) apply. Their underlying principles are that border controls must be co-ordinated, and that touchpoints upon physical cross-border transport operations are minimised. When applied, this means that trade, customs, and transport authorities must work together to facilitate the flow of goods across borders – on either side of the border and across the border. Next to improved conditions for keeping goods and traffic moving, this should also yield improved control outcomes. Details about how these principles and objectives can be applied are often elaborated in bilateral or regional customs co-operation agreements, with provisions, amongst others, for:

- Service commitments (including operating hours and maximum processing times);
- The facilitation of transit movements;
- Command structures for co-ordinated border services, and the demarcation of respective responsibilities;
- Harmonising applicable legislation and regulations;
- Aligning respective positions vis-à-vis international trade and customs agreements;
- Developing, implementing, and maintaining shared technology and systems;
- The implementation and operation of “one-stop-shop” border crossing facilities;
- The mutual recognition of documents, certificates, and authorisations (thus reducing scope for duplicating processes and activities);
- Shared data standards for the communication of administrative data;
- Risk analysis and intelligence sharing;
- Joint international investigations into cross-border crimes (often co-ordinated via INTERPOL or the WCO).

The WTO Trade Facilitation Agreement (WTO 2014) is a little more specific, as is summarised in Box 2-4. The WCO Revised Kyoto Convention (WCO 2006) also offers a set of recommended standards which are summarised in Table 2-3.

**Box 2-4 :Border agency co-operation obligations specified in the WTO Trade Facilitation Agreement; Article 8, Trade Facilitation Agreement (WTO 2014)**

1.	Each Member shall ensure that its authorities and agencies responsible for border controls and procedures dealing with the importation, exportation, and transit of goods cooperate with one another and coordinate their activities in order to facilitate trade;
2.	Each Member shall, to the extent possible and practicable, cooperate on mutually agreed terms with other Members with whom they share a common border with a view to coordinating procedures at border crossings to facilitate cross-border trade. Such cooperation and coordination may include: <ul style="list-style-type: none"> <li>(a) alignment of working days and hours;</li> <li>(b) alignment of procedures and formalities;</li> <li>(c) development and sharing of common facilities;</li> <li>(d) joint controls;</li> <li>(e) establishment of one stop border post control.</li> </ul>

**Table 2-3: WCO Revised Kyoto Convention standards with relevance to co-ordinated border management**

Standard	Synopsis and commentary
Standard 3.1	The location of customs facilities is to be determined by factors that take the needs of business operators into account. It is reasonable for operators to expect a streamlined service that meets the border control needs of other agencies, too.
Standard 3.11	Paper documents shall be in accordance to the UN-layout key; electronically lodged declarations shall be compliant with international standards agreed by WCO members. Information sharing between different agencies (and the business community) is made easier; thanks to international data standards much of this can be done automatically.
Transitional Standard 3.35	If goods must be inspected by customs and other (non-customs) authorities then such inspections should, as far as possible, be carried out at the same time.
Standard 3.3	Office hours at common border crossings are to be aligned
Transitional Standards 3.4 and 3.5	Controls by the respective customs agencies at common border crossing should, where possible, be operated jointly and share the same facility.
Standard 6.3 - 6.4	Risk management is to be used for customs control purposes. The decision to inspect goods, including the means of transport, is to be based on risk analysis. Information and data provided by non-customs agencies can significantly enhance customs risk management capabilities.
Standard 6.9	“The Customs shall use information technology and electronic commerce to the greatest possible extent to enhance Customs control.” Control capabilities, especially where they relate to non-customs agencies, are significantly enhanced where the respective electronic systems are integrated.

Standard 6.7	Mutual administrative assistance agreements are to be sought to enhance control This provides the legal basis for one customs administration to assist another.
Standard 6.8	“The Customs shall seek to co-operate with the trade and seek to conclude Memoranda of Understanding (MoUs) to enhance Customs control.” Such MoUs can serve multiple purposes. For example, MoUs can be used: to negotiate access to sensitive information; reward businesses for compliant behaviour; encourage operational practices that support customs control (e.g., vetting of suppliers and customers).
Standard 7.2 – 7.4	Computer applications shall use internally accepted standards. The development of computer applications shall consider the needs of all parties (necessitating extensive consultation with those parties). These standards concern the interfaces with the business community as well as the interfaces with all non-customs agencies.

Source: adapted from WCO (2006, 2015b)

Further co-operation and co-ordination opportunities can also be found at home, by ensuring that frontier-based executive agencies work together effectively. This can be achieved in many ways, including, for example, through:

- Joint audits and inspections in instances where control objectives overlap – for example in the context of applicable customs, VAT, and tax audits;
- Harmonised data standards, where the various government agencies agree on standardised datasets to enable more streamlined data sharing;
- Synchronised border inspections, where relevant authorities conduct their controls jointly and thus reduce the need for repeated handling operations;
- Harmonised operating hours in line with the requirements of business operators;
- Sharing of intelligence, information, and data to enable more informed risk profiling and targeted investigations;
- Pooled facilities and equipment to enable better utilisation and save costs, e.g., in the form of shared office buildings, inspection facilities, and staff transport (cars, buses, etc);
- Collaborative criminal investigation and prosecution;
- Cross training of officers. In Finland, for example, customs officers are trained by the Border Guard to be able to inspect identification documents and visas. Border guards in turn are trained by customs to search vehicles and recognise prohibited and restricted goods (Poutiainen 2015);
- Single Window type solutions that are in line with UN CEFAC Recommendation 33 (UNECE 2020) provide for a single interface between business and government (as opposed to one with each agency).

Quick wins through co-ordinated border management can often be found within the respective border agencies. This might be at the national level for the entire organisation; e.g., to ensure rules and regulations are applied consistently, or to implement shared electronic infrastructure (e.g., an electronic customs system). It might be at the district level, often with focus on making the best use of staff and resources

---

(e.g., office space, laboratory facilities, and mobile inspection equipment). At the local level it might relate to:

- Developing forecasting models to ensure that staff can plan ahead, and that resources are optimally deployed;
- Management practices that seek to identify scope for improvement;
- Measures to ensure that operational insights are fed into the policy making process;
- Active staff management that ensures that trade and transport facilitating policy objectives and measures are reflected in operational practices.

## 8 Border crossing facilities design

Surprisingly, the literature is somewhat undeveloped here. The OSCE and UNECE original “Handbook of Best Practices at Border Crossings” (2012; especially Chapter 6) offers original, detailed insights. The International Convention on the Harmonization of Frontier Controls of Goods (UNECE 1982) does touch upon minimal requirements, such as for staff and equipment. It also refers to operating principles, for example, by specifying that controls by different agencies should be conducted jointly (not separately) – see Chapter 4.

The design challenge for border facilities is that such fixed infrastructure needs to be flexible to accommodate changes in demand and use – as might be expected in the long-term with growing trade flows and evolving regulatory requirements. Often, demands for border services also change throughout the day with peak and off-peak periods. At maritime ports and airports, the direction of traffic usually matters, too. Handling staff are likely to priorities outward over inward traffic or vice-versa. This has implications on whether border staff need to predominantly cater for export procedures or import procedures. At some locations, border traffic flows are twenty-four hours a day, seven days a week (24/7); at other locations flows are dependent on shipping, ferry, railway, or airline schedules. Design requirements and subsequent specifications are thus likely to be unique for each border crossing or gateway facility.

However, the field of industrial engineering and operations management does offer a few useful principles that can be applied to developing optimised border crossing and gateway facilities. Text book performance objectives that need to be reflected in facilities’ design concern quality, speed, dependability, flexibility, and cost (Slack et al. 2022). Subsequent facility design considerations (e.g., Tompkins 2010) tend to be based on: strategic objectives and directions; the products handled; processes, flows, and space requirements; and staff requirements. Within the context of border crossing facilities and gateways, several facilitation issues thus merit attention. The following is a list (in no specific order) detailing a few examples of how textbook principles can be applied to the design of border crossings and gateway facilities. There are likely to be many more!

- Control requirements change, traffic flows, and the quality of control and service is undermined if facilities do not offer sufficient flexibility. This can often be achieved by adopting design choices that allow equipment and processes to be reconfigured with relative ease, thus reducing the risk of creating bottlenecks and delays;

- 
- Options for shifting control activity to alternative locations (e.g., for slow moving goods or vehicles selected for inspection) or away from the border (perhaps multiple locations) can help overcome space constraints and keep flows across the border moving;
  - Many types of goods require special handling, including temperature controlled items. It is important that facilities can cater for such handling requirements; and if required, shippers can pre-arrange the necessary handling (e.g., by booking inspection slots for phytosanitary goods in advance or arranging for reefer points to hook-up refrigerated shipping containers);
  - Inspection equipment and tools need to be readily accessible; scope for delays due to the appropriate kit not being at hand should be reduced. Planning and prepositioning of critical equipment (e.g., forklifts or loading and off-loading) can ensure that shared equipment is more readily available;
  - Many controls take place on, or at the vehicles transporting goods. Electronic equipment that enables officers to complete processes “on the go” instead of in the office can speed up processes significantly. Mobile phones and computers for completing administrative processes can be invaluable;
  - Queues quickly become bottlenecks unless actively managed: e.g., by adopting queue management systems or layouts that allow for traffic flows to be separated;
  - Flows need to be managed appropriately with either staff and equipment being brought to the goods (mobile), or vehicles and/or goods to be moved to dedicated facilities;
  - Control processes may be designed to combine control activities, for example, by multiple agencies at once rather than in sequence;
  - Where possible, processes should be designed to be completed prior to arrival at the border post or gateway facility: e.g., during loading or after export departure (as is often possible for air and maritime shipments);
  - Robust forecasts for traffic flows at borders and gateway facilities, especially if there are peak and off-peak periods, is invaluable for optimising staffing levels and shift patterns. It also frees up staff to plan ahead in anticipation of forthcoming peak traffic and goods flows. Ideally, staff also partially complete processes in advance, so that when vehicles and goods arrive the steps to complete clearance are minimised.

In addition to all the above, quick wins are often found through improved risk management and effective targeting, thus focusing processes and resources on activities that merit attention. The adoption of risk management principles allows processes for business operators that are trusted and have good compliance records to be relaxed (WCO 2022c; Widdowson 2005). It is also likely that such operators invest considerable resources themselves to maintain that level of trust. They thus should be treated preferentially, and many countries grant such operators dedicated fast lanes (Davis and Friske 2013).

## 9 Customs facilitations

A key feature within international trade policy is concern for trade tariffs (e.g., UN 1950) and the level of protection they provide to industry at home, whether lower tariffs can be offered in exchange for

---

preferential access to markets abroad, and whether tariff levels can be reduced to give markets at home access to cheaper supplies from abroad. Such deliberations are usually outside the scope of conversation about the facilitation of trade (e.g., Grainger 2011; Staples 2002; WTO 2015). However, businesses operating in global markets expect that they can do so on equal footing and not be penalised by having to pay import duties on goods and materials used in export manufacture. They also expect that customs procedures governing the payment of duties are aligned with business requirements. This is to ensure that customs compliance requirements do not undermine supply chain performance (see Chapter 1) and thus jeopardise effective participation in global supply chain networks – sometimes also referred to as global value chains (OECD 2012).

To this end, most countries are contracting parties to the WCO Revised Kyoto (Customs) Convention (WCO 2022a). This ensures a harmonised approach to the design of national customs legislation that includes fiscal measures that enable businesses to participate in global supply chain opportunities on competitive terms. These range from temporary admission procedures where goods – including transport vehicles carrying goods – can be imported temporarily without incurring customs liabilities, to drawback procedures where import duties for goods and materials used in export manufacture are refunded or suspended; see Box 2-5. **The principle thus is to provide for customs measures that enable exporters to effectively participate in global supply chain networks.**

**Box 2-5: Customs procedures with fiscal benefits; WCO's Revised Kyoto Convention (WCO 2006)**

- **Temporary admission**, where goods can be imported on a temporary basis with partial or full exemption from any customs duties and taxes. Temporary admission procedures are often used to ensure that import duties and tax liabilities are not incurred on the “means of transport” (e.g., the truck transporting goods);
- **Customs transit** without the need to pay duty and taxes on goods:
  - from the point of entry to an approved inland destination;
  - for transport between customs inspection facilities;
  - for transport between two customs approved premises; and
  - for shipments enroute to a third country (i.e., international transit).
- **Deferment** of duty and tax payments by allowing businesses to pay them on a periodic basis (e.g., monthly) instead of for each and every declaration;
- **Customs warehousing**, where goods may be stored without the payment of customs duties;
- Entry into an approved **Customs free zone**, thus treating goods as if they had not been imported;
- **Inward processing relief**, where goods may be brought into the country free from duties and taxes providing that they are used for export processing, manufacturing, or repair;
- **Outward processing relief** where goods may be temporarily exported to another country for manufacturing, processing, or repair and then re-imported with total or partial exemption from import duties and taxes;
- **Drawback** where import duties for goods and materials used in export manufacture are refunded or suspended;



- **Processing for home use**, where manufacturers import items for the manufacture of goods under customs control and pay the import tariff that applies to the finished good, if lower than the tariff rates that would ordinarily apply to the imported manufacturing inputs;
- **Humanitarian relief**, where an emergency has been declared and certain types of goods, subject to strict conditions, may be imported free from import duty and taxes.

A customs facilitations challenge is that businesses can find that compliance requirements for customs facilitations are overly complex. Often, access to customs facilitations is subject to authorisation and guarantee requirements. In many countries, there are ongoing conversations about how access to customs facilitations can be made easier and less burdensome, especially within the context of trusted trade frameworks (WCO 2021). At present, there are still many anecdotes, even in the most developed countries, about how large experienced traders choose to forgo customs facilitations because of their complexity (e.g., Grainger 2016).

## 10 Regulatory co-operation and alignment to mitigate the impact of Non-Tariff Measures

Placing goods onto international markets can face many regulatory hurdles that are not just Customs or transport specific. A dominant trade policy concern is the impact of Non-Tariff Measures (NTMs). These are usually defined as “policy measures other than ordinary customs tariffs that can potentially have an economic effect on international trade in goods, changing quantities traded, or prices or both” (UNCTAD 2010: 99). Standardised NTM classifications distinguish between “technical NTMs” and “non-technical NTMs” (UNCTAD 2019). The former includes sanitary and phytosanitary (SPS) measures (that apply to most agricultural goods and many foods), and Technical Barriers to Trade (TBT) measures (that relate to product standards, amongst others), and pre-shipment inspections (e.g., mandated independent company or agency), amongst other technical NTM measures. Non-technical NTMs include quantitative restrictions (quotas, non-automatic import licensing), price measures, forced logistics or distribution channels, and similar (see Table 2-4).

**Table 2-4: First Tier Non-Tariff Measures (NTMs) classifications; examples**

UNCTAD NTM Classification (UNCTAD 2019)		Examples
Technical Measures (Imports)	A	Sanitary and phytosanitary measures <ul style="list-style-type: none"> <li>• Prohibitions that prevent the import of meat from countries that are not approved because the absence of sanitary hazards cannot be assured;</li> <li>• Pesticide residual testing requirements for fruit and vegetables;</li> <li>• Strict food labelling requirements that must be adhered before goods can be sold.</li> </ul>
	B	Technical barriers to trade <ul style="list-style-type: none"> <li>• Restrictions on the use of potentially dangerous chemicals in the manufacture of children’s toys;</li> </ul>

			<ul style="list-style-type: none"> <li>• Produce sold as Organic (Bio) must comply with applicable certification conditions;</li> <li>• Imported motor vehicles must conform with road safety standards.</li> </ul>
	C	Pre-shipment inspection and other formalities	<ul style="list-style-type: none"> <li>• Goods must be verified by an independent inspection company (e.g., to verify quantity and price) before shipment to the export market;</li> <li>• Restrictions that force importers to use a specified point of entry, as is often the case for the import of live animals and most products of animal origin.</li> </ul>
Non-technical measures (Imports)	D	Contingent trade-protective measures	<ul style="list-style-type: none"> <li>• Anti-dumping duties</li> <li>• Countervailing investigations and duties</li> <li>• Temporary quantitative restrictions</li> </ul>
	E	Non-automatic import licensing, quotas, prohibitions, quantity-control measures, and other restrictions not including sanitary and phytosanitary measures or measures relating to technical barriers to trade	<ul style="list-style-type: none"> <li>• Permit requirements for goods subject to CITES controls;</li> <li>• Permanent, temporary, or seasonal import quotas;</li> <li>• Prohibitions on materials for religious, moral, or cultural reasons.</li> </ul>
	F	Price-control measures, including additional taxes and charges	<ul style="list-style-type: none"> <li>• Import (market) prices that are set by the authorities in the importing country;</li> <li>• Customs surcharges and seasonal duties;</li> <li>• Additional (non-tariff taxes) like import VAT and Excise duties;</li> <li>• Infrastructure fees and surcharges that apply to the use of ports or border crossings.</li> </ul>
	G	Finance measures	<ul style="list-style-type: none"> <li>• A requirement to pay anticipated customs duties in advance, prior to arrival;</li> <li>• Conditions and restriction on the use of foreign currency;</li> <li>• Deposits payable for the use of reusable packaging, e.g., wooden pallets (the deposit is refunded when packaging is returned to specified locations).</li> </ul>
	H	Measures affecting competition	<ul style="list-style-type: none"> <li>• The mandatory use of a national transport service (e.g., shipping line or railway company);</li> <li>• State owned import monopolies.</li> </ul>
	I	Trade-related investment measures	<ul style="list-style-type: none"> <li>• Mandatory local content specifications;</li> <li>• Restrictions that only permit foreign owned companies to export.</li> </ul>
	J	Distribution restrictions	<ul style="list-style-type: none"> <li>• Conditions that restrict distribution to local companies.</li> </ul>

	K	Restrictions on post-sales services	<ul style="list-style-type: none"> <li>• Maintenance services (e.g., for an aircraft engine) must be performed by an approved service provider.</li> </ul>
	L	Subsidies and other forms of support	<ul style="list-style-type: none"> <li>• Government funded trade finance (Credit) on preferential terms;</li> <li>• Price regulations that cap the maximum price for essential items (e.g., cooking oils);</li> <li>• Tax and duty exemptions for a specific industry sector or location (e.g., enterprise zone).</li> </ul>
	M	Government procurement restrictions	<ul style="list-style-type: none"> <li>• Procurement is restricted to domestic suppliers only;</li> <li>• Conditions that require foreign companies to set up a national entity or enter into a joint venture with a national company;</li> <li>• Conditions that compel foreign companies to hire national staff.</li> </ul>
	N	Intellectual property	<ul style="list-style-type: none"> <li>• Registration requirements to safeguard intellectual property, e.g., patents, geographical indicators, copyrights, trademarks;</li> <li>• Procedures to seek assistance in the enforcement of intellectual property, e.g., by law enforcement and border staff.</li> </ul>
	O	Rules of origin	<ul style="list-style-type: none"> <li>• Preferential and Non-preferential rules of origin;</li> <li>• Proofs of origin and linked procedures;</li> <li>• Direct shipment rules.</li> </ul>
Exports	P	Export-related measures	<ul style="list-style-type: none"> <li>• Export formalities, such as those relating to customs;</li> <li>• Export health certificates for meat in line with the requirement of the importing country;</li> <li>• Testing requirements prior to export, such as for diseases in livestock.</li> </ul>

Source: Adapted from UNCTAD (2019)

Compliance with NTM conditions can be challenging and is often perceived to be trade prohibiting where compliance costs make the export sale uncompetitive. NTM related compliance costs are typically incurred in the form of:

- Information costs that relate to the effort of trying to identify and assess the specific requirements for the targeted export markets, and make informed business decisions (information costs);
- Specification costs for any product specific adaptations or modifications in production processes so that the exported goods comply with the requirements of the export market; and
- Conformity assessment costs (e.g., testing, certification, sampling) to prove that products meet the regulatory requirements of their export market (OECD 2017).

Each of these costs (or their combination) are the result of regulatory divergences in requirements and specifications between the exporting and importing markets. Significant facilitation can thus result from

---

**reducing the regulatory distance** between markets. This can be achieved through regulatory alignment and international regulatory co-operation, and might take shape in the form of:

- Countries adopting **good regulatory practices** that reduce diverging practices, or unnecessary duplication amongst trade partners;
- **Mutual recognition** agreements where countries agree to recognise their respective processes and procedures;
- Adopting international **standards** (e.g., for product standards and consumer safety), and countries working together towards common regulatory goals and systems;
- Commitments to **transparency** that ensure clarity about compliance requirements, and also give trade partners (e.g., within the framework of a bilateral or regional trade agreement) confidence that regulatory control objectives have been adequately enforced (e.g., by sharing information and through regular reporting).

(adapted from OECD 2013, 2017).

NTMs frequently manifest themselves in cross-border transport operations in the form of controls and procedures. They are sometimes also referred to as non-customs trade procedures that aim to safeguard prohibitions and restrictions (see Chapter 1, Box 1-3). Strict registration, authorisation, licensing, certification, or permission requirements apply. Procedural obstacles (see below) can be significant.

## 11 The facilitation of trade and customs procedures

Trade and customs procedures can give rise to many operational frustrations and transaction costs between business operators and applicable regulatory authorities. A key concern are the many documents, or their electronic equivalent, that need to be prepared, processed, shared, and handled. They include:

- **Commercial documents**, especially commercial invoices;
- **Transport documents**, such as the bill of lading, standard shipping notes, consignment notes, cargo receipts, and cargo manifests;
- **Cargo handling documents**, such as packaging lists, labels, dangerous goods declarations, loading lists, loading plans;
- **Terminal instructions (port or border)**, such as slot applications, arrival notifications, and departure confirmations;
- **Customs documents**, such as an import, export and transit declaration, pre-departure or pre-arrival notifications, and accompanying transit documents;
- **Authorisations, certificates and licences**, such as those issued by customs and other government agencies where control is conditional on additional requirements – including those that apply to preferential origins, permit the shipment of restricted goods, or needed for SPS type controls (e.g., veterinary health certificate, phytosanitary certificate, fumigation certificate), and other NTMs;
- **Financial documents**, such as payment instructions, guarantees, and letters of credit;
- **Insurance documents**, including certificates, whether arranged on an open policy basis, annual basis, single voyage basis, or under a freight forwarder's open cover facilities.

(See also Figure 1-6)

Practitioners at the front-end of trade and custom compliance operations can be quick to list all kinds of issues that might merit urgent attention (see Box 2-6). The phrase “stuck at Customs” – even if Customs is not necessarily to blame – is often used when referring to border related delays that arise from incomplete documentation and inefficient administration. Another analogy is that of a “bottleneck”, especially if inefficient administration leads to a slowing down or halt of trade and traffic flows. Some authors equate the challenge of facilitating trade flows to that of plumbing (e.g. Staples 2002). The objective is to “unblock” any obstacles; leakages that drain the system, in terms of costs, must be fixed.

**Box 2-6: Common trade flow inhibiting issues that merit attention**

1. Excessive paperwork and authorisation requirements;
2. Long queues at the government offices responsible for stamping paperwork;
3. Different ministries demand declarations that are similar or overlapping in content;
4. Checks at the border are unnecessarily long;
5. Border crossing may only be operational between 09:00 and 17:00 – or even worse, have different operating hours to their counterparts across the border;
6. Border staff may decide to ‘close shop’ during lunch breaks, causing backlogs and further delay;
7. Customs officers may be unnecessarily heavy handed in order to encourage payment for ‘special’ treatment;
8. Government executives may display a lack of commercial awareness, failing to appreciate how their actions may impact on the economy at large;
9. Operators may not be aware of the governing rules and procedures and have no avenue to obtain such information: often compliance requirements are established by costly trial and error;
10. Key publications such as the customs tariff are not publicly available;
11. Frontline staff may have not been briefed about new procedures, subsequently implementation may vary significantly throughout the country;
12. Capacity at official labs to check health risk may be severely limited, leading to backlogs and very long delays (sometimes more than one or two months);
13. Government veterinary authorities may be deemed not suitably capable by their counterparts in key export markets, effectively rendering exports to these countries illegal;
14. Paper documents go missing, especially when travelling with the goods (for example, in the driver’s cab);
15. Rejected declarations because reference numbers in supporting documents contain errors (e.g., the number “8” can easily be confused with the letter “B”);
16. Correction mechanisms to amend declarations or erroneous information may not exist – or are very cumbersome unless facilitation monies have been paid;
17. Appeal mechanisms to challenge decisions made by executive officers are nonexistent or very time consuming;
18. Delay because declarations are processed manually rather than electronically;
19. Procedures to enable inland clearance are unavailable;
20. The operational practices of one government agency contradict those of another.

Source: Grainger and McLinden (2013)

Procedural obstacles can, as already outlined, arise within the context of transport operations (such as between shippers and transport operators, or between transport operators and transport regulators). They are also often associated with NTMs where compliance requirements need to be considered days, if not weeks or months, prior to shipment, as is often the case with SPS procedures (see, for example, Figure 1-7). If too complex or burdensome, trade and customs procedures are often trade-disabling. Procedural impediments can also be found across the supply chain (see, for example, Figure 1-6) amongst commercial parties as well as with the applicable border agencies. Subsequent ideas to help reduce procedural obstacles to the cross-border flow of goods are plentiful (see UNECE 2023b) – and many of which are supported by applicable international conventions and agreements (see Chapter 4). Their aims, as outlined by Grainger (2021) are to:

- Make international trade and cross-border processes more efficient, less costly, and easier;
- Harness data-sharing technologies to best effect;
- Improve co-ordination and co-operation between the various parties involved in cross-border logistics operations;
- Assess and evaluate frictions in cross-border logistics operations, hold parties accountable to their promises and obligations, and to learn and innovate.

And concern:

- The simplification and harmonisation of applicable rules and procedures;
- The modernisation of trade compliance systems;
- Best practices in the administration and management of trade and customs procedures; and
- The institutional mechanisms to safeguard ongoing commitment to reducing trade-related compliance costs.

(See also Table 2-5)

**Table 2-5: Topics within trade facilitation**

<b>1. The simplification and harmonisation of applicable rules and procedures</b>
<b>Harmonisation of Procedures</b> For example: the adoption and implementation of international conventions and instruments; and the harmonisation of controls applied by the various different government agencies.
<b>Avoidance of Duplication</b> For example: regional or bilateral agreements to recognise export controls in lieu of import controls; shared inspection facilities, for instance for customs officers, veterinarians, plant health inspectors, and health inspectors; and the formal recognition of private sector controls in lieu of official checks where practical and in the public interest (e.g., as is often the case for supply chain security or for compliance with product standards).
<b>Accommodate business practices</b> For example: to accept commercial documents (such as the invoice) in lieu of official documents; and to allow goods to be cleared inland, away from the bottlenecks at ports and border-posts (e.g.; under movement, transit, or post clearance control arrangements).
<b>2. The modernisation of trade compliance systems</b>
<b>Solutions</b>

For example: use of electronic information systems, the Single Window concept, electronic customs systems, port community systems, websites, and information portals.
<b>Standardisation</b> For example: electronic standards for the exchange of information between computers; paper document standards; barcode standards; document referencing conventions; and standards for the description of locations.
<b>Sharing of experiences</b> For example: training and awareness building; development of toolkits and implementation guides; collaborative and open-source system developments.
<b>3. Administration and Management</b>
<b>Service standards</b> For example: public service level commitments; publish and make available applicable rules and procedures; produce plain language guides; develop online websites; keep the customs tariff up to date; provide for efficient appeal mechanisms.
<b>Management principles</b> For example: enforcement of controls in proportion to the risk against which they seek to protect; selective (risk based) controls that reward compliant behaviour (e.g., preferential treatment at the border).
<b>4. Institutional mechanisms and tools</b>
For example: establishing a national trade facilitation body; produce and publish whitepapers setting out reform ambitions and inviting stakeholder comments.

Source: adapted from Grainger (2011)

Inhibiting trade and customs procedures can be identified and analysed in many ways. The International Trade Centre, for example, actively captures procedural obstacles in its series of NTM Surveys<sup>12</sup> by reference to the following categories: administrative burdens related to goods; information or transparency issues; discriminating behaviour of officials; time constraints; informal or unusually high payments; lack of sector specific facilities; lack of recognition or accreditations; and “other” (Table 2-6). ITC reports about procedural NTM obstacles are available for several OSCE participating States and UNECE member countries. The analysis of procedural obstacles, including those with Customs, also feature prominently in the World Bank’s practical toolkit for “Trade and Transport Facilitation Assessment” (World Bank 2010) and the UNESCAP’s adaptation of standard Business Process Analysis (BPA) methodology (UN ESCAP 2012). The World Customs Organisation offers an assessment approach that focuses on the time it takes to complete customs release procedures at border crossings and gateway facilities – the so-called Time Release methodology (Matsuda 2012; WCO 2018).

**Table 2-6: International Trade Centre Classification of Procedural Obstacles in its NTM surveys**

<b>A</b>	<b>Administrative burdens related to regulations</b>	A1. Large number of different documents; A2. Documentation is difficult to fill out; A3. Difficulties with translation of documents from or into other languages; A4. Numerous administrative windows/organisations involved, redundant documents.
----------	--	---

<sup>12</sup> <https://ntmsurvey.intracen.org/publications/itc-series-on-ntms/>

<b>B</b>	<b>Information/transparency issues</b>	B1. Information on selected regulation is not adequately published and disseminated; B2. No due notice for changes in selected regulation and related procedures; B3. Selected regulation changes frequently; B4. Requirements and processes differ from information published.
<b>C</b>	<b>Discriminating behaviour of officials</b>	C1. Arbitrary behaviour of officials regarding classification and valuation of the reported product; C2. Arbitrary behaviour of officials with regards to the reported regulation.
<b>D</b>	<b>Time constraints</b>	D1. Delay related to reported regulation; D2. Deadlines set for completion of requirements are too short.
<b>E</b>	<b>Informal or unusually high payment</b>	E1. Unusually high fees and charges for reported certificate/regulation; E2. Informal payment, e.g., bribes for reported certificate/regulation.
<b>F</b>	<b>Lack of sector-specific facilities</b>	F1. Limited/inappropriate facilities for testing; F2. Limited/inappropriate facilities for sector-specific transport and storage, e.g., cold storage, refrigerated trucks; F3. Other limited/inappropriate facilities, related to reported certificate/regulation.
<b>G</b>	<b>Lack of recognition/accreditations</b>	G1. Facilities lacking international accreditation/recognition; G2. Other problems with international recognition, e.g., lack of recognition of national certificates.
<b>H</b>	<b>Other</b>	H1. Other procedural obstacles, please specify.

Source: International Trade Centre, various; e.g. ITC (2018)

The underlying **principle** of such assessments is that by identifying procedural obstacles – making them visible – policymakers can take the necessary actions. Such actions should be informed by stakeholder needs (e.g., Grainger and Shaw 2018) that may be identified through detailed trade facilitation needs assessments – such as those prepared by the UNECE<sup>13</sup>. **Business consultation and dialogue is often considered to be essential** (Grainger 2010) and should ideally be supported by dedicated institutions like National Trade Facilitation Committees, as required by the WTO Trade Facilitation Agreement (WTO 2014), or dedicated trade procedures committees – so call PRO Committees (Box 2-7) in line with the UN CEFAC Recommendation No.4 (UNECE 2015). The notion is that informed consultation and dialogue amongst stakeholders is essential for unearthing procedural and operational impediments, such as those listed in Box 2-6. PRO Committees or National Trade Facilitation Committees are also good organisations for identifying appropriate solutions, and for assisting in their implementation (Grainger 2014). The underlying **principle** as outlined in Figure 2-1, is:

- To identify how current procedures – the “as is” – can be improved;
- Work out how demands for the “should be” or “could be” can become a reality, i.e., the “to be”;

<sup>13</sup> <https://unece.org/trade/studies-regulatory-and-procedural-barriers-trade>



- Commit to continuous improvement by reviewing the “to be” once implemented, and thus becomes the new “as-is”.

**Box 2-7: UNECE Recommendation No 4 “National Trade Facilitation Bodies”; Extracts**

6. The establishment of an NTFB can significantly benefit the advancement of a national trade facilitation policy. Some of the key advantages that an NTFB can bring are to:

- Help a country to compete internationally;
- Reduce the costs of international trade (both for Government and Trade);
- Adopt the most efficient and effective best practices (government procedures and business processes aligned to international standards);
- Bring public and private sector together to adopt and support trade facilitation practices.

7. An NTFB can establish collaboration between the public and private sector for the design of measures to eliminate or drastically reduce the barriers to efficient and effective trading processes. This approach to solving problems in the international supply chain is greatly improved if the NTFB works with similar organizations at the regional, sub-regional and international levels, and participates in the work of international bodies dedicated to trade facilitation and to the development of international trading standards.

...

10. The United Nations Centre for Trade Facilitation and Electronic Business (UN/CEFACT) recommends that Governments establish and support national trade facilitation bodies with balanced private and public sector participation.

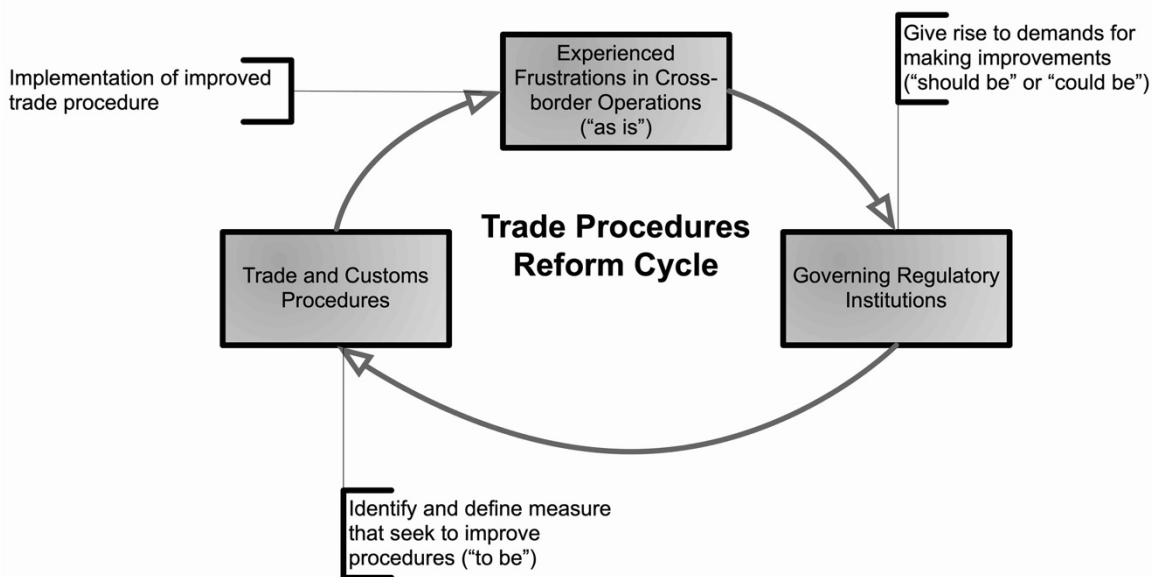
...

24. The following diagram provides a non-exhaustive list of public and private actors that may become members of an NTFB ...



Source: UNECE (2015)

**Figure 2-1: Trade Procedures Reform Cycle**



Source: adapted from Grainger (2010)

The underlying objective of such efforts is to minimise procedural obstacles and their impacts on businesses as well as their impact on the cost of enforcement and administration. Procedural reform opportunities can usually be identified by subscribing to the UNECE's four **fundamental trade facilitation principles** that are highlighted in the UNECE trade facilitation implementation guide (UNECE 2023d), amongst other UNECE and UN CEFAC publications. These are transparency, simplification, harmonisation, and standardisation (Box 2-8). A particular focal point in the application of these principles is modernisation and utilising the opportunities that innovations in information technology provide. Such technologies are often reliant on harmonised and standardised procedures and data requirements, documents, and approaches to information technology. The principles discussed in UN CEFAC Recommendation 18 (UNECE 2002) and outlined in Box 2-9 apply.

**Box 2-8: The four fundamental principles of trade facilitation; UNECE Implementation Guide; Extract**

1. **Transparency** within government promotes openness and accountability of a government's and administration's actions. It entails disclosure of information in a way that the public can readily access and use it. This information may include laws, regulations and administrative decisions of general application, budgets, procurement decisions, and meetings. Regulatory information should be published and disseminated, when possible, prior to enforcement to allow parties concerned to take note of it and make necessary changes. Furthermore, relevant stakeholders and the general public should be invited to participate in the legislative process, by providing their views and perspectives on proposed laws prior to enactment;
2. **Simplification** is the process of eliminating all unnecessary elements and duplications in trade formalities, processes, and procedures. It should be based on an analysis of the current, "As-Is", situation;
3. **Harmonisation** is the alignment of national procedures, operations, and documents with international conventions, standards, and practices. It can come from adopting and

---

implementing the same standards as partner countries, either as part of a regional integration process, or as a result of business decisions;

4. **Standardisation** is the process of developing formats for practices and procedures, documents, and information internationally agreed by various parties. Standards are then used to align and, eventually, harmonise practices and methods.

To achieve these principles, full cooperation between government authorities and the business community is essential.

Source: UNECE (2023d)

**Box 2-9: General principles concerning trade facilitation procedures and data requirements, documents and information technology; UN CEFAC Recommendation 18 (UNECE 2002)**

Procedures and data requirements

- Procedures should be kept to a minimum.
- Procedures should be commercially oriented and relate more closely to trade and transport requirements.
- Procedures should be simplified, harmonised, and should comply with international standards.
- Data requirements should be kept to a minimum.
- Data requirements should be simplified, harmonised, and standardised to ease the information flow.
- Laws, regulations and other information regarding procedures and data requirements should be readily accessible to all parties concerned.

Documents

- Documentation requirements should be kept to a minimum;
- Documents should [follow a standardised layout]... in line with [the] UN Layout Key for Trade Documents (UNECE 2017b).
- The use of plain paper, documents produced, or appearing to be produced by reprographic automated or computerised systems should be acceptable.
- The presentation of supporting documents should not be required.
- Hand-written signatures and their equivalents should be avoided as far as possible (e.g., on invoices) on paper documents.

Information technology

- The use of information and communication technology and the resulting electronic solutions should be encouraged.
- The use of electronic documents and standard format should be supported.
- The requirement for authentication can be fulfilled by means of technological solutions and need not be accompanied by a signed and/or authenticated paper document.

The use of information technology also allows stakeholders to reimagine procedures that may have been originally developed with paper documents in mind. A core ambition for many trade facilitation advocates is the adoption of the **“single window” principle**, which holds that all trade related information need only be submitted once at a single-entry point, for example, via one electronic trade single window (UNECE 2020). Such electronic trade infrastructure can provide for radically streamlined procedural and

---

administrative arrangements providing that it does not simply seek to just replicate paper processes, but also transforms administrative practices. It is an **established principle of modernisation** that information technology should not seek to make inefficiency go faster (e.g., by replacing paper procedures with their electronic equivalent), efforts should seek opportunities to reengineer (Hammer 1990) and make procedures more efficient by weeding out redundant processes and enabling automation.

## 12 Trade finance and payment services

The expectation for payment is what drives commercial trade. Access to payment infrastructure and standard payment instrument is thus a **prime prerequisite** for any international trade activity. Although there have been many recent innovations in this area, especially in e-commerce as well as through online banking, procedural obstacles can be prohibitive in some parts of the world. In addition to payment, access to export finance can pose similar challenges – especially where financial service providers and their procedures discriminate unfairly against company size or gender, amongst other issues. The underlying **principle** is that any procedural obstacles should be assessed, and where possible eliminated or streamlined to make sure that their impact is minimal, if at all. Approaches might be direct through the hand of the regulator by fostering measures that reduce procedural obstacles, or indirect by encouraging innovation (e.g., for how payment can be made) and competition (e.g., between financial institution and allowing new entrants).

Another theme here are official procedures that are dependent on the payment of fees and charges. The **principles** already outlined for customs, trade, and transport procedures apply here, too. Procedures for the payment of fees should be designed in the simplest and efficient of ways without disrupting trade flows. This can be achieved, for example, by designing systems that: allow to make payments for multiple services (such as for customs duties, road tolls, and inspection fees) via one interface; permit electronic bank transfers; and provide for automatic payment, payment in advance, or against credit. Likewise, the cost of compliance with procedures dependent on financial securities (bonds) can be significantly reduced if exemptions (or reductions) are granted to trusted, pre-approved businesses. The underlying **principle** here is that financial securities mandated by Customs or other government agencies should be proportionate to the risk of non-compliance; and for the most trustworthy of operators, they may be eliminated.

## 13 Education and training

Compliance with applicable regulatory trade and transport procedures is dependent on operators being aware of, and know how to comply with, them: a fact that is often overlooked. Trade facilitation transparency measures – such as those of the WTO Trade Facilitation Agreement (see Chapter 4) – often advocate the implementation of websites and information portals. But the sheer complexity of trade and transport related considerations can still be daunting for potential traders. Thus, for many, facilitation is also about giving potential exporting businesses hands on assistance in their journey towards becoming successful exporters. This might be through public funded programmes which assist businesses directly (e.g., telephone helplines, mentoring services, training workshops); it might be through fostering formal

---

education and training programmes that give employers access to qualified staff; or through private sector initiatives that seek to raise awareness of trade opportunities – especially in e-commerce through the service of online marketplaces and express parcel providers. International organisations may offer training programmes and tools to help raise awareness about facilitation opportunities (Box 1-7). In-person or online facilitation training is provided regularly by the International Trade Centre and UNCTAD. Specific to transport, there is also the LearnITC platform<sup>14</sup>. Noteworthy, too, is the work of the OSCE Border Management Staff College which, amongst other activities, advocates the OSCE’s Border Security and Management Concept (Box 2-10). Also noteworthy are the professional training standards for customs professionals (WCO 2019), amongst others (see Box 1-6).

**Box 2-10: OSCE Border management Staff College; Border Security and Management Concept; extracts**

Based in Tajikistan at the OSCE compound, the Border Management Staff College (BMSC) works to enhance the knowledge of senior border security and management officials while promoting greater co-operation and exchange of information among them. The college draws on the OSCE Border Security and Management Concept (OSCE 2005) which aims to:

- “4.2 To reduce the threat of terrorism, including by preventing cross-border movement of persons, weapons and funds connected with terrorist and other criminal activities;
- 4.3 To prevent and repress transnational organized crime, illegal migration, corruption, smuggling and trafficking in weapons, drugs and human beings;
- 4.4 To promote high standards in border services and competent national structures;
- 4.5 To promote dignified treatment of all individuals wanting to cross borders, in conformity with relevant national legal frameworks, international law, in particular human rights, refugee, and humanitarian law, and relevant OSCE commitments;
- 4.6 To create beneficial conditions for social and economic development in border territories, as well as for the prosperity and cultural development of persons belonging to all communities residing in border areas, with access to all opportunities;
- 4.7 To foster prospects for joint economic development and help in establishing common spaces of freedom, security and justice in the OSCE area;
- 4.8 To ensure the security of the international transport circuit for supply of commodities.”

Key principles of co-operation are:

- “5. The participating States agree that their common prosperity and security can be enhanced through an increase in beneficial cross-border movements of people, goods, services and investments.
- 6. Issues of a regulatory nature raised by cross-border movements can best be addressed through direct co-operation between the border services and competent national structures of the participating States, based on relevant agreements. This co-operation should take place at the bilateral, regional and multilateral levels.
- 7. Sovereign national authorities, and in particular the border services responsible on each side of the border, have the best knowledge of the issues at hand. Cross-border dialogue, transparency and confidence-building constitute the first logical steps towards generating solutions with added value to the benefit of all.

---

<sup>14</sup> <https://learnitc.unece.org>

8. Borders in the OSCE are not uniform. Every border has a particular character and may call for specific policy choices. Each participating State has the sovereign right to choose how to secure and manage its borders, taking into account relevant political, military, economic and social considerations.”

## 14 Summary Analysis

This chapter has introduced a broad range of cross-border facilitation themes and principles, which are aimed at:

- Trade and transport capacity building, including the development and co-ordination of hard and soft transport and trade infrastructure;
- The simplification, harmonisation, standardisation, modernisations, and transparency of applicable procedures;
- Activities and practices aimed at improving the performance of border-crossing facilities and trade gateways.

For **transport facilitation**, the principles are as follows:

- The development of cross-border transport infrastructure must be co-ordinated to safeguard connectivity between trade partners as well as with domestic transport infrastructure;
- The use of transport systems is subject to regulation that should be co-ordinated and harmonised with trade partners; transport specific international organisations (table 2-2) lend instruments and recommendations that can be adopted and followed;
- Efforts should be made to identify impediments resulting from inefficient transport procedures. Solutions that reduce or remove their impact should be sought;
- Transit procedures (international and domestic) should be accommodated in the most cost-effective way. The TIR system offers a model that is used in many countries (Box 2-3).

For **border and border crossings management**, the principles are as follows:

- Goods and vehicles should not be “stuck at the border”; touchpoints between regulators and business operators, and subsequent impacts upon cross-border trade flows are to be minimised;
- Trade, customs, and transport authorities must work together to facilitate the flow of goods across borders and safeguard regulatory control objectives. Such co-operation and co-ordination might be at internal, national, and international (cross-border) levels;
- Design requirements for border crossings and trade gateway facilities need to be considered so that control functions can be performed efficiently with minimal disruption to trade flows. Industrial engineering and operations management principles concerning layout design that are dependent on strategic requirements (including facilitation), handling requirements, processes, flows, space requirements, and staff requirements must be considered.

For **Customs facilitations**, the principles are as follows:

- Countries should take a harmonised approach to customs legislation that is in line with the WCO Revised Kyoto Convention;
- Standard customs procedures (Box 2-5) with fiscal benefits ensure that export industries can compete internationally irrespective of national import tariffs.

For **non-tariff measures**, the principles are as follows:

- Regulatory divergence between markets should be reduced. This can be achieved through co-ordination and regulatory alignment;
- The cost impact of strict registration, authorisation, licensing, certification, or permission requirements can be reduced through the facilitation of applicable procedures (see below).

The principles for the **facilitation of trade and customs procedures** are:

- Procedural obstacles and impediments to trade should be reduced or removed;
- Dialogue and co-ordination between stakeholders are essential; National Trade Facilitation committees (as required by the WTO Trade Facilitation Agreement) or PRO Committees in line with UN CEFACT Recommendation No.4) are also essential;
- Transparency, simplification, harmonisation, and standardisation are core principles, though many others, especially about the use of modern ICT, apply.

For **trade finance and payment services**, the principles are as follows:

- Efficient access to payment infrastructure is a prime prerequisite for international trade activity. Procedural obstacles to accessing international payment solutions should be removed. Approaches might be direct through the hand of the regulator by fostering measures that reduce procedural obstacles, or indirect by encouraging innovation and competition;
- Procedural obstacles should also be removed for the payment of official fees and charges;
- Financial securities mandated by Customs or other government agencies should be proportionate to the risk of non-compliance; and for the most trustworthy of operators, they may be eliminated.

For **education and training**, the principles are as follows:

- compliance with applicable regulatory trade and transport procedures is dependent on operators who are aware of them and know how to comply with them. It is thus important that compliance requirements can be easily identified (e.g., via trade information portals);
- Training and support programmes to help develop cross-border trade capacity are essential.

It is likely that additional themes are added to conversations about how cross-border trade flows can be better facilitated. Writing in 2023, there are the lessons from the Covid-19 pandemic (CCSA 2020; UNECE 2021a, 2023e) to reflect upon, as well as the many impacts that are unfolding in response to the war in Ukraine (e.g., Guterres 2023; OECD 2023; WCO 2022b). Foreseeable, too, is the need to accommodate ongoing pressures for mitigating the impacts of climate change, including, for example, pathways towards environmentally friendlier transport, logistics, and production systems (e.g., McKinnon 2016; UNECE 2023a). Poverty reduction, capacity building, and economic co-operation are always relevant (e.g., Azevêdo 2017). But with people made vulnerable from conflict and other catastrophes, the facilitation of cross-border humanitarian logistics operations also matter (Grainger et al. 2019; UNECE 2021b). The UN

---

Sustainable Development Goals (SDGs) can lend some orientation (UN 2015; UNECE 2022b) about current and unfolding thematic concerns. The many principles summarised in this chapter apply.

Readers might wish to reflect on **ongoing** cross-border facilitation themes (as outlined in this Chapter) and any **foreseeable** themes that may impact on cross-border trade flows. In this context, it is important to consider how well the principles reviewed in this chapter are applied, and whether there is scope to draw further on the reviewed principles. Readers may also wish to identify new principles which the literature has not yet considered at the time of writing.

## 15 References

- 3SI (2022), 'Joint Declaration of the Seventh Summit Three Seas Initiative', Available at <https://3seas.eu/about/joint-declaration-of-the-seventh-three-seas-initiative-summit>.
- ACTS (2023), 'ASEAN Customs Transit System', Available at <https://acts.asean.org> [Accessed 3 Jan 2023].
- Azevêdo, Roberto (2017), 'WTO Press Conference — Entry into force of Trade Facilitation Agreement', (Geneva: World Trade Organizations).
- Batista, Luciano (2012), 'Translating trade and transport facilitation into strategic operations performance objectives', *Supply Chain Management: An International Journal*, 17 (2), pp.124 - 37.
- CCSA (2020), 'How COVID-19 is changing the world: a statistical perspective Volume II', (Geneva: Committee for the Coordination of Statistical Activities).
- Davis, Donna. F. and Friske, Wesley (2013), 'The role of public-private partnerships in facilitating cross-border logistics: A case study at the U.S./Canadian border', *Journal of Business Logistics*, 34 (4), 347-59.
- DPDHL (2022), 'GoTrade 2022 Summit Report: Fostering sustainable and inclusive trade; recommendations for policy makers and practitioners', (Bonn).
- European Commission (2010), 'Guidelines for Integrated Border Management in European Commission External Cooperation', EuropeAid, (Brussels: European Commission).
- (2021), 'Transit Manual', TAXUD, (Brussels: European Commission).
- European Council (1987), 'Council Decision of 15 June 1987 concerning the conclusion of a Convention between the European Community, the Republic of Austria, the Republic of Finland, the Republic of Iceland, the Kingdom of Norway, the Kingdom of Sweden and the Swiss Confederation on a common transit procedure', *Official Journal of the European Union*, 87/415/EEC.
- GATT (1947), 'The General Agreement on Tariffs and Trade', (WTO).
- Grainger, Andrew (2010), 'The Role of the Private Sector in Border Management Reform', in Gerard McLinden, et al. (eds.), *Border Management Modernization* (Washington: World Bank), 157-74.
- (2011), 'Trade Facilitation: a conceptual review', *Journal of World Trade*, 45 (1), 39-62.
- (2014), 'The WTO Trade Facilitation Agreement: Consulting the Private Sector', *Journal of World Trade*, 48 (6).
- (2016), 'Customs Management in Multinational Companies', *World Customs Journal*, 10 (2).
- (2021), *Cross-border logistics operations : effective trade facilitation and border management* (London: Kogan Page).
- Grainger, Andrew and McLinden, Gerard (2013), 'Trade facilitation and development', in Arvid Lukauskas, Robert M. Stern, and Gianni Zanini (eds.), *Handbook of Trade Policy for Development* (Oxford University Press).
- Grainger, Andrew and Shaw, Duncan (2018), 'A method for measuring trade facilitation', *WCO News*, (85), 21-23.



- 
- Grainger, Andrew, Rundle, Jamie M., and Ahsen, Saad Raafay (2019), 'Customs and Humanitarian Logistics', *Global Trade and Customs Journal, Volume 14, Issue 4, 14 (4)*, 154-68.
- Guterres, António (2023), 'Secretary-General's press encounter in Kyiv, Ukraine [as delivered; 8th Mar 2023]', (Kyiv: United Nations).
- Hammer, Michael (1990), 'Reengineering Work: Don't Automate, Obliterate', *Harvard Business Review*, 68 (4), 104.
- ICAO (2022), 'Annex 9 to the Convention on International Civil Aviation: Facilitation (16th edition)', International Civil Aviation Organization, (Montréal: ICAO).
- ICC (2005), 'The need for investment in port and freight transportation infrastructure', (Paris: International Chamber of Commerce).
- IMO (1965), 'Convention on Facilitation of International Maritime Traffic (FAL) (as amended)', International Maritime Organizations, (London: IMO).
- (2018), 'Resolution FAL.13 (42): Revised guidelines on the prevention of access by stowaways and the allocation of responsibilities to seek the successful resolution of stowaway cases', International Maritime Organization, (London: IMO).
- IRU (2023), 'Making freight truly paperless: e-CMR', Available at <https://www.iru.org/what-we-do/facilitating-trade-and-transit/e-cmr> [Accessed 3 Jan 2023].
- ITC (2018), 'Kyrgyzstan: Company Perspectives; an ITC series on non-tariff measures', (Geneva: International Trade Centre).
- Levinson, Marc (2006), *The Box: How the Shipping Container Made the World Smaller and the World Economy Bigger* (Princeton: Princeton University Press).
- Matsuda, Shingo (2012), 'The Time Release Study as a performance measurement tool for a supply chain and an international corridor', *World Customs Journal*, 6 (1), 79-92.
- McKinnon, Alan (2016), *Decarbonizing Logistics: Distributing Goods in a Low Carbon World* (London: Kogan Page).
- Murray, Carole, et al. (2012), *Schmitthoff: the law and practice of international trade* (Twelfth edn.; London: Sweet & Maxwell).
- OECD (2012), 'Mapping global value chains [TAD/TC/WP/RD(2012)9]', Trade and Agriculture Directorate, (Paris: Organisation for Economic Co-operation and Development).
- (2013), *International Regulatory Co-operation: Addressing Global Challenges* (Paris: Organisation for Economic Co-operation and Development).
- (2017), *International Regulatory Co-operation and Trade: Understanding the Trade Costs of Regulatory Divergence and the Remedies* (Paris: Organisation for Economic Co-operation and Development).
- (2023), 'Statement by the OECD Secretary-General on Ukraine [24Feb2023]', (Paris: Organisation for Economic Co-operation and Development).
- OSCE (2005), 'OSCE Border Security and Management Concept: Framework for Co-operation by the OSCE Participating States', Ministerial Council, (Ljubljana: Organization for Security and Co-operation in Europe).
- OSCE and UNECE (2012), 'Handbook of Best Practices at Border Crossings – A Trade and Transport Facilitation Perspective', (Vienna: Organization for Security and Co-operation in Europe).
- Poutiainen, Mika (2015), 'Managing land borders, the innovative Finnish model', *WCO news*, February (76), 12-16.
- Slack, Nigel, Brandon-Jones, Alistair, and Burgess, Nicola (2022), *Operations Management* (Pearson).
- Staples, Brian Rankin (2002), 'Trade Facilitation: Improving the Invisible Infrastructure', in Bernard Hoekman, Aaditya Mattoo, and Philip English (eds.), *Development, Trade, and the WTO: A Handbook* (Washington: World Bank), 139-48.
- Tompkins, James A. (2010), *Facilities planning* (Fourth edn.; Chichester: Wiley).

- 
- UN (1950), 'Protocol amending the Convention signed at Brussels, on 5 July 1890, concerning the creation of an International Union for the Publication of Customs Tariffs as well as the Regulations for the execution of the Convention instituting an International Bureau for the publication of customs tariffs, and the Memorandum of signature', (Belgium: United Nations).
- (1956), 'Convention on the contract for the international carriage of goods by road (CMR)', United Nations, (Geneva).
- (2015), 'Transforming our World: the 2030 Agenda for Sustainable Development', (New York, Geneva: United Nations).
- UN ESCAP (2012), 'Business Process Analysis Guide to Simplify Trade Procedures', (Bangkok: United Nations).
- UNCTAD (2010), 'Non-Tariff Measures: Evidence from Selected Developing Countries and Future Research Agenda', (Geneva: United Nations).
- (2019), 'International Classification of Non-tariff Measures (2019 Version)', (Geneva: United Nations).
- UNECE (1982), 'International Convention on the Harmonization of Frontier Controls of Goods', (Geneva: United Nations).
- (2002), 'Recommendation No 18: Facilitation Measures Related to International Trade Procedures', United Nations Centre for Trade Facilitation and Electronic Business, (Geneva: United Nations).
- (2015), 'Recommendation 4: National Trade Facilitation Bodies', United Nations Centre for Trade Facilitation and Electronic Business, (Geneva: United Nations).
- (2017a), 'Transport Trends and Economics 2016- 2017: Innovative ways for Financing Transport Infrastructure', Inland Transport Committee, (Geneva: United Nations).
- (2017b), 'Recommendation No.1: United Nations Layout Key for Trade Documents Recommended Practice and Guidelines', United Nations Centre for Trade Facilitation and Electronic Business, (Geneva: United Nations).
- (2018a), 'TIR Handbook: Customs Convention on the international transport of goods under cover of TIR carnets (TIR Convention, 1975)', (Geneva: United Nations).
- (2018b), 'eCMR ExecGuide', United Nations Centre for Trade Facilitation and Electronic Business, (Geneva: United Nations Economic Comision for Europe).
- (2020), 'Recommendation No.33 Recommendation and Guidelines on Establishing a Single Window', United Nations Centre for Trade Facilitation and Electronic Business, (Geneva: United Nations).
- (2021a), 'Rcommendation No. 47: Pandemic Crisis Trade-Related Response', United Nations Centre for Trade Facilitation and Electronic Business, (Geneva: United Nations).
- (2021b), 'Recommendation No. 44: Cross-Border Facilitation Measures for Disaster Relief', United Nations Centre for Trade Facilitation and Electronic Business, (Geneva: United Nations).
- (2022a), 'Inland Transport Committee (ITC) Strategy until 2030', (Geneva: United Nations).
- (2022b), 'Sustainable Inland Transport Connectivity Indicators: Understanding the performance of road, rail, inland waterway, and inter-modal transport systems', (Geneva: United Nations).
- (2023a), 'Climate Change and Sustainable Transport', Avaialble at <https://unece.org/transport/climate-change-and-sustainable-transport> [Accessed 14 Mar 2023].
- (2023b), 'Trade Facilitation Implementation Guide: Establishing a Single Window - itinerary', Avaialble at <http://tfig.unece.org/contents/itinerary-02-start.html> [Accessed 5 Feb 2023].
- (2023c), 'International Transport Infrastructure Observatory', Avaialble at <https://unece.org/international-transport-infrastructure-observatory> [Accessed 23 Feb 2023].
- (2023d), 'Trade facilitation - principles and benefits', Avaialble at <http://tfig.unece.org/details.html> [Accessed 25 Jan 2023].

- 
- (2023e), 'Observatory on Border Crossings Status due to COVID-19 Home', Available at <https://wiki.unece.org/display/CTRBSBC/Observatory+on+Border+Crossings+Status+due+to+COVID-19+Home> [Accessed 25 Feb 2023].
- (2023f), 'Summary List of International UNECE Transport Agreements and Conventions', Available at <https://unece.org/list-agreements> [Accessed 5 Jan 2023].
- WCO (2006), 'Revised Kyoto Convention; International Convention on the Simplifications and Harmonisation of Customs Procedures', (Brussels: World Customs Organisation).
- (2015a), 'Coordinated Border Management', *WCO news*, February (76).
- (2015b), 'Coordinated Border Management Compendium', (Brussels: World Customs Organization).
- (2017), 'Transit Guidelines', (Brussels: World Customs Organisation).
- (2018), 'Guide to measure the time required for the release of goods (Version 3)', (Brussels: World Customs Organization).
- (2019), 'PICARD Professional standards', (Brussels: World Customs Organisation).
- (2021), 'SAFE Framework of Standards (2021 edition)', (Brussels: World Customs Organization).
- (2022a), 'List of the Contracting Parties to the Revised Kyoto Convention', (updated 23 September 2019) Available at [http://www.wcoomd.org/en/Topics/Facilitation/Instrument%20and%20Tools/Conventions/pf\\_revised\\_kyoto\\_conv/Instruments](http://www.wcoomd.org/en/Topics/Facilitation/Instrument%20and%20Tools/Conventions/pf_revised_kyoto_conv/Instruments) [Accessed 30 Dec 2022].
- (2022b), 'WCO Secretary General issues statement on Ukraine [09Mar2023]', (Brussels: World Customs Organization).
- (2022c), 'WCO Customs Risk Management Compendium', Available at <https://www.wcoomd.org/en/Topics/Facilitation/Instrument%20and%20Tools/Tools/Risk%20Management%20Compendium> [Accessed 9 Dec 2022].
- Widdowson, David (2005), 'Managing risk in the customs context', in Luc De Wulf and Jose B Sokol (eds.), *Customs Modernization Handbook* (Washington: World Bank), 91-99.
- World Bank (2010), 'Trade and Transport Facilitation Assessment: A Practical Toolkit for Country Implementation', (Washington: World Bank).
- WTO (2014), 'Agreement on Trade Facilitation (WT/L/931)', Preparatory Committee on Trade Facilitation, (Geneva: World Trade Organization).
- (2015), 'World Trade Report 2015; Speeding up trade: benefits and challenges of implementing the WTO Trade Facilitation Agreement', (Geneva: World Trade Organization).
-