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International Convention on the Harmonization of Frontier Controls of Goods, 1982
Issues in the application of the Convention

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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

Preface

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Preface

The last few decades have witnessed significant policy developments with focus on improving the operational aspects of the cross-border transport and trade environment. Key instruments, amongst many others, include the:

- International Convention on the Harmonization of Frontier Controls of Goods (UNECE 1982)
- International Convention on the Simplification and Harmonisation of Customs Procedures - Revised Kyoto Convention (WCO 2006), and
- WTO Agreement on Trade Facilitation (WTO 2014)

A sizable literature that ranges from international instruments to assessment tools and guidance materials is available. In 2012, the OSCE and UNECE added to that literature with its “Handbook on Best Practices at Border Crossings – A Trade and Transport Facilitation Perspective”. This publication is separate, but builds on the handbook by offering broad ranging guidelines to the efforts in cross-border facilitation.

The term “cross-border facilitation” is used in this publication as a shorthand label for the many themes and principles that seek to improve cross-border transport and trade flows. It thus ties together topics such as: transport facilitation; border and border crossing management; customs facilitation; the mitigation of Non-Tariff Measures (NTMs) on trade costs; the facilitation of trade, customs, and transport procedures; effective access to financial services; and education and training. Border crossing facilities and trade gateways (e.g., ports and airports) are a focal point but, in line with modern supply chain management practices, much of the effort associated with border controls can be shifted up or down the supply chain, for example, during the loading or unloading of vehicles.

The control effort can usually also be reduced by modifying governing regulations. For Non-Tariff Measures (NTMs) and in the transport domain, for example, regulatory mutual recognition and harmonisation efforts can radically reduce the need for border related controls. And in the case of the European Union, all border controls between its Member States have become redundant. Trade facilitation is a cross-border facilitation theme that receives extensive attention. It can be defined in narrow terms, where policy efforts seek to reduce the administrative obstacles between business operators and border agencies. Trade facilitation can also be defined in wider terms, where efforts seek to weed out regulatory and commercial transaction costs that arise in cross-border supply chains. Standard trade facilitation measures, such as those detailed in the WTO Trade Facilitation Agreement, are now binding for most countries (Azevêdo 2017).

Good cross-border facilitation yields significant economic benefits. It also brings friendly, neighbouring countries closer together, builds trust, and provides the basis for robust cooperation. Cross-border facilitation activities should also ensure that regulatory control objectives are addressed effectively in line with public expectations. This might be through the executive hand of officers at border posts, or in partnership with the private sector where good compliance behaviour reduces the need for intervention at the border.

This publication has two uses in mind. The first is as a set of Guidelines that serve as a broad and comprehensive introduction to the subject. This entails four interdependent chapters that:

- set the context (Chapter 1);
- discuss the many themes and principles (Chapter 2);
- elaborate on policy drivers, especially within the context of experienced costs and the levels at which mitigating actions can be taken (Chapter 3); and
- review key instruments and itineraries for policy makers (Chapter 4).

Moreover, each Chapter offers proposed action points that readers can, if they so wish, explore for application in their own professional practice.

The second envisaged use for this publication is as a framework-resource for cross-border facilitation specific training. The idea is to consider the four chapters offered here as the first part of a Handbook which can be appended with additional, seminal materials. Annex 1 contains suitable suggestions for trainers about what can be appended along with references to seminal complementing texts and resources. Over time, it is likely that good trainers may also choose to add their own materials, including bespoke materials that they have co-created with students and fellow experts.

There is an underlying logic to how the four chapters in this publication interlink. Chapter 1 builds the case for cross-border facilitation by reference to the international business environment, international supply chain management principles and transport practices, and the specific need for businesses to be competitive in such an environment. Trends in transport and trade policy, and the need for effective control, are elaborated, too. The underlying premise for cross-border facilitation is that there is always scope for innovation and improvement from which border agencies and business operators can benefit. In short, it is argued that there is always a need for moving from the current “as is” to an improved “to be”. This might be through the implementation of radical innovations or practices that safeguard continuous improvement.

Chapter 2 introduces themes and principles that shape how the current “as-is” can be reimagined. This is a long chapter with lots of signposts to subjects that dominate contemporary conversations within cross-border facilitation. Chapter 3 elaborates on trade costs that impact upon businesses and the competitiveness of cross-border supply chains. Transport and travel costs, together with information and transaction costs, are of significant concern (e.g., WTO 2023). But there are multiple levels at which mitigating action can be taken. Performance improvements can be achieved by looking inward into the organisation itself, or outward by working in partnership with others, and by seeking to improve the transport and trade environment.

Key international instruments are the focus of Chapter 4. These are reviewed in detail along with the cross-border facilitation measures that they provide. Those measures are then discussed within the context of itineraries that reform-minded policy makers and their stakeholders may wish to consider. The fact that most cross-border facilitation measures do not stand on their own, but built upon another, is emphasised.

The motivation for the OSCE and UNECE offering these guidelines is multifaceted. Many of the examples in the original OSCE and UNECE "Handbook on Best Practices at Border Crossings – A Trade and Transport Facilitation Perspective", which was published in 2012, have been superseded. And while the themes and principles still hold, there is now a vast array of literature and resources for interested readers to consider (e.g., UNECE 2023). It was thus felt that any update to the OSCE and UNECE handbook (2012) should be less sensitive to the rapid developments in this subject area; and importantly, it should build on seminal materials rather than seek to duplicate those. Each chapter in this publication thus includes extensive reference materials for readers to consider. Figures, tables, and boxes are used extensively to help draw attention to additional points. An underlying premise throughout this publication is that transport services and connectivity are a key prerequisite for effective cross-border trade, and that the topics presented here under the label "cross-border facilitation" are deeply interwoven.

There is considerable opportunity for reform. This includes the work of the UNECE and the OSCE. For the UNECE this includes the:

- Convention on the Contract for the International Carriage of Goods by Road, "CMR" (UN 1956) and the CMR document (UNECE 2018b) which help reduce transaction costs between transport operators an shippers;
- The TIR Convention (UNECE 2018a), which provides for streamlined international transit procedures.

Transport and subsequent trade costs can also be reduced through investment in transport infrastructure and supporting the development of efficient transport services. Improvements in transport connectivity are often also dependent on the harmonisation of vehicle licensing, operating licences, visas arrangements for drivers and crew, amongst many other regulatory aspects that are associated with cross-border transport operations. The International Convention on the Harmonization of Frontier Controls of Goods (UNECE 1982), reviewed in Chapter 4, is an important instrument in this regard.

Of importance for the OSCE to highlight upfront is the "OSCE Strategy Document for the Economic and Environmental Dimension" that was agreed by Participating States at their 2003 Ministerial Council in Maastricht (OSCE 2003). It states that:

- Cooperation can make a substantial contribution to tackling emerging economic and environmental challenges and threats to security;
- Integration into the global economy is a precondition for benefiting fully from globalisation and trade liberalisation;
- Regional and subregional integration processes and agreements can give an important impulse to trade and economic development;
- International trade and investment are vital factors for accelerating economic growth and promoting economic development;
- Many benefits can be had from measures that facilitate market access, including reduced customs tariffs and barriers to entry;

- Foreign and domestic investment, including investment in industry and energy, as well as in transport and communications infrastructure, is a necessary condition for sustainable and environmentally sound economic growth, increased employment, higher living standards, and reduced levels of poverty;
- A component of good governance is the effective management of public resources by strong and well-functioning institutions;
- Human resources are an essential factor for economic growth and development;
- Good governance and sustainable development imply policies and systems that promote social partnership and cohesion.

Furthermore, specifically to the operations of borders and border management, OSCE participating states are committed to promoting open and secure borders in a free, democratic, and more integrated OSCE area without dividing lines. In doing so, they also commit themselves to co-operate by following the principles of international law, mutual confidence, equal partnership, transparency and predictability, and pursuing a comprehensive approach in a spirit that would facilitate friendly relations between States. Aims, by drawing on extracts from the OSCE Border Security and Management Concepts agreed at the Ministerial Council in Ljubljana (2005), include:

- To promote free and secure movement of persons, goods, services, and investments across borders;
- To reduce the threat of terrorism, including by preventing cross-border movement of persons, weapons, and funds connected with terrorist and other criminal activities;
- To prevent and repress transnational organized crime, illegal migration, corruption, smuggling, and trafficking in weapons, drugs, and human beings;
- To promote high standards in border services and competent national structures;
- To promote dignified treatment of all individuals wanting to cross borders;
- To create beneficial conditions for social and economic development in border territories;
- To foster prospects for joint economic development and help in establishing common spaces of freedom, security, and justice;
- To ensure the security of the international transport circuit for supply of commodities.

In addition to the work of the OSCE and UNECE, there are many more international organisations that have an active remit within the cross-border facilitation space. These include, amongst others, the:

- Global Alliance for Trade Facilitation (GAfTF)
- International Air Transport Association (IATA)
- International Chamber of Commerce (ICC)
- International Civil Aviation Organization (ICAO)
- International Maritime Organization (IMO)
- International Trade Centre (ITC)
- Organisation for Economic Co-operation and Development (OECD)
- UN Centre for Trade Facilitation and Electronic Business (UN CEFACT)
- UN Economic Commission for Asia and the Pacific (UN ESCAP)

- United Nations Commission on International Trade Law (UNCATRAL)
- United Nations Conference on Trade and Development (UNCTAD)
- World Bank Group (WBG)
- World Customs Organization (WCO)
- World Trade Organization (WTO)

Activities and instruments may be orientated towards: business requirements (e.g., GAfTF, ICC, UNCATRAL, ITC); specific transport modes (e.g., ICAO, IATA, IMO, UNECE); or capacity building (e.g., UNCTAD, WBG). Some of the listed organisations have a regional focus (e.g., UNESCAP, UNECE). The WCO is dedicated to customs administration and controls, within which trade facilitation features strongly (WCO 2019). The WTO's efforts stride towards the liberalisation of trade and safeguarding the rules of the global trade system. UN CEFACT has a focus on trade facilitation and electronic business.

If you are new to cross-border facilitation this all might sound complicated, perhaps overwhelming. Please bear with us! Hopefully, the plain language used for this publication will ease you in gently. If already an expert in some aspects of the subject, we hope to encourage reflection on the interconnectedness of issues and subsequent opportunities for effective action. Trainers and educators should hopefully find Annex 1 to be a useful complementing resource, but we very much welcome suggestions about how materials and contributions can be further developed.

Without further ado, we wish you happy reading and subsequent actions.

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Chapter 1

Cross-Border Facilitation: backdrop and context

1 Chapter overview

When painting a picture, the backdrop sets the tone. At the very least, it is usually a good idea to start with a basecoat or primer first. Likewise, when seeking to make improvements, it is usually best to become familiar with the context first. The term “cross-border facilitation” is used in this publication as an umbrella term for all the efforts that aim to improve the flow of transport and goods across borders. That aim has received considerable policy attention in recent years. The “prize” for policy makers is trade-led economic growth. Cross-border facilitation also brings friendly countries closer together, builds trust, and provides the basis for robust co-operation. It enables businesses to participate in international markets; and consumers benefit from increased competition for their patronage. But despite such promises, cross-border trade and transport obstacles can be persistent; and there is always scope for improvement and innovation.

The impact of the Covid-19 pandemic, to give one example, shows just how important global supply chains are, and how important it is to make sure that borders do not unduly disrupt these (UNECE 2021). By giving the operational aspects of cross-border trade and transport movements their due consideration, there is also scope for rethinking administrative arrangements and border management practices. This does not have to be at the expense of diminished regulatory control outcomes. Control and facilitation go hand in hand. There are many lessons and best practice insights to learn from. And these are often showcased by international organisations dedicated to bringing nations closer together within the spirit of trust, co-operation, and sustainable prosperity.

Since the publication of the OSCE and UNECE “Handbook of Best Practices at Border Crossings” (2012), a broad body of literature has established itself. Cross-border facilitation topics that share the aim of wanting to improve transport and trade flows include:

- Transport facilitation and connectivity
- Border crossing management
- Customs facilitations
- The reduction of obstacles to trade from Non-Tariff Measures (NTMs) – such as those that might arise in the trade of goods subject to sanitary and phytosanitary controls, amongst many other NTMs.
- The facilitation of trade, customs, and transport procedures
- Financial services, especially for trade finance and for making payment.

While Chapter 2 takes a closer look at that literature with its underlying themes and principles, this introductory chapter provides the necessary backdrop. Attention is drawn to the current “As-is” international business environment and its enabling factors; especially those relating to trade liberalisation and transport. Discussed, too, are the cross-border supply chains, and the need for business competitiveness. Common regulatory models and border control arrangements are explained, thus providing the context against which any “To-be” improvements can be made. An underlying premise is that stakeholder needs differ. For policy makers, cross-border facilitation is largely about providing for an effective and well governed business environment that delivers in terms of economic growth, sustainable prosperity, and further development. For business operators, it is about their ability to effectively participate in cross-border commerce on competitive terms. For executive regulatory agencies, especially border agencies, the need for cross-border facilitation is shaped by their responsibilities in safeguarding public control expectations without hindering trade flows. Readers are invited, at the end of this chapter, to reflect on their role within the cross-border trade environment, applicable operational practices, and their specific needs.

2 The environment within which cross-border trade takes place

Borders, to a large part, delineate where the sovereignty of one nation ends and the other begins. And applicable rules and regulations often differ between one side of the border to those on the other side. Border controls to safeguard compliance with the respective rules and regulations are often deemed necessary. But, there are notable exceptions (see Box 1-1) and recent decades have witnessed the emergence of an international – some might say global (Dicken 2014) –

trade and business environment. The proclamations by Ministers at OSCE Ministerial Council meetings give testament to the many benefits – as outlined in the Preface – that such coming together can provide (OSCE 2003, 2006, 2011, 2016). Efforts towards trade liberalisation in many parts of the world have led to a production system where goods and materials criss-cross borders multiple times. And, considerable economic growth has been created by virtue to the fact that if countries sell more, they are able to buy more. Underlying factors commonly attributed to the development of international, cross-border production systems, include:

i. Trade policies that reduce trade tariffs, provide for the free movement of financial resources, and foster foreign direct investment (FDI);
ii. Efforts by competing firms (especially Multinational Enterprises; MNEs) to expand their global footprint in search of new market opportunities and access sources of supply on competitive terms;
iii. Developments in transport and in information and communication technologies (ICT) that help reduce the cost of distance.

And, within recent history, worldwide trade has grown by leaps and bounds. The World Trade Organization (WTO), for example, reports that the world trade volume today is roughly 43 times the level recorded in the early days of the General Agreement on Trade and Tariffs (GATT). Between 1950 to 2021 that is a growth of 4300 per cent[1]. Enabling trade liberalising policy, which includes the establishment of the World Trade Organization (WTO) in 1995, has led to significant reductions in trade tariffs. Worldwide weighted mean tariffs[2] dropped from 8.6per cent in 1994 (pre-WTO) to just 2.7per cent in 2017[3]. The trend is similar for Europe and Central Asia, including and excluding high income countries (Figure 1-1). But the weighted applied figures indicated in Figure 1-1 (which takes the availability of preferential duty rates into account) hide the fact that some sectors still benefit from tariff protection.
Table 1-2 shows a snapshot of 2021 for the simple average tariffs[4] by product group in major export markets. Proponents of free trade might argue that there is still scope for further tariff liberalisation, while others may stress the need to protect key sensitive industries from foreign competition. Common reasons for tariff protection are national security concerns or the wish to mitigate short-term adverse economic impacts. But, many will also argue that because trade tariff rates are on average relatively low already, it is time for trade policy to move on and focus on non-tariff measures, especially by addressing the costs associated by trade and customs procedures (Grainger 2011; WTO 2015).

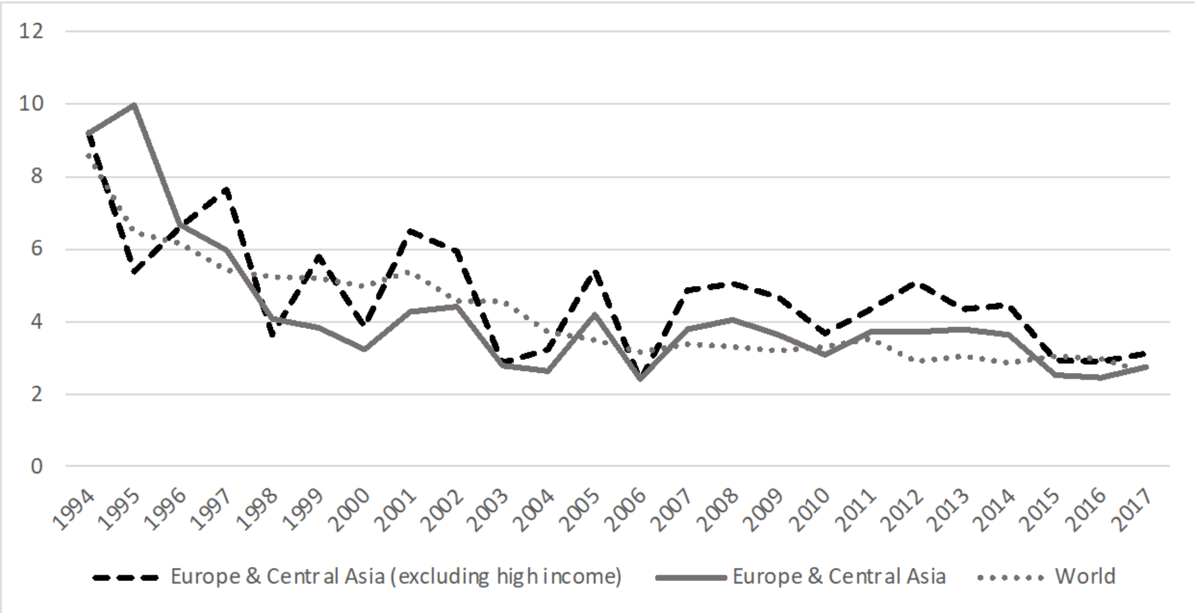
Box 1-1: Exceptions to formal border controls

1. The need for border control activity is significantly diminished, where customs tariffs and regulatory differences have been reduced or removed. Perhaps the most prominent example is the European Union, which has no internal borders between its Member States. It is also worth highlighting that compliance with trade, transport, and customs procedures does not necessarily have to be checked at the border. Alternative control options exist (see for example Box 1-5);
2. Border arrangements can be simplified and fast-tracked for trusted operators. Such businesses may even be granted extensive autonomy from official border controls, on the conditions that they have systems in place that guarantee compliance with applicable regulatory objectives. Many customs administrations, for example, apply audit-based control methods that replace (or reduce) the need for active border controls;
3. A challenge at many borders is informal cross-border trade (Cantens 2012). This is often associated with borders where regulatory institutions and executive agencies are not yet established or weak. For regulators the challenge is often about exerting their authority

[1] See: https://www.wto.org/english/res_e/statis_e/trade_evolution_e/evolution_trade_wto_e.htm
[2] Weighted mean applied tariff is the average of effectively applied rates (which are often preferential duty rates) weighted by the product import shares corresponding to each partner country.
[3] latest available figures
[4] Calculated by averaging WTO Most Favoured Nation (MFN) tariffs by product group. Unlike Table 1-2, the figures are not weighted by trade volumes between partnering countries, nor do they take the availability of lower, preferential tariff rates into account.

and enticing businesses to operate within the applicable rules. Good transport routes with facilities to support regulatory compliance are important. Reform conversations often focus on how to entice businesses into the formal economy on terms that compare favourable (and less risky or costly) than under informal arrangements.

Figure 1-1: Tariff rate, applied, weighted mean, all products (per cent)



Source: WTO trade data

Table 1-1: MFN simple average import tariffs by product group and market in per cent, 2021

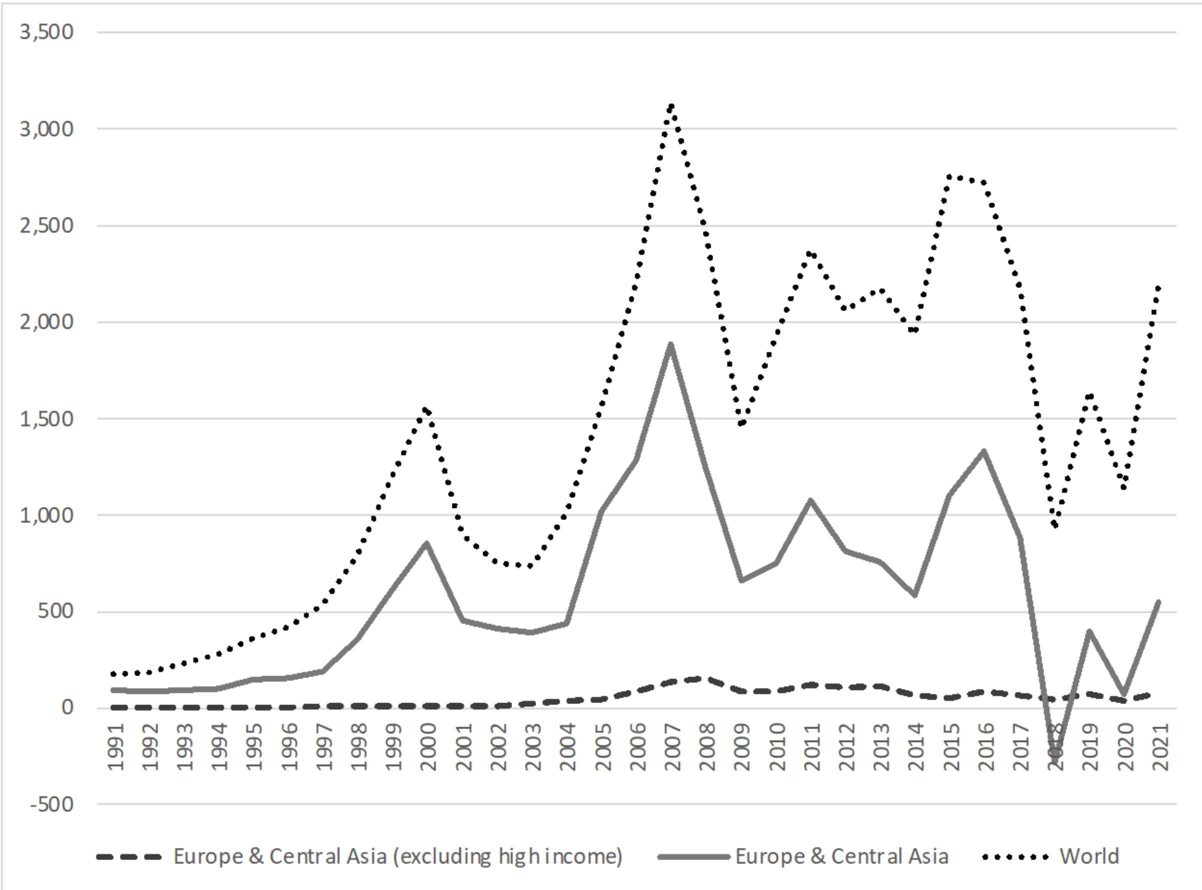
Product Group	Brazil	Canada	China	EU	India	Japan	UK	USA
01 - Animal products	8.3	24.6	13.2	17	32.5	11.2	16.5	2.3
02 - Dairy products	18.3	249	12.3	39.5	35.7	91.4	37.8	19.4
03 - Fruits, vegetables, plants	9.7	2.3	12.2	10.8	33.6	10.5	7.7	4.6
04 - Coffee, tea	13.3	10.1	12.3	5.9	56.3	14.3	5.5	3.3
05 - Cereals and preparations	10.7	20.1	19.5	14.5	37.3	34.4	12.2	3.1
06 - Oilseeds, fats and oils	8	3.1	10.8	5.7	53.4	8.2	4.6	7.3
07 - Sugars and confectionery	16.5	3.5	28.7	24.3	51.5	24.1	25.6	14.9
08 - Beverages and tobacco	17.3	3.6	18.2	19.9	76.3	14.9	17.5	18.1
09 - Cotton	6.4	0	22	0	26	0	0	3.5
10 - Other agricultural products	7.7	6.3	11.8	3.1	29	3.8	2.8	1
11 - Fish and fish products	10.3	0.9	7.2	11.5	30	5.7	10.8	0.7
12 - Minerals and metals	10.1	1	6.3	2	11.8	1	0.8	1.8
13 - Petroleum	0.1	0.9	5.3	2.5	9.2	0.7	1.6	1.9
14 - Chemicals	7.7	0.7	6.2	4.5	10.3	2.1	3	2.8
15 - Wood, paper, etc	10.3	1	3.2	0.9	10.5	0.9	0.6	0.6
16 - Textiles	23.2	2.3	7	6.5	25.5	5.4	5.1	8
17 - Clothing	35	16.6	6.8	11.5	24.1	9	11.4	11.6
18 - Leather, footwear, etc	15.8	3.8	10.6	4.1	14.6	9.9	3.1	3.9
19 - Non-electrical machinery	12.8	0.4	6.7	1.8	8.2	0	0.6	1.2
20 - Electrical machinery	13.8	0.8	5.5	2.1	10.3	0.1	0.9	1.4
21 - Transport equipment	18.8	5.5	9.6	4.7	31.1	0	3.2	2.9
22 - Manufactures n.e.s.	15.1	2.4	6.7	2.1	11.9	1.1	0.8	2.1

Source: WTO trade data[5]

[5] https://stats.wto.org

Next to liberalisation in trade tariffs, recent decades have also witnessed the free and uninhibited cross-border movement of capital in many parts of the world. This has enabled businesses to make Foreign Direct Investments (FDI). Figure 1-2 shows global FDI figures from 1991 to 2021, much of which is attributed to competing companies expanding their global footprint in search for markets (Douglas and Wind 1987; e.g., Levitt 1983; Prahalad and Doz 1986) as well as active inward investment promotion activities (e.g., OECD 2023). In 2019 the FDI inflows into Europe were USD404 billion of which USD401 billion went to countries in the European Union and USD3 billion to the remaining European countries (incl. UK). Numbers for 2020 were significantly repressed during the Covid-19 pandemic, but on the rise again for 2021 (UNCTAD 2022). Figure 1-2 also shows that FDI figures for Europe and Central Asia roughly follow global FDI trends[6], but once high-income countries are excluded, the figures look significantly flatter. An eye on FDI figures (and scope for improvement) matters from a cross-border facilitation perspective because it is estimated that half of global exports are accounted for by Multinational Enterprises (MNEs) (Cadestin et al. 2018). Thus, policy activity that drives FDI also drives cross-border transport flows with subsequent demands on border agencies. And vice versa, cross-border facilitation efforts that international businesses value can have a positive impact on FDI.

Figure 1-2: Foreign Direct Investment (FDI), net inflows; Billion USD



Source: WTO trade data

Trade flows are also linked to distance (Disdier and Head 2008) and the cost of transport in particular (Limão and Venables 2001). Remoteness can be overcome through good transport connectivity, which in turn is dependent on mode specific transport infrastructure (Box 1-2) and transport services. When developing cross-border transport networks (e.g., Figure 1-3), it is essential that efforts are co-ordinated, and that applicable regulations (e.g., from signage to safety

[6] The decline in FDI figures for 2018, especially in Europe, stems from corporate income tax reform in the United States and resulting repatriations of accumulated foreign earnings.

and operating specifications) are harmonised (UNECE 2023c). If not, the cost for using such infrastructure for international shipments is likely to be significantly higher. The scope for competitive cross-border trade is diminished. Transport policy makers are thus often tasked with co-ordinating cross-border infrastructure developments – hard and soft – to enhance transport connectivity and reduce international transport costs (see also Chapter 3).

Box 1-2: The modes of transport: a brief explainer

As a rule of thumb, maritime transport modes tend to be significantly more cost effective in tonnage terms when compared to other modes (with the notable exception of pipelines). And it is estimated that 80 percent of global trade in volume terms is carried by sea (Benamara, Hoffmann et al. 2017). Rail, over distance, tends to be more cost efficient than road in tonnage terms. Air lends itself well for shipments with a comparatively high value or time sensitivity (e.g., perishables, spare parts, parcels), that are shipped over long distances. Road tends to be the default mode of transport, at least for the first leg (e.g., to the port or rail terminal), by virtue of the fact that most business premises have direct road access, but not necessarily direct access to rail, maritime, and air transport. Each mode of transport has its own characteristics and constraints which might differ from one country to the next. For example, some countries have significantly more generous railway gauges than others, and are thus able to run more generously sized rolling stock. Likewise, the quality of roads may be superior in some countries when compared to others, and thus enable greater loads (e.g., by allowing for heavier loads and multiple trailers). The respective modal economics, next to their handling characteristics, are also dependent on applicable regulations, market forces, operational scale, and load utilisation (Rushton and Walker 2022). The humble shipping container and supporting multimodal transport systems – with their comparatively low handling costs and large operational scale – are often highlighted as a key enabler for the contemporary international production systems (Levinson 2006).

Figure 1-3: Cross-border transport network example; International railway networks within Europe and neighbouring regions; 2022

Source: International Transport Infrastructure Observatory[7]

Distance is also shrunk by using modern information and communication technology (ICT). ICT enables people and computers to connect without travel or delay. Critical decisions and instructions can be taken quickly, often actions can

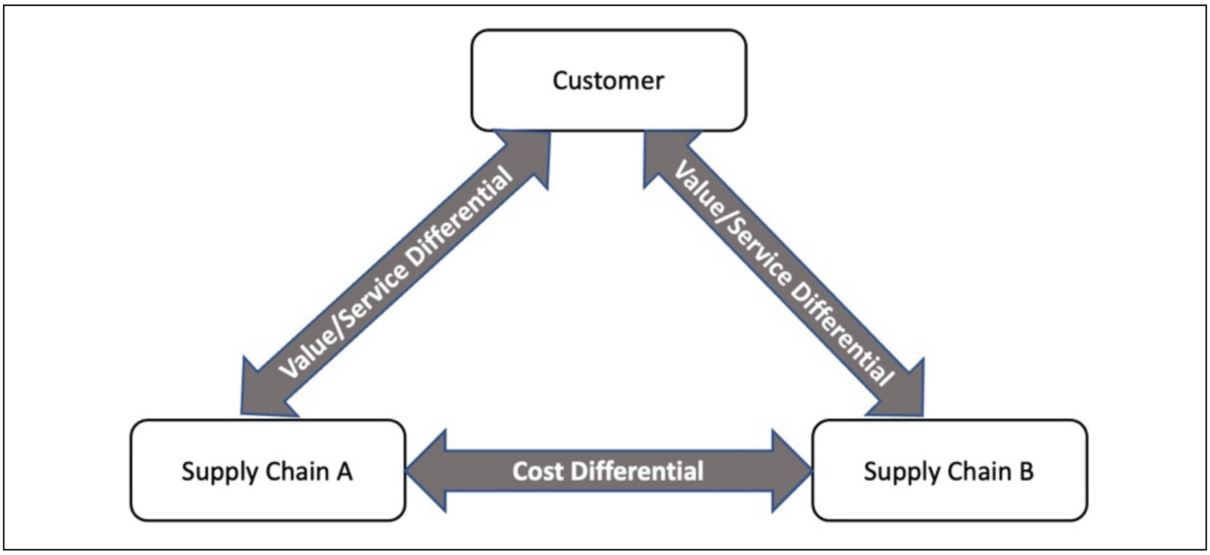
[7] URL: https://unece.org/international-transport-infrastructure-observatory

be automated. ICT has been a key enabler of modern co-ordinated supply chain operations. Transport facilitation, such as through the work of the UNECE (2023c), or the facilitation of trade and electronic business, such as through the work of the United Nations Centre for Trade Facilitation and Electronic Business (see UN/CEFACT 2023; UNECE 2023d), are thus dominant themes in cross-border facilitation. A key economic principle – prominently highlighted in 1776 by Adam Smith with reference to “good roads, canals and navigable rivers” and their ability to reduce the cost of carriage (Smith 1776; Book I, Chapter XI) – is that by reducing the cost of distance, the size of the potential market for businesses to compete in is increased. Economic welfare gains can be expected.

3 International supply chains, networks, and drive for competitiveness

Businesses seldom pursue market opportunities on their own. They rely on the services, materials, and goods produced by other businesses. The image of a chain with interlinked businesses – the supply chain – is often invoked. Such supply chains convert raw materials into goods that are placed into the hands of customers. But often, the flow of materials and goods can take multiple routes, with multiple options and combinations. It is thus usually more appropriate to refer to such trade flows from suppliers’ suppliers to customers’ customers as “global value chains” (e.g. OECD 2012) or “supply chain networks” (Christopher 1992). Competition for customers is less driven by the performance of a single firm alone, but more by how well various parties in a supply chain work together. Winning supply chains are those that perform favourably in terms of cost or value, and service (Figure 1-4). In this context, competitiveness also depends on how well businesses and border agencies work together to weed out trade compliance costs (Box 1-3) and overcome border related bottlenecks (Chapter 2). This often necessitates an approach to supply chain management that treats border agencies, as far as possible, as an integral link (Grainger and Morini 2019). Reference is often made to “partnership” where regulators work with the private sector to reduce non-compliance risks (e.g., through electronic systems, post clearance controls, trusted trader programmes) and give access to eased border clearance arrangements (e.g., WCO 2021). The result should not only help improve control outcomes, but also ensure that compliant supply chains are competitive.

Figure 1-4: Value and cost/service differentials as a source for competitive advantage



Adapted from Christopher (1992); Ohmae (1983)

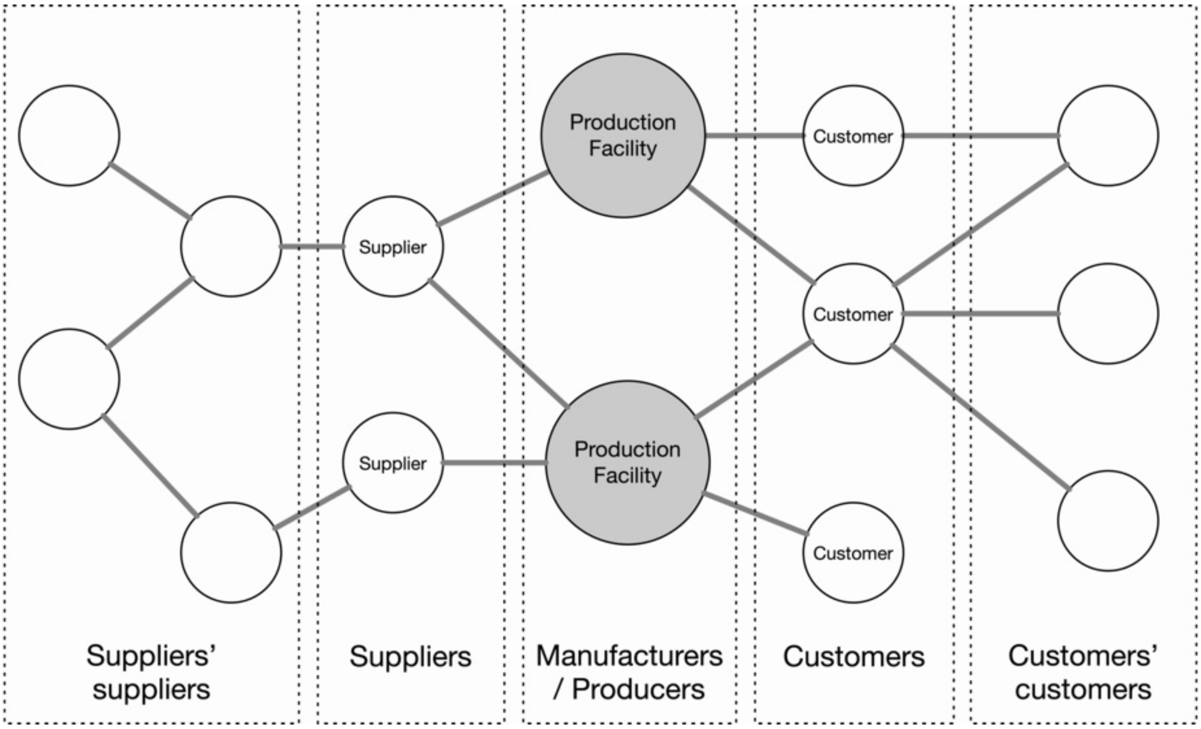
Box 1-3: Business compliance costs, a brief explainer

Compliance costs associated with trade and customs procedures are often described as “friction” or a “transaction costs” between those that seek to comply with applicable regulations and those that enforce and control those regulations. The impact of such costs on traders might be direct and indirect (Grainger 2011). Direct costs relate to border formalities, including those that apply immediately to collecting, producing, transmitting, submitting, and processing any documents (or their electronic equivalent) to complete border processes and controls. Further direct costs include the charges and fees associated with applicable border procedures, including those linked to

bonds and guarantees, laboratory tests, test certificates, inspection fees, and stamp charges. Direct costs also include the fees and charges levied by service providers that need to be procured in conjunction with border clearance formalities. Those may include labour and handling charges for moving goods to inspection and storage facilities, demurrage charges, out–of–hours surcharges, and software and document fees (for the creation, processing, and submission of declarations) amongst other compliance related expenses.
Indirect costs are often less tangible but can be very prohibitive. They include the costs resulting from delay at the border, missed business opportunities, and undermined business competitiveness. Indirect costs are often the outcome of missing or erroneous documentation (for example non–matching reference numbers), delay by government authorities, congestion at inspection facilities, or overall heavy handedness applied by executive agencies. Complexity, compliance cost, and fear of non-compliance with subsequent penalties is often thought to be a key reason for why some businesses choose to forgo cross-border business opportunities.

Lower costs for cross-border trade can translate into higher business profits and shareholder returns. Where competition is effective, lower prices that benefit end consumers should be expected. “Value added” is created by placing goods into the hand of consumers, in a way that is superior to that of competing supply chains – for example by delivering goods on time when needed (not too soon and not too late). Depending on operational preferences, supply chain networks (Figure 1-5) can be configured in a very fluid, agile way that is responsive to changes in the business environment and market conditions. Supply chains can also adopt more ridged operational models that favour scale and lasting collaboration with key suppliers or customers. And, while such supply chains can be very lean and cost effective (Womack and Jones 2003), they may also be less responsive to sudden changes in market conditions. Resilient firms may thus draw on multiple supply chain options, with some operating on agile and others on lean principles (Towill and Christopher 2002). The hand of the regulator can actively impact supply chain configuration decisions, for example by: imposing or reducing tariff levels; granting access to customs facilitations for export industries (e.g., freezones, customs warehouses, duty drawback); FDI incentives; and the implementation of transport and trade facilitation measures that seek to reduce border related red-tape.

Figure 1-5: Supply chain networks

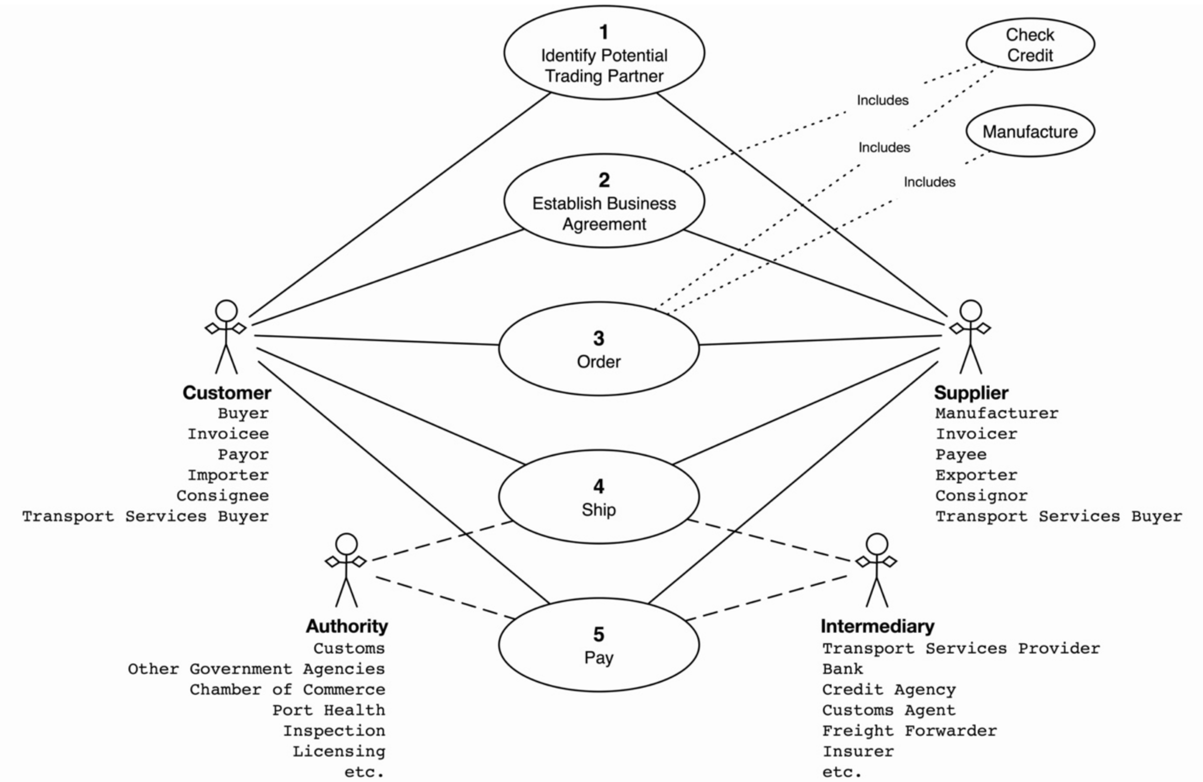


Source: author

Inevitably, supply chain configuration and competitiveness are very dependent on the nature of transaction costs between interacting organisations across the supply chain (e.g., Williamson 1981, 2008). In cross-border trade, such transaction costs do not only include the expense of agreeing and making an export sale, it also includes the respective costs of the seller and buyer for making the necessary arrangements with their service intermediaries (e.g., transport service providers and banks) as well as with the applicable regulatory agencies. As Figure 1-6 shows by reference to the UN CEFACT's "International Supply Chain Reference Model" – drawn as a use case diagram (e.g., UN ESCAP 2012) – the arrangements for an international trade transaction can be complex. And interacting businesses, to sustain their competitiveness, will have a keen interest in making sure that transaction costs between them, as well as with the regulatory authorities, are as efficient as possible. Key trade facilitation measures that provide for simplified, harmonised, and modernised procedures between business parties and their respective regulatory agencies are often advocated (UNECE 2023a). The aim, as is discussed in Chapter 3, is to reduce business compliance costs, and strength the border agencies' ability to control the cross-border flow of goods effectively.

Given the overall complexity of arrangements, a significant cross-border facilitation theme concerns training. This might be targeted at officials so that they understand how their operational practices link into cross-border supply chains and impact their performance. Training might also be directed at businesses new to cross-border trade and in need of guidance about how to navigate complex requirements correctly.

Figure 1-6: International Supply Chain Reference Model



Source: adapted from SWEPRO (2002) and UN/CEFACT (2017)

4 Regulatory procedures

When supply chains cut across borders, goods – along with the vehicles and people moving those goods – become subject to trade and customs procedures. Border controls apply. Their purpose might relate to fiscal and trade policy measures (e.g. GATT 1994), the administration of market rules and non-tariff measures (NTMs) (e.g. UNCTAD 2019), or the enforcement of prohibitions and restrictions (Box 1-4). A dominant regulatory theme is the collection of tax revenue in the form of import taxes (including trade tariffs and import duties), which can represent a significant contribution to the overall national tax income –especially when accounting for import VAT and Excise duties.

Box 1-4: List of international regulatory concerns with impact on border controls; NTM examples

- Agricultural quality standards; e.g., those developed by UNECE Working Party 7;
- Strategic export controls that draw on at least 14 international treaties, conventions, and working groups; e.g., the "Australia Group", the "Zangger Committee", and the UN Convention against Transnational Organized Crime (Grainger 2021: 92-93);
- Specific rules and procedures for products of animal origin, plant origin, food, and live animals. This includes the Codex Alimentarius and the work of the WHO and FAO, as well as the IUU procedures concerning illegal fishing (FAO 2023), phytosanitary controls (IPPC 2001), and wood packaging (IPPC 2019), amongst others;
- Measures to stop illegal trade in conflict diamonds (Kimberly Process 2023);
- The United Nations Guidelines for Consumer Protection (UN 2015; UNCTAD 2017);
- Measures to protect intellectual property, including the WTO's agreement on trade related aspects of intellectual property rights (WTO 1994);
- Measures to protect the environment, such as: the Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES 1973); the Vienna Convention, and subsequent Montreal Protocol for the protection of the ozone layer (UNEP 1985, 1987); the Basel Convention concerning the control and movement of waste (UNEP 1989); the Stockholm Convention concerning international movements and control of organic pollutants (UNEP 2017b); the Rotterdam Convention concerning banned chemicals and pesticides (UNEP 2017a); and the Cartagena Protocol concerning the transport and use of living modified organisms (SCBD 2000);
- Measures to stop illegal trade in cultural property; for example by reference to the obligations falling under the UNESCO Convention on the Means of Prohibiting and Preventing the Illicit Import, Export and Transfer of Ownership of Cultural Property (UNESCO 1970).

But regulatory concerns, especially when taking applicable prohibitions and restrictions into account, also extend to: safety and security, environment and health, consumer protection, trade policy (Grainger 2011), and business services (Table 1-2). Depending on the type of regulation and targeted export market, compliance procedures have multiple components and often need to be addressed before the export sale is made. The most visible agency at border facilities is usually the customs administration, followed by the immigration services, and specialist agencies such as those responsible for sanitary and phytosanitary measures. At road crossings, the border police (or similar) may be responsible for the processing of driver details and vehicles (e.g. temporary admission). Depending on the applicable procedures and regulatory concerns, many other types of government agencies are likely to have a stake, too (Table 1-3).

Table 1-2: Regulatory themes with examples

Regulatory Category	Examples of related activity
Revenue Collection	Payment and collection of Customs duties, excise duties, carbon border taxes, and other indirect taxes; payment of control and inspection fees; management of bonds and other financial securities.
Safety and Security	Security and anti-smuggling controls; dangerous goods handling; vehicle checks; immigration and visa formalities; strategic export controls and licences; sanctions.
Environment and Health	Phytosanitary, veterinary, and hygiene controls; health and safety measures; CITES controls; waste regulations; ozone depleting substances.

Consumer Protection	Product testing; labelling; conformity checks with marketing standards (e.g. fruit and vegetables).
Trade Policy	Access to preferential tariffs (preferential origin rules); tariff quota restrictions; collection of trade statistics; the administration of cabotage rules, and the licensing of foreign transport operators.
Business services	Market protection through the enforcement of anti-dumping measures; intellectual property safeguards; and access to trade compliance cost reducing measures for trusted operators.

Source: adapted from Grainger (2011)

Table 1-3: Examples of government agencies with a stake in border controls

• Aviation Authority	• Ministry for Internal Affairs
• Border Guards	• Ministry for Trade and Industry
• Contracted private inspection and testing companies	• **Phytosanitary Inspection Services**
• **Customs Administration**	• **Police**
• Embassy officials (document accreditation)	• Port Health Authorities
• Environment Agency	• Port, Railway, Airport, Dry/Inland Port Operators
• Finance Ministry	• Public Health Agency
• Health and Safety Agency	• **Quarantine Inspection Service**
• Health Ministry	• Trading Standards Bodies
• Highway Agency	• Transport Ministry
• **Immigration Services**	• Vehicle licensing authorities
• Ministry for Food and Agriculture	• **Veterinary Inspection Service**

A key principle in the international trade of goods is that they must be declared and placed under the control of the customs administration. This is to ensure that goods can be assessed for any applicable import duties and taxes. It also gives customs the powers to hold goods until they are satisfied that the requirements set by any other non-customs agencies have been met. Subsequently, there are two components to the work of customs officers. The first concerns the administration of customs procedures and processing of declarations, the second relates to enforcement activities that range from physical checks at the border to criminal investigations and prosecution. Often, administration and enforcement activities overlap. For example, business operators with a good compliance record, and thus trustworthy, may benefit from fast-track or light touch customs treatment with minimal risk of physical checks (and their costs) at the border (e.g Coelho 2019).

When comparing the administrative arrangements between countries, it is important to highlight that these can differ markedly. As is highlighted by the WCO in its 2021/22 Annual Report (WCO 2022a), the customs administration may be set up as:

- An independent or semi-independent ‘customs agency’ or ‘customs service’ – as is the case for Azerbaijan, Uzbekistan, and Tajikistan;
- A ‘revenue authority’ where the customs and tax authorities have been incorporated into a single agency – as is the case for Armenia, Kazakhstan, and Ukraine;
- A ‘ministerial department’ where the customs administration is a department, bureau, or division within a ministry (e.g., the Ministry of Finance) – as is the case for Kyrgyzstan, Serbia, and Turkey;
- A ‘border protection service’ where the customs administration is, in addition to its customs portfolio, also responsible for border specific immigration services (such as visa verification) – which is the model for the United States of America, and for Australia.

Despite differences in their institutional arrangements for customs controls, most OSCE participating States and UNECE member States have harmonised their customs legislation in line with the WCO Revised Kyoto Convention (discussed in Chapter 4). They also subscribe to the International Convention on the Harmonization of Frontier Controls of Goods (UNECE 1982), and WTO Trade Facilitation Agreement (WTO 2014) which include extensive provisions that seek to make border processes more efficient and less disruptive to cross-border trading businesses (see Chapter 4 for further details).

In addition to the customs administration, other agencies are also visible at border crossing and trade gateway facilities. The **immigration services**, for example, process immigration and visa formalities. But, procedures for transport workers, such as crew on ships and aircrafts or drivers of trains and trucks, can vary by mode and location. Operators of ships and aircrafts are usually obliged to notify relevant authorities with a crew list (ICAO 2022; IMO 2018). If transport workers are to leave the terminal, additional immigration formalities are likely to apply. Preferential treatment for professional drivers should normally be made available by reference to the International Convention on the Harmonization of Frontier Controls of Goods (UNECE 1982).

Sanitary and Phytosanitary (SPS) checks are often mandatory for all products of animal origin, products of the soil, and most foods. They are normally conducted by qualified specialist. Here, too, institutional models can differ significantly from one country and location to the next. Often, but not necessarily, inspectors are employed by specialist Directorates within the Ministry for Agriculture, or similar. At some maritime ports, they may be employed by the Port Health Authority. Checks range from verifying that health certificates issued in the export market match the cargo that has been declared, to taking samples and testing the goods for sanitary and phytosanitary risks. Usually, goods subject to SPS controls can only be brought into the country at dedicated, authorised border crossings or gateways that are staffed by qualified inspectors.

Vehicle checks may be performed at border crossing facilities or their immediate proximity (e.g., on access roads). Again, practices and procedures (including who is responsible) can vary significantly from one country to the next. They also vary significantly by mode or transport. In the case of maritime transport, for example, vessel operators need to book berths in advance. Berth applications require proof that the vessel is insured. Insurance certification is usually subject to a vessel survey by the underwriter. In the case of road vehicles, it is usually mandatory that the vehicle is insured, too, and that the driver is qualified to operate it. Where prevailing transport policy enforce cabotage restrictions, which limit or restrict transport services by foreign operators, further checks and formalities might apply. Usually, this entails the verification by relevant agencies that the conditions for applicable licences have been met.

Public health checks might take place, too. This is a relatively new regulatory requirement where Covid-19 restrictions extend to the mobility of people, and transport workers need to demonstrate that they meet applicable vaccination requirements, or are exempt by virtue of their status as "key workers" (see UNECE 2023b).

Depending on the goods moved, there may be further regulatory agencies (Table 1-2) with an active interest. These may work in co-operation with Customs but may also be independent. Licensing, certification, authorisation, or permit condition can apply, especially if subject to additional NTMs (see Box 1-3).

5 Border control models

In line with the remit of border officials, the purpose of border facilities is to enable business operators to efficiently place goods under the control of relevant authorities, enable those authorities to process applicable controls and checks, and then to release goods. The latter might be for free circulation (imports), export, or under restrictions (e.g., transit and onward transport to a Customs authorised facility further inland). In addition, where suspicion about non-compliance is merited, physical inspections might be required.

For business operators, trade arrangements often start weeks, if not months, before the goods arrive at the border facility. Transport must be booked, export finance may need to be arranged, the terms of trade (including who is responsible for what; see Box 1-5) must be agreed upon. Most regulatory procedures require some advance planning. At the very least, the relevant authorities at border facilities must usually be notified on what vehicles or vessels the goods are due to arrive. Import quota and preferential origin documents – which give access to lower import duties – may be required before committing to the export sale; without such documents, regular Most-favoured Nation (MFN) import duties might make the purchase unviable from a business point of view. Some documents need to be obtained prior to shipment, such as plant and animal health certificates. Their issuance is subject to an inspection (which needs to be booked) by the relevant, authorised authorities. Usually (unless there are enabling electronic systems) such certificates must be posted (e.g., using express services) to the importer so that arrangements for veterinary health or phytosanitary import clearance can be made. Inspection procedures often requires port stevedores (maritime), cargo handlers (air), or drivers (road) to take the goods to the designated inspection facility (see example in Figure 1-7).

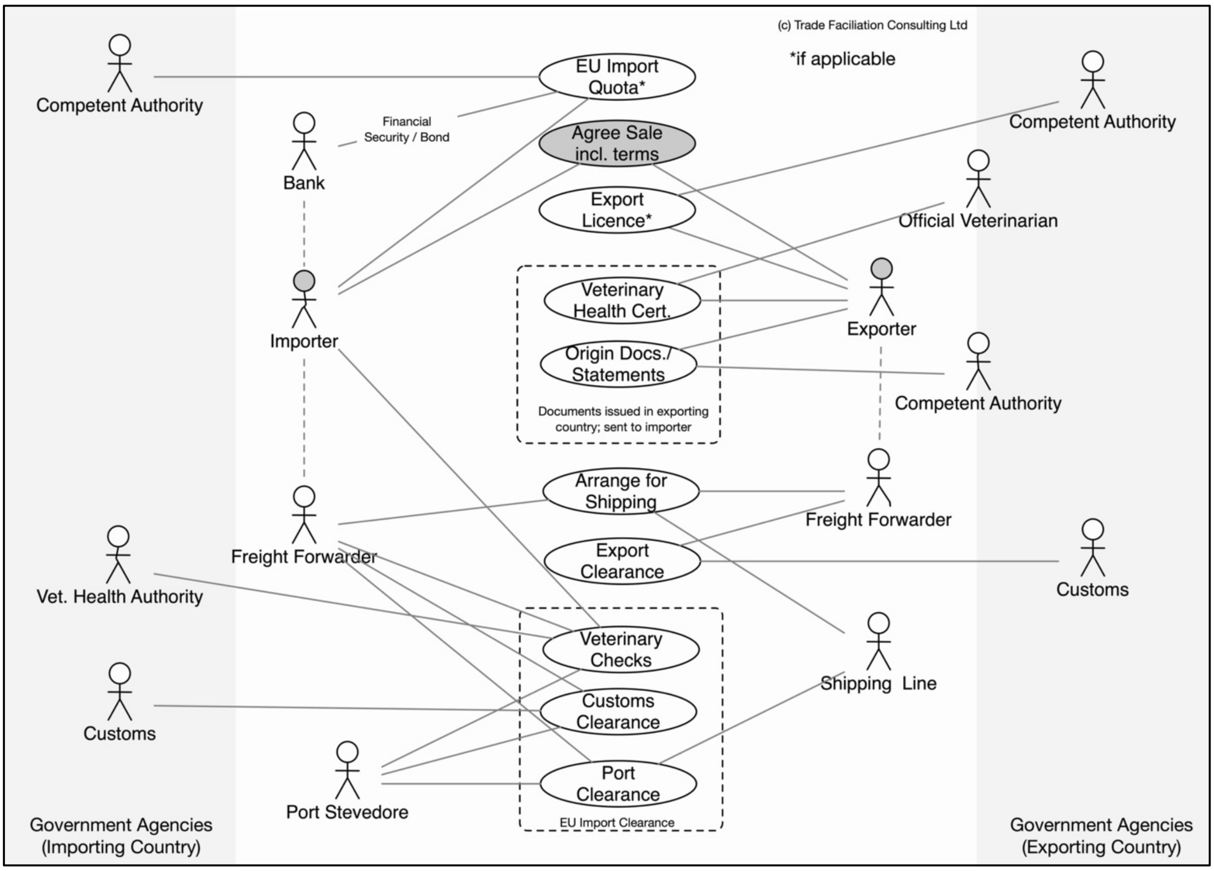
Box 1-5: Incoterms® 2020

In any export sale the seller and buyer need to agree who is responsible for the import and export formalities, transport arrangements, costs, and risks (which can be managed through insurance). Best practice for buyers and sellers is to avail themselves of the Incoterms ® 2020. These are standardised commercial terms that lend clarity to:

- Who is responsible for organizing carriage, insurance, obtaining shipping documents, and obtaining applicable import or export licences;
- The point at which the seller is deemed to have delivered the goods and the burden of risk (if things go wrong) transferred over to the buyer;
- Who must bear applicable costs, such as those relating to transport, packaging, loading, unloading, checking, and security.

There are 11 terms to choose from. The respective responsibilities of the seller and buyer for transport, costs, and risks differ by Incoterm® 2020 rule. The Ex-Works rule (EXW) places the least amount of burden on the seller. The Delivered Duty Paid (DDP) rule, by contrast, places the majority of obligations and responsibilities – including those for the export, transit, and import formalities – upon the seller (ICC 2019). For the remaining 9 rules, responsibilities for export formalities fall upon the seller, and the responsibilities for import formalities fall upon the buyer.

Figure 1-7: Importing products of animal origin into the EU by container; Use case diagram



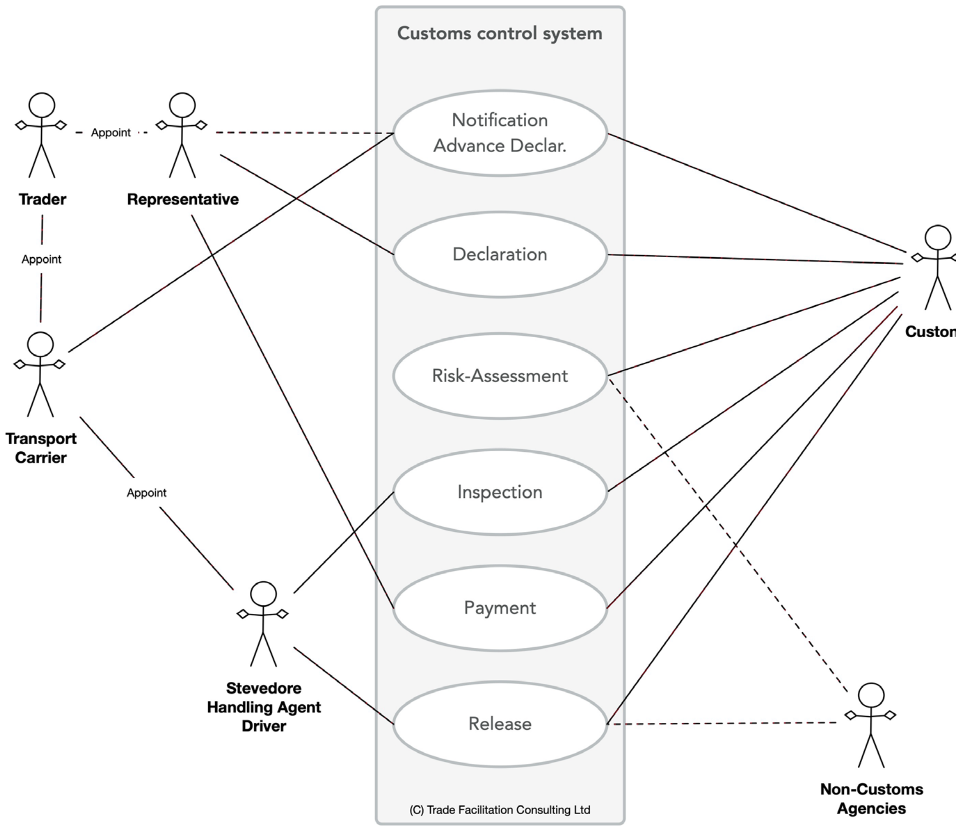
Procedures for placing goods under the control of a specific authority (like Customs; see Figure 1-8) tend to have the following steps:

1. Advance notification to let the authorities know that goods are going to be at the facility ready for processing and release;

2. A full declaration, often building on the information already communicated in advance;
3. A risk assessment, to establish the risk of non-compliance and subsequent impact, and to inform relevant partis about any resulting inspection decision;
4. Inspection, if deemed necessary;
5. Payment of any applicable fees (if not already made in advance) and import duties (if not deferred);
6. Release, which may be into free circulation, or subject to conditions.

In addition to the above, operators may also need to pre-notify and declare the means of transport. Applicable procedures can differ, depending on the mode of transport and the specific points of entry.

Figure 1-8 details a common model for placing goods under customs control



For most businesses that trade, compliance with regulatory procedures consumes considerable effort. The services of intermediaries, such as freight forwarders and customs brokers, are relied upon extensively. These benefit from economies of scale that compare favourably to compliance activities conducted in-house (Verwaal and Donkers 2003). Nevertheless, subcontracting compliance activities to third parties does not mean that non-compliance risks are outsourced, too (Grainger 2016). Inevitably, considerable co-ordination between the buyer, seller, and their respective intermediaries, is necessary. Usually, electronic solutions for sharing relevant operational and regulatory data are relied upon extensively (e.g., Hausman et al. 2010).

6 Border facilities

Border facilities need to be suitably specified to fulfil their function well and not unnecessarily disrupt the flow of goods moving through them (see Chapter 3). Requirements differ markedly by type of border crossing and gateway. For example, the operational needs for processing goods delivered via road transport differ to those landed at maritime seaports. Processing and performance demands and expectations also depend on the needs of business users. For some users, processing capabilities and subsequent clearance times are very important[8], especially where goods are perishable or otherwise time sensitive. For others, expedient clearance times might be less pressing – especially if they choose to hold goods at the facility under temporary storage arrangement[9]. Reasons for delaying a full declaration may include: the buyer has not yet initiated import clearance; the importer has not yet decided what to do with the goods; onward transport is not available; or storing goods at the port or border might be more cost effective than after clearance. Predictability of clearance outcomes and risk of costly physical inspections may be more important.

Depending on the type of border facility, the traffic and goods flow can be managed through queuing systems. Busy sea- and airports often require users to book delivery and collection slots in advance. This helps moderate operational pressures at the sea- or airport, especially during peak times, including linked control and inspection activities. Well managed queuing systems also enable truck drivers to utilise that time for their mandatory resting periods[10]. Certain trades have special control demands. Products of animal origin, live animals, and products of the soil, for example, can usually only be cleared at authorised border facilities with suitable inspection facilities. At many border crossings, such facilities are operated by private companies where fees may apply. The efficiency of processing goods through those facilities is as much dependent on the official inspectors as it is on the stevedores and cargo handling agents working with them (Figure 1-8).

Of course, much of the operational pressure at border facilities is shaped by regulatory demands. As is discussed in Chapter 2, there are many ways to reduce those. This might be through automation, and by encouraging business operators to always be compliant. Pressures on border crossing facilities can also be reduced through improved co-operation between border officials (WCO 2015). In this context, it is also worth pointing out that there are alternative control models to border checks that take place elsewhere (Box 1-6). From a cross-border facilitation perspective, these alternative models deserve exploring.

Box 1-6: Regulatory control options that are away from the border; examples

- **Self-assessment and audit-based controls**: e.g., where the need to submit import declarations for each shipment is replaced with the requirement to keep records in the importer's own system and make those records available to customs on a periodic basis[11]. Many countries also rely on audit-based control systems for the collection and payment of VAT;
- **At the point of manufacture**: e.g., where compliance with applicable rules is certified by the manufacturer. The European Union's CE marking system, to confirm conformity with EU safety, health, and environmental requirements, is an example of such an approach;
- **During loading:** as is the case for certain types of veterinary checks, certain types of transit procedures, and for aviation security;
- **Subsequent to export clearance:** e.g., where operators have collated and shared sufficient information to initiate (perhaps even complete) import clearance before goods arrive;
- **At the point of sale**: e.g., where importers or their distributors are liable for the product. This obliges them to seek assurances from the manufacturer, or to conduct tests to ensure goods conform with applicable regulations and product standards;
- **Mutual recognition**: e.g., where control activities conducted in the country of export are recognised in the country of import, thus do not need to be repeated;

[8] And often the core focus of formal border performance assessments, such as the: Wco, 'Guide to Measure the Time Required for the Release of Goods (Version 3)', (Brussels: World Customs Organization, 2018).

[9] A standard customs arrangement that allows importers to store goods for a limited period of time (e.g., 45 or 90 days) before declaring goods in full to customs.

[10] In the European Economic Area (EEA), for example, drivers are required to take breaks of at least 45 minutes (separable into 15 minutes followed by 30 minutes) every 4.5 hours at the latest (EC/541/2006).

[11] e.g. during a customs audit and/or in the form of a periodic summary declaration.

- **Unilateral recognition**: Many markets, especially in emerging and developing countries, accept product conformity certification of the exporting country, thus negating the need for further testing at home.

Border staff and their administrations are central to clearance operations, and need to stand on three legs:

- The executive powers that enable them to stop, hold, and inspect goods where necessary;
- Public service commitment to ensure that trade flows are not unduly disrupted, public control expectations are met, and business competitiveness is not undermined;
- Work towards continuous improvement, to ensure that resources are put to best effect, and that compliance cost burdens are minimised.

Much of their activities must be in concert with the operators of trade gateways and with the business community at large. Co-ordination, as is elaborated on in Chapter 3, must also be with colleagues across the border. International instruments in the form of Agreements, Conventions, and Guidelines can help in aligning policies and operational practices (Chapter 4). Inevitably, cross-border facilitation demands a broad skillset. The development of such skills can be specified in formal training programmes – e.g., such as the WCO PICARD training standards (Box 1-7). It can also be made available through text books (e.g., Grainger 2021), guidelines such as this publication, and detailed online resources that can be read in tandem with this publication (Box 1-8). It may also be worth holding onto the following premisses:

- Border facilities should not be viewed as obstacles to international trade and commerce. Instead, they should be viewed as facilities that help connect[12];
- Control and facilitation go hand-in-hand – they are two sides of the same coin. The term "facilitation" should not be viewed in any way whatsoever as a compromise that undermines public control interests. Facilitation seeks to weed out friction and make processes and their procedures more efficient, thus improving operational performance and control outcomes;
- There is always scope for improvement, and a characteristic of well managed public and private sector organisations is their commitment to both innovation and continuous improvement. The former can result in radical performance improvements, while the latter, if well managed, helps iron out remaining frictions and find incremental scope for service and performance enhancements (Box 1-9).

Box 1-7: Customs knowledge requirements listed in the WCO PICARD standard; extract

1. The customs business, including revenue collection, trade compliance, the protection of society, safety and security, and protection against unfair trade
2. The interactions between Customs and other government agencies
3. Customs policy
4. The judicial and legal systems
5. The international supply chain
6. International economics
7. Strategic planning
8. Change management

[12] A sentiment that is prominently reflected in the vision statement of the World Customs Organisation (WCO): "Bringing Customs together for a safer and more prosperous world; Borders divide, Customs connects". See: Wco, 'Vision, Mission and Value', <https://www.wcoomd.org/en/about-us/what-is-the-wco/vision-mission-values>, accessed 9 Dec 2022.

9. Project, programme and portfolio management
10. Risk management
11. Information/knowledge management
12. Emerging technologies
13. Financial management
14. Human resource management
15. Customs instruments
16. Customs management
17. Public and media relations, and communication

Source: WCO (2019)

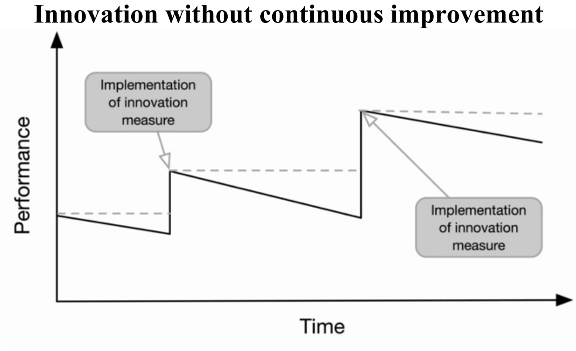
Box 1-9: Online reference resources; selection

	UNECE Trade Facilitation Implementation Guide: https://tfig.unece.org
	WTO Trade Facilitation Implementation Facility: https://www.tfafacility.org
	WTO – Trade Facilitation Database: https://www.tfadatabase.org
	UNECE Border Crossing Facilitation: https://unece.org/transport/border-crossing-facilitation
	World Customs Organization: https://www.wcoomd.org
	UNECE Trade Facilitation Recommendations: https://unece.org/trade/uncefact/tf_recommendations

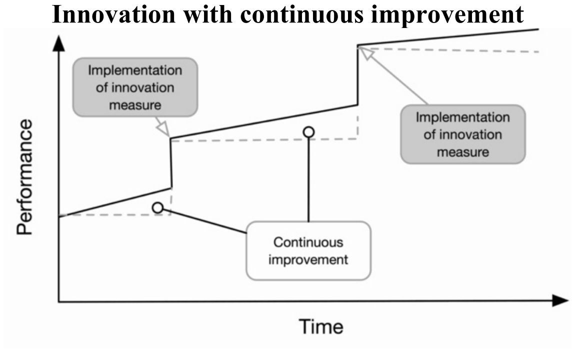
Box 1-8: Innovation and continuous improvement; a brief explainer

Innovations – e.g., by adopting new technologies – should result in radical performance improvements, but over time their benefits can erode, especially where the implemented solution is no longer an "innovation" and represents the norm. Thus, organisations are often advised to also subscribe to continuous improvement principles that maintain and improve upon their performance gains (e.g. Imai 1986).

Innovation without continuous improvement



Innovation with continuous improvement



The ideas underpinning continuous improvement are nothing new and well established. A common approach is to apply the Deming Cycle – named after Edward Deming (1986) and is at the core of Total Quality Management (TQM) practice, including ISO Standards like the ISO 9000 family[13]. It holds that processes can be improved in a continuous fashion through:

i. **planning** – by identifying causes for performance erosion and defining steps that seek to ensure that performance levels are improved; targets are set;
ii. **doing** – by adopting and carrying out performance improvement plans;
iii. **checking** – by monitoring and evaluating performance against planned targets and outcome expectations;
iv. **acting** – by adjusting original processes and procedures in line with what has been learnt in previous steps.

7 Summary analysis

This chapter has presented a broad overview of the environment within which cross-border facilitation takes place. As such, it has outlined the backdrop against which reform ambitions aimed at improving cross-border trade and transport flows is set. To recap, a key factor in the emergence of cross-border trade is the liberalisation of trade tariffs and finance. This has encouraged increased global trade activity that has also been enabled by innovations in transport as well as in information and communication technologies. Export markets may choose to protect some sectors from foreign competition by applying significantly higher tariffs for these (see Table 1-2). Competition between firms for markets and growth can often spur foreign direct investment. A key feature of modern commerce is that businesses seldom pursue market opportunities on their own and are linked to supply chains that convert raw materials into the goods that are placed into the hands of end-customers. The competitiveness of those supply chains matters, and a key aspect of supply chain management is to weed out friction between supply chain partners as well as with regulatory authorities. But, compliance requirements with regulatory authorities can be complex, involving multiple different government agencies. When goods cross borders, they must be declared. Controls, usually at dedicated border facilities, also apply to the vehicles moving those goods as well as the people operating those vehicles (i.e., transport workers). Cross-border transport and trade operations can be complex. Costs can be significant and will impact the competitiveness of a trade.

Against this backdrop, there is considerable scope for exploring opportunities that improve cross-border trade flows. This includes trade policy, where measures that help bring down applicable tariff barriers can be explored. Regional and bilateral trade agreements are pathways that are often taken. The development and co-ordination of suitable transport infrastructure and systems is another. Measures may also be targeted at making compliance with regulatory procedures

[13] https://www.iso.org/iso-9001-quality-management.html

less costly. Likewise, there may be scope for making sure that control models – and border facilities in particular – complement, rather than frustrate, cross-border trade movements. It is likely that changes in administrative practices as well as in business practices can achieve improvements, too. And, while the contemporary international business environment is one characterised by the innovative use of modern transport and ICT, there is always scope for continuous improvement.

Before moving on to Chapter 2, which takes a closer look at cross-border facilitation themes and principles, readers may want to reflect on:

- Their specific role within the cross-border environment and how their activities (or interests) impact those of others;
- The significance that framing trade and transport policy has – especially with regard to tariffs, transport connectivity, and regulatory arrangements;
- The actions of businesses in response to those policies;
- The economic activity that results from increased cross-border trade (e.g., by offering supporting services, linking national supply chains to international supply chains, the ability to draw on foreign resources to foster growth).

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