

■ PART II

Economics and Practices of Trade Facilitation

Part II focuses on five key areas of trade facilitation where improvements can be made in many countries in the region. Chapter 1 addresses the need for timely publication of trade regulations and procedures and increased transparency in the administration of trade transactions. Chapter 2 discusses simplification of trade procedures and documents using relevant international instruments. Chapter 3 discusses trade facilitation issues arising from the increasing number of product standards and related conformity assessment procedures. Chapter 4 emphasizes the importance of increasing the efficiency of trade-related infrastructure and services. Chapter 5 tackles transit trade facilitation, a priority for many landlocked developing countries and an important aspect of regional integration and inclusive development.

All chapters begin with a discussion of the regional state of play with regard to the particular area covered, based on relevant cross-country indicators and the existing economic literature. Each chapter features basic principles and good practices for trade facilitation in each area, which are grounded in existing international instruments and recommendations. Relevant principles and practices are illustrated by selected experiences and/or case studies of countries in Asia and the Pacific.

■ CHAPTER 1

Publication and Administration of Trade Regulations

Publication and implementation of trade regulations are critical first steps for trade facilitation. If rules are not publicly available and are not implemented efficiently, then their potential benefits are lost. Under certain circumstances, some governments may want to introduce relatively complicated trade regulations. However, whatever the rules, regulations, and standards, these should be publicized and provide the foundation for all administrative processes and decisions.

If accurate and detailed information on trade-related laws, regulations, procedures, formalities, and documentation are not publicly available, it is extremely difficult for traders, particularly the small or infrequent ones, to comply. Further, this gives the enforcing agencies room to alter procedures and requirements at will (either to facilitate or impede trade), creating opportunities for collusion between agents and traders where agents extract rent from traders, which then results in loss of public revenue.

Lack of transparent and publicly available trade-related rules are among the most critical nontariff barriers to international trade. As shown in Table 2.1, the private sector's top priorities for trade facilitation are timely and comprehensive publication of trade rules and regulations, and their effective and transparent application. The publication of rules and regulations, and administration based on the published rules, are the basis for reducing the costs associated with goods crossing international borders. This chapter discusses the state of play and the impact of effective administration on trade, followed by best practices and experiences in Asia and the Pacific.

Table 2.1: Private Sector Priority Ranking of Selected Trade Facilitation Measures

Trade Facilitation Measures	Ranking					
	Overall	Bangladesh	China, People's Republic of	India	Indonesia	Nepal
Elimination of bribery and other corrupt practices of officials involved in the clearance and release of imported goods	1	1	1	1	2	1
Improvement of coordination between relevant agencies, particularly on document requirement, e.g., through the establishment of a single window for one-time submission and collection of all trade documents	2	3	3	4	2	4
Timely and comprehensive publication and dissemination of trade rules and regulations (e.g., through the internet)	2	6	4	4	1	1
Computerization and automation of trade procedures, e.g., online submission and approval of customs declarations, cargo manifests, including electronic payment of fees and customs duties	4	6	5	2	5	6
Harmonization and standardization of documentation requirements based on international standards	5	4		8	8	4
Reduction and simplification of documentation requirements for import and export procedures	6	1	7	3	6	

Source: UN Economic and Social Commission for Asia and the Pacific (ESCAP). 2006a.

Publication and Administration: State of Play

Cross-country data on the extent to which trade-related rules, regulations, and procedures are published, and how they are published, are not readily available. Information on the quality of administration of trade-related rules is also very limited although attempts have been made to collect it through private sector surveys such as the annual World Economic Forum's executive opinion survey and the World Bank's Logistics Performance Index.²²

The Global Competitiveness Report (GCR) is one of the best sources of indicators in this area (Box 2.1). In particular, the GCR data on irregular payments on exports and imports can provide an indication of the quality of rules and the lack of publication and administration in trade policy; that is, irregular payments are more likely to be required when clear rules are not published or when administration is not consistent with the stipulated rules and regulations.²³ As shown in Figure 2.1, Singapore and Hong Kong, China reported very few irregular payments in exports and imports, outperforming the G7 average. Although irregular payments are an issue in most Asian countries included in the survey, some countries did make significant improvements from 2011 to 2013, particularly Kazakhstan, Armenia, Cambodia and the Philippines. Further, though general improvement in Asia and the Pacific is very minimal, G7 economies also got worse a bit.

²² Information on the quality of administration is broadly related to governance. For discussion of alternative governance measures, see United Nations Development Programme (UNDP). 2005; Kaufmann and Kraay. 2008; Dixit, A. 2009.

²³ This indicator was available in GCR until its 2006/2007 edition. It is now reported instead in the GETR.

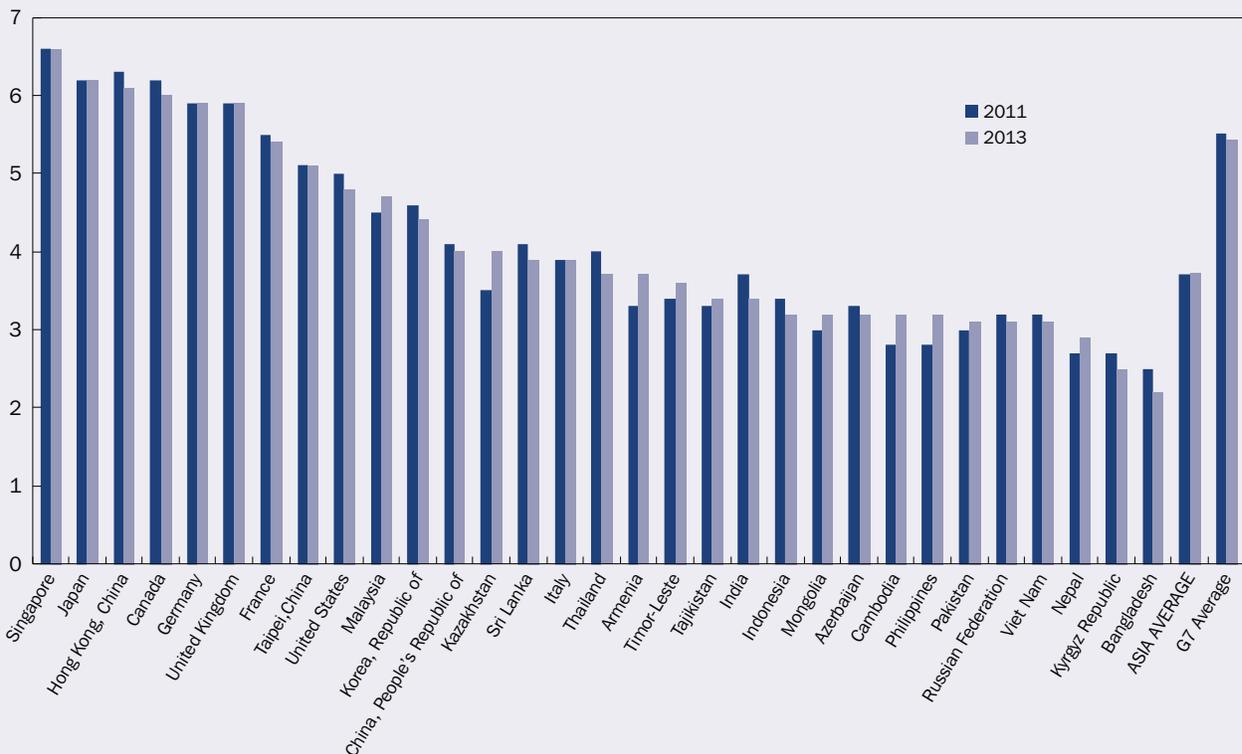
Box 2.1: The Global Competitiveness Report

The Global Competitiveness Report (GCR) covers more than 130 economies and contains over 110 indicators, along with associated country rankings. It is prepared annually by the World Economic Forum, an independent international organization committed to improving the state of the world by engaging leaders in partnerships to shape global, regional, and industry agendas. Incorporated as a foundation in 1971 and based in Geneva, Switzerland, the World Economic Forum is nonprofit; it is tied to no political parties or national interests.

The main feature of the Global Competitiveness Report is the Global Competitiveness Index, which is computed from both publicly available statistics and the World Economic Forum’s Executive Opinion Survey, a comprehensive annual survey conducted by the World Economic Forum and its network of partners. It is designed to capture a broad range of factors that affect an economy’s business climate. The GCR has 12 pillars of competitiveness: institutions, infrastructure, macroeconomic stability, health and primary education, higher education and training, goods market efficiency, labor market efficiency, financial market sophistication, technological readiness, market size, business sophistication, and innovation. GCR 2012/2013 features 144 economies. It contains a detailed profile for each of the economies featured in the study as well as an extensive section of data tables with global rankings covering over 100 indicators.

Source: Global Competitiveness Report 2012-2013. Available at <http://www.weforum.org/issues/global-competitiveness>.

Figure 2.1: Irregular Payments in Exports and Imports, 2011 and 2013



Source: World Economic Forum. Global Competitiveness Report. 2011 and 2013.

Box 2.2: The Complementarity of World Bank’s Logistics Performance Index and Doing Business Indexes

For trade activities, Doing Business focuses on red tape obstacles to the movement of goods across borders, and the ease of export and import for small- and medium-sized enterprises.^a The World Bank’s LPI uses a broader and more comprehensive approach to supply-chain performance to measure some of the critical factors of trade logistics performance. These are the quality of infrastructure and logistics services, the security of property from theft and looting, the transparency of government procedures, macroeconomic conditions, and the underlying strength of institutions. The value-added of the LPI is that it provides a global benchmark of logistics efficiency service quality not treated specifically in Doing Business.

^a The Doing Business database and indicators are discussed in Part I Chapter 1.
Source: World Bank Logistics Performance Index.

Table 2.2: Transparency in Trade Regulations – Perceptions from Global Logistics Operators

	East Asia and the Pacific Average (%)	
	2007	2012
Do you receive adequate and timely information when regulations change?	41	23
Is customs clearance a transparent process?	25	26

Source: World Bank. Logistic Performance Index. 2007 and 2012.

While the GCR has significantly improved its country coverage in recent years, it has yet to cover Asian countries whose transparency in government policy making needs to be captured. For example, the GCR does not cover Afghanistan, Bhutan, the Lao People’s Democratic Republic, and Myanmar.

World Bank Logistics Performance Index (LPI) also provides information on regulatory transparency and, more specifically, on the transparency in customs clearance in some countries in Asia and the Pacific (Box 2.2). The information is based on the perceptions of global freight forwarders and express carriers who were asked to respond to the following questions: “Do you receive adequate and timely information when regulations change?” and “Is customs clearance a transparent process?” (Table 2.2). LPI and GCR results are consistent with each other.

The use of information communication technology (ICT) is also critical for the publication of regulations. ICT is an effective tool to publicize regulations and make these available to concerned parties without discrimination. It can also facilitate the participation of various stakeholders in the regulatory process, allowing for efficient electronic submission of comments on existing or new regulations. Consultation and feedback of various stakeholders through the internet have the potential to increase government transparency as these provide citizens new channels of influence and reduce barriers to public participation in policy making.

The UN E-Participation Index is an indicator of administrative transparency and willingness to engage in consultations. It is a composite measure based on information from government websites, capacity for the public to engage in consultative processes electronically, and government willingness to take account of electronically submitted inputs in decision making. Countries in Asia and the Pacific are found to be at different stages of development in this area (Figure 2.2). The Republic of Korea has the highest e-participation score, having the highest percentage of internet users in the world (Part II Chapter 4). This can be explained by its government's strong emphasis on the development of a national information technology (IT) infrastructure and e-government solutions. While many Asian countries have improved their scores in e-participation during 2008 and 2012, Kazakhstan, Singapore, Japan, Mongolia, Malaysia and Brunei Darussalam have made the most progress during the period.

Overall, the various indicators provide a remarkably consistent picture of governance in the region, regardless of the specific data set or index examined. While some governments in the region, notably Singapore and New Zealand, are setting the global standard in this area, many still lag far behind. Much remains to be done to improve the publication and administration of trade regulations and procedures, given the fact that only 25% of global logistics providers operating in the region describe the customs process as transparent, and less than half indicate that they have been informed of the regulatory changes.

Impact of Effective Publication and Efficient Administration on Trade

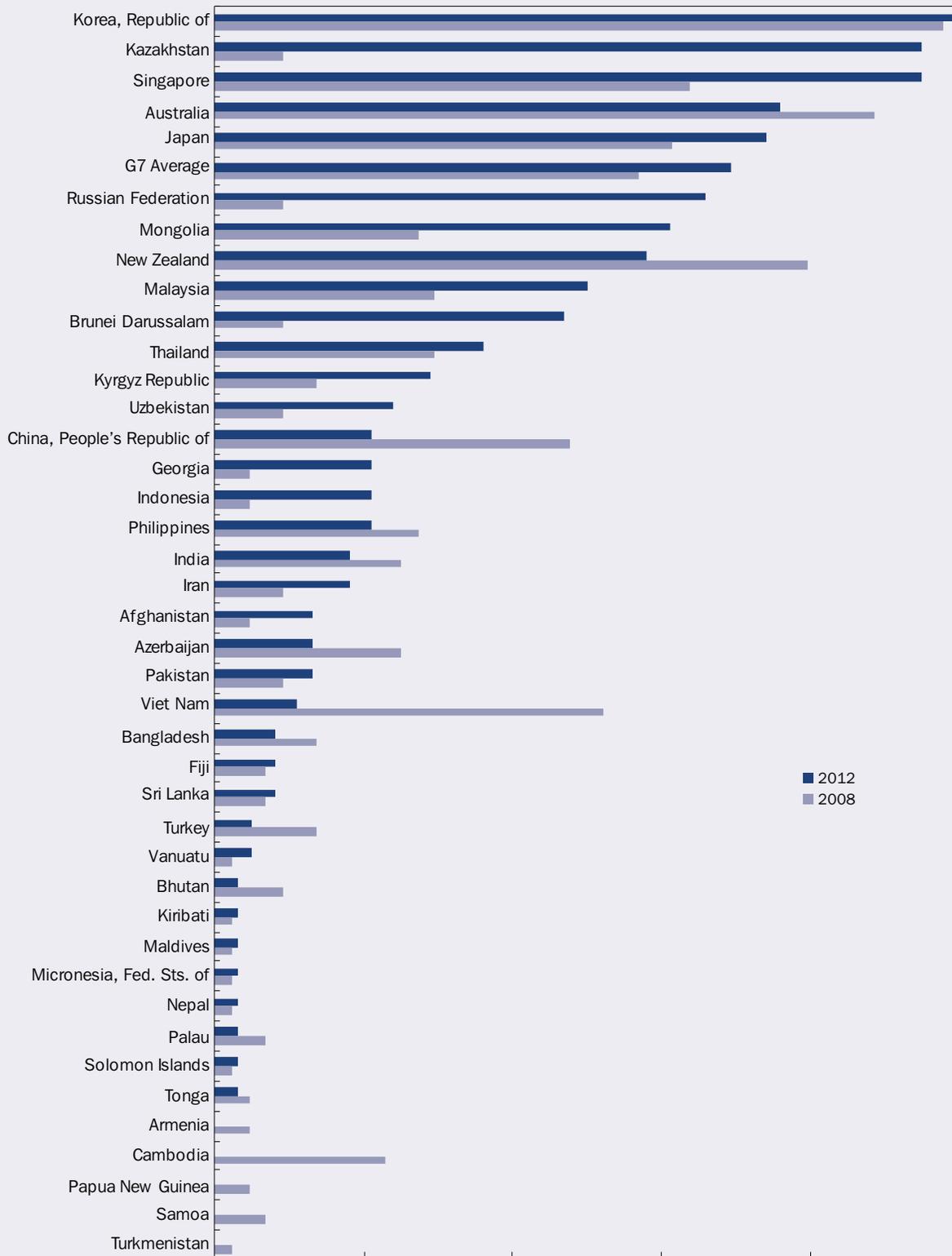
It is difficult to disentangle the impact of effective publication of trade rules and regulations from their efficient administration because of lack of data and the fact that publication is a likely precondition to efficient administration. Efficient administration of existing rules and regulations may be measured in terms of corruption, or its absence.

Abe and Wilson (2008)²⁴ attempted to quantify the benefits of reducing corruption and improving transparency to lower trade costs in Asia and the Pacific. They found substantial benefits from increasing transparency in the countries ranked below the regional average. If transparency in these countries were raised to the average in the region, then regional trade would increase by 11% and global welfare would increase by \$406 billion. Under this scenario, the gross domestic product (GDP) of the Philippines, Thailand, and Viet Nam would increase by about 20%. Although the numerical results must be treated with caution because both gravity and computable general equilibrium studies are sensitive to assumptions, the Abe and Wilson (2008) study highlights the potential magnitude of gains from improved transparency.

Corruption can be a major obstacle to trade in manufactured goods (rather than primary products), especially those characterized by value chains. Pomfret and Sourdin (2008) find that the relationship between trade costs of imports into Australia and the Transparency International Corruption Perception Index for the exporting country is weak at the aggregate level, but much stronger for air freight than for sea freight and stronger for some categories of manufactures than

²⁴ Abe and Wilson (2008) use factor analysis to construct a composite index of transparency, which they plug into a gravity model to estimate the impact of increased transparency on trade, and then use the Global Trade Analysis Project (GTAP) global general equilibrium model to calculate the consequences for GDP and welfare.

Figure 2.2: E-participation Index



Source: UN E-participation Index 2008 and 2012.

for others.²⁵ A producer located in a country whose officials can delay trade by discretionary actions is unlikely to become involved in value chains where timely delivery at competitive prices is critical. Thus, corruption could be a substantial obstacle to participation in the fastest-growing area of international trade, especially in East Asia.

To eradicate corruption, a holistic approach to trade facilitation reform is necessary. High trade costs and complicated procedures create an environment conducive to corruption and bribery. The intuition is that higher costs of official trade due to inefficient and/or ineffective regulations or decaying infrastructure can create an incentive for traders to seek quicker and cheaper access to international markets through corrupt means. Bribes may be exercised by security guards to restrict pilfering, by shipping planners who offer priority, or by clerks who stamp documents. Shepherd (2009) demonstrates that longer days to export and import appear to lead to greater prevalence of trade-related corruption. Regulatory reform, availability of information on rules and regulations, automation of trade procedures, and upgrading of infrastructure might therefore provide a second-round boost to trade through reduced corruption.

Basic Principles and Good Practices

While information dissemination on customs procedure is an important component of trade facilitation, the scope for publication issues is not limited to customs-related rules. Any trade-related laws, regulations, procedures, and associated requirements should be published.

Various World Trade Organization (WTO) agreements have articles on publication and administration-related matters under the title of transparency. Thus, the concept of transparency is not just a principle—it is an operational mandate for all WTO agreements. General Agreement on Tariffs and Trade (GATT) Article 10 is Publication and Administration of Trade Regulations. Article 10 of the Technical Barriers to Trade (TBT) Agreement is Information About Technical Regulation, Standards and Conformity Assessment Procedures. Annex B of the Sanitary and Phytosanitary (SPS) Agreement is Transparency of SPS Regulations. Based on the stipulations in these agreements, the governing principles on transparency can be summarized as follows:

- (i) *Trade-related laws, regulations, procedures, and documents should be made publicly available and easily accessible.* As GATT Article X-1 has required, all trade-related information such as rules, regulations, procedures, and associated documents shall be published to enable governments and traders to become familiar with them (Box 2.3). This is important to allow access to accurate and timely information on trade procedures and formalities. However, GATT X-1 does not require any country to disclose confidential information. The principle of timely publication is equally important to technical regulations for product quality that may have major implications for both producers and traders (TBT Article 2.9.1).²⁶ Moreover, while it is not required by WTO, regulations that have a large impact on trade should be published not only in the national

²⁵ Pomfret and Sourdin (2008) use the cost, insurance, and freight/free-on-board (CIF/FOB) gap as the measure of trade costs and control for distance and for value/weight of commodities.

²⁶ In the case of the SPS Agreement, it is required that interested members of the WTO should be able to become acquainted with the regulations (SPS Annex B-1).

Box 2.3: Increasing Transparency of Administration: What Should Be Published?

Hong Kong, China, Japan, Mongolia, Norway, Switzerland, and Turkey^a have proposed the prompt publication of laws, regulations, judicial decisions, and administrative rulings of general application as specified in Article X of the General Agreement on Tariffs and Trade (GATT), 1994. These include the following:

- importation, exportation, or transit procedures required by government (including port, airport, and other entry point procedures and required forms and documents);
- rate of duties and taxes imposed on or in connection with importation, exportation, or transit (including applied tariff rates);
- general rule for classification of products for customs purposes as well as examples of such classifications;
- import, export, or transit requirements, restrictions, or prohibitions;
- fees and charges imposed on or in connection with importation, exportation, or transit procedures as required by government;
- penalty provisions against breaches of import, export, or transit formalities;
- appeal procedures; and
- agreements or parts thereof with any country or countries relating to importation, exportation, or transit.

While legislative texts are important for litigation and appeal and dispute settlement, practical descriptive information or excerpts have greater value in the actual conduct of trade transactions^b. Information on operational implications of legislation such as outlines of border crossing formalities, opening hours of border crossings and other agency offices, and updated release and clearance times at selective border crossings are essential for traders. This type of information (available through agency-level information notes outlining major trade-related procedures under their responsibility, or as part of a trade facilitation handbook that provides descriptive practical operational information to traders) is a useful tool for transparency. In any case, relevant administrations should adopt information policies to ensure that the published information is updated and accurate.

^a WTO (TN/TF/W/155/Rev.1). 2009.

^b United Nations Conference on Trade and Development (UNCTAD). 2008.

language of a concerned country but also in a foreign language (e.g., English, French).²⁷ Publishing such information through the internet, a means widely accessible to the general business community, is highly encouraged. For example, Trade Portal of India, a website established and maintained by the India Trade Promotion Organization (www.tradeportalofindia.org), contains information on customs and other border agencies' regulations, online forms for traders, tax calculator, and other useful information.

- (ii) *Enquiry points should be established to answer questions on complex trade and customs rules, regulations, and procedures.* The establishment of an enquiry point is an effective way to enhance transparency of administration, as it could serve as a useful tool to improve accessibility of trade-related information, especially to private sector traders. SPS and TBT agreements require enquiry points, meant to provide answers to all reasonable questions from interested members on sanitary and phytosanitary measures and technical regulations (SPS Annex

²⁷ Only developed members of the WTO are required to submit notification in a foreign language (English, French, or Spanish), if required by other members under SPS and TBT Agreement (SPS Annex B-8, TBT10.5).

B-3 and TBT Article 10). An example of an enquiry point is the Open Trade Gate Sweden (www.opentradegate.se) introduced by the Swedish government to ease exports from developing countries. It is a one-stop information center through which exporters from developing countries may inquire about general customs procedures and documents, information about the customs tariff that the Swedish importer must pay for the product, reduction of the customs tariff through a preferential agreement, certificate of origin required to benefit from such an agreement, the value-added tax (VAT) applicable for the product on the Swedish market, and product-specific requirements such as labeling and packaging.

- (iii) *Reasonable intervals between publication and implementation should be put in place.* The prompt publication of new or amended rules and regulations is crucial. GATT Article X-2 stipulates that measures shall not be enforced unless such measures have been officially published. Moreover, as the SPS agreement requires except in urgent circumstances (SPS Annex B-2), a reasonable period of time should be maintained between publication and enforcement to give traders time to get acquainted with the new rules, and time to adjust business processes to comply with those new rules and requirements. For example, in the case of moving to automated submission of trade data and information through online forms, traders have to be provided with a reasonable time to obtain the necessary ICT and training.
- (iv) *Mechanisms for prior consultation on new or amended laws and regulations with interested parties should be established.* Each government has authority to amend or introduce new trade laws and regulations, which may arise, for example, from the implementation of international commitments (e.g., trade agreements and customs conventions) or modernization of customs processes (e.g., new ICT solutions). However, a regular consultation with interested parties, notably governments and the private sector, prior to adoption of new and amended laws and regulations would minimize the negative impact of regulations, enhance trust and cooperation between government and the private sector, and, more importantly, ensure predictability and improve the quality of regulations. This is especially true in the case of technical regulations, where each government shall allow a reasonable period for the submission of comments on the technical regulation from other countries (TBT Agreement Article 2.9.4).
- (v) *An effective appeal mechanism should be put in place.* It is crucial for affected traders to have recourse to an independent appeal mechanism for review and, where appropriate, for the correction of administrative action or omission.²⁸ Efficient administrative appeal procedures can provide traders faster and cheaper means to deliver solutions than courts. Article 11 of the Customs Valuation Agreement gives traders the right of appeal to customs or an independent body while GATT X-3 provides for the establishment of an administrative or judicial body independent of enforcement agencies for prompt reviews and correction of administrative actions relating to customs matters.
- (vi) *Customs rulings should be provided in a timely manner and in advance of the relevant trade transaction upon the written request of an applicant who has provided all necessary information.* Many countries have already established an advance ruling system, which allows a trader to apply for a written ruling, generally, on how tariff classification, valuation, and origin will be applied

²⁸ UNCTAD. 2008.

by the importing country to a specific situation when it imports. Advance rulings are supplied by customs on request, and in many cases can be legally binding so long as the trader provides complete and accurate information when requesting the ruling. This mechanism provides the trading community with greater commercial predictability and certainty, as traders can know in advance what tariff would be applied on the imported goods— or what tariff duties they will have to pay—should they proceed with the transaction. The WTO Rules of Origin Agreement already requires countries to provide advance rulings on origin, and a number of countries have proposed to extend such a requirement to other customs areas as part of the ongoing multilateral trade facilitation negotiations.²⁹

Experience of Economies in Asia and the Pacific

Advance Ruling and Appeal System of Customs Valuation: The Case of Sri Lanka

Sri Lanka Customs³⁰ has recognized the importance of issuing advance rulings, particularly for classification and valuation of goods as a vital tool for facilitating the clearance of imported goods. When the Harmonized System (HS) was introduced in 1989, it established a unit in the Imports Division to provide advance rulings on classification of goods (HS codes). This is widely used by importers who are uncertain of the HS code of certain commodities. This is also used by exporters, particularly for country of origin claims. The facility enables traders to forecast their financial commitments to customs in terms of import duties and avoids delays in clearing consignments due to disputes that may arise between the authorities and the traders. Whenever a written request for an advance ruling is received by Sri Lanka Customs, it responds in writing within 2 to 3 days, with a validity period of 6 months. Customs is obliged to honor the ruling once it is given, even though customs may have been incorrect, notwithstanding that such a ruling may be disadvantageous from a customs revenue point of view.³¹

There have been instances when this facility was misused by certain importers.

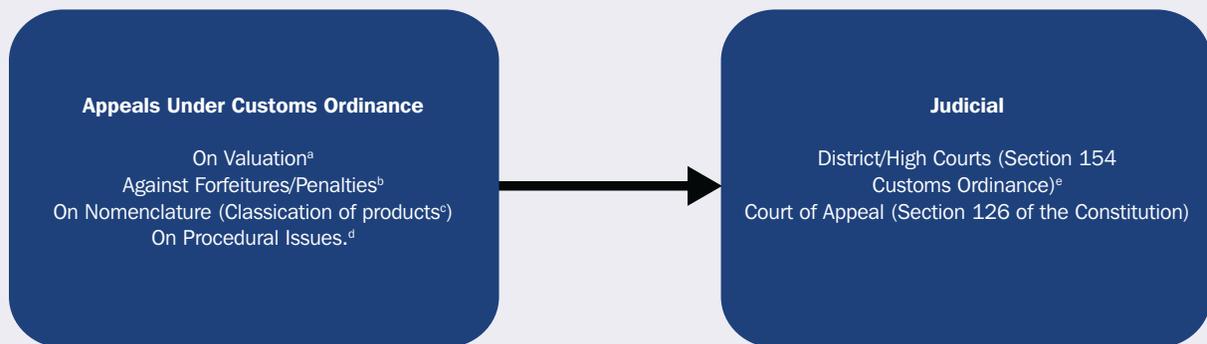
During the latter part of 2008, an importer of paints obtained an advance ruling from Sri Lanka Customs on the HS codes applicable for resin and for hardener/catalyst as two separate items that fell under sections 6 and 7 of the tariff. In November 2008, the trader imported the two items and lodged the import declaration of the two items under the two separate tariff headings as indicated in the advance ruling, which attracted lower rates of duty. Customs collected import duty accordingly. However, when the goods were subjected to physical verification prior to the release of the consignment, customs found out that the two imported items were not separate items but were, in fact, a set that needed to be classified as a final product, which attracted a higher rate of duty.

²⁹ See, for example, the proposal of Australia, Canada, Turkey, and the United States, WTO (TN/TF/W/153). 2008; Revised Kyoto Convention on Advance Rulings. 2009.

³⁰ Based on an interview between Mr. T. S. A. De Silva and Dr. Nevil Goonawardena, Director of Sri Lanka Customs, on 24 December 2008.

³¹ On advance rulings on valuation, Sri Lanka Customs encourages importers to provide the relevant information in advance to minimize delays in clearing consignments. Even though customs accepts the declared value at the time of importation on the basis of the information provided in advance, those consignments would still be subjected to post-clearance audit that may result in a change in the customs valuation of the consignment.

Figure 2.3: Sri Lanka Customs Appeal System (2009)



^a Appeal procedures incorporated in the Customs (Amendment) Act No. 2, 2003.

^b To the director general of customs (Section 164).

^c Appeal procedures implemented through departmental or ministerial orders.

^d These could also include disputes related to duty concessions, drawbacks, temporary imports, temporary exports, carnets, etc.

^e To the minister of finance/secretary to the treasury (Section 165).

Source: Author's own compilation

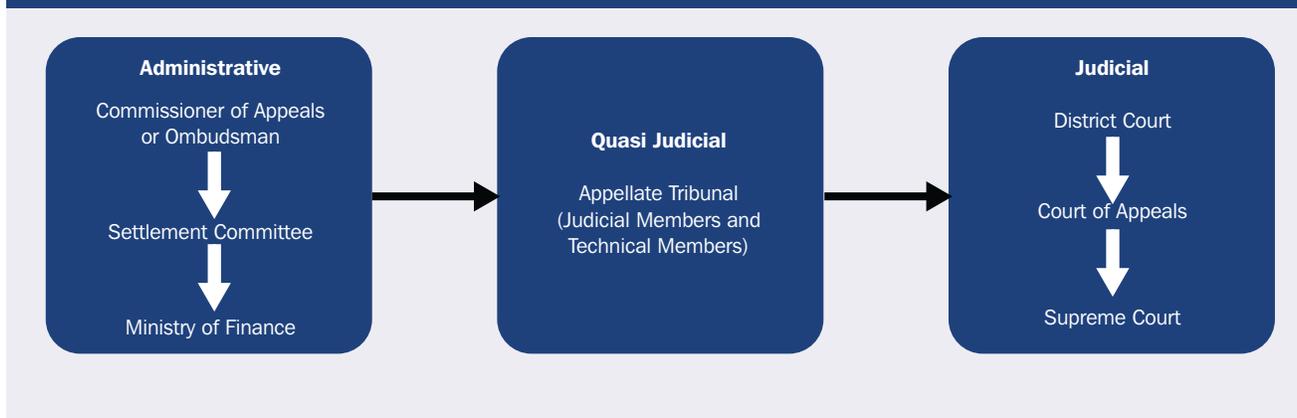
A related problem is the case where importers are uncertain of the customs value when entered into a forward contract. In such circumstances, Sri Lanka Customs provides the facility for importers to register their contracts with customs, and get a ruling on the customs value applicable for calculating the customs duty subject to post-clearance audit. There have been instances when importers, after registering their contracts with the indication that the shipments will be received on a part shipment basis, have attempted to disregard the registered contracts when the market prices dropped below the contracted prices.

While appeal procedures have been implemented through departmental or ministerial orders, or through practice, a formal appeal system was introduced in the Customs Law of Sri Lanka in 2003 (Figure 2.3).³² In Sri Lanka, the majority of appeals arise from disputes over the classification or valuation of goods. In the case of appeals on classification, the Customs Nomenclature Committee provides the rulings, and if the party concerned is not satisfied with the decision, the customs administration would refer such matters to the WCO for an opinion. If an appeal arises with regard to the value of goods, the Customs Valuation Committee provides the ruling. Aggrieved parties who are not satisfied with the ruling may appeal to the judicial body. Finally, if an aggrieved party is not satisfied with the rulings of the judicial body, the matters in dispute would be referred to the WCO Technical Committee for advice.

Because of the foregoing examples, Sri Lanka Customs deemed that its appeal system was inadequate. Hence, it included customs appeal systems as one of the areas for improvement under the ADB-assisted Fiscal Management Reform Program. Under an improved appeal system such as that illustrated in Figure 2.4, the number of appeals is expected to decline.

³² The Customs Ordinance of Sri Lanka is over 150 years old and the concept of "appeals" had not been included in the Customs Law of Sri Lanka until the Customs (Amendment) Act, No. 2, 2003.

Figure 2.4: Structure of the Proposed Appeal System for Sri Lanka Customs



The proposals for a new appeal system in Sri Lanka Customs have been drafted based on the revised legal provisions of the customs ordinance and current practices. These proposals included, among other things, the general guidelines for making appeals, persons entitled to make such appeals, and the procedural requirements pertaining to appeals. The proposals also envisaged creating an independent appellate tribunal that would have powers such as the right to summon witnesses and make binding rulings. These proposals, however, required further revision of the Customs Law, particularly on appeal procedures, powers of the appellate authority, and appeals to the judiciary.

Reform of Advance Classification Ruling in Japan: Target Response Period and Object

Like other customs offices in Asia and the Pacific Japan Customs has also improved its Advance Classification Ruling System (tariff classification, the origin, and customs valuation).³³ Although inquiries can be in oral, written, or e-mail form, the Japan Customs encourages importers to submit written inquiries in the interest of accuracy. A written inquiry is provided in the form of a response paper which importers could attach at the time of declaration. Information in the paper, such as tariff classifications, is then reviewed upon customs examination. Japan Customs also responds to oral and e-mail inquiries through the same channels, but would not consider such a response an official reference in the customs examination.

A written response with regard to the tariff classification and origin of goods is usually available within 30 days, which is the target period set by Japan customs, while the actual average time necessary for the issuance of a response paper is as short as 15 days. A written response on customs valuation is usually made within 90 days after the submission of a written inquiry. Every year, Japan's customs administration resets within a stipulated time its target response period and response ratio. As a result, its response period and ratio have improved significantly (Table 2.3).

When importers object to a decision made by the customs office, they can file an objection, which can be made only against the written response from the customs office. An objection cannot be made against oral responses. Objections should be filed

³³ Japan Customs. 2009.

Table 2.3. Japan's Response Time to Advance Ruling Requests, by Classification

	2004	2005	2006	2007	2008	2009	2010	2011
Oral response within 1 day (%)	99.6	99.8	99.8	99.7	99.9	99.9	99.6	99.6
Written response within 30 days (%)	94.8	95.8	99.6	99.9	99.7	99.4	99.9	99.8
Average time required for written response (no. of days)	18.7	18.3	15.3	15.3	14.3	13.9	13.9	13.2

Source: Japan Customs. Available at www.customs.go.jp/index.htm

within 2 months from the date of issuance or notification of the written response. The final decision is made by the customs office, usually within 30 days from the submission of the objection.

The issued response paper is valid for 3 years (the actual validity period is stipulated in the response paper) unless the situation changes due to the amendments of laws and regulations. It is void if the content of the inquired goods does not match the actual article, if the expiration date has lapsed, or if the application of laws and regulations is incorrect.

Japan Customs, in principle, makes written responses publicly available through its website without disclosing the names of inquiring parties. This is because the information provided in written responses, such as classification and customs valuation, is useful for traders other than the inquiring party. Certain written responses containing confidential information are made available after a blackout period (usually 180 days) to avoid any inconvenience their publication may cause to the concerned importers.

■ CHAPTER 2

Trade Procedures and Documents

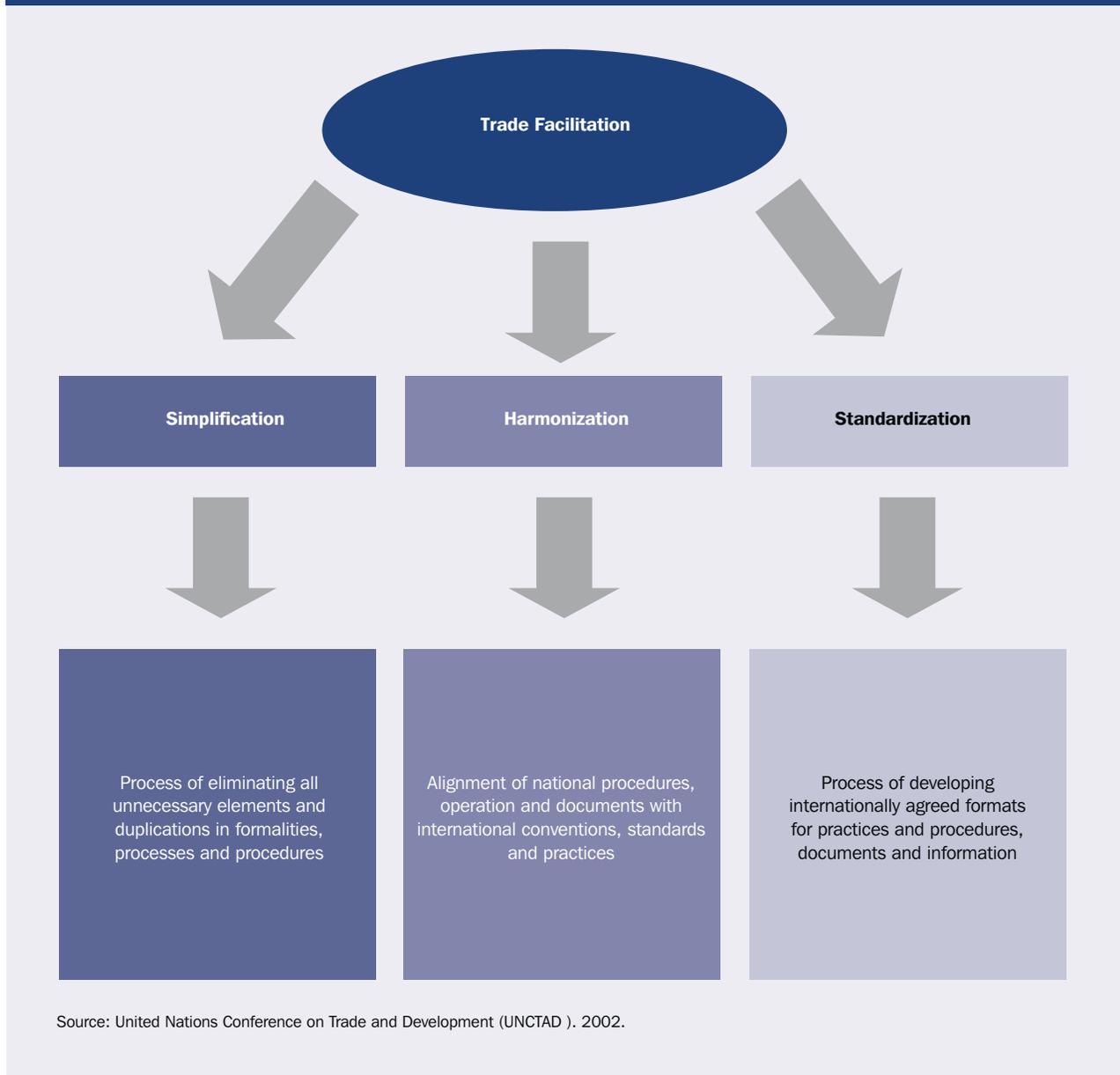
As explained in Part I, trade procedures can be categorized as commercial, transport, regulatory, and financial. Each procedure requires the exchange of information and documents between parties. Commercial procedures include the negotiation and preparation of a sales contract and a commercial invoice, which serve not only as the basis for the buyer's payment for the goods but also as a source of information for the customs, tax, and banking authorities. Transport procedures involve a contract with a transport service provider (carrier or freight forwarder) to move the agreed consignment of goods from the consignor to the consignee, and ensure that the consigned goods are duly delivered to the consignee after the necessary regulatory requirements and formalities are met. The listing and acknowledgment receipt of goods by the carrier for transport, as well as the specific delivery terms agreed to with the shipper, are contained in a bill of lading or waybill (for container trade).

Regulatory procedures are those that involve interactions with government agencies and other authorities for traders (or assigned intermediaries) to complete import and export operations in accordance with applicable laws and regulations. These procedures are intertwined with commercial and transport procedures. They may include applying for and obtaining an export license, a sanitary or phytosanitary certificate, a certificate of origin, and other relevant documents before lodging the customs export declaration. Besides customs clearance procedures, other regulatory procedures may have to be completed to allow the passage of goods and their means of transport across borders. These procedures may include (i) inspections of driver passports and visas by the border police and/or immigration officials; (ii) inspections of vehicles and drivers by transport and/or police officials to ensure compliance with national transport regulations; and (iii) agricultural, veterinary, and public health inspections carried out by officials of the relevant government agencies to ensure compliance with national quarantine and public health regulations.³⁴

Documents and data in paper or electronic format are important, as they provide the means to exchange information associated with commercial, transport, regulatory, or financial procedures. However, trade procedures and documents should not be used to create additional protection for domestic products. Traders often face complex and myriad formalities and documents, and have to put up with repetitive requests for the same information. For example, to move a consignment across the

³⁴ Misovicova and Azhari. 2007.

Figure 2.5: Simplification, Harmonization, and Standardization in Trade Facilitation



India-Bangladesh border, Indian exporters to Bangladesh have to obtain some 330 signatures on 17 documents at several stages.³⁵ As evident from the various definitions of trade facilitation discussed in Part I, to simplify, harmonize, and standardize procedures and documents is an essential step in reducing import and export time costs, and making them more predictable (Figure 2.5).

Following a review of performance in this area and its impact on trade in Asia and the Pacific, this chapter introduces guiding principles and practices aimed to lessen the burden of trade documentation and procedures. Relevant

³⁵ De and Ghosh. 2008.

international instruments and experiences of economies in Asia and the Pacific are then introduced.

Trade Procedures and Documents: State of Play

The procedures involved in moving a 20-foot container from a factory to the deck of a ship ready for departure (i.e., for export), or vice versa, can be divided into four stages: document preparation, customs clearance and technical control, port and terminal handling, and inland transportation and handling. The time (in days) necessary to complete each stage in the case of import or export is shown in Figures 2.6 and 2.7. The data revealed that the most delays and additional costs are associated with the preparation of trade documents and inland transport and handling, except in Pacific Islands where the major bottleneck is ports and terminal handling, followed by customs clearance for imports and inland transport handling for exports. In most cases, the time to prepare documents for import is slightly longer than the time to prepare export documents. Documents preparation to import ranges from 1 day in Singapore, 2 days in Hong Kong, China, US, UK and the Republic of Korea, 3 days in Germany, Malaysia and Australia, and 5 days in Japan, Solomon Islands and New Zealand to 28 days in Mongolia, 49 days in Afghanistan, and 50 days in Uzbekistan.

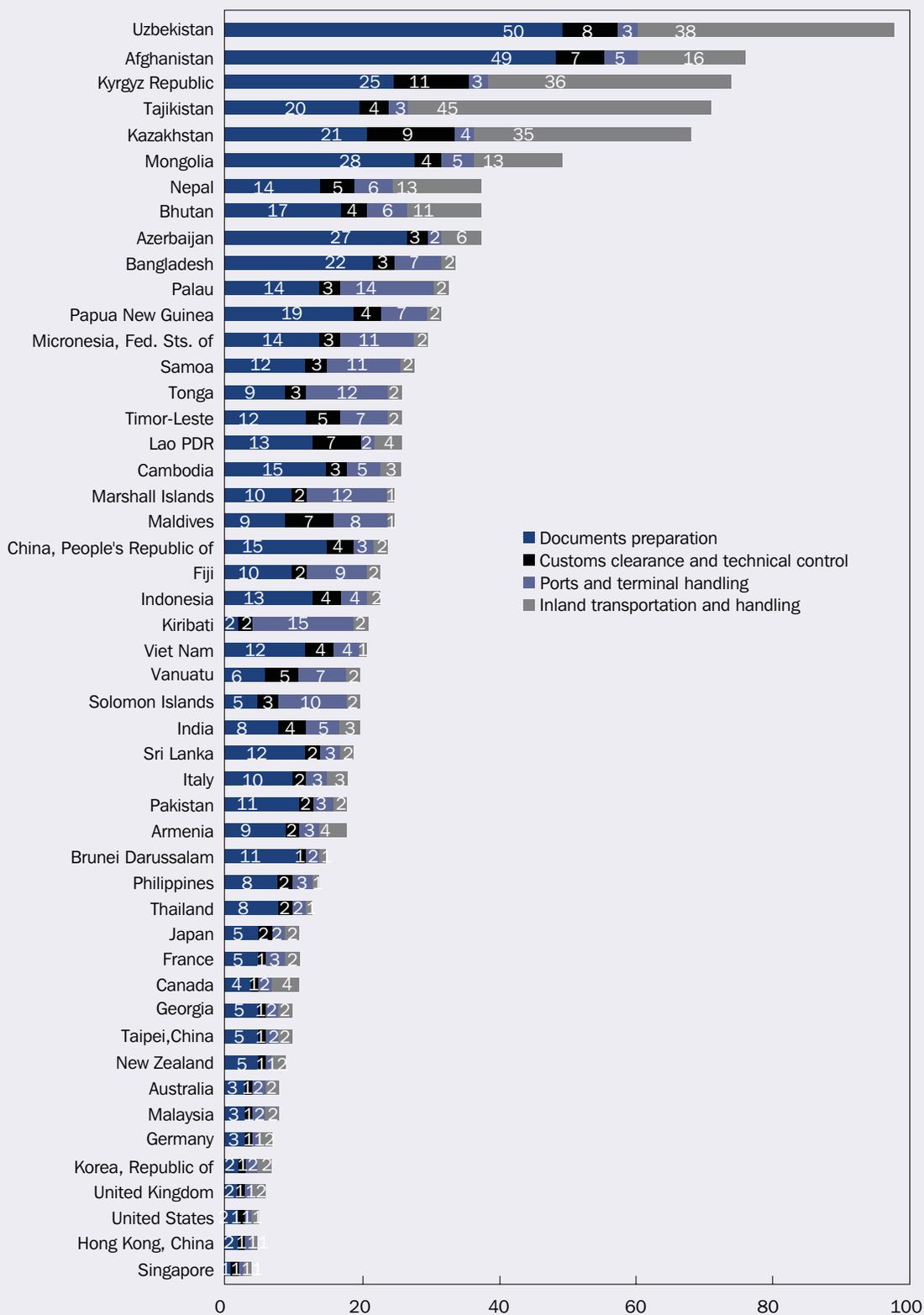
The same pattern can be seen while documents for export are being prepared. Generally, the average time spent for customs clearance and technical control is about four times less than the time necessary for document preparation. The time and costs necessary for imports and exports is highly correlated with the number of documents required. This is explained by the fact that 75% of delays are attributed to administrative obstacles such as customs and tax procedures, clearances, and cargo inspections; and only 25% to poor road and port infrastructure (Djankov et al. 2006). This is generally true for all sub regions in Asia and the Pacific except for Central Asia, which comprises eight landlocked countries where inland transport efficiency is a crucial issue.

Given the importance of document preparation in the overall import and export process, it is not surprising to find that the number of days necessary to complete trade procedures is strongly correlated with the number of documents. The number of documents required by government authorities for traders to meet regulatory requirements for imports and exports varies widely across and within the subregions of Asia and the Pacific (Figure 2.8). According to *Doing Business*,³⁶ the Republic of Korea, Hong Kong, China, Singapore, and Georgia require only three to four documents for either import or export. However, most traders in the region still face 50% more trade documentation requirements than in the G7 countries, where only about four documents are required. This is particularly true for traders in landlocked countries, where a double-digit number of trade documents need to be prepared for each trade transaction.

Many countries have reduced the required number of import and export documents since 2006, but improvements have been more pronounced in import documentation than in export documentation and in landlocked countries, Georgia and the Kyrgyz Republic. Between 2006 and 2012, the number of import documents was reduced enormously in Georgia (from 15 to 4), in Thailand (from 12 to 5), the Kyrgyz

³⁶ These estimates are only indicative, as the number of required documents can be expected to vary significantly depending on the type of goods and mode of transport. World Bank *Doing Business* 2013.

Figure 2.6: Number of Days Necessary to Complete Import Procedures



Source: World Bank *Doing Business* 2013

Figure 2.7: Number of Days Necessary to Complete Export Procedures

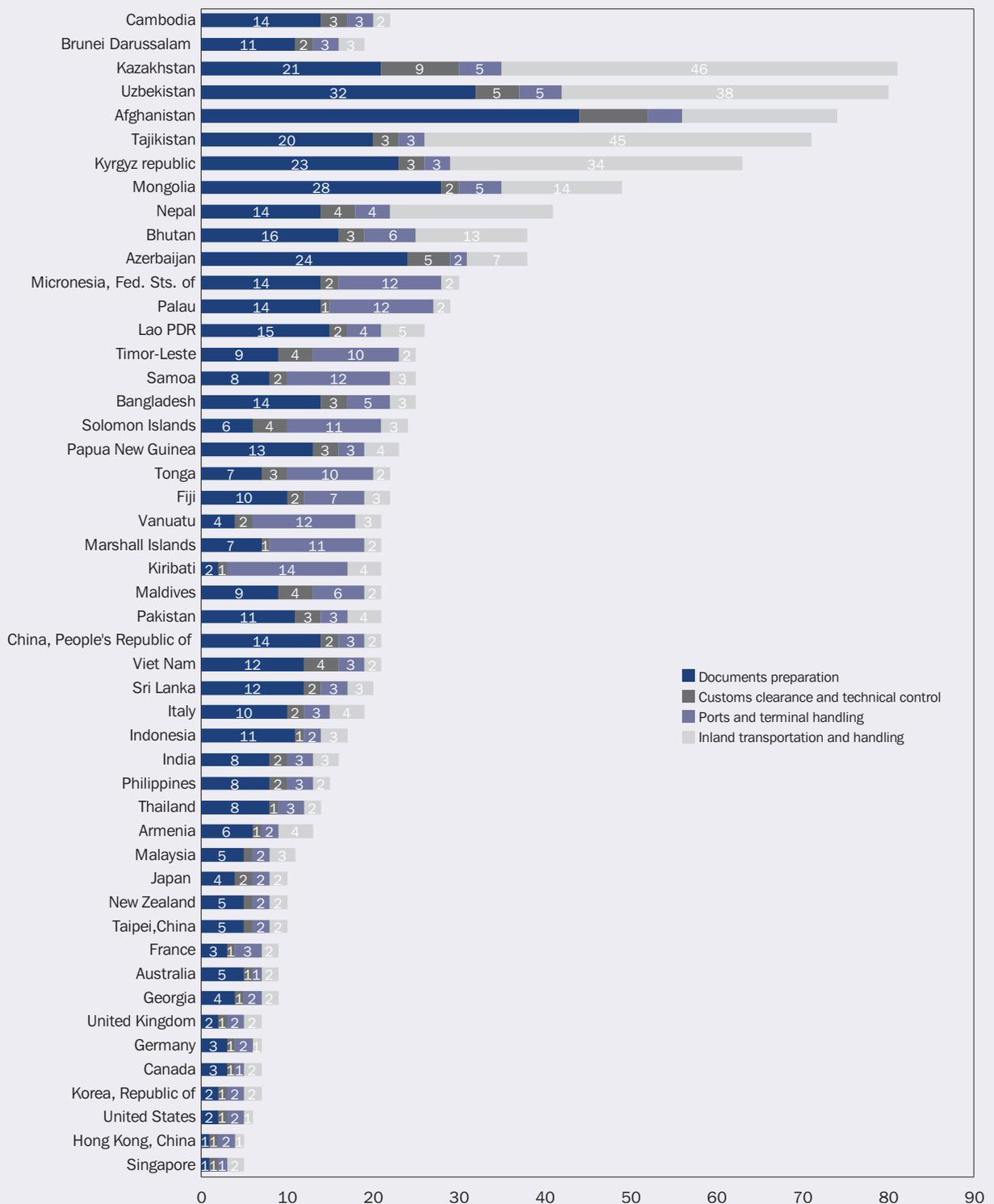
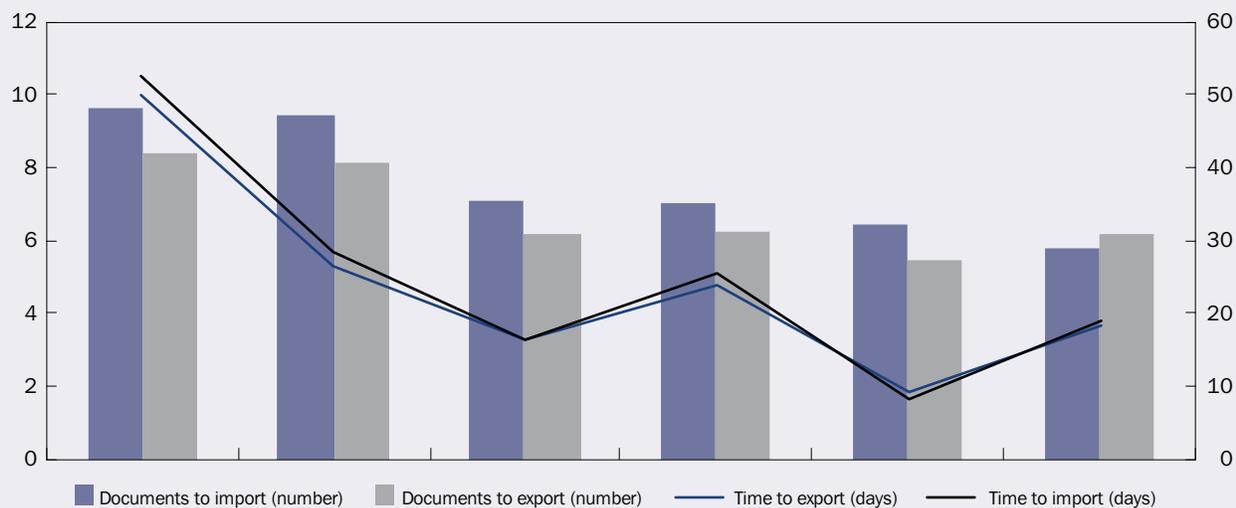
Source: World Bank *Doing Business* 2013

Figure 2.8: Documents and Time Necessary for Imports and Exports by Subregions



Source: World Bank *Doing Business* 2013.

Republic (from 16 to 10), the Lao People’s Democratic Republic (from 15 to 10), the Republic of Korea (from 8 to 3), and Hong Kong, China (from 8 to 4). For export documents, a large number of reduction is evident in the Kyrgyz Republic (from 14 to 8), Georgia (from 9 to 4), Thailand (from 9 to 5) and Hong Kong, China (from 6 to 4) during the same period.³⁷

While most countries have reduced the required number of documents, much progress is still needed in cutting transaction costs. In particular, procedural improvements can be made to reduce the necessary number of days to import and export—a critical issue for the trade of time-sensitive goods such as perishable products (Box 2.4).

In addition to the *Doing Business* data on the time and cost of import and export procedures, and the number of related documents, other indicators that allow cross-country comparisons have been developed.³⁸ However, none of these provide an accurate situation in each country as the length of time, number of documents, and cost of procedure vary widely depending on the type of product, the route and mode of transport, and other factors.

Taking this into account, ESCAP, together with UNECE and UNNExT, have developed a business process analysis (BPA) methodology that enables the detailed mapping, costing and timing of import and export procedures for a given product or route. The methodology introduces the use of the Unified Modeling Language (UML) to describe procedures, an international standard that makes it easier to compare procedures across agencies and countries. Key outputs of such BPA analysis are

³⁷ World Bank *Doing Business*. 2013

³⁸ A number of survey-based indexes relating to customs and border control procedures exist, including a “burden of customs procedures” indicator from the goods market efficiency section of the GCR and an “efficiency of import–export procedures” indicator from the GETR (both available at www.weforum.org). The World Bank’s Logistics Performance Index (LPI) also has a Customs Efficiency index.

Box 2.4: Cumbersome Paperwork in the Perishable Food Supply Chain

The perishable food supply chain is generally considered to be the most complex in terms of movement of goods because of its temperature-sensitive nature and the great amount of time involved in document preparation, clearance, and technical and border controls. According to SITPRO (2008), a single complete consignment transaction, from seller to buyer, can require some 150 documents with duplicate information to be entered 42 times. In 2006, SITPRO conducted research on the cost of maintaining paper-based supply chains, focusing on perishable foods. Perishable foods present a greater risk of spoilage costs that could result from missing or delayed documentation. The research revealed that

- A typical complete consignment transaction from grower to retailer requires 150 documents.
- Over the course of 1 year, 1 billion paper documents are generated.
- 30% of the data are entered more than once.
- Duplicate consignment data are keyed in at least 189 million times each year.
- Over 90% of the paper documents used are destroyed.
- The cost of document-related administration is around 11% of the supply chain value per annum.

Source: SITPRO. 2008.

time-procedure charts that make it easy to identify specific procedural bottlenecks in the overall trade transaction process (see Box 2.5).

In an effort to measure the efficiency of border procedures based on time spent from the arrival to the release of goods, the WCO developed a Time Release Study (TRS) in 1994 based on earlier initiatives of Japan and the United States. The primary objectives of the TRS are to identify problems and bottlenecks in customs clearance procedures and provide guidance in improving the efficiency of customs administration.

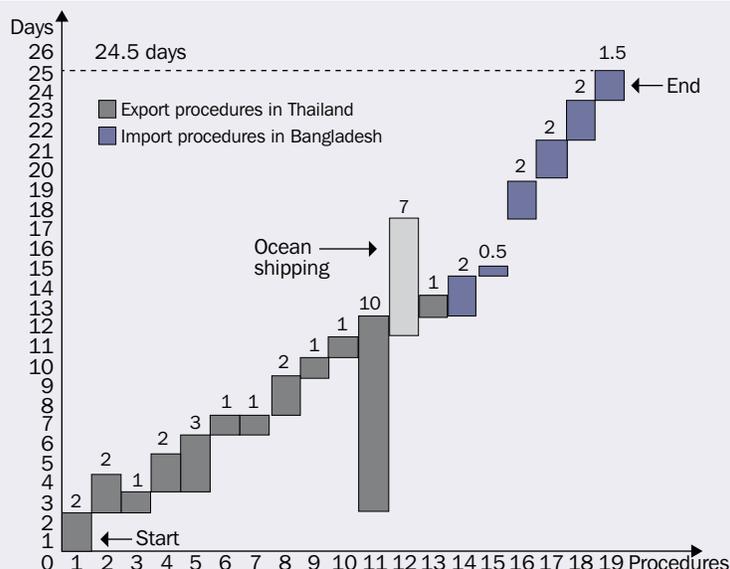
Japan has been conducting a TRS every 2 to 3 years since 1991. The Japanese TRS covers about 95% of import and export declarations for air and sea cargo. The TRS results showed a remarkable reduction in average processing time for sea cargo, from 7 days in 1991 to 2.6 days in 2009 (Figure 2.9). For air cargo, Japan reduced release time from 2.2 days in 1991 to 0.6 days in 2006. In the Republic of Korea, clearance time was reduced by 72%, from 14.8 days in 1997 to 3.6 days in 2007.³⁹

Since 2005, the Republic of Korea has been operating an independent and web-based TRS system that allows the Korean customs administration to capture comprehensive and real time information and calculate TRS results on a monthly basis.

³⁹ Next to Japan and the Republic of Korea, another six countries in Asia and the Pacific (the PRC, Indonesia, Malaysia, the Philippines, Papua New Guinea, and Thailand) have undertaken the study either once or several times. Due to methodological differences, however, it is difficult to do an exact cross-country comparison of the TRS results.

Box 2.5: ESCAP Business Process Analysis Initiative for Trade Facilitation

In an effort to streamline trade procedures in Asia and the Pacific, ESCAP has initiated the conduct of standardized Business Process Analyses (BPAs) of import and export procedures for specific products and trade routes in recent years, based on the United Nations Network of Experts for Paperless Trade in Asia and the Pacific (UNNEX) BPA Guide for the Simplification of Trade Procedures. The figure is one of the outputs of the BPA analyses already conducted, i.e., a time-procedure chart of the export-import process from Thailand to Bangladesh. It shows that the entire sugar trade transaction process between Thailand and Bangladesh (by sea) takes 24.5 days and that obtaining permits and preparing documents take the most time, followed by transport and handling issues.



The regular conduct of standardized cross-border BPA of trade procedures for products of common interest is recommended as a way to better measure supply-chain and trade facilitation performance among countries.

Source: ESCAP (2011), Trade Facilitation in Asia and the Pacific: An Analysis of Import and Export Processes, Trade and Investment Studies No. 71, ESCAP. United Nations. Available at: <http://www.unescap.org/tid/publication/tipub2615.asp>

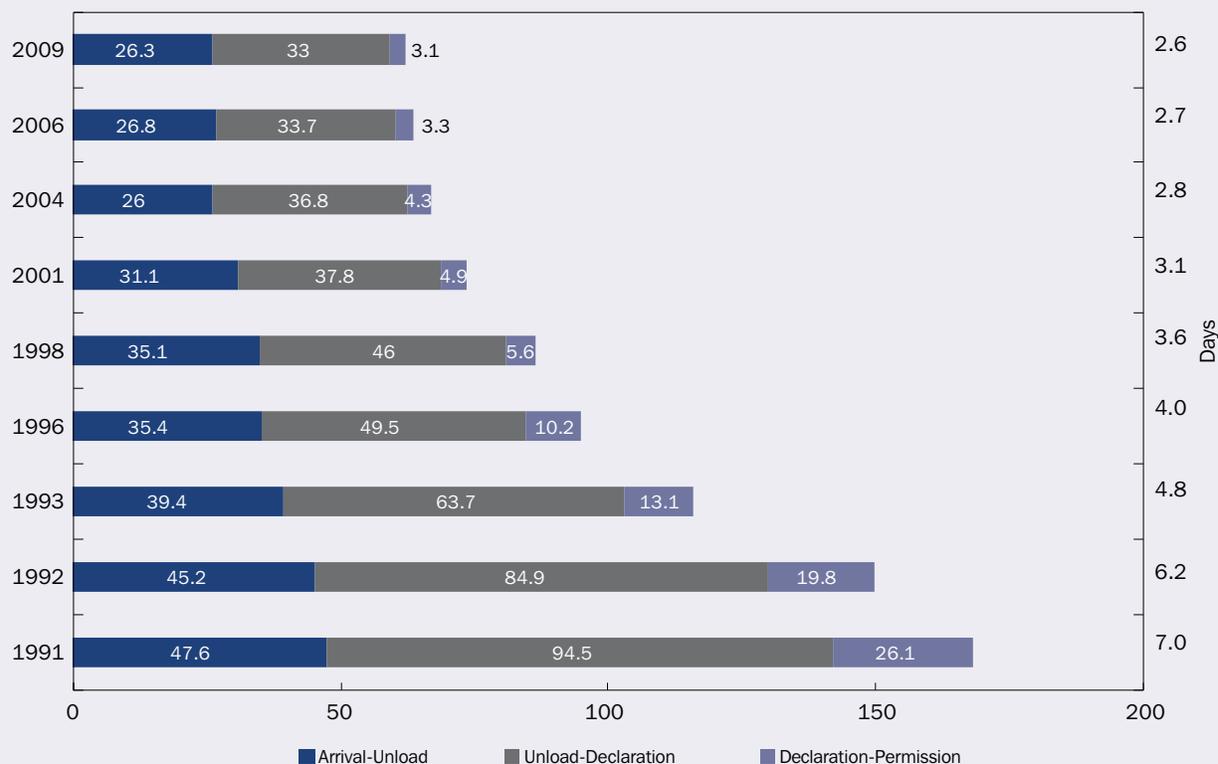
Sr. No.	Process	Days	Sr. No.	Process	Days
1	Buy	2.00	11	Process documents required by importer	10.00
2	Obtain good movement permit	2.00	12	Ocean shipping	6.00
3	Obtain goods movement permit	1.00	13	Verify accuracy/ authenticity of explored cargo	1.00
4	Obtain cargo insurance	2.00	14	Collect and endorse documents for import	2.00
5	Arrange transport	3.00	15	Provide customs declaration online	0.50
6	Provide customs declaration	1.00	16	Handling cargo at port	2.00
7	Collect empty container from yard	1.00	17	Clear goods through customs	2.00
8	Stuff container	2.00	18	Transfer goods to importer's premise	2.00
9	Clear goods through customs	1.00	19	Pay	1.50*
10	Handle container at terminal and stow on vessel	1.00	Total		24.50*

Impact of Cumbersome Procedures on Trade

Simplifying trade procedures and documentation is important to speed up trade and increase the predictability of delivery times in the absence of countries that are highly likely to be excluded from regional and global value chains, and as uncertainty of supply and the subsequent necessity to hold inventories quickly erode any cost advantage from fragmenting production across borders.

An increasing number of research studies have found that excessive trade and customs procedures can inhibit trade, mainly by increasing the time it takes to export or import. Djankov et al. (2006) utilized the *Doing Business* detailed data based on a questionnaire that referred to a standardized export transaction, and completed

Figure 2.9: Improvement in Japan's Release Time of Sea Cargoes, 1991–2009



Note: Average release times are shown in hours.

Source: Matsumoto and Lee, 2007 and Igarashi, 2010.

in 2005 by freight-forwarding companies, port authorities, and customs officials.⁴⁰ Using a simple-difference gravity equation, they estimated that, on the average, a 1-day delay in product shipment reduces trade by 1%. Each day that a product is delayed prior to shipment reduces trade by at least 1%. The importance of time is even more pronounced for time-sensitive goods; using a difference-in-difference gravity equation (i.e., testing whether two similar countries' relative exports of time-sensitive goods differ from their relative exports of time-insensitive goods), Djankov, Freund, and Pham estimated that a day's delay could reduce relative export competitiveness of time-insensitive goods by 1% and time-sensitive goods by 7%.

Another study (Wilson, 2007) on trade procedures and documents, which included filing port documents, customs declarations, and commercial documents such as invoices, indicated that a 10% reduction in the time at the border of the country of import increases trade by an estimated 6.3%. A 10% reduction in the required number of signatures on import documents could increase trade by 9.9%, while a 10% reduction in the number of documents required by the importer may generate an 11% increase in trade.

⁴⁰ The standardized transaction is by a domestic firm with specified characteristics shipping a dry-cargo, full 20-foot container load without requiring any special safety standards.

Improving trade procedures often involves using information communication technology (ICT) to fulfill the various regulatory and documentation requirements. There is evidence that improvements in ICT and use of the internet have been associated with lower trade costs since the mid-1990s.⁴¹ Shepherd and Wilson (2008) found that improvements in ICT have had a strong impact on trade in Southeast Asia, providing support for countries to accelerate the ongoing computerization and automation of trade procedures for trade facilitation.

While the aforementioned estimates are only indicative, they show that countries with cumbersome procedures are at a disadvantage. The actual cost and impact of time on trade is likely to vary significantly depending on the traded commodity, the mode of transport, the route and destination, and even the prevailing business model in a country or industry.

Basic Principles and Good Practices

The following principles apply to authorities responsible for national regulations and administrative practices relating to the movement of goods in international trade:

- (i) *Trade procedures, data, and documents should be based on international conventions, standards, and other relevant instruments.* Countries should harmonize their procedures, data, and documentary requirements with international conventions, standards and other relevant instruments to improve transparency and predictability. The main international instruments are set out in the next section.
- (ii) *Data and documents should be kept to a minimum.* Cumbersome, repetitive and non-standardized trade documents and data required for border crossing are frequently identified by the business community as a major deterrent to entering certain markets. As such, authorities should adopt simplified documents aligned with international standards. Existing documents and data should be analyzed and reviewed to identify redundant or unnecessary documentation such as consular invoices. Using trade data and documents aligned to international standards—such that data elements common to various documents are always located in the same place on all documents and formatted in the same way⁴²—would help make documents easier to fill out and minimize errors, address language problems, and meet the needs of computerization and automation of procedures since standardized documents are easier to migrate to electronic documents. In addition, authorities may accept copies of documents, especially when one government agency already holds the original document⁴³ as well as make commercially available information that is already available in the context of commercial transactions, such as a commercial invoice or bill of lading. The introduction of a single window facility to allow one-time submission of all relevant information to authorities and to meet regulatory requirements for imports, exports, and transit should also be pursued to the extent possible

⁴¹ Freund and Weinhold. 2004; Fink, Mattoo, and Neagu. 2005.

⁴² This could be done using an international instrument called the United Nations Layout Key for Trade Documents (UNLK). This is further discussed in the next section (International Instruments).

⁴³ The government agency holding the original document should have the right to authenticate such a copy.

Box 2.6: What is a Single Window Facility?

A single window is a one-stop facility that allows exchange of information between traders and government to reduce the complexity, time, and costs involved in international trade. The United Nations Centre for Trade Facilitation and Electronic Business (UN/CEFACT) defines a single window as a facility that allows parties involved in trade and transport to lodge standardized information and documents at a single entry point to fulfill all import, export, and transit-related regulatory requirements. If information is electronic, then individual data should only be submitted once.^a The features of a single window facility include

- lodging standardized information and documents at a single entry point only once,
- sharing information among government agencies,
- providing coordinated controls and inspections by various government authorities,
- allowing payment of duties and other charges, and
- providing a single source of trade-related government information.

The development of a single window facility does not presuppose the existence of or requirement for a sophisticated computerized information system. A manual single window or customs automation system (such as the Automated System for Customs Data or ASYCUDA) could be a good starting point.

Implementing a single window would simplify trade processes and procedures and promote greater transparency and predictability in international trade transactions.

Several countries in Asia and the Pacific such as Australia, Hong Kong, China, the Republic of Korea, Malaysia, Singapore, and Thailand are each fully or partly operating a single window while others are in the process of establishing such a facility. The most forthcoming initiative is the Association of Southeast Asian Nations (ASEAN) Single Window to provide an integrated environment for trade information flows among the national single windows of all 10 ASEAN member countries by 2012.

^a UN/CEFACT. 2005.

(Box 2.6). Possible steps involved in simplifying and harmonizing trade documents, as well as in developing an automated trade documentation system, are outlined in Part III.

(iii) *Clearance and release procedures should be kept as simple as possible.* The following are the measures and practices that should be simplified to speed up clearance and release of goods:

- **Pre-arrival processing of documents.** The customs authority should allow traders to submit clearance data prior to arrival of the consignment. The data should be processed and analyzed without delay so that consignments can be released immediately upon arrival. When duties and other charges are not determined on or prior to arrival, a mechanism allowing for release based on the provision of a (financial) guarantee or surety to customs may also be put in place.
- **Computerization and automation of customs and other border agency procedures** for import and export, making it possible for traders to present customs declarations, and other supplementary documents electronically. Ideally, electronic payment of duties, taxes, and fees should

Box 2.7: Benefits of the Pakistan Customs Computerized System

Under the Customs Administrative Reform, the Central Board of Revenue implemented the Pakistan Customs Computerized System (PACCS). The system was introduced in April 2005. Since then, PACCS brought numerous tangible benefits and savings to the customs authority and the trading community. These include:

- reducing the number of steps in import clearance from 26 to 1;
- reducing the customs processing time from 4 days to 10 hours (with more than 50% of consignments being cleared within 4 hours); and
- reducing the dwell time of cargo at port from 11 days to 4 days.

One year after the introduction of PACCS, the system processed about 61,000 goods declarations and cleared about 200,000 containers. The collected revenue amounted to PRs20.0 billion. In addition, the PACCS (i) introduced transparent clearance procedures for imports and exports; (ii) minimized the steps between the tax collector and traders; (iii) integrated all processes associated with imports and exports, and created strong linkages among the relevant border agencies; and (iv) established a reliable data bank for post-clearance audit.

Source: Central Board of Revenue Pakistan. www.fbr.gov.pk/newcu/

also be made possible. The benefits of using customs automation systems to facilitate clearance procedures are enormous (Box 2.7).

- **Risk management systems** should be put in place, and authorities should systematically use them to conduct documentary and physical examination of shipments. Such systems allow the identification of the risk level associated with a particular shipment according to specific (non-discriminatory) criteria, and based on the analysis of available information. The objective is to ease the clearance and release of low-risk consignments, and to identify high-risk consignments for inspection. Such systems should be based on international standards and practices such as those of WCO (e.g., Chapter 6 of the General Annex of the Revised Kyoto Convention). Since each border agency (especially plant, food, veterinary, and quarantine agencies) operates some kind of risk management system, ideally, all border agency systems should be unified. Risk management should be applied in conjunction with an authorized traders' scheme and post-clearance audit (Box 2.8).
- **Post-clearance audit** is an international best practice by customs designed to facilitate trade by refocusing control from the border to the back end of the import clearance process. A customs authority may release the majority of consignments upon arrival with compliance verification at a later time. Such compliance verification is conducted at the importers' premises, where auditors have access to relevant company records. The post-clearance audit system allows the release of low-risk imports with minimum customs intervention at the border. It therefore facilitates the release of legitimate imports while protecting government revenue.
- **Authorized traders schemes** should be developed for highly compliant traders. These schemes provide additional facilitation measures to traders who demonstrate a high level of compliance with import and export requirements such as the possibility of periodic declarations and

Box 2.8: Risk Management Experience of Customs Agencies in the Central Asia Regional Economic Cooperation

With the increasing volume of trade and the limited resources of customs administrations, the traditional method of inspecting every consignment upon arrival at the customs borders has become a barrier to trade. Risk management enables customs administrations to balance their control functions with trade facilitation through a selective inspection of traded goods on a scientific basis, complemented by post-entry audits. In the past, risk management has been perceived as a process utilized only by highly developed customs administrations with automated and fully computerized systems.

On the contrary, risk management program is more relevant to all customs administrations as an international best practice. The program has been embraced by all CAREC participating countries' customs administrations, which are at various stages of reforms and modernization. For example, Afghanistan established post-clearance audit units in eight regional customs houses and Kazakhstan commenced developing a selective control and risk management system. The Kyrgyz Republic developed a prototype automated risk management system and Uzbekistan approved a customs risk management system. Overall, introduction and effective implementation of a risk management program requires a change in the mindset (i.e., change management together with other enabling conditions, including the promotion of informed compliance, management leadership and support, a structured approach for data review, improvement of the intelligence function, partnership with the private sector, regional cooperation, and relevant use of information and communications technology).

Source: ADB. 2006.

reduced physical inspections or documentary requirements. The selection of authorized traders should be based on risk management techniques. Harmonization and mutual recognition of authorized traders schemes with partner countries should be pursued to the extent possible.

- **Coordination of border control procedures** should be given special attention to ensure that clearance of documents and physical control of consignment by all agencies are conducted at a single point and time. Coordination and cooperation may further include the alignment of working days and hours, development and sharing of common facilities, and development of procedures for exchange of non-confidential information.

International Instruments

World Trade Organization (WTO) rules promote simple trade procedures. General Agreement on Tariffs and Trade (GATT) Article 8 seeks to limit the costs and complexity of the import and export processes by imposing specific legal obligations on members. It explicitly recognizes the need to reduce the number and complexity of import- and export-related fees and formalities. It also recognizes that fees and charges may be charged in connection with import and export, and that penalties may be imposed for minor breaches of customs procedures.

However, the majority of the Article 8 provisions can be considered to be “best endeavor” provisions, without explicit obligations with respect to the need to minimize the incidence and complexity of import and export formalities, or to decrease and simplify import and export documentation requirements. For this reason, ongoing trade facilitation negotiations aim to clarify this Article to make it more operational.⁴⁴ Certain subjects covered by Article 8 are also now regulated by

⁴⁴ WTO (TN/TF/W/43/). 2009.

Box 2.9: Revised Kyoto Convention: Background and Structure

Drawn up in 1973, the World Customs Organization Kyoto Convention seeks to overcome barriers created by the diversity and complexity of customs procedures and documentation in different economies. In June 1999, the WCO adopted a revised version of the convention, known as the Revised Kyoto Convention.

The Revised Kyoto Convention comprises three parts—the body, general annex, and specific annexes. The body contains the preamble and provisions on the scope, structure, administration, accession, and amendment, all of which are obligatory. The general annex has 10 chapters, containing core principles and standards and transitional standards dealing with clearance of goods, payment of duties and taxes, customs and trade cooperation, use of risk management, and information technology (IT) application, among others. All of them are obligatory. The general annex also contains detailed guidelines on the implementation of the convention.

There are 10 specific annexes, comprised of 25 chapters covering various aspects of customs procedures and providing guidelines for implementation. They contain standards and recommended practices. Accession to specific annexes is optional, and may be accomplished after accession to body and general annex, (i.e., contracting parties may accede to only those specific annexes and chapters that are relevant to them and may notify reservations only to recommended practices in the chapters they accept).

The Convention was entered into force on 3 February 2006 and has 52 contracting parties as of 10 January 2007.

The general annex contains the standard customs procedures for wider implementation, which are mandatory for accession and totally binding for contracting countries and parties. The adoption of specific annexes is not obligatory. Specialized provisions state that contracting countries or parties may voluntarily choose to adopt all or part of the specific annex(es), and can also withdraw implementation of the same. The Convention tackles (i) effective rules for transit procedures, (ii) fees limited to the cost of services rendered, (iii) simplified procedures and limited data requirements, and (iv) publication of regulations and appeals, which are complementary with the WTO Articles related to trade facilitation.

Source: WCO The Revised Kyoto Convention. 2009.

specific WTO agreements. The agreements on preshipment inspection, sanitary and phytosanitary (SPS) measures, and technical barriers to trade impose disciplines on, among other things, certain fees and formalities imposed by members in connection with importation. The Agreement on Rules of Origin and the Agreement on Import Licensing also relate to the subject matter covered by Article 8.

The WCO Convention on Simplification and Harmonization of Customs Procedures, also known as the Revised Kyoto Convention, is one of the most important trade facilitation instruments and can provide guidance on the principles discussed earlier. It has been in force since February 2006 and provides the international standards and recommended practices for relations between customs authorities and third parties (Box 2.9).

Other WCO instruments include the following conventions, standards, and guidelines:

- (i) *WCO International Convention on the Harmonized Commodity Description and Coding System*. The WCO International Convention on the Harmonized Commodity Description and Coding System establishes a uniform system of commodity classification that serves as the basis for the customs tariffs of over 190 countries. By creating a uniform system of commodity description, the Convention helps reduce the costs related to international trade. The International Convention on Mutual Administrative Assistance in Customs

Matters recognizes that closer cooperation between customs administrations is needed, and that this cooperation can be achieved by accurately assessing duties and taxes and finding a balance between compliance and facilitation.

- (ii) *WCO Data Model*. Version 3 of the Data Model (2009) provides a whole-of-government set of data and data structures, including requirements for cross-border regulatory agencies (Customs, agriculture, environment protection, etc.) controlling export, import and transit. It provides an international standard for data harmonization and the development of common electronic messages for stable, predictable business-to-government and government-to-government data exchange.
- (iii) *Customs Convention on ATA Carnet*.⁴⁵ The ATA Carnet is an international customs document that permits duty-free and tax-free temporary import of goods for up to 1 year. The ATA carnet system is an example of close cooperation between business and customs. Each country in the system has a single guaranteeing body approved by the national customs authorities and the World Chambers Federation established by the International Chamber of Commerce. The national guaranteeing association is entitled to issue carnets and to authorize local chambers of commerce to deliver them on its behalf. The ATA international guarantee chain provides reciprocal guarantees, assuring customs administrations that duties and taxes due in case of misuse will be paid. The 1990 Istanbul Convention on temporary admission combined, within one international instrument, all existing conventions on temporary admission, including the ATA Convention. It provides simplified and harmonized procedures and standardized model customs documents for temporary importation of goods (including means of transport) specified in the annexes to this convention. It took effect on 27 November 1993.
- (iv) *SAFE Framework of Standards*. The Framework of Standards to Secure and Facilitate Global Trade (SAFE Framework) establishes standards that provide supply chain security and facilitation at a global level to promote certainty and predictability. The SAFE Framework enables integrated supply chain management for all modes of transport; enhances the role, functions, and capabilities of customs to meet the challenges and opportunities of the 21st century; strengthens cooperation between customs administrations to improve their capability to detect high-risk consignments; enhances cooperation between customs and businesses; and promotes the seamless movement of goods through secure international trade supply chains.
- (v) *WCO's Immediate Release Guidelines*. The WCO's Immediate Release Guidelines supplement the principles set out in the legal text of the Revised Kyoto Convention, and provide an indicative list of data elements for the different categories of consignments detailed in Appendix 1 of the guidelines. The time necessary to release goods has increasingly become the measure by which the international trading community assesses the effectiveness of a customs administration. The WCO's Time Release Study provides guidance to customs administrations on the best way to undertake internal review. An online software to help countries to conduct TRS is available at the WCO website.

⁴⁵ ATA is a combination of the French and English phrases "Admission Temporaire/Temporary Admission."

The relevant UN Economic Commission for Europe (UNECE) instruments and standards that aim to simplify trade procedures include, among others, the following:

- (i) *International Convention on the Harmonization of Frontier Controls of Goods (UNECE 1982)* aims to facilitate the border crossing of goods by harmonizing and reducing formalities, as well as the number and duration of border controls. The Convention establishes border control procedures such as customs controls, medico-sanitary inspections, veterinary inspections, phytosanitary inspections, controls of compliance with technical standards, and quality controls. These procedures largely call for national cooperation and coordination of various services, as well as international cooperation between respective border services. In particular, the convention foresees joint controls of goods and documents through the provision of shared facilities, the same opening hours, and the same types of services at the same border. Finally, the Convention also promotes the one-stop shop principle for border controls.⁴⁶
- (ii) *United Nations Layout Key for Trade Documents (UNLK, ISO 6422)* is an international standard for customs and trade documents. It integrates a set of international standards and codes to design an aligned series of forms while using a master document. It can also be used to design screen layouts for the visual display of electronic documents. The UNLK (Figure 2.10) can be used for the creation of international, regional, or national layout keys, which provide the basis for trade documents set at various levels: international (e.g., United Nations Conference on Trade and Development [UNCTAD] certificate of origin, WCO customs declaration, and International Federation of Freight Forwarders Associations [FIATA] forwarding instruction); regional (e.g., the single administrative document of the European Union or Form D under the Common Effective Preferential Tariff of ASEAN); national (e.g., the customs declaration in the Kyrgyz Republic or in the Lao People's Democratic Republic); and company (e.g., invoices and packing lists).
- (iii) *United Nations Trade Data Elements Directory (UNTDDED, ISO 7372)* contains the standard data elements, which can be used with any method for data interchange on paper documents, as well as with other means of data communication. It provides a nontechnical description of trade information requirements from the perspective of business or authorities. The definition is syntax-neutral and provides the basis for a later migration to electronic trade documents and automation.
- (iv) *Recommendation and Guidelines on Establishing a Single Window (UN/CEFACT Recommendation 33)* recommends establishing a facility such as a single window (Box 2.6) that allows parties involved in trade and transport to lodge standardized information and documents at a single entry point to fulfill all import, export, and transit-related regulatory requirements. If information is electronic, then individual data elements should be submitted only once. This may also provide a platform for coordinating controls among the agencies involved and payment of relevant duties, taxes, and fees.
- (v) *Recommendation on Facilitation Measures related to International Trade Procedures (UN/CEFACT Recommendation 18)* provides a comprehensive set of recommendations on international best practices and standards for the facilitation and harmonization of trade transactions, from initial commercial

⁴⁶ UNECE. 1982.

Figure 2.10: United Nations Layout Key and Its Application to the Forwarding Instruction Document of the International Federation of Freight Forwarders Associations

LAYOUT KEY FOR TRADE DOCUMENTS					
Consignor (Exporter)		Date, Reference No. etc.			
Consignee		Type (if other than consignee) or other address			
Notify or delivery address		Country whence consigned		Country of origin	
				Country of destination	
Transport details		Terms of delivery and payment			
Shipping marks: Container No.		Number and kind of packages; Goods description		Commodity No.	Gross weight
					Cube
				Net quantity	Value
		Place and date of issue; Authentication			

FIATA FORWARDING INSTRUCTIONS FFI					
3336 Consignor		Emblem of National Association		(approved by FIATA) 1498 Consignor's reference No.	
1				2	
3132 Consignee		3109 Freight Forwarder			
3		4			
3180 Notify party		3228 Country of origin		Documentary credit	
5		6		7	
Goods ready for shipment		1499 Conditions of sale			
Place				9	
Date					
8066 Mode of transport		10		Transport insurance 11	
<input type="checkbox"/> Air		<input type="checkbox"/> Road		4332 Insurance conditions	
<input type="checkbox"/> Rail		<input type="checkbox"/> Sea		Covered by us	
				Covered by consignee	
				6345 Currency and 5001 value insured	
3238 Place of destination		To be covered by you			
7102		7224 Number & 7064 type of pkg.		7002 Description of goods	
12				13	
				7307 Commodity code	
				14	
				6232 Gross weight	
				15	
				6048 Net net weight	
				16	
The goods and instructions are accepted and dealt with subject to the Trading Conditions printed overleaf.					
4378 Handling instructions (dangerous goods etc.)					
17					
Dimensions/Measurement and weight of each package					
1246 Document enclosed:		190 Document required:		4052 Terms of delivery	
		18		19	
				3110 Place and 2006 date of issue	
				20	
				4425 Authentication	
				21	

Source: UNECE. 2002.

documents to payment measures, official controls, and transportation of goods. Using complementary standards and internationally agreed-upon codes such as the following helps information exchange in a precise, unified and secure way between governments and the trading community

- International Organization for Standardization (ISO) Country Code for Representation of Names of Countries (ISO 3166);
- Numerical Representation of Dates, Time and Periods of Time (ISO 8601);
- Alphabetic Code for the Representation of Currencies (ISO 4217);
- Codes for Units of Measurement Used in International Trade (UNECE Recommendation 20); and

- Codes for Ports and Locations (UNECE Recommendation 16, also known as the UN/ LOCODE).⁴⁷

As implementation and use of the abovementioned instruments in a national or regional context has been found to be very challenging for many developing countries in Asia-Pacific, ESCAP together with UNECE and experts from the United Nations Network of Experts for Paperless Trade in Asia and the Pacific (UNNExT) have developed a series of practical guides aimed at practitioners from the region. As of 2012, the series included: (1) The UNNExT Business Process Analysis Guide to Simplify Trade Procedures, (2) The UNNExT Data Harmonization and Modelling Guide for Single Window Environment, (3) The UNNExT Capacity-Building Guide on Electronic Single Window Legal Issues, (4) The UNNExT Guide for the Design of Aligned Trade Forms for Paperless Trade, and (5) The UNNExT Guide to Single Window Project Planning and Implementation. These guides, as well as upcoming ones, are available at www.unescap.org/unnext/tools.

Experience of Economies in Asia and the Pacific

Developing a National Single Window – The Case of Singapore’s TradeNet⁴⁸

The TradeNet system, which has been operational since 1989, began as an electronic data interchange (EDI) system that links multiple parties involved in external trade transactions, including 35 controlling agencies,⁴⁹ to a single point of transaction for most trade documentation tasks, such as processing import and export permits and certificates of origin.

In 1985, Singapore experienced its first recession. Government response was the establishment of a high-powered Economic Committee to chart new strategies to improve its economic competitiveness. One recommendation was to expedite the use of information technology to improve trade competitiveness. In 1986, Hong Kong, China, a major shipping competitor, revealed that it was creating a trade-oriented EDI system (TradeLink), which further strengthened Singapore’s resolve to implement TradeNet. In 1986, to emphasize the government’s commitment to this project, Mr. Lee Hsien Loong, then Minister for Trade and Industry, announced publicly the TradeNet project to be completed within 2 years. This had the effect of speeding up the work of various committees and officials involved. It also gave the TradeNet team full authority and resources to proceed.

The Singapore Trade Development Board (STDB), now known as International Enterprise Singapore, was tasked with mobilizing a core team comprising representatives from relevant government agencies such as Customs, Port of Singapore Authority, and Civil Aviation Authority of Singapore and from the private sector to conceptualize a nationwide EDI system for traders to submit trade declarations electronically to the regulatory authorities. A TradeNet Steering Committee was created to oversee the process. Three working subcommittees, one each for sea and

⁴⁷ All trade facilitation standards, recommendations, and code lists of UNECE-UN/CEFACT are available at www.unece.org/cefact/recommendations/rec_index.htm

⁴⁸ Input provided by Jonathan Koh, CrimsonLogic Pte Ltd, is gratefully acknowledged. More relevant information can be found in UNNExT Brief No. 02, March 2010 entitled “Best Practice in Single Window Implementation: Case of Singapore’s TradeNet, available at <http://www.unescap.org/tid/unnext/pub/brief2.pdf>.

⁴⁹ Examples of controlling agencies are Arms and Explosives Branch, Central Narcotics Bureau and Agri-Food & Veterinary Authority. There are 35 controlling agencies in Singapore including Singapore Customs.

air shipping, and various government agencies were formed to specify functional requirements and propose data standards. The staff of the National Computer Board were appointed to support each subcommittee. Each subcommittee developed a profile of essential trade documentation activities, which were integrated into an “Integrated Procedures Report.” Efforts were made to reduce the 20 forms used in international trade into a single online form to serve nearly all trade documentation needs in Singapore. This single administrative document formed the core of the new computerized system.

It was also decided that the development of the TradeNet system and the provision of processing services were to be contracted to a newly set up company. By creating such company as an independent profit center, the government would not have to bear the cost of running and operating a nationwide network infrastructure and services. The beneficiaries, namely, trading companies, would pay for use of the services without incurring developmental or maintenance costs. In March 1988, Singapore Network Services Pte Ltd (SNS), now known as CrimsonLogic Pte Ltd, was created to own and operate the TradeNet system. SNS is owned by the four key agencies involved in TradeNet: STDB (55%), Port of Singapore Authority (PSA) which runs the port facilities (15%), Civil Aviation Authority of Singapore (CAAS) which runs all airport facilities (15%), and Singapore Telecoms which runs the telecommunication system (15%). SNS contracted International Business Machines (IBM) to develop the first version of the system which went live on 1 January 1989, when the first transaction on TradeNet—a shipping application—was submitted. Approval of the shipment was returned 10 minutes later.

By December 1989, TradeNet had 850 out of 2,200 possible subscribers, and handled about 45% of all trade documentation, a threefold increase from the first year target of 15%. Due to overwhelming response, STDB brought forward the date for the mandatory use of TradeNet from early 1993 to early 1991. By mid-1991, TradeNet had 1,800 subscribers, and was processing 95% of all trade documentation. Today, all trade documentation is 100% electronically submitted and processed. The number of permits applications had increased from 10,000 daily in 1987 to 30,000 in 2007, amounting to some 9 million transactions a year. The number of companies using TradeNet in the same year reached about 2,500 companies with a total 8,000 individual user accounts.

The direct capital cost of TradeNet’s development was in excess of S\$20 million in 1987. This does not include the costs that various agencies incurred in conceiving the project, developing requirements and specifications, managing contract or establishing SNS. In 1989, a company joining TradeNet had to pay a one-time connection fee of S\$750, a monthly charge of S\$30 for a dial-up port, and transaction costs of S\$0.50 per kilobyte of transmitted information (the average declaration requires 0.7 kilobytes). The company also had to acquire the necessary hardware (about S\$4,000) and applications (between S\$1,000 and S\$4,000) for the processing and transmission of the coded UN/EDIFACT data. Today, TradeNet is completely web-based. Aside from broadband charges, the user pays a one-time registration fee of S\$50 and a monthly fee of S\$20 per user. In addition, the user pays S\$2.88 for each declaration made through the system.

TradeNet streamlined trade procedures and protocols, which made the entire trading community more competitive internationally. Users found that there were significant savings accruing from filling out a single online form versus over 20 paper forms in the past. One main benefit of TradeNet was a reduced turnaround time for processing typical trade documents—from 2 to 4 days to as short as 10 minutes.

Faster turnaround made it possible to better organize shipments and improve productivity. Freight forwarders have reported savings of 25%–35% in handling trade documentation as TradeNet operates 24 hours as opposed to agencies that open only during normal office hours. Benefits also accrued to government agencies using the system. Customs moved from a system of post-approval of applications to pre-approval, such that customs duties are now prepaid through electronic means and customs receive payments faster. The system also enabled faster compilation of more accurate and complete external trade statistics since data need not be re-keyed in by the government agencies to compile the trade statistics.

Further trade-related services were continually added to the TradeNet. For example, in 1990, a module that enables traders to apply electronically for certificates of origin (CO) was added, reducing CO applications processing and approval from 2 days to half a day. Further enhancements to TradeNet initiated in 1999 reduced trade documentation processing time to 1–2 minutes. The current web-based TradeNet version 4.0 was implemented in October 2007. It comprises major enhancements, providing a simplified permit structure, with less declaration fields. TradeNet 4.0 also offers a full suite of permit processing services, including a new “import for re-export” permit for traders bringing in goods for re-export. Along with this new version, the processing and transmission fees were reduced from the S\$2.00 and S\$0.40 (per kilobyte) to S\$1.80 and S\$0.18 (unlimited), respectively, resulting in a further 12% reduction in cost per declaration relative to the previous version.

TradeNet is now a core application within Singapore TradeXchange platform, which also went live in October 2007. TradeXchange is a neutral electronic platform that facilitates the exchange of information in the trade and logistics community. It provides connectivity to commercial systems and regulatory systems in other countries. Leveraging on the connectivity and core applications of TradeXchange, a number of value-added service providers are providing various application services to the trade and logistics community in areas such as trade documentation preparation, supply chain management, logistics and freight management, trade finance and insurance. TradeXchange is the first information technology project in Singapore to be implemented as a public–private partnership, with CrimsonLogic Pte Ltd appointed by the government through a competitive tender to develop, operate, and maintain the platform.

The following critical success factors can be identified from the Singapore experience:

- (i) *Commitment at the highest level.* The then Minister of Trade and Industry provided full support to the TradeNet team. The government found it useful to set a deadline for the new system to be developed and implemented.
- (ii) *Multi-agency steering committee.* A multi-agency steering committee with private sector representation has to be organized as early as possible, with a lead agency spearheading the concept and coordinating activities of all the parties to be involved. STDB was the lead agency in Singapore’s case. The steering committee should set up a series of sub-committees comprising of representatives from both the public and private sectors to look into the following aspects: 1) simplification of documentation and procedures; 2) development of a community systems; and 3) data administration.
- (iii) *Establishment of a corporate vehicle.* A separate corporate entity, Singapore Network Services Ltd (SNS) was created with the necessary capitalization to develop and operate the system.

Figure 2.11: Electronic Certificate of Origin in Sri Lanka Aligned to United Nations Layout Key and UNTD

The screenshot shows a software window titled "The document contains the following fields" with a toolbar at the top. The main area contains a form with the following fields:

- 1. Consignor / Exporter
- 2. Ref.No.
- 3. Consignee
- 4. Ref. No. (Where applicable only)
- 5. Country of Origin (Dropdown menu showing LK SRI LANKA)
- 6. Port of Loading and any other comments
- 7. FOR OFFICIAL USE

The form also includes the logo and contact information of The Ceylon Chamber of Commerce:

Certificate of Origin
The Ceylon Chamber of Commerce
 60, Navam Mawatha
 Colombo 02
 Sri Lanka
 Tel : (0094) 11 - 2433148, 2421745-6
 Fax : (0094) 11 - 2437477, 2449352, 2381012
 Email : eco@chamber.lk

At the bottom of the form, there is a table header with columns: 8. Item No, 9. Shipping Marks, 10. Package Type /Quantity, 11. Summary Description, 12. Commodity Code, and 13. Quantity & Type. A "Del" button is located at the bottom right of the form area.

Source: Ceylon Chamber of Commerce.

- (iv) *Phased implementation.* A “big bang” method is not recommended. To ensure success, it is necessary to consider a phased implementation, with a selected set of documents and goods and with a pilot group of users in the initial period.
- (v) *Establishment of document service centers.* The setting up of document service centers is critical to the acceptance and success of the new system as a large number of small and medium enterprises do not have the daily volume to justify the computer system to prepare and submit their trade documents.
- (vi) *Technical service providers.* To provide for competition, the lead agency may select a number of (the actual number will depend on the volume of daily transactions to be handled) service providers to develop software to run the system. The software developers shall sell their softwares and services to the business community based on their marketing and merit. They shall also provide the training and technical support to their customers to operate the system efficiently.

Sri Lanka's Electronic Certificate of Origin

The Ceylon Chamber of Commerce launched an online electronic certificate of origin (e-CO) in July 2007 (Figure 2.11). This service allows more than 300 exporters to apply for a certificate of origin via the internet. Using this system, about 80 e-COs are issued each day, which represent one third of all certificates of origin issued in a day. Besides saving time and costs associated with obtaining the e-CO, it also eliminates human error and increases transparency and predictability of the issuing process. Moreover, introduction of the e-CO also provided an opportunity to simplify the previous format of the certificate of origin together with the entire application and issuance procedure. In designing the simplified e-CO, a full harmonization with the UNLK and UNTDED was conducted. The data elements were based on the UNTDED, which made them interoperable with ebXML or UN/EDIFACT. The e-CO was developed using the UN Trade Facilitation Toolkit for aligned trade forms and AdobeLiveCycle Software.⁵⁰

When an e-CO is received in any computer application, the processing of data can be automated without the need for further changes in the system. Therefore, the e-COs can be generated in paper, XML, PDF, and EDI formats and be visualized using a standard internet browser or implemented in standard office software that supports electronic signatures.

When the e-CO system became fully operational, the exporters not only could apply for a certificate of origin online, but the Chamber could also return the approved e-COs back to the exporters online. This way, the chamber could process nearly 90% of the requests for certificates of origin received through the automated system. Further developments are envisaged for approved e-COs to be shared online with the banks or to the importing country's customs point of clearance.

⁵⁰ The UN Toolkit was developed by the five UN regional commissions with UNECE as lead agency. The UN Toolkit is a web-based tool on UNLK and other international standards and codes that enables trade facilitators to develop aligned series of trade documents and forms. The forms may also be "write-enabled," which allows traders to complete the forms electronically and e-mail them or print them on paper.

■ CHAPTER 3

Product Standards and Conformance

Product standards set out specific characteristics of a product such as size, shape, design, functions, and performance, or the way it is labeled or packaged before it is put on sale.⁵¹ Standards that are imposed by government authorities and become mandatory are often referred to as technical regulations or sanitary and phytosanitary (SPS) measures, and governed by the World Trade Organization (WTO) Agreements on Technical Barriers to Trade (TBT) and on SPS Measures.

The objective of such regulations is most often to protect human safety and health. Moreover, such regulations aim to protect animal and plant life and health; the environment; and consumers against deceptive practices, such as misleading labeling. Technical regulations are also issued in some countries to ensure quality (e.g., standards on the size of certain fruits and vegetables) or to promote trade and technical harmonization (e.g., standards on telecommunications equipment to ensure compatibility).⁵² While regulations and standards may clearly serve the public interest, it is important that they be designed to minimize any trade-restricting side effects.⁵³ Inappropriate regulations and standards, as well as inadequate conformity assessment procedures through which the application of standards is verified, can indeed result in high costs and inefficiencies for traders.

The WTO identifies four sources of costs to exporters from differing national product standards.⁵⁴ First, economies of scale are lost if a company must adjust its production process to comply with diverse technical requirements in individual markets. Second, compliance with technical regulations generally needs to be confirmed through testing, certification, or inspection by laboratories or certification bodies. These conformity assessment costs are usually at the exporter's expense. Third, the

⁵¹ In certain cases, the way a product is produced can affect these characteristics, and it may then prove more appropriate to draft technical regulations and standards in terms of a product's process and production methods rather than its characteristics per se. For details, see www.wto.org/english/tratop_e/tbt_e/tbt_info_e.htm

⁵² A clear distinction needs to be made between international standards that determine product quality and safety (such as TBT and SPS) and trade facilitation international standards to ease and harmonize trade procedures and information flows. A detailed explanation of the latter ones is provided in Chapter 2.

⁵³ Universal standards would serve this purpose but may be inappropriate if countries face diverse conditions and if meeting a global standard is unattainable, such as in least developed countries with limited administrative capacity.

⁵⁴ World Trade Organization (WTO) Technical Information on Technical barriers to trade. Accessed date 2009.

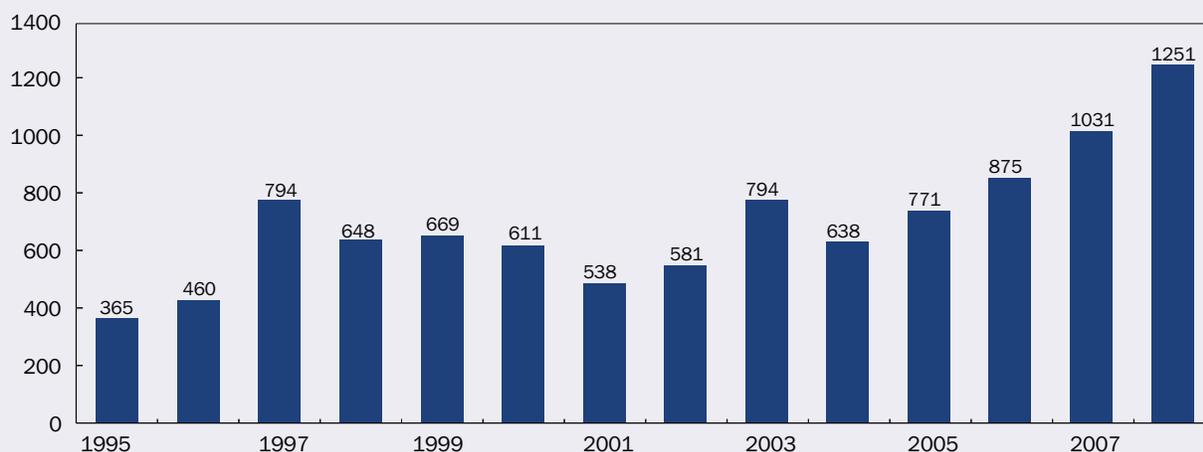
existence of technical standards generates information costs, which may include costs associated with evaluating the technical impact of foreign regulations on the production process, translating and disseminating product information, and training experts. Fourth, exporters may face additional unexpected costs if confronted with new regulations, as they often have less information and therefore less time to adjust as compared to firms in the importing country.

Product Standards and Conformance: State of Play

The number of technical regulations has grown at a rapid pace and recent trends in the number of TBT notifications suggest that the pace is accelerating. The number of notifications in 2008 was twice as high as in the early 2000s (Figure 2.12). Since the Agreement took effect on 1 January 1995 until 31 December 2008, 10,026 notifications have been made by 106 members.

With the support of the UN Economic and Social Commission for Asia and the Pacific (ESCAP), exploratory private sector surveys were conducted in Bangladesh, the PRC, Fiji, India, Indonesia, and Nepal in 2005 and confirmed that traders in Asia and the Pacific found that technical and sanitary standards and requirements are among the most problematic trade facilitation issues.⁵⁵ Exporters in developing countries sometimes face the prospect of detentions of their agricultural and food shipments upon arrival in developed countries, often on the ground of insanitariness and contamination. Import restrictions imposed on the basis of noncompliance with sanitary or phytosanitary requirements are also common (Box 2.10). While detentions and import restrictions imply the necessity of improving the capacity of

Figure 2.12: Annual Number of Technical Barriers to Trade Notifications



Source: World Trade Organization 2009.

⁵⁵ ESCAP 2008.

Box 2.10: Sanitary and Phytosanitary Conformance Issues and Import Restrictions on Exports from Asian Countries: Some Examples

- Import restrictions on chicken meat exports of Thailand (Athukorala and Jayasuriya, 2005). In 2002, Australian quarantine regulations required that chicken meat from Thailand be heated for 143 minutes at 70 degrees Celsius to avoid the possibility of carrying a certain disease. The heating process adversely affected the quality of the chicken, and effectively closed the Australian market for Thai chicken exports. In June 2002, Thailand provided Australia with a risk assessment report, which showed that the risk of introducing diseases to backyard flocks through cooked chicken meat was negligible.
- Import restrictions on prawns and prawn products (Jongwanich 2009). In 2001–2007, Thailand, on behalf of the Association of Southeast Asian Nations (ASEAN), urged Australia to lift its interim measures on prawns and prawn products (which required risk management measures for White Spot Syndrome and Yellow Head Virus) on the basis that the measures were not based on scientific evidence and were trade-restrictive. On 20 September 2007, Australia accepted Thailand's proposal on alternative cooking parameters and was willing to consider the same proposals from other exporters and discuss equivalent measures such as zoning and compartmentalization.
- Import restrictions on fish and fishery exports from India (Henson and Jaffee 2008). The European Union imposed border testing for frozen products, conducted inspections of India's fish processing facilities, and eventually banned India's fish and fishery exports for noncompliance with hygiene standards. The ban was lifted after the Indian government improved hygiene standards in the facilities.

Source: Athukorala and Jayasuriya. 2003; Henson and Jaffee. 2008; Jongwanich. 2009.

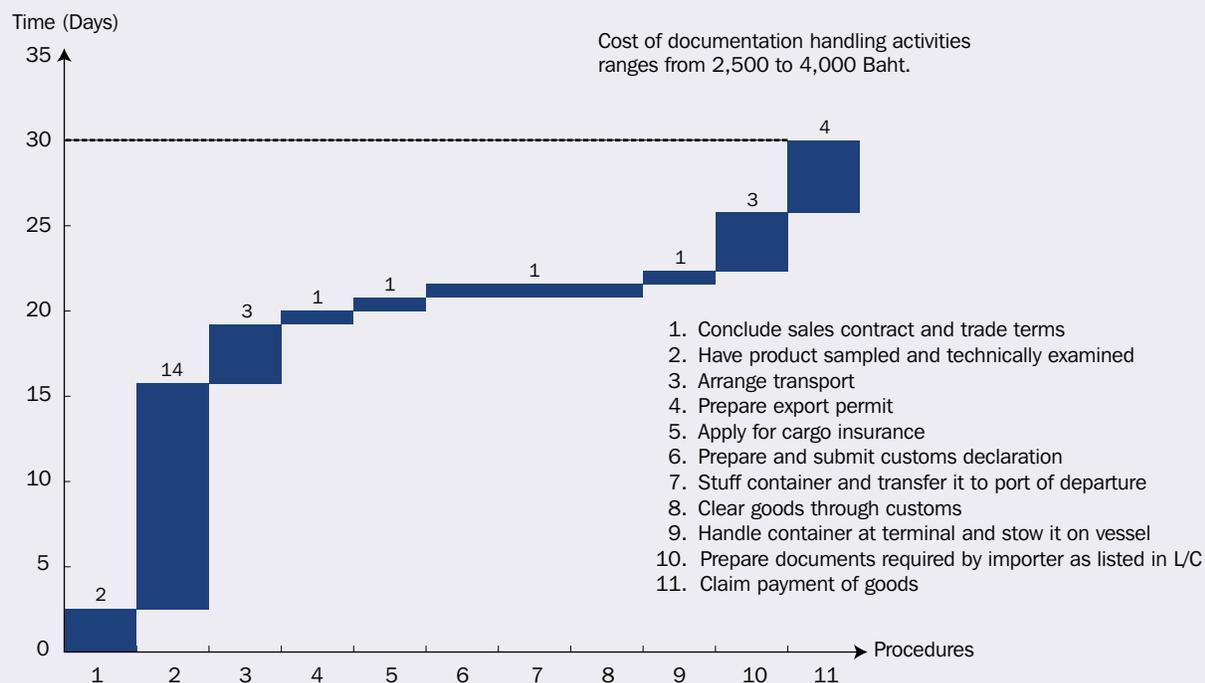
exporters from developing countries to supply products that meet standards, the appropriateness of the regulatory requirements also needs to be ensured.

While the standards themselves can be an issue, a key concern from a trade facilitation perspective is the efficiency of the conformity assessment procedures, which can add significant time to the export process. For example, Keretho (2007) found that the sampling, testing, and other procedures involved in obtaining relevant SPS certificates in Thailand account for almost half of the 30 days necessary to prepare all the documents needed for the export of frozen shrimps (Figure 2.13). More importantly, the 30-day estimate does not include additional conformity assessment procedures (e.g., inspection and testing) that may also take place once the shrimps arrive in the importing country, particularly if the authorities in the country of import are less confident in the competence, reliability, or methods of the conformity assessment service providers who delivered the initial certificate in the country of origin.

While the situation differs greatly across countries and subregions, developing countries have reported various problems in relation to conformity assessment procedures.⁵⁶ Developing country exporters, in particular SMEs, have sometimes found conformity assessment requirements in export markets difficult to meet due to the lack of a developed and internationally recognized quality infrastructure in their country (Box 2.11), e.g., limited physical and technical resources for national conformity assessment, and insufficient number of accredited laboratories at the national or regional level. Moreover, the developing countries cited the high costs and difficulties of obtaining foreign accreditation, establishing internationally recognized accreditation bodies, participating in international conformity assessment systems, and implementing International Organization for Standardization/International

⁵⁶ Second Triennial Review of the Operation And Implementation of the Agreement on TBT. 2000.

Figure 2.13: Time–Procedure Chart of Thailand’s Frozen Shrimp Exports



Source: Keretho, S. 2007.

Box 2.11: Overview of a National Quality Infrastructure

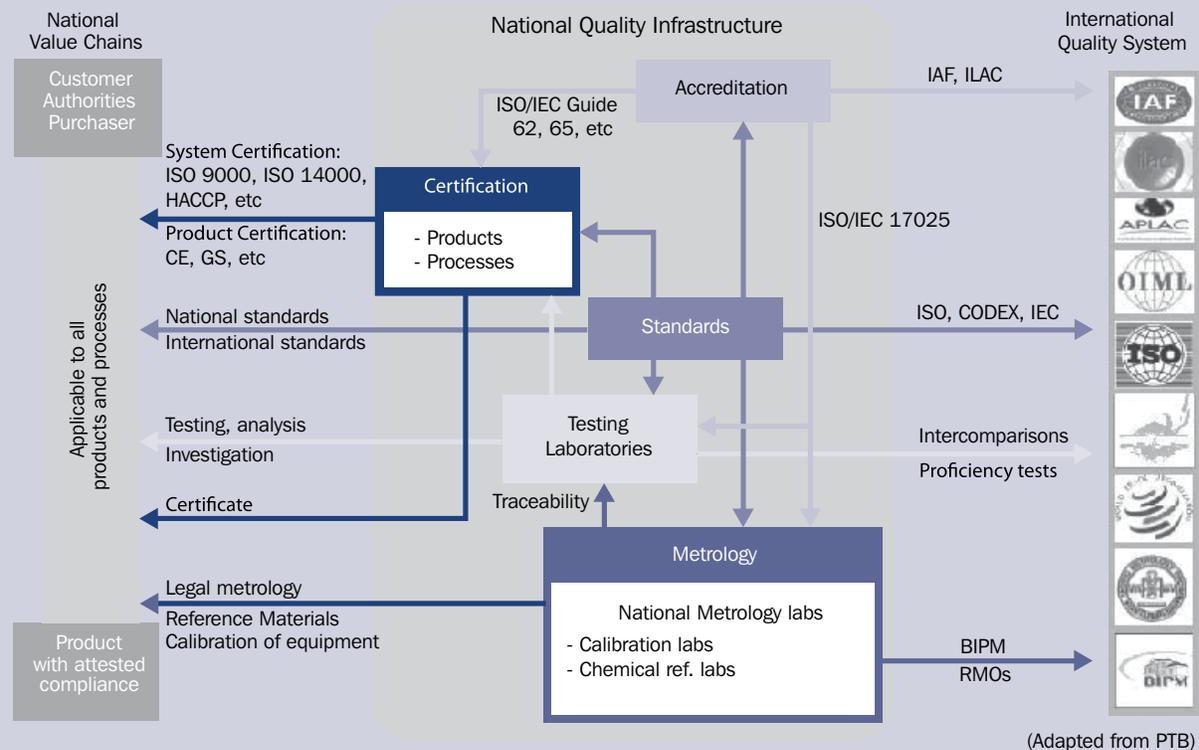
A quality infrastructure can be understood as the totality of the institutional framework (whether public or private) put in place to formulate, issue, and implement standards and the associated evidence of compliance (i.e., the relevant mix of inspection, testing, certification, metrology, and accreditation) in order to improve the suitability of products, processes, and services for their intended purposes; prevent barriers to trade; and facilitate technological cooperation.^a The organizations that make up a quality infrastructure should individually or collectively provide the following output:

- **Standards, technical regulations, and SPS measures** are formal documentation containing the requirements that a product, process, or service should comply with. Standards are usually developed and published under the auspices of a national standards body (NSB) in accordance with the World Trade Organization Technical Barriers to Trade Code of Conduct and the Directives of International Electrotechnical Commission (IEC) and the International Organization for Standardization (ISO). In developing countries, NSBs are generally government or semi-government organizations with close links to other government agencies, and often responsible for developing both national standards and technical regulations. SPS measures may also be developed by the NSB in cooperation or in conjunction with the ministries of trade and industry, health, and agriculture or an SPS authority.
- **Metrology** is the technology or science of measurement. Metrology is essential to ensure the accuracy of measurements where these have an influence on the transparency of economic transactions, health, and safety, as well as to warrant the adequate functioning of measurement instruments used in industry, production, and testing. A national metrology institute is responsible for ensuring that national measurement standards are maintained at certain accuracy levels and for diffusing these standards to the industries. National metrology institutes are generally government or semi-government organizations.

^a Derived from the definition of standardization in ISO/IEC Guide 2:2004.

Box 2.11 continued

Figure B2.11: National Quality Infrastructure Set Up



- **Testing** is the determination of product characteristics against the requirements of the standard. In the past, government laboratories were responsible for providing testing services, especially to the authorities; these services are now increasingly provided by the private sector.
- **Certification** is the formal substantiation that a product, service, organization or individual meets the requirements of a standard. This has often become mainly a commercial activity even though both public and private organizations provide such services.
- **Accreditation** is the activity of providing independent attestation as to the competency of an individual or organization to provide specified services (e.g., testing and certification). Accreditation bodies are invariably government organizations and there should be only one such body in a country.

Figure B2.11 illustrates the relationships between the quality infrastructure organizations. Everything starts with standards, which contain the requirements for the product or service. Once the product has been manufactured it has to be tested by a testing laboratory. The certification organization assesses the supplier and products or service, and issues a certificate stating compliance with the standard. Through metrology the testing laboratory can ensure that its measuring equipment functions adequately. National quality infrastructure organizations participate in the international quality system to contribute or access international standards (e.g., NSBs are members of ISO), or to facilitate the recognition of their services abroad.

Electrotechnical Commission (ISO/IEC) guides on conformity assessment procedures.⁵⁷

Overall, the growing number of technical regulations and standards and the significant time and costs involved in conformance, as well as the inherent complexity and long-term nature of quality infrastructure development, suggest that countries in the region will have to pay more attention to the development of product standards, conformity assessment procedures, and infrastructure in line with the principles and best practices outlined in relevant international agreements.

Impact of Product Standards on Trade

Nontariff barriers to trade in the form of technical requirements and standards, as well as SPS measures, pose a major challenge to economists not only because of the measurement challenges⁵⁸ but also because of the complex effects.⁵⁹ Many standards are beneficial and the impact on trade is second order to the benefits in terms of improved health, safety or environmental conditions. Even the trade impact is double-edged, with transparent regulations that help promote market development internationally and domestically, while divergent standards may create an undesirable bias in favor of domestic firms.

Much of the literature in the 1990s and early 2000s was concerned with identifying technical barriers to trade in a descriptive or institutional way.⁶⁰ Four types of empirical approaches were used in identifying technical barriers to trade: surveys, macro-econometric analysis, partial equilibrium approaches, and computable general equilibrium models.⁶¹

One of the best known surveys on conformity assessment procedures is a 1999 survey conducted by the Organisation for Economic Co-operation and Development (OECD). This survey of 55 firms associated with the dairy products, auto equipment, and terminal telecommunications equipment industries in Germany, Japan, the UK, and the US⁶² found that firms adopted compliance strategies when exporting, although they had difficulty in assessing in advance the costs of complying with foreign requirements. In general, the firms did not perceive the cost of different mandatory technical requirements to be large but they did report difficulties complying with non-mandatory standards. They also reported observable cost reductions due to harmonization of standards or mutual recognition agreements. Conformity assessment costs varied significantly from company to company and across industries, and time delays were acknowledged as an important cost of conformity assessment. Smaller firms reported greater reliance on external

⁵⁷ Third Triennial Review of the TBT Agreement. 2003.

⁵⁸ Deardorff and Stern (1998) characterized regulatory barriers as “one of the most difficult nontariff barriers imaginable to quantify.” Their conclusion that “the best approach is to collect information from experts in the industry itself” is an admission of defeat in assembling anything other than disaggregated case-specific data.

⁵⁹ For example, SPS and other standards may play a role as catalysts for the development of regulatory, institutional, and administrative capacities, and the upgrading of production technologies and supply chains, consequently creating positive externalities in the domestic market and improving competitiveness, which might be particularly evident in developing countries (See also Jongwanich 2009; Henson and Jaffee 2008).

⁶⁰ Henson and Wilson. 2005.

⁶¹ Keith Maskus and John Wilson (in the first two chapters of their edited book) proposed this taxonomy. It is also adopted by Popper, et al., 2004

⁶² The report *Assessment of the Costs for International Trade in Meeting Regulatory Requirements* is available at [www.oecd.org/olis/1999doc.nsf/linkto/td-tc-wp\(99\)8-final](http://www.oecd.org/olis/1999doc.nsf/linkto/td-tc-wp(99)8-final)

information sources and difficulty in spreading compliance costs over small export volumes.⁶³

Econometric approaches typically include the number of regulations or a survey-based perception index of regulatory severity in a regression of trade volumes. This is the approach in the gravity model analysis of trade costs such as the work of Wilson et al. (2005). In general, regulatory variables appear to be less important than port efficiency variables or those related to information communication technology (ICT) infrastructure and services.

Several studies have made case-specific analyses, especially to agricultural products. Krissoff, Calvin, and Gray (1997) estimated the tariff equivalents of phytosanitary requirements of US apple exports to Japan, Mexico, and the Republic of Korea, and found them to be generally larger than the tariff rates on these products and significant barriers to trade. Other examples include studies of US dairy markets in Canada and Mexico after NAFTA by Thilmany and Barrett (1997), and of US beef imports by Paarlberg and Lee (1998).

All of these approaches have their shortcomings because regulatory barriers are heterogeneous and inherently difficult to measure. Most technical barriers to trade are product-specific and hence poorly captured in computable general equilibrium models. Moreover, they are not equally onerous, so counts of regulations do not capture the relative severity of national regulatory regimes. Surveys suffer from respondent bias, which is important given the likelihood that the costs will be more onerous for smaller firms, and that firms that are deterred from exporting at all will be omitted from surveys of companies that trade.

The econometric studies rely on survey or count data so their results are of dubious value. Partial equilibrium studies can be valuable for highlighting the impact on trade and welfare of individual technical barriers, especially those covered by the SPS Agreement. These studies highlight the potentially high costs of standards that differ in each country, especially if they are introduced in response to lobbying by domestic producers that compete with imports.

Basic Principles and Good Practices

As mentioned earlier, two specific WTO agreements, the TBT and SPS agreements, set out the principles and rules in the areas of standards and conformance.⁶⁴ The TBT Agreement sets out international rules on technical regulations, voluntary standards, and conformity assessment procedures. It applies to regulations, standards, and procedures in both industrial and agricultural products except when they are SPS measures. SPS measures are regulations imposed on some agricultural products to (i) ensure food safety for both humans and animals, (ii) protect human life from plant or animal-carried diseases, and (iii) protect animals and plants from pests and diseases. Regulations adopted to meet one or more of these three objectives are expected to comply with the provisions of the SPS agreement.

⁶³ More recently, in 2004–2005, the OECD conducted additional studies on conformity assessment procedures, but the results have yet to be reported. See www.oecd.org/document/62/0,3343,en_2649_36251006_1842622_1_1_1_1,00.html

⁶⁴ The two agreements are mutually exclusive. As such, in the area of food labeling, requirements on information related to food safety (health warnings, use, dosage) fall under the SPS Agreement, but requirements for a label's position, lettering, and information on nutrient content are covered by the TBT Agreement (Pellan 2003; Agreements on SPS and TBT. 1995).

While there are differences between the TBT and SPS agreements, both attempt to strike a balance between a country's legitimate need to impose standards and a country's use of standards and procedures to limit trade (e.g., through unnecessarily stringent labeling requirements). They attempt to identify the trade-distorting aspects of standards, and compel countries to ensure that technical regulations and standards do not unnecessarily restrict international trade.

Borrowing from the TBT and SPS agreements, the following principles should be promoted and adhered to the extent possible when preparing, adopting, and applying technical regulations, standards, and SPS measures:

- (i) *Nondiscrimination*. Technical regulations should accord products imported from any country a treatment no less favorable than similar products of national origin or originating from any other country. This is in line with the general nondiscrimination principle in WTO as defined in GATT Article 1 (Most Favored Nation) and GATT Article 2 (National Treatment). In the case of the SPS measures, however, some flexibility exists to deviate from the most favored nation principle when they aim to prevent the entry of plant or animal-borne pests and disease into a country, since the level of prevalence of specific diseases and pests may vary across countries.⁶⁵
- (ii) *Avoidance of unnecessary obstacles to trade*. Technical regulations should be made no more restrictive than necessary to fulfill legitimate objectives (e.g., national security requirements; protection of human, animal, and plant life or safety; or environmental protection). They should be based on the risks associated with noncompliance, which should be assessed according to information such as available scientific and technical information, and intended end uses of products. While the SPS Agreement does not prohibit countries from developing and implementing national standards that are more stringent than international standards, WTO members must, if they do not align national requirements with international requirements and standards, justify their reasons for the use of more stringent domestic standard in case it restricts trade. The SPS Agreement particularly emphasizes the need for scientific evidence to justify trade-restricting measures (Box 2.12). Moreover, in an effort to avoid unnecessary obstacles to trade, it is recommended that regulations specify

Box 2.12: Scientific Standards in the Sanitary and Phytosanitary Agreement: The Case of Japan's Apple Restrictions

The WTO dispute settlement body's interpretation that the SPS agreement only allows standards set on the basis of scientific evidence with no leeway given to national authorities was highlighted in the case of Japan's apple restrictions, which aimed to prevent the introduction of the fire blight plant disease through imported apples from the US. The restrictions violated the SPS Agreement because of lack of scientific evidence to support such a measure. Japan defended the restrictions, saying they were provisional and precautionary, and argued that their national authorities should be given deference in their interpretation of the scientific evidence. The WTO dispute settlement body rejected this defense and found Japan's restrictions to be "clearly disproportionate to the risk." Fire blight affects plants but has no human health consequences. Thus this case dealt only with plant safety rather than the emotionally charged issue of human health safety. The case highlights the WTO's attempt to enforce the principle of scientific standards as key to upholding trade restrictions on SPS grounds, and cannot be superseded simply by claims of national autonomy.

Source: Harvard University Center for International Economic Development. 2004.

⁶⁵ ITC UNCTAD/WTO. 2006.

product performance requirements rather than product design or descriptive requirements.

- (iii) *Harmonization.* Technical regulations should, to the extent possible, be based on relevant international standards. Box 2.13 features international standards developed by international standard-setting organizations such as the Food and Agriculture Organization (FAO), ISO, United Nations Economic Commission for Europe, and World Health Organization (WHO). International standards may be used either by direct application or by a process of modifying an international standard to suit local conditions. Relying on international standards is an effective way to help reduce the costs faced by producers and traders. Countries should therefore participate to the extent possible in the appropriate standard-setting bodies to ensure that international standards meet their needs. The SPS Agreement also stresses that member countries should play an active role in the promotion of food safety and plant protection standards within the framework of the Codex Alimentarius Commission (CAC) and the International Office of Epizootics, subject to the limits of their resources.
- (iv) *Transparency.* Technical requirements should be prepared, adopted, and applied in a transparent manner. Good practices include (i) allowing a period of at least 60 days for the submission of comments on a draft standard by interested parties; (ii) promptly providing copies of the draft to interested domestic and foreign parties, and charging the same fees, apart from the real cost of delivery, to all parties; (iii) incorporating relevant comments received in the final standard and explaining, if applicable, why a standard departs from corresponding international standards; (iv) promptly publishing the standard once it has been adopted; and (v) notifying trading partners (through the WTO) and allowing sufficient time for interested parties to get acquainted with the standard before it is enforced (pre-enactment publication). Other relevant good practices can be found in the Code of Good Practices for the Preparation, Adoption and Application of Standards (Annex 3 of the TBT Agreement).⁶⁶ Countries also need to establish enquiry points and national notification authorities (the two may be the same body) to answer questions about regulations and to notify other countries of new regulations. Other principles and practices of transparency related to publication and administration were discussed in Chapter 1.
- (v) *Equivalence and mutual recognition.* Technical regulations and standards in foreign countries should be recognized as equivalent provided they fulfill or satisfy the objectives of national regulations. Whenever possible, countries should seek to mutually recognize each other's standards and regulations. Provisions on equivalence in the SPS agreement (Article 4) state that WTO members shall accept the SPS measures of other members as equivalent, even if these measures differ from their own or from those used by other countries trading in the same product, and even if the exporting country objectively demonstrates to the importing country that its measures achieve the importing country's level of SPS protection. For this purpose, reasonable access shall be given, upon request, to the importing country for inspection, testing, and other relevant procedures. Furthermore, WTO member countries shall, upon request, enter into consultations to achieve bilateral and multilateral agreements on recognition of the equivalence of specified SPS measures. Recognition of equivalence is a complicated process and therefore rarely used in practice, as countries prefer to work toward harmonization based on international

⁶⁶ WTO Agreement on TBT. 1995.

Box 2.13: Sources of International Standards

With the increasing globalization of markets, international standards (as opposed to regional or national standards) have become critical to the trading process, ensuring a level playing field for exports and guaranteeing imports meet internationally recognized levels of performance and safety. A number of bodies are involved in developing international standards in different sectors. Three such sources of standards are briefly presented below.

International Organization for Standards

The International Organization for Standards (ISO) is the world's largest developer and publisher of international standards in various subjects and fields, including product standards. ISO has more than 17,500 international standards on a variety of subjects with some 1,100 new standards being published every year. The scope of ISO covers standardization in all fields except electrical and electronic engineering, which are the responsibility of the International Electrotechnical Commission (IEC), and telecommunications, covered by the International Telecommunication Union. The three organizations have a strong collaboration on standardization in the field of information technology.

ISO is a network of the national standards bodies of 161 countries (one member per country), with a Geneva-based central secretariat that coordinates the system. The ISO standards are voluntary and are based on international consensus among experts in the field. ISO work in developing standards is mainly carried out by experts from the industrial, technical, and business sectors, which have asked for the standards and subsequently put them to use. As a nongovernment organization, ISO has no legal authority to enforce the implementation of its standards. ISO does not regulate or legislate. However, countries may decide to adopt ISO standards (mainly those concerned with health, safety, or the environment) as regulations, for which ISO provides the technical basis.

Codex Alimentarius Commission

The Codex Alimentarius Commission was established by the Food and Agriculture Organization (FAO) and the World Health Organization (WHO) to protect the health of consumers and ensure fair practices in food trade. The Commission first met in 1963. Codex is funded by FAO and WHO, and has 180 member governments, including the European Community as a member organization.

The Codex Alimentarius (Latin for "food code"), a collection of internationally adopted food standards, guidelines, and codes of practice, is the result of the work of the Commission and around 20 of its technical committees, bringing together scientists, technical experts, and government regulators as well as international consumer and industry organizations. Codex standards are adopted in most cases by consensus and are based on the best scientific and technical knowledge. Codex is the only international forum. The Codex Alimentarius officially covers all foods, whether processed, semi-processed, or raw, but far more attention has been given to foods that are marketed directly to consumers. In addition to standards for specific foods, the Codex Alimentarius contains general standards covering matters such as food labeling, food hygiene, food additives, and pesticide residues, as well as guidelines for the management of government import and export inspections and certification systems for foods.^a

United Nations Economic Commission for Europe

The United Nations Economic Commission for Europe (UNECE) develops global agricultural quality standards to facilitate international trade. It covers a wide spectrum of agricultural products: fresh fruit and vegetables, dry and dried produce, seed potatoes, meat, cut flowers, and eggs and egg products. The standards encourage high-quality production, improve profitability, and protect consumer interests. UNECE standards are used internationally by governments, producers, traders, importers, exporters, and international organizations.^b

^a Relevant information on Codex Alimentarius, including the food standards, can be found at www.codexalimentarius.net/web/index_en.jsp

^b UNECE. accessed date 2009.

standards.⁶⁷ More progress has been made in unilateral or multilateral recognition of conformity assessment results.

Facilitating Conformity Assessments

International Standard ISO/IEC 17000 defines conformity assessment as a “demonstration that specified requirements relating to a product, process, system, person or body are fulfilled.” Conformity assessment procedures such as testing, inspection, and certification offer assurance that products fulfill the requirements specified in regulations and standards. One of the crucial decisions for governments is whether to make conformity assessment mandatory through regulations in specific sectors, or to rely on the market to determine in a voluntary manner the conformity assessment requirements within normal transactions between buyers and sellers.

This decision should be based on (i) an assessment of the risks involved with a particular product or process; and (ii) an understanding of the impact a newly proposed regulation will have on trade and sustainable development. For low-risk products, a supplier’s declaration of conformity made by the supplier using its own testing system may be sufficient. For products that present a higher risk, third-party certification or inspection undertaken by an independent public or private service provider may be necessary. Technical and SPS regulations generally require third-party verification or certification. In this case, TBT and SPS certificates are typically required as part of the documentation necessary for customs clearance. Thus, it is important that all procedures involved in obtaining the relevant certificates be as transparent and efficient as possible.

The general principles of nondiscrimination and prevention of unnecessary barriers to trade, harmonization, and transparency for developing and adopting technical requirements and standards also apply to conformity assessment procedures. Good practices promoted under these principles include the following:

- (i) *Limit the amount of required information to what is necessary to assess conformity and determine fees.* Confidentiality of the information provided should be respected so as to protect the legitimate commercial interests of the applicant, regardless of whether the product is of domestic or foreign origin. Fees imposed for assessing the conformity of products, as well as the citing of facilities used in conformity assessment procedures, should be nondiscriminatory and consistent with the prevention of unnecessary barriers to trade.⁶⁸ A procedure to review complaints concerning the operation of a conformity assessment procedure should be put in place and corrective action must be imposed when a complaint is justified.
- (ii) *Complete conformity assessment procedures as expeditiously as possible.*⁶⁹ The standard processing period of each conformity assessment procedure should be published, and the anticipated processing period communicated to the applicant upon request. When receiving an application, the competent body should promptly examine the documentation and informs the applicant in a precise and complete manner of all deficiencies.

⁶⁷ WTO (G/TBT/W/173/Add.1). 2002.

⁶⁸ WTO Agreement on TBT. Accessed date 2009.

⁶⁹ In line with the nondiscrimination principle, they should be completed in a no less favorable order for products originating in the territories of other members than for like domestic products (TBT Article 5.2.1).

The competent body should transmit the results of the assessment as soon as possible in a precise and complete manner to the applicant so that corrective action may be taken if necessary. This applies even when the application has deficiencies.

The competent body should proceed as far as practicable with the conformity assessment if the applicant so requests. Upon request, the applicant should be informed of the stage of the procedure, explaining the delays, if any. In general, authorities are encouraged to develop flexible and innovative mechanisms to reduce time-to-market of goods while still meeting the mandatory conformity assessment requirements. For example, in 2001, the Philippines explained that, to ease the problems of long queues in testing laboratories, it devised arrangements such as interim recognition of test results from country of origin. In the case of Indonesian cement exported to the Philippines, if the test provided by the exporter was conducted by a laboratory that was accredited by an Asia Pacific Laboratory Accreditation Cooperation (APLAC) member, the results were recognized by the Philippines Bureau of Product Standards, and the cement shipment could be sold in the Philippine market while samples were undergoing the mandatory 28-day test in Philippine laboratories.⁷⁰

- (iii) *Unilaterally accept the results of the conformity assessment procedures in other countries whenever possible.* This would contribute to reducing unnecessary barriers to trade associated with duplicative testing and certification. Unilateral recognition opens up domestic markets, promotes the establishment of fair competition, and as a result gives consumers more product choices. Recognition also helps safeguard the interests of consumers by ensuring that imported products do not cost more because of reassessment.⁷¹ This practice goes one step further than the Philippines' interim recognition arrangement. However, a country adopting such practice should be satisfied; the procedures concerned offer an assurance of conformity equivalent to its own procedures.
- (iv) *Allow conformity assessment bodies located in foreign countries to participate in conformity assessment procedures.* TBT Article 5.6 suggests that foreign bodies should be allowed to provide conformity assessment services under conditions no less favorable than those accorded to domestic bodies. As pointed out by the TBT committee during various triennial reviews, such a practice should be seriously considered, as it could contribute to providing a wider choice of competent conformity assessment bodies for suppliers and regulators.⁷² The Japanese organic agriculture regulations may be considered a best practice in this area, allowing, among other options, competent foreign conformity assessment bodies to undertake conformity assessment as long as they are accredited by the Japanese authorities (Box 2.14).

In addition, the following practices and measures are particularly important for developing countries to facilitate export:

- (i) *Follow conformity assessment guides and recommendations issued by international standardizing bodies.* The use of common procedures such as international guides, recommendations, or standards in relation to the operation of

⁷⁰ WTO (G/TBT/W/166). 2001.

⁷¹ Second Triennial Review of the Operation and Implementation of the Agreement on Technical Barriers to Trade. 2000.

⁷² Third Triennial Review of the Operation and Implementation of the Agreement on Technical Barriers to Trade. 2003.

Box 2.14: Conformity Assessment Regulations on Organic Agriculture in Japan

The Japanese technical regulation on organic agriculture specifies who is able to undertake conformity assessment services in a flexible way that maximizes the supply of conformity assessment services in exporting countries while also ensuring an adequate degree of technical competence. In addition to accredited conformity assessment bodies based in Japan, three types of organizations can register to undertake certifications:

- Conformity assessment bodies located in a country that has been determined by the Japanese authority as having an equivalent system can, for a fee, obtain accreditation from the Japanese authorities. Provided they indicate the scope of their planned activities at the time of registration, these bodies can also undertake conformity assessments in third countries.
- Any recognized certifier in the country of export can certify raw agricultural products to be imported into Japan for further processing; the products will be recertified by a registered Japanese company after processing.
- Any registered company, either in Japan or in another country, can enter into a “trust contract” with companies in other countries. This is as long as the registered company is recognized by a national, regional, or international organization with established reliability, including the International Organic Accreditation Service of the International Federation of Organic Agriculture Movements, the main non-government body involved in organic agriculture standards and labeling.

Source: Rotherham. 2003.

accreditation, testing, inspection, and certification bodies (e.g., by ISO or IEC), can help achieve the required confidence among trading partners in the area of conformity assessment.⁷³ It is also recommended that developing countries participate in the preparation of guides and recommendations for conformance assessment procedures conducted by international standardizing bodies. This is because the procedures adopted by importing countries can greatly affect the ability of exporters to compete in these markets.

- (ii) *Negotiate mutual recognition agreements for conformity assessment.* Government-to-government mutual recognition agreements (MRAs) on conformity assessment procedures eliminate duplicative testing and/or certification. Moreover, MRAs bring significant benefits in terms of market access certainty, reduced costs, and faster time to market for products. While MRAs on a multilateral basis would be beneficial and trade-facilitating they are a very complex undertaking. As pointed out by Singapore during the fifth triennial review of the TBT Agreement, the success factors for MRAs are the confidence fostered in each other’s regulatory regimes and the commitment of regulators in the negotiations.⁷⁴ Bilateral or regional MRAs for conformity assessment such as the ASEAN MRAs (see next section) may therefore be pursued, as they may set the stage for harmonization of regulations and standards.
- (iii) *Develop an internationally accredited national accreditation system for conformity assessment bodies.* As explained in Box 2.11, a national accreditation body is an important part of a national quality infrastructure, as it has the

⁷³ The TBT Agreement requires the use of these guides except where such guides or recommendations or relevant parts are inappropriate for the members concerned for, among other things, such reasons as national security requirements; the prevention of deceptive practices; protection of human health or safety, animal or plant life or health, or the environment; fundamental climatic or other geographical factors; and fundamental technological or infrastructural problems.

⁷⁴ WTO (G/TBT/W/312). 2009.

Box 2.15: Mutual Recognition Arrangement—Asia Pacific Laboratory Accreditation Cooperation

The Asia Pacific Laboratory Accreditation Cooperation (APLAC) was initiated in 1992 as a forum for laboratory accreditation bodies in Asia and the Pacific. Its primary aim is to establish, develop, and expand a mutual recognition arrangement among accreditation bodies in the region.

Signatories to the APLAC mutual recognition arrangement (MRA) now include 27 accreditation authorities in 15 Asia and the Pacific economies plus India. This MRA is based on regular peer evaluations against the international standard ISO/IEC 17011. Signatory accreditation bodies have thoroughly evaluated each others' systems of accreditation. These recognition arrangements also include mechanisms to ensure that the results of testing, calibrations and inspections, and reference materials certification are covered by the arrangement and carry the same degree of accuracy and credibility on an ongoing basis.

Mutual recognition means that each partner agrees to recognize accreditations granted by the other partners as equivalent to their own. The APLAC MRA enables testing, calibration and inspection reports, and reference material certificates from the exporting country to be accepted in the importing country. It helps avoid requirements for retesting, recalibration, reinspection, or recertification, thus saving exporters time and money.

While accreditation is increasingly being recognized by regulators worldwide as evidence of competence to carry out conformity assessments, accreditation bodies cannot compel a domestic regulator to accept endorsed reports and certificates from an overseas laboratory or inspection body accredited by an MRA partner. Although the APLAC MRA can facilitate unilateral or mutual recognition of conformity assessment procedures, the decision on regulatory acceptance remains fully with the governments involved.

Source: APLAC. 2009.

responsibility to verify the competence of conformity assessment bodies such as laboratories, which provide certificates and test results to exporters. While national accreditation systems are useful in increasing the supply and quality of conformity assessment services, they ideally need to be recognized in foreign countries such that tests and certificates issued by nationally accredited laboratories can be readily accepted by them. International Laboratory Accreditation Cooperation (ILAC), an international cooperative organization of laboratory accreditation bodies, and APLAC (Box 2.15), which is in charge of accrediting calibration, testing, and inspection facilities, were established to achieve an international one-stop testing mechanism through MRAs.

Experience of Economies in Asia and the Pacific

Mutual Recognition of Conformity Assessment: Association of Southeast Asian Nations Mutual Recognition Arrangement

ASEAN has a very ambitious scheme of mutual recognition regarding conformity assessment. ASEAN member countries signed a framework agreement on MRAs as early as 1998, and three sector MRAs on electrical and electronic equipment,⁷⁵

⁷⁵ An ASEAN electrical and electronic equipment MRA was signed April 2002 and ASEAN Harmonized Electronic Equipment Regulatory Scheme was signed December 2005.

telecommunications,⁷⁶ and cosmetics⁷⁷ were signed a few years thereafter. Member countries are required to accept test reports or certifications that have been issued by a testing laboratory or a certification body of the other parties (Framework Agreement on MRA, Article 3). This reduces the burden of duplicate testing and certification requirements in all ASEAN territories. The agreement also lists the member's contact points with regard to conformity assessment policies.

Furthermore, the ASEAN MRA for electrical and electronic equipment enables the acceptance of test reports and certification of equipment produced outside ASEAN, so long as tests are conducted by a laboratory or a certification body certified by ASEAN-listed conformity assessment boards (CABs). It also allows the acceptance of test reports and/or certification for those produced outside ASEAN that are issued by a testing laboratory or a CAB-approved certification body located outside ASEAN, through arrangements between concerned member countries or between ASEAN and relevant CABs.⁷⁸ Thus, so long as products are tested and certified by a relevant testing laboratory or a certification body, a further conformity assessment test is no longer required upon importation into the ASEAN territory.

It should be noted that the mutual recognition of conformity assessment and of product standards are different. Cooperation on mutual recognition of product standards has not been significant compared with conformity assessment, and ASEAN has focused instead on harmonizing product standards such as those for cosmetic products.⁷⁹

Electronic Certification System for Agricultural Products in New Zealand

Electronic certification or E-cert, a webapplication used by the New Zealand Food Safety Authority, assists in providing government-to-government assurances that animal products exported from New Zealand comply with the regulatory requirements of importing countries. There are three E-cert systems:

- Animal Products E-cert used for exported animal products, excluding dairy products (e.g., meat, seafood, game, poultry, eggs, pet food, bee products, hides, wool, and skins);
- Dairy E-cert used for exported dairy products; and
- Phyto E-cert used for exported plant products. This E-cert system is owned and operated by the Biosecurity Division of the Ministry of Agriculture and Forestry.

The primary purpose of E-cert is to track the market eligibility and product status from the time of production until export (verification), and to approve and print sanitary export certificates (certification). The contents of the export certificates are supported by the verification regime, which manages or controls the advice about product compliance with importing country requirements. An approved export

⁷⁶ To date, MRA on telecommunication is entered into between Brunei Darussalam and Singapore, Indonesia and Singapore, and Malaysia, and Singapore.

⁷⁷ ASEAN Harmonized Cosmetic Regulatory Scheme was signed September 2003.

⁷⁸ ASEAN Harmonized Conformity Assessment Procedures for Electrical and Electronic Equipment, Appendix C, accessed date 2009.

⁷⁹ See Agreement on the ASEAN Harmonized Cosmetic Regulatory Scheme at www.aseansec.org/18213.htm

certificate is available to the appropriate border agency of the importing country (electronically or in paper form). In Animal Products E-cert, an export certificate is supported by an extensive collection of approved electronic internal transfer documents that track the product movements within New Zealand. These are called eligibility documents or eligibility declarations. There are three groups of authorized E-cert users: New Zealand industry users (consignors and consignees), independent reviewers (inspectors and official verifiers), and importing country officials (border inspection officials).

E-cert is a mechanism to increase the robustness of the precertification verification checks, improve the efficiency of the export certification process, significantly reduce the risk of errors, and provide a means to improve the quality and range of data from which to make strategic decisions. E-cert reduces the likelihood of fraud; paper certificates can be fraudulently used and providing international agencies with the means to validate paper certificates significantly increases the likelihood that they will be detected. In addition, the full electronic approach would mean that paper certificates would not be created and the ability to create fraudulent certificates would be significantly reduced. E-cert provides the ability to rapidly respond to increasingly changing market requirements.

On a cross-border basis, the E-cert system has been operating efficiently between Australia and New Zealand.⁸⁰ Existing case studies of Australia and New Zealand show that adopting the E-cert system has major benefits for government agencies and the trading community. These include savings of about \$100 per transaction and enhanced security of traded food and agricultural products.⁸¹ Certification data are securely and directly transferred from government to government to reduce the opportunity for fraudulent activity and to improve efficiency at ports of entry by providing prior notice of imports. The E-cert can be available on the internet within minutes of authentication by the issuing government.

Real time SPS data-sharing enables border officials to verify container contents prior to arrival in compliance with the World Customs Organization (WCO) pre-shipment notification requirements. Being internet-based, data are accessible and easily downloaded for integration into existing import management systems, and electronic certificates can be verified onscreen. The procedure to obtain E-cert in New Zealand is shown in Figure 2.14.

Onerous Labeling Requirements and the Technical Barriers to Trade Agreement: Case of Malaysia

The benefits to exporters of the TBT agreement, an effective national authority, and conforming to internationally recognized standards are illustrated by the case of Malaysian condom exports.⁸²

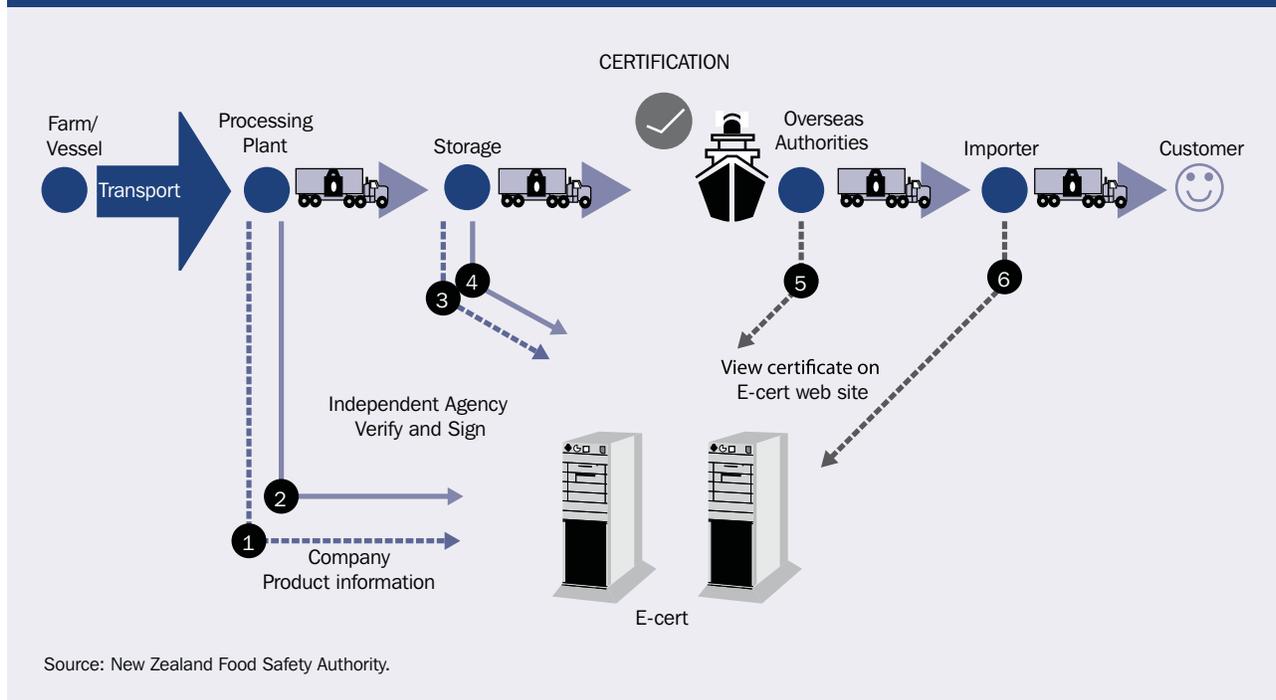
In 2003, the Ministry of Social Welfare of Colombia proposed a new requirement for the labeling of natural latex condoms, that each condom in the individual container shall bear at least the following information: manufacturer, trade name, sanitary register number, expiry date, batch number, the number of condoms contained, instructions for use of the condom, the statement that the condom is made of natural

⁸⁰ Australian Government's Department of Finance and Deregulation. 2008.

⁸¹ Gollan, P. 2006.

⁸² Norma Mansor, Noor Hasniah Kasim and Yong Sook Lu (2005).

Figure 2.14: Procedure to Obtain E-certificate to Export Food Products in New Zealand



rubber latex that can cause irritation, and instructions for the storage such as “Store the condom in a cool dry place away from direct sunlight”. The proposed regulation took effect on 15 August 2003.

Medical-Latex (DUA) SDN BHD (ML), a Malaysian condom manufacturer, called Standards and Industrial Research Institute of Malaysia (SIRIM) to express dissatisfaction with the new requirements. ML had been producing condoms for export since 1987, and is the biggest supplier in Latin America, exporting 80 million condoms a year to Colombia, Ecuador, and Venezuela. Losing ground in these markets would adversely affect MLs profitability.

In 1983, SIRIM was appointed by the Malaysian government to manage GATT/WTO enquiry and notification functions. Apart from being the focal point for TBT enquiries, SIRIM also works with other government agencies and the private sector to highlight new or amended regulations and standards issued by WTO members that would have implications for Malaysia’s domestic industry. Malaysia also set up the National Subcommittee on the TBT Agreement to examine the effective implementation of Malaysia’s rights and obligations under the TBT agreement and to coordinate the implementation issues related to the TBT with other agencies responsible for the agreement.

ML had two principal objections to the Colombian draft regulation. First, giving prominence to the warning that latex could cause irritation was in contravention of the TBT agreement since there is no scientific proof that natural rubber can cause allergies. Article 2.4 of the TBT agreement stipulates that where technical regulations are required and relevant international standards exist, members should

use them. ML insisted that “Medical-Latex meets all major international standards such as ISO 9001, EN 46001 (medical device directive), British Standards Institute and Laboratoire National de Métrologie et d’Essais (LNE). ML condoms carry quality seals from these highly reputable British and French standards organizations.”

Second, ML was concerned that in the event of the enforcement of the Colombian decree, ML’s expenses would be adversely affected. Redesign of the individual container of the condom would be necessary because the existing packet is too small to accommodate the proposed labeling. Furthermore, sales could be badly affected as the warning against allergies would be given undue prominence and create panic among the consumers.

SIRIM referred the case to the national subcommittee, which accepted the manufacturer’s points. The case was then taken to the WTO Committee on Technical Barriers to Trade, which found that Colombia’s decree breached its obligations under the TBT agreement. The important point is not only that the decree was not implemented but also that the costs to the exporter of enforcing its rights under the TBT were small due to the efficient institutional arrangements in Malaysia.

CHAPTER 4

Trade-Related Infrastructure and Services

This chapter considers the role that infrastructure and services play in facilitating trade. Its focus is not on infrastructure upgrades or services sector reform in general but rather on their specific potential to reduce trade costs in goods markets.⁸³ It therefore highlights ways in which policy makers can approach reforms in trade-related infrastructure and services, with a view to maximizing their positive impact on trade flows. Since this is still a potentially very broad area, this chapter deals only with those aspects of infrastructure and services that are most directly related to international trade in goods (Box 2.16).

The interplay between infrastructure and services sectors provides an important part of the context in which import and export transactions take place.⁸⁴ Efficient and effective reform in these areas can thus make a useful contribution to broader

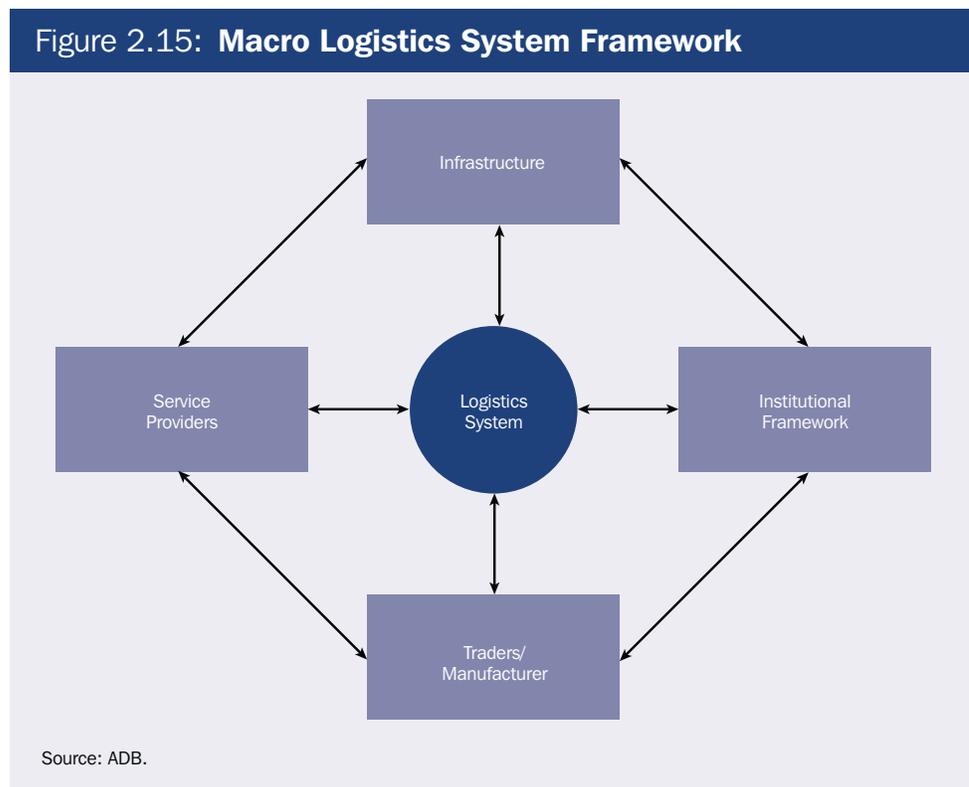
Box 2.16: Infrastructure, Services, and Trade: Where are the Closest Links?

A number of services sectors and a number of types of infrastructure are very intimately connected to goods trade that they need to be considered as part of any comprehensive approach to trade facilitation. This chapter focuses on three sectors widely believed to have the closest links to trade:

- **Transport.** The efficiency of ports, international transport links, and internal transport networks directly influences the level of trade costs in goods markets. For example, inefficient trucking services lead to longer dockside stand time and costly inventory accumulation, as well as reducing export volumes.
- **Logistics.** Efficient freight forwarders, distributors, and other logistics service providers make it possible for importers and exporters to connect with each other at a minimum cost and with minimum delay. Logistics costs represent a significant portion of final consumer prices—around 20% in developed countries, and twice that in many landlocked developing countries.
- **Telecommunications.** The performance of telecommunications affects the transaction costs associated with trading, such as obtaining information on foreign market conditions and concluding deals with foreign buyers or sellers.

⁸³ De (2009) shows that between 2000 and 2005, a 10% rise in transport costs lowers Asia's trade by 3%–4% from what it would otherwise be.

⁸⁴ Wilson et al. 2005.



trade facilitation efforts. However, this is not to say that it is straightforward. While it is obvious that more efficient port facilities can help promote trade, the difficulty resides in identifying the optimal combination of physical infrastructure upgrading and regulatory reform. The effects of services sector reforms undertaken without regard to the state of the underlying infrastructure, or of infrastructure upgrades pursued without an appropriate regulatory framework, are likely to be limited, and may, in some cases, even be perverse. To make the intimate links between these two types of interventions clear, they are sometimes referred to in the literature as dealing with “hard” (physical) and “soft” (regulatory) infrastructure.

It is appropriate to consider infrastructure and services reforms together because of the close interrelationship between the two. Competition policy is one area in which this intersection is particularly important. Historically, monopoly arrangements have been pervasive in a number of the sectors that are of primary interest from a trade facilitation point of view, such as transport (air and maritime), and telecommunications. Indeed, restrictive arrangements persist to some extent even today in areas such as international liner shipping. From a trade facilitation point of view, it is important to recognize that one way to reduce trade costs in goods markets is to combine regulatory reform and infrastructure upgrading in affected sectors. As Figure 2.15 makes clear for the case of logistics, the interplay between infrastructure, regulations, service providers, and traders creates a complex situation that provides numerous challenges for policy makers. A thorough review of logistics in Australia, for instance, found that sector performance and trade in goods can be affected by factors such as access of private operators to infrastructure, cohesion of intermodal transport transfer points, and the level of competition at all points in the supply chain.⁸⁵

⁸⁵ De Sousa, Dariel, and Findlay. 2007.

Against this background, this chapter first reviews a selection of cross-country data on trade-related infrastructure and services. It then summarizes the existing economic literature, focusing on quantitative analyses of the links between infrastructure (ports, roads, and rail) and services sectors (transport/logistics and telecommunications) on the one hand, and trade in goods on the other. The third section of the chapter presents best practice guidelines based on general principles of effective and efficient regulation, and discusses sources of sector-specific best practices. The chapter concludes with five case studies. The first reports the results of a recent quantitative analysis of the costs and benefits of transport corridors in the Greater Mekong Subregion (GMS). The case of Central Asia and Regional Economic Cooperation (CAREC) features a joint transport and trade facilitation program. The case of the Brunei Darussalam-Indonesia-Malaysia-The Philippines East ASEAN Growth Area (BIMP-EAGA) highlights the sequencing of reforms in addressing trade and connectivity issues. The case of the Pacific Islands, specifically Timor-Leste and Papua New Guinea, features the efforts of developing a potential subregional economic corridor through border management, services and infrastructure. The case of the Association of Southeast Asian Nations (ASEAN) looks at the liberalization of logistics services markets.

Efficiency of Trade-Related Infrastructure and Services: State of Play

Starting with trade-related infrastructure, there are many data sources dealing with crucial links such as ports, roads, and air transport. The World Bank's World Development Indicators (WDI) provides statistical data on the length of national rail networks, and the length and quality (percentage paved) of road networks. The *Global Competitiveness Report* (Box 2.1) asks company executives to rate the quality of sea ports and airport facilities on a scale of 1 to 7. Other indicators can be found in the World Bank's Enterprise Survey on whether transportation is a major constraint (survey), and the percentage of shipments lost due to breakage or spoilage (direct measurement).⁸⁶

The *Global Competitiveness Report* air and sea ports indicators are useful in giving an idea of broad, cross-country trends in performance, covering the state of physical infrastructure as well as some aspects of performance in maritime services and air transport. Table 2.4 reproduces these data for 2009 and 2013, covering air and sea ports in Asia and the Pacific. Performance across this group is very heterogeneous. Performance on airports is generally stronger than maritime ports. In maritime ports, Singapore is the leading performer globally. In the case of airports, Singapore is again the world leader while Mongolia has the lowest score. In general, East Asia performs quite well on both measures while parts of South and Central Asia appear to have considerably improved, bringing them in line with international best practice.

The World Bank's Logistics Performance Index (LPI) takes a broader view of the logistics sector as it provides an overall "logistics friendliness" score based on perception data (survey) and objective data (direct measurement or statistics). The LPI should be considered as an indicator of outcomes, reflecting sector performance based on underlying regulatory and physical infrastructure. Given the range of

⁸⁶ World Bank's Enterprise Survey, 2009.

Table 2.4: Efficiency of Air and Sea Ports

	Quality of Port		Quality of Air Transport	
	2009	2013	2009	2013
Armenia	2.7	3	4.2	4.7
Azerbaijan	4.2	4	5.2	5
Georgia	3.9	4.3	4.2	4.3
Kazakhstan	3.2	3.4	3.7	4.1
Kyrgyz Republic	1.8	1.5	3.1	2.9
Pakistan	3.7	4.4	4.2	4.3
Tajikistan	1.6	1.7	3.5	4.2
Bangladesh	2.6	3.3	3.4	3.5
India	3.3	4	4.7	4.7
Nepal	2.9	2.7	3.5	3.2
Sri Lanka	4.5	4.9	4.8	5
Brunei Darussalam	5	4.5	5.6	4.9
Cambodia	3.4	4.2	4.2	4.4
Indonesia	3	3.6	4.4	4.2
Malaysia	5.7	5.5	6	5.9
Philippines	3.2	3.3	4.1	3.6
Singapore	6.8	6.8	6.9	6.8
Thailand	4.4	4.6	5.8	5.7
Viet Nam	2.8	3.4	3.9	4.1
China, People's Republic of	4.3	4.4	4.4	4.5
Hong Kong, China	6.6	6.5	6.7	6.7
Japan	5.2	5.2	5.1	5.3
Korea, Republic of	5.2	5.5	5.9	5.9
Mongolia	2.4	3	2.7	3.3
Taipei, China	5.5	5.3	5.7	5.4
Timor-Leste	2.2	2.7	2.6	2.9

Source: *Global Competitiveness Report*. 2009 and 2013.

services that are included, the LPI captures important aspects of performance in sectors such as transport and distribution (Box 2.17).

As Figure 2.16 shows, there is a considerable spread in LPI scores across Asia and the Pacific. Singapore is the best performer in the world, although its score declined slightly in 2012. Hong Kong, China, Japan, Taipei, China, the Republic of Korea, the PRC, and Malaysia were among the top 10 performers in Asia and the Pacific. On the average, performance of countries in East Asia and the Pacific was very strong, as evidenced by the fact that most countries in these subregions achieved increased scores in 2012 compared with the results from the previous surveys. Many countries in South Asia achieved low scores in 2012, reflecting the challenges of geographical isolation to international trade these countries have to face.

The World Bank's WDI data set provides information on the number of telephone subscribers and internet users as an indicator of the sophistication of the telecommunications sector.⁸⁷ Figure 2.17 presents WDI data on the number of internet users per hundred population in Asia and the Pacific economies. Once

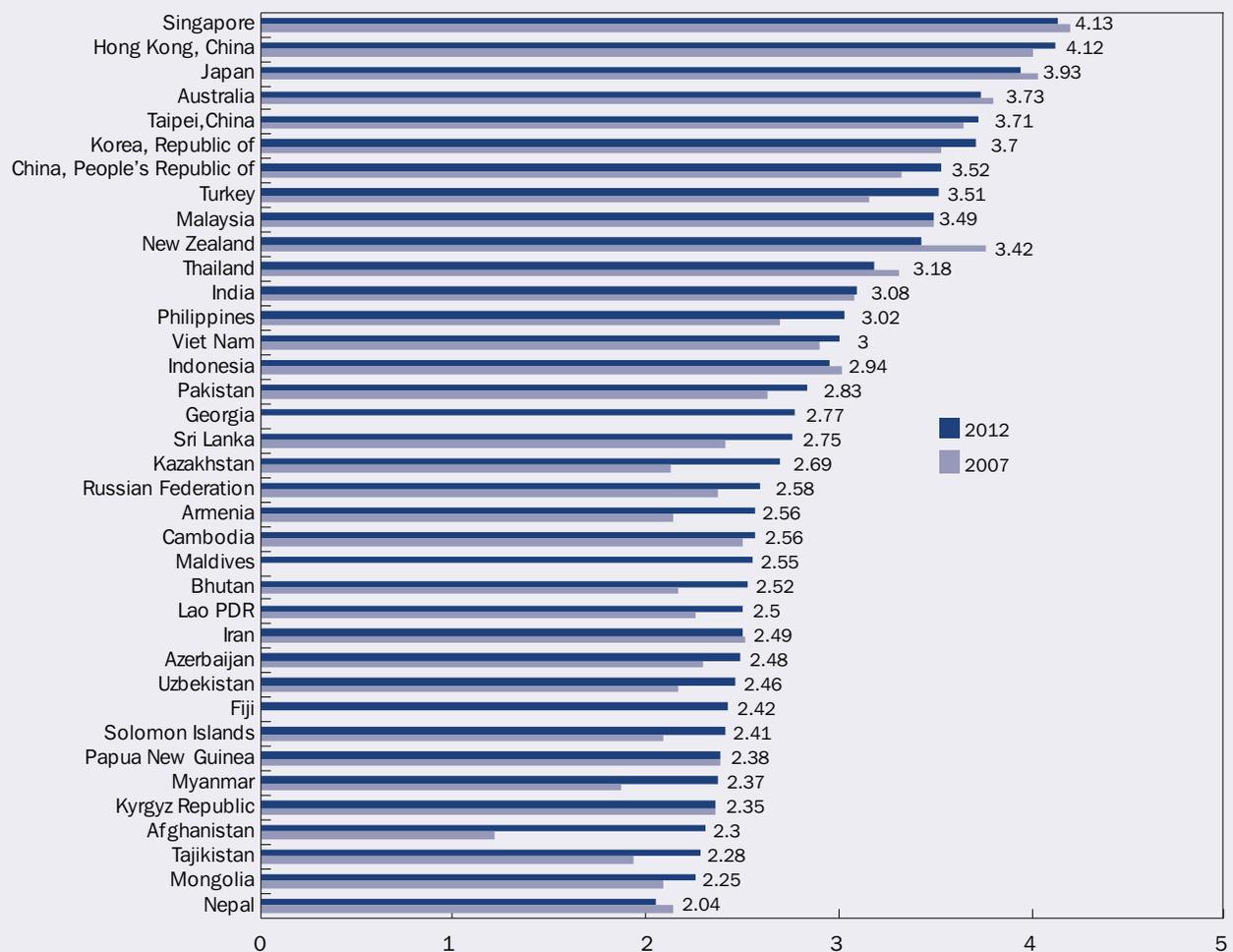
⁸⁷ Other data can be accessed from the World Telecommunication/ICT Indicators Database with detailed statistical data on network size and type, traffic, service quality, and some pricing information. www.itu.int/ITU-D/ict/publications/world/world.html

Box 2.17: What does the World Bank's Logistics Performance Index Measure?

The Logistics Performance Index (LPI) is a global benchmarking tool designed to help countries identify the challenges and opportunities they face in terms of their trade logistics performance. The LPI is based on information from a web-based questionnaire completed by more than 800 logistics professionals (freight forwarders and express carriers) worldwide. Each respondent was asked to rate performance on a numerical scale in seven logistics areas for eight countries with which they conduct business. The seven areas of performance are (i) efficiency and effectiveness of customs and border procedures, (ii) quality of transport and information technology infrastructure for logistics, (iii) ease and affordability of arranging international shipments, (iv) competence of the local logistics industry, (v) ability to track and trace international shipments, (vi) domestic logistics costs, and (vii) timeliness of shipments in reaching their destinations. The LPI website reports data on each of these dimensions individually, as well as each country's global LPI score, which reflects a weighted average of performance in all seven areas.

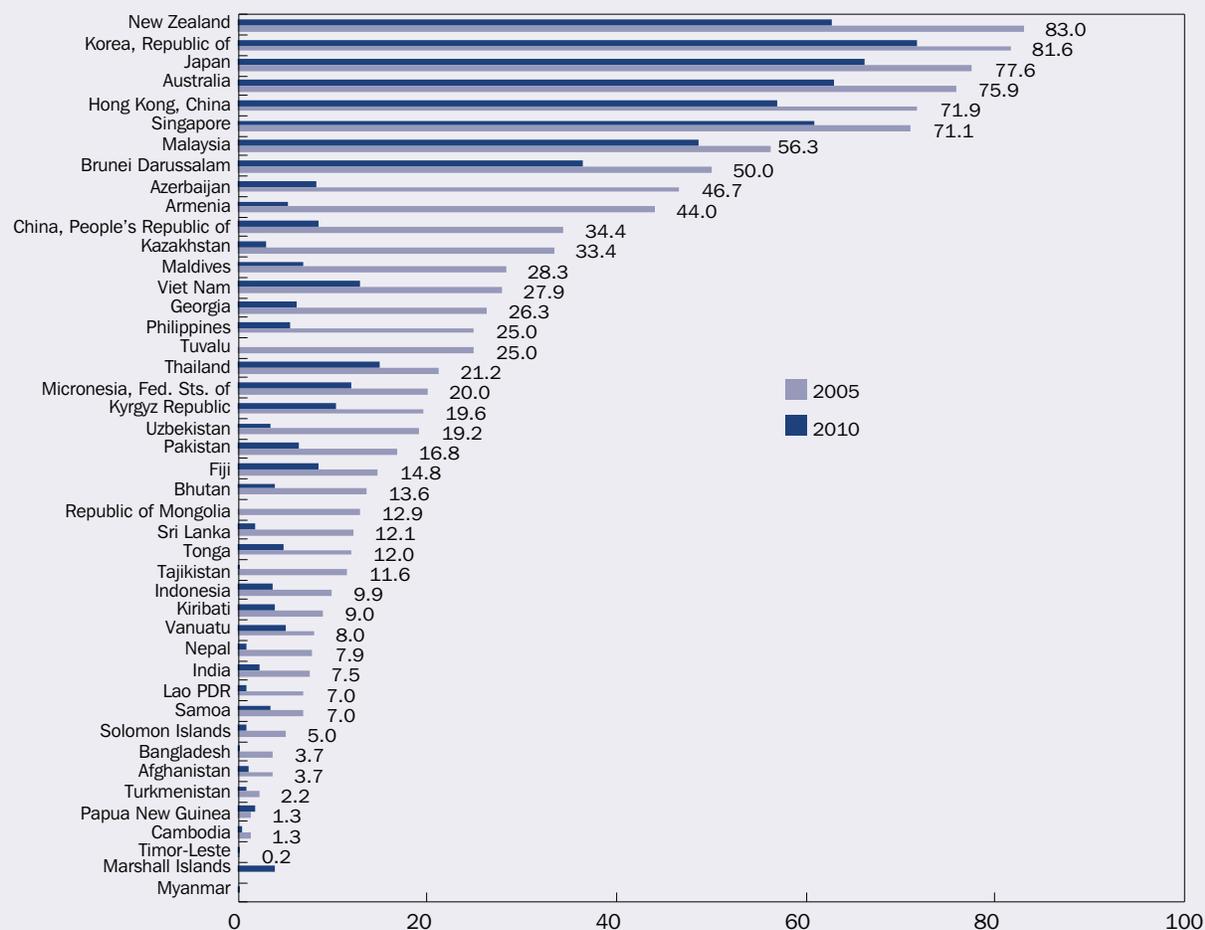
Source: World Bank. 2007.

Figure 2.16: Logistics Performance



Source: World Bank Logistics Performance Index. 2007 and 2012.

Figure 2.17: Internet Users per Hundred Population in Asia and the Pacific Economies



Source: World Development Indicators. 2005 and 2010.

again, this region is notable for its heterogeneity: internet penetration rates range from some of the highest in the world (83% in New Zealand) to some of the lowest (0.7% in Myanmar and 0.21% in Timor-Leste). Despite this, all countries, except PNG, demonstrated improved performance over time in this respect.

A final set of indicators in relation to services covers policy restrictiveness with regard to the regulatory framework. These indicators are based on a mix of direct measurement (regulatory review) and expert surveys.⁸⁸ The Product Market Regulation of the Organisation for Economic Co-operation and Development (OECD) provides general information on the extent of government involvement in the economy, with specific data on sectors such as telecommunications and transport.⁸⁹

⁸⁸ An ongoing World Bank project (forthcoming) will supplement these measures with details on applied market access and national treatment restrictions in various countries and sectors based on expert input from international legal and consulting firms. At this stage, the data are expected to cover 50 developing countries in the finance, telecom, retail, transport, and professional services sectors.

⁸⁹ OECD. www.oecd.org/eco/pmr

The main dimensions of policy restrictiveness in the air sector are captured in the Air Liberalization Index produced by the World Trade Organization (WTO).⁹⁰

Impact of Efficiency in Infrastructure and Services on Trade

At its most basic, the idea that better infrastructure can boost international trade has obvious intuitive appeal—more efficient infrastructure reduces the level of trade costs facing importers and exporters, and should therefore tend to increase trade flows. A study by Limao and Venables (2001) shows that deficiencies in overall infrastructure explain a substantial portion of Africa’s relatively low levels of internal and external trade. Improving infrastructure quality from the 75th to the 25th percentile of their aggregate infrastructure index would result in a 50% increase in baseline trade. Later studies have focused on particular types of infrastructure but with similar results, e.g., a 10% increase in port efficiency is associated with a 3% increase in bilateral trade (Bloningen and Wilson 2008).⁹¹ Poverty-reduction effects of basic infrastructure can also be important. An economic analysis of the Lao People’s Democratic Republic road infrastructure demonstrates that constructing new dry season-only roads has a poverty-reducing effect 17 times stronger than upgrading old dry-season-only roads to all-season roads (Menon and Warr 2008). The implication is that the provision of basic infrastructure should be based on an appropriate compromise between quality and performance, taking into account the overall effects on social welfare.

One aspect that requires closer investigation, however, is the balance of costs and benefits from infrastructure upgrading. This is because improving facilities such as ports, roads, rail links, or airports can require extensive technical skill and financial resources. The constraints in developing countries can, in some cases, be daunting. It is thus important to have as much information on both the costs and benefits of infrastructure upgrades before proceeding. Recent work examining particular types of infrastructure upgrading has generally found that even once the upfront costs are netted out, the benefits remain strongly positive.⁹²

Inappropriate service sector regulations can create opportunities for private actors to capture economic rents or engage in anti-competitive conduct, affecting sector prices and thus trade costs in goods, as well as productivity in goods sectors (Francois and Wooton, 2001). One important empirical finding by the economists is that improving services sector performance is one way of helping less productive enterprises enter international markets.⁹³ On airline regulations, the existence of an Open Skies Agreement reduces air transport costs to the US by 9% and increases the share of imports arriving by air by 7% for US trade.⁹⁴ Recent work generally suggests that the provisions of bilateral air services agreements appear to have a significant impact on trade in air transport services.⁹⁵ Geloso-Grosso (2008) estimated that Asia-Pacific Economic Cooperation member economies could increase passenger traffic by at least 5% to 7% through incremental relaxation of current policy restrictions.

⁹⁰ Air services agreements are available in its QUASAR database.

⁹¹ For other examples, see Buys et al. (2006) and Shepherd and Wilson (2007) on roads, Donaldson (2009) on railways, and Freund and Weinhold (2004) on internet hosts.

⁹² Examples include Buys et al. (2006), Shepherd and Wilson (2007), and Edmonds and Fujimura (2008).

⁹³ Arnold et. al., 2006, 2007, and 2008.

⁹⁴ Micco and Serebrisky. 2006.

⁹⁵ Piermartini and Rousova. 2008; Geloso-Grosso. 2008a, and 2008b.

For maritime shipping services, competition law exemptions that have traditionally allowed price fixing and cooperative working arrangements also lead to higher shipping prices. The effects are large; removing regulatory restrictions would reduce maritime transport costs affecting US imports across all partners and sectors by over \$800 million, while eliminating anti-competitive arrangements would save an additional \$2 billion. Evidence shows that there can be undue exercise of market power in shipping services that leads to possible charging of higher rates on goods with inelastic demand.⁹⁶ Auxiliary maritime services such as cargo reservation, handling services, and mandatory port services also exert a significant effect on pricing in international maritime (liner) transport (Fink et al. 2002).

High-quality logistics are the lifeblood of air and maritime transport and distribution networks in exporting and importing countries, and thus logistics performance matters for international trade in goods. For example, the wide variation in logistics costs among the Middle Eastern and North African countries can greatly influence shipping costs.⁹⁷ One recent study suggests that improvements in logistics could increase the trade impacts of lowering remaining border barriers by a factor of two or more (Hoekman and Nicita 2008).

A competitive telecommunications sector, in particular internet services, can have significant implications for trade facilitation. Freund and Weinhold (2004) show that growth in internet connections contributed to a one percentage point increase in annual export growth over the period 1997–1999. Another study concludes that the trade impact of the internet might be as large as or larger than that of other infrastructure such as ports. Enhancing the speed and cost of internet access can increase trade by 4%, which is more than the 2.8% increase achieved by improving port efficiency.⁹⁸

Basic Principles and Good Practices

It is extremely difficult to identify generally applicable principles in an area as vast as trade-related infrastructure and services. Sector- and country-specificity are important characteristics of reform, as is the necessity to combine investments in physical and human capital with regulatory changes. Rather than set out a point-by-point shopping list of reforms, this section focuses on a few broad principles of efficient and effective regulation.⁹⁹ The approach suggested is therefore not one of traditional industrial policy grounded in government support for particular sectors.

⁹⁶ Hummels, Lugovsky and Skiba. 2007. One-sixth of importer–exporter pairs are served by a single liner service, and more than half are served by three or fewer liner services.

⁹⁷ Devlin and Yee. 2005; Nordas et al. 2006.

⁹⁸ Wilson et al. (2005) constructed a cross-country database on trade facilitation focusing on four aspects, including infrastructure development and services sector efficiency. They proxy the first dimension as the average of air and sea ports performance, and the second dimension as the average of the speed and cost of internet access and the effect of the internet on business. All data are based on executive perceptions, as measured by the World Economic Forum's GCR.

⁹⁹ As one source of guidance on particular aspects of reform in more specific contexts, the World Bank has produced a collection of toolkits designed to aid policy makers in undertaking regulatory and infrastructure reform in areas such as ports, roads, and telecommunications. They can be accessed at <http://rru.worldbank.org/Toolkits/>. Additional best practice guidance on regulatory issues, in particular for the services and infrastructure sectors, is available from a variety of sources. In the case of air transport, the International Civil Aviation Organization has issued Declaration of Global Principles for the Liberalization of International Air Transport that deals with sector issues such as safety and security, the tension between competitors, and cooperation between carriers. In information and communications technology, the International Telecommunications Union regularly publishes best practice guidelines covering issues such as infrastructure sharing, spectrum management, and connectivity. They can be accessed at www.itu.int/ITU-D/treg/bestpractices.html

Rather, the measures that are suggested can be seen as a kind of generalized industrial policy, in the sense of providing the institutions and regulations needed to support efficient and competitive industries. It is not about governments “picking winners,” but about allowing winners to pick themselves through competitive markets.

Since the objective is not to discuss infrastructure and services in general but instead to highlight the role they can play as trade facilitation instruments, the question posed in this section is: how can trade-related infrastructure and services be designed so as to most effectively lower the costs of doing business internationally? Although the principles set out are largely aligned with the core disciplines of the General Agreement on Trade in Services (GATS), it is important to stress that they in no way conflict with the right of individual countries to pursue socially important regulatory objectives. It is important for each country to develop its own market-friendly approach to regulation depending on its development level and local conditions. Moreover, there is obvious scope for countries to move beyond the GATS, either unilaterally or regionally. Many of the reforms discussed in this section are consistent with the WTO’s most favored nation obligation, and can thus be pursued by countries unilaterally or regionally, regardless of the progress of negotiations in Geneva.

- (i) *Transparency.* In designing and implementing improvements to physical and regulatory infrastructure, policy makers need to ensure that the process followed is transparent and inclusive. This principle covers areas such as being open to public scrutiny and debate; allowing interested private parties the opportunity to comment on proposed regulations, and participate more generally in the regulatory process; provision of independent review or appeal procedures; and publication of new regulations prior to their entry into force. In addition, governments should specify well-defined criteria against which performance of reform packages can be assessed. Performance reviews should have two dimensions: ex ante assessment to aid in the choice of policy instruments, and post-evaluation to track implementation and learn from experience on the ground. It is important that cost–benefit analyses be conducted to inform the design and implementation of upgrades to trade-related infrastructure and services sectors, and that they take full account of these sectors’ interlinkages with the wider economy.
- (ii) *Competition.* Whenever possible, regulatory objectives should be pursued using market-based mechanisms. Development of trade-related infrastructure and service sector regulatory frameworks should aim to promote, rather than restrict, competition among market actors as one way of pursuing the objective of lowering costs for importers and exporters who use their services. In the areas of infrastructure and services, this principle is particularly vital in view of the customary monopolies and other restrictive arrangements in sectors such as telecommunications, port services, and transport. Despite the difficulties policy makers can face in designing competition-based mechanisms consistent with the achievement of broader regulatory goals, recent experience in both developed and developing countries suggests that significant progress in this direction is being made. Implementation of a general competition law, and limiting exemptions as far as possible, is an important step. The GATS provides a concrete framework for advancing a number of the points mentioned earlier.¹⁰⁰ Articles 8 and 9 of GATS contain provisions designed to promote competition by limiting the abuse of monopoly power, and providing for international

¹⁰⁰ Mattoo et al. 2007.

consultations in relation to broader anti-competitive practices. Clearly, though, the main momentum for regulatory reform in this area must come from domestic sources.

- (iii) *Nondiscrimination*. is also an important concept that can be seen as an extension of competitive principles. Treating market actors without favoring incumbents over new entrants or domestic over foreign operators helps ensure pro-competitive market conditions. Attention to entry barriers facing potential domestic and foreign entrants is crucial in maintaining competitive pressure on incumbent operators. This issue affects both the framing of regulations and the design of physical infrastructure. Issues of network connectivity and interoperability loom large in the sectors of particular interest in this chapter, mainly in transport and telecommunications. GATS firmly entrenches non-discrimination as a core regulatory principle by taking up the obligations of national treatment (no discrimination between domestic and foreign providers, Article 17), and most favored nation status (no discrimination among trading partners, Article 2).¹⁰¹ Effective and efficient national regulations tend to follow the same approach.
- (iv) *Holistic approach*. The fourth principle is a holistic approach to effective regulation and liberalization. It is important that regulatory reform takes proper account of intersectoral linkages, and the possibility that reforms in one sector can have important effects on performance in related sectors. In terms of GATS, this means that it is important that there are no a priori exclusions in terms of modes or sectors that are potentially subject to liberalization commitments. This is especially true for regional integration schemes in services as contained in GATS Article 5.1(a). This holistic approach to regulatory reform is essential to take account of actual business needs. First, given a situation where services are supplied by a combination of various modes (cross-border, consumption abroad, commercial presence, and movement of natural persons), making commitments in all four modes to meet business needs is highly desirable and encouraged as much as possible. Second, the exclusion of a whole sector or subsector should be avoided, particularly in the area of trade-related services. In addition, regardless of the classifications used by GATS commitments, undertaking commitments in interrelated sectors can be beneficial. Logistics services is one example of this dynamic. Indeed, the WTO negotiations on logistics services have been heavily influenced by this cross-sector dimension. Of particular relevance in the present context are the WTO negotiations on logistics services. Although the trade classification currently does not classify logistics as an independent category, members appear to be comfortable treating the cluster of categories covered by logistics in a comprehensive fashion precisely because of the cross-cutting nature of these services ranging from transportation to courier deliveries. Undertaking commitments in all sectors that impact logistics contributes to the greater facilitation of logistics services. If the liberalization of one sector, along with the logistics services chain, is deficient, the whole logistics chain may not function effectively.
- (v) *Progressive liberalization and forward looking stance*. Policy makers need to identify reform priorities in the areas of trade-related infrastructure and services, and proceed step-by-step. Analysis of economy-wide costs and benefits is an important starting point for that process. Since linkages among sectors are complex, reform should be undertaken progressively and in a manner that

¹⁰¹ While most favored nation status is a general obligation that applies unless a specific exemption is claimed (negative list), national treatment and market access commitments only apply to the extent set out by WTO members in their schedules of commitments (positive list).

is appropriate given a country's social and economic specificities. In addition, regulators should be forward looking, in the sense of not prejudging future technological developments. It is widely acknowledged that technological developments in the services area are significant, and business models frequently change depending on available technologies. It is important that liberalization and competition policies support ongoing technological developments that meet specific needs in those markets. In particular, regulators need to ensure that incumbent businesses cannot use technological specificity or lack of compatibility as a means of restricting entry and competition.

Experience of Economies in Asia and the Pacific

The preceding discussions highlighted the complex interplays among trade-related infrastructure and services, altogether affecting trade facilitation. A central message that flows from the analyses is the importance for policy makers to take an integrated approach within the framework of a broad set of trade facilitation policies. This section provides four case studies on trade-related infrastructure the: (i) GMS; (ii) CAREC; (iii) BIMPEAGA; (iv) Pacific Islands; and one case study on services liberalization in ASEAN. The section asserts that the regional and subregional approach to the trade facilitation associated with trade-related infrastructure and services is effective and efficient because it provides income and development opportunities to member states. Specifically, it offers the following advantages:

- (i) greater benefits, accruing from economies of scale;
- (ii) a wide range of trade facilitation and infrastructure issues that can be covered;
- (iii) institutional development and strengthening that further deepens cooperation, which, in turn, is beneficial to potential negotiations with third countries and other regions and/or subregions;
- (iv) prospective narrowing of the infrastructure gaps among regions and subregions; and
- (v) potential smoothing of income disparity among member states.

Further, it is demonstrated in the case studies that while the goals of integration could be common among regions, the approaches to trade facilitation and advancements in trade-related infrastructure and services are unique to each region, depending on initial conditions, geographic characteristics and the level of development, and therefore needs.

In GMS, the approach to trade cost reduction is improving regional connectivity, first through the transport corridors program, followed by the provision of regulatory support to regional infrastructure development through the GMS cross-border transit agreement (CBTA). The transport corridors program developed transport networks throughout the subregion to increase trade volume within and outside GMS. CBTA covers customs and borders formalities, exchange of commercial traffic rights, transit regimes, infrastructure standards, and vehicle requirements for cross-border traffic. In CAREC, the approach to reducing trade cost is the consolidation of efforts in trade facilitation and transport. The CAREC Joint Transport and Trade Facilitation Strategy developed priority corridors, which were focused on improvements in trade facilitation measures, thereby creating synergistic effects on trade cost reduction.

Box 2.18: Sequencing Reforms

As the discussion in this section has shown, regulatory reform in trade-related services sectors can cover an enormous amount of ground. This makes the issue of sequencing absolutely critical. How can a reform-minded government invest in political capital so as to maximize the benefits from reform, minimize adjustment costs, and lay the foundation for further reforms in the future? This is an extremely difficult question to answer in the abstract since the political and economic situation in each country can be very different. However, it is possible to identify a number of guiding principles from previous reform efforts:

General institutions and policies. Most of the reforms discussed in this section rest on the institutional bedrock of transparency and competition. Competition policy is particularly important; without vigorous enforcement of competition laws, sector liberalization can lead to the replacement of a domestic monopolist by a foreign one, with no net welfare gain for the domestic economy. Cross-cutting reforms in these areas are therefore a common first step toward implementing broader regulatory reforms.

Identification of priority sectors. It is unlikely that any government could undertake regulatory reform in all relevant sectors simultaneously. It is therefore important to identify sectors with particularly strong linkages to the rest of the economy. Reform in these sectors can have particularly large economic effects. Transport is an example of such a sector, since it is used as an intermediate input in almost every other sector of the economy.

Identification of priority modes of supply. For each priority sector, reform will have the biggest economic payoff if it is targeted at the dominant mode of supply. Since the dominant mode varies from sector to sector, governments need to be aware of the commercial realities of each individual sector.

Adjustment mechanisms. Although this section has highlighted the benefits of regulatory reform, governments must also be aware of the fact that it induces resource reallocations and, thus, adjustment costs for some members of the community. It is important to address these costs up front and to design mechanisms to limit their impact. Economic actors facing large adjustment costs can form a powerful lobby against regulatory reform, and may indeed make it politically difficult for the program to get moving. In such cases, it may be appropriate to consider compensatory measures.

Source: Hodge, James. 2002.

In BIMP-EAGA, the goal of breaking the vicious cycle of low trade volume—no connectivity is approached by sequencing reforms (Box 2.18). Fragmented supply chains and improvements in trade facilitation measures are first addressed, followed by the development of transport networks. This sequence of reforms is borne out of a diagnostic analysis that identifies critical constraints to integration and trade. The approach to developing the potential sub-regional economic corridor in the Pacific is building border relations with neighbors, covering border management and border infrastructure and services.

These subregional integration approaches are expected to bring interrelated benefits at the regional and national levels—lower trade costs and time, increased intraregional and international trade volume, sustained growth, and poverty reduction.

Transport and Economic Corridors: The Case of the Greater Mekong Subregion¹⁰²

Among the various aspects of trade facilitation, infrastructure arguably has the strongest potential to promote regional spillovers. Seaports and airports do not just serve the countries where they are located, but also link neighboring countries with

¹⁰² ADB. 2007; Edmonds and Fujimura. 2008; Menon and Warr. 2008; Stone and Strutt. 2009.

world markets. The same is true of roads, which can act as important transit corridors within the region, in particular where landlocked countries are concerned. Regional infrastructure upgrades thus provide substantial scope for national and regional economic benefits—but at the same time pose a number of particular difficulties for policy makers. This case study investigates both aspects more closely, drawing on recent quantitative work looking at the effects of implementing economic corridor programs in the Greater Mekong Subregion, which comprises Cambodia, the Lao People’s Democratic Republic, Myanmar, Thailand, Viet Nam, and provinces of Yunnan and Guangxi in the PRC.

Since 1992, under the GMS Program, ADB has been active in assisting countries in the region promote a broad agenda of economic integration, covering trade and infrastructure aspects. In particular, ADB provides financial support for hard and soft cross-border infrastructure, promotes regular policy dialogue for trade facilitation, builds capacity building of DMCs and generates knowledge products in trade facilitation (Box 2.19 contains examples of ADB-financed economic corridors).

Progress on integrating the once heavily insulated GMS economies through reduced intra- and extra-regional trade costs has required action on a number of fronts. Such an approach is entirely consistent with the emphasis this chapter has placed on interlinkages between physical and regulatory infrastructure. One of the first steps taken in 1995 was to adopt the GMS Transport Master Plan, which identified road and other transport projects likely to have a particularly strong impact on regional connectivity, and thus flow through to lower trade costs. As a follow up, GMS economies in 2003 entered into a CBTA, designed to provide greater regulatory support to regional infrastructure development. The CBTA therefore covers areas such as customs and border formalities, exchange of commercial traffic rights, transit regimes, infrastructure standards, and vehicle requirements for cross-border traffic.

Recent empirical work suggests that on an aggregate level, the GMS economies have made substantial progress in terms of lowering trade costs and promoting economic integration. Transport cost savings range from 16% to 65% (median = 45%), and time savings from 25% to 50%.¹⁰³ Using a computable general equilibrium (CGE) model, it is the “soft” (regulatory) aspects of cross-border transport that have the biggest impact in addition to significant trade and economic welfare benefits from infrastructure upgrading. There is also a generally significant association between the density of cross-border roads and bilateral trade among GMS countries (Edmonds and Fujimura 2008). In some cases, these studies also find evidence that enhancement of the domestic road network can promote trade.

In the case of the Lao People’s Democratic Republic, road upgrades can have significant economic welfare benefits, including through increased trade. Menon and Warr (2008) conducted a detailed cost–benefit analysis, and found that the balance is generally positive. Interestingly, they found that provision of dry-season-only roads to areas that currently lack any road connection at all has a real gross domestic product (GDP) impact that is 6 times as large as that associated with upgrading existing dry-season roads to all-weather roads. The difference in poverty incidence is even larger; new dry season roads have a poverty-reducing effect 17 times as large as that associated with upgrades. In terms of maximizing anti-poverty effects, their cost–benefit analysis suggests that building new dry-season roads is relatively attractive.

¹⁰³ Stone and Strutt (2009) reviewed a variety of findings and did their own analysis using the CGE model.

Box 2.19: Greater Mekong Subregion Economic Corridors

GMS North–South Corridor

The GMS North–South Transport Corridor, which links the PRC and Thailand through the Lao People’s Democratic Republic, is a good example of what can be achieved. In 1997, it took 3 days for goods to move across one 270 km section of dirt track along the corridor of the Lao People’s Democratic Republic. Today that same trip takes 4 hours, with a large increase in commercial traffic. Most importantly, 2004’s per capita gross domestic product (GDP) in impoverished Luang Nantha province in the Lao People’s Democratic Republic—where the highway passes—doubled that of 2003’s GDP. The \$90 million corridor was equally funded by ADB, the PRC, and Thailand.

Southern Economic Corridor

Financed by an ADB loan approved in 1998 with a combined amount of \$140 million (\$40 million for Cambodia and \$100 million for Viet Nam, with the governments of the two countries providing the rest of the \$197 million), the project involved the reconstruction of 105 km of Route Number 1 (from Neak Leoung, Cambodia to the border of Bayet, Viet Nam), including minor improvements to other transport sections. The Phnom Penh–Ho Chi Minh City highway represented the primary segment of the GMS Southern Economic Corridor linking Cambodia, Thailand, and Viet Nam.

The total value of trade passing through the Bavet–Moc Bai border crossing post increased by about 41% per annum between 2003 and 2006. The number of people crossing the border increased at an average annual rate of 53% during the same period, while the number of vehicles crossing the border increased at an average annual rate of 38%. Travel time from Phnom Penh to Bavet has been reduced by 30%. Along Route Number 1, there has been substantial ribbon development, including residences, buildings, and shops. At the Bavet border post, the increase in traffic from Viet Nam—both passengers and goods—has led to the establishment of commercial and leisure facilities, including several casinos and hotels that attract large numbers of tourists. An industrial park close to Bavet has opened, providing employment opportunities for the local residents. New industrial areas have also been built near the project roads.

East–West Transport Corridor

This is the second major GMS subregional transport project, which seeks to improve the central corridor linking Da Nang in Viet Nam with Tak in Myanmar, thereby expanding the market for transit and bilateral trade among three countries—the Lao People’s Democratic Republic, Thailand, and Viet Nam. The immediate impact of infrastructure development has been dramatic. Average vehicle speeds have increased and the average travel time between Kaysone Phomvihane and Dansavanh has dropped from 10–12 hours to 4 hours, while the travel time between Dong Ha and Lao Bao was cut from 4 hours to 2 hours. On both sides, border clearance time has been reduced and is more efficient than before. Average trade value through Lao Bao has escalated and crossing trade value peaked at \$148.5 million in 2007. Industrial estates are developing in Lao Bao and Dong Ha, and more boom towns are being planned. Increased connectivity has also led to an expansion of the tourism and services sectors, which account for a major part of increased traffic between and the Lao People’s Democratic Republic and Thailand. The movement of people has increased significantly, from around 95,000 in 2000–2001 to almost 274,000 in 2007.

Source: ADB. 2009.

Given the regional context within which the GMS transport corridor programs are nested, it is important for policy makers to deal effectively with the distribution issues that arise. The Northern Economic Corridor, for instance, is built mostly on Laotian territory but primarily benefits the PRC and Thailand by providing these two relatively large economies with a better overland linkage. Regional coordination and cooperation are therefore crucial to ensure that such linkages are adequately provided, even when the costs and benefits are effectively borne by different parties. In this case, the project is largely financed on concessional terms by the governments of the PRC and Thailand. In addition, the Lao People’s Democratic Republic has the right to collect a user charge on traffic originating in either of the other two countries (Box 2.19).

The GMS transport corridors program provides a good example of the way in which transport upgrading can support a broader economic integration agenda. The lessons for policy makers can be distilled down to the following points:

- (i) Identification of transport corridor projects should be based on a rigorous ex ante assessment of relative costs and benefits, and should be subject to ex post evaluation.
- (ii) Infrastructure upgrading needs to be accompanied by ancillary measures such as regulatory reform in transport services sectors, improved logistics, and simplified border crossing procedures.
- (iii) Financial mechanisms such as transfers, loans, or user charges should be considered to smooth out uneven distributions of costs and benefits across regional economies.

Joint Transport and Trade Facilitation Strategy: The Case of Central Asia Regional Economic Cooperation Economies

The CAREC Program was initiated in 1997 in order to finance infrastructure projects and improve the region's policy environment in the areas of transport, energy, trade policy and trade facilitation.¹⁰⁴

CAREC is also an alliance of multilateral institutions including ADB, European Bank for Reconstruction and Development (EBRD), International Monetary Fund (IMF), Islamic Development Bank (IDB), United Nations Development Programme (UNDP) and the World Bank (WB). ADB is the Secretariat of the CAREC Program. The transport and trade facilitation efforts of CAREC focus on trade cost and time reduction that will enhance the region's competitiveness and expand international and intraregional trade. The subsequent gains from global and regional integration sustained economic growth and improved living standards. The region's huge trade costs and time are associated with inadequate transport facilities and poor infrastructure network related to their landlocked nature—impediments that set the background for the transport and trade facilitation policy landscape of CAREC.

During the 6th Ministerial Conference on CAREC (3 November 2007), the Transport and Trade Facilitation Strategy (TTFS) was endorsed in support of CAREC's program of development through cooperation, leading to accelerated economic growth and poverty reduction.

There were separate strategies for the sectors, transport, and trade facilitation before recognizing the benefits from synergies in implementing a joint transport and trade facilitation strategy. The potential benefits from investments and technical assistance projects to improve transport infrastructure will be maximized if trade facilitation measures are also implemented to reduce time spent in crossing borders and in transit. The joint TTFS is expected to increase CAREC's competitiveness and intraregional and international trade. The strategy's 10-year Action Plan (2008–2017) takes an integrated approach, combining transport investments with trade facilitation initiatives and enhancing the three pillars of the strategy—infrastructure, management, and technology.

¹⁰⁴ ADB. 2005.

The transport component of the TTFS aims to provide reliable, fast, seamless (between modes and across borders), competitive, safe, and environmentally friendly services. The actions in the transport component consist of the following:

- (i) establishment of competitive transport corridors across Central Asia;
- (ii) efficient facilitation of movements of people, goods, and vehicles across borders; and
- (iii) development of safe and people-friendly transport systems.

These actions later became the focus of the TTFS in the 7th Ministerial Conference on 21 November 2008. The action plan has the following three goals, which are particularly focused on the six selected CAREC corridors:

- **Goal 1** is to improve transport infrastructure facilities such as roads, rails, ports, and airports; there are 52 investment projects and 20 technical assistance (TA) projects under this.
- **Goal 2**, with 10 investment projects and 40 TA projects, focuses on trade facilitation measures such as customs reforms and modernization, effective functioning of the national transport and trade facilitation committees, regional logistics development, and private sector participation.
- **Goal 3** is a mix of transport and trade facilitation measures, covering roads, aviation, and trade facilitation projects to minimize the negative environment and social impacts during the development of CAREC corridors; replace the aging vehicle fleet with fuel-efficient and low-emissions vehicles; and facilitate movement of people across borders.

The trade facilitation component, on the other hand, is further embodied in the Regional Trade Facilitation and Customs Cooperation Program (RTFCCP), presented in the 6th and 7th Ministerial Conferences on CAREC. RTFCCP supports TTFS through its Integrated Trade Facilitation Program and Customs Cooperation initiatives, which started in 2002 during the Customs Cooperation Committee's first meeting in the PRC. Table 2.5 outlines the elements of RTFCCP and their progress.

This joint strategy in the transport and trade facilitation sectors conveys the following lessons:

- (i) Consolidated and coordinated transport and trade facilitation efforts are beneficial, particularly under certain conditions. In the case of CAREC, though trade facilitation is conceptually distinct from transport improvements, there are synergies to be gained by focusing trade facilitation efforts at the priority CAREC corridors selected under the transport strategy because most intra- and inter-regional trade flows use limited east–west and north–south routes.
- (ii) Redundancy and conflict in measures are avoided with the creation of joint national and regional committees under the Integrated Trade Facilitation Program.
- (iii) Benefits are realized from synergies and complementarities of transport and trade facilitation.

Table 2.5: Regional Trade Facilitation and Customs Cooperation Program Progress Report, 2008–2009

Integrated Trade Facilitation Program

- (i) National joint transport and trade facilitation committees and a regional joint committee
 - The terms of reference for the national committees were agreed upon in a May 2009 workshop for national committee members.
- (ii) Trade logistics development
 - Conduct of trade logistics studies in all CAREC countries.
 - Development and upgrading of logistics centers in the region.
- (iii) Corridor performance and monitoring
 - In February 2009, ADB signed memorandums of agreement with 12 partner associations to collect data, and held the CAREC Corridors Performance Measurement and Monitoring Workshop.
 - The quarterly report for April–June 2009 was submitted to the 8th Ministerial Conference.
 - ADB is initiating collaboration with other international organizations in monitoring corridor performance.
 - On June 2009, ADB and the International Road Transport Union signed a memorandum of understanding to jointly monitor road transport performance in the Central Asia Regional Economic Cooperation (CAREC) region and beyond.
- (iv) Single window
 - Kazakhstan has adopted new technology to facilitate compliance with the World Customs Organization and World Trade Organization recommendations on the establishment of single windows.
 - Azerbaijan is adopting a single window approach, delegating all functions of relevant ministries to the state customs committee.
 - Tajikistan approved the concept for the establishment of a single window.
 - Uzbekistan created a working group to develop a concept for single window.
- (v) Trade logistics development
 - Nine studies (8 on CAREC countries and 1 regional overview) on transport and trade logistics development strategies were completed.
- (vi) Strengthening cooperation mechanisms and private sector involvement
 - The CAREC Federation of Carriers and Forwarders Associations was launched by 13 partner associations.

Customs Cooperation

- (i) Simplification and harmonization of customs procedures
 - Kazakhstan submitted a draft law to simplify customs procedures.
 - Uzbekistan created an interagency working group for single window.
 - Azerbaijan began implementing a single window approach.
 - The Kyrgyz Republic amended the customs code.
- (ii) Information communication technology for customs modernization and data exchange
 - Afghanistan is implementing ASYCUDA transit mode in four major transit routes.
 - Kazakhstan is upgrading its automated customs information system.
 - Uzbekistan is improving its unified automated information system for the state customs committee.
 - The Kyrgyz Republic is installing a unified automated information system and plans to introduce a single administration document.
 - Mongolia is installing a customs automated information system.
- (iii) Risk management and post-entry audit
 - Afghanistan established post-clearance audit units in eight regional customs houses.
 - Kazakhstan is developing a selective control and risk management system.
 - The Kyrgyz Republic developed a prototype automated risk management system.
 - Uzbekistan approved a customs risk management system.
- (iv) Joint customs control and one-stop services
 - A seminar on joint customs control for senior CAREC customs officials was organized.
- (v) Regional transit development
 - A protocol between the Kyrgyz Republic and Kazakhstan on Putting into Operation the Joint Technology for Using Sealed Safe Packages was signed on 9 September 2008.
- (vi) Capacity building
 - ADB examined available capacity building resources in the region and developed a framework for an integrated trade facilitation capacity building program.

Source: ADB. 2009.

infrastructure for transport and logistics providers or time-taking control measures (which may be prohibitive if the traded goods are mostly perishables). Such analyses will also highlight the benefits of identified trade facilitation measures at both micro (firms) and macro (economy) levels.

ADB's experience in support of BIMP-EAGA trade shows that one of the major challenges faced by this subregion is its underdeveloped markets and weak trade linkages to world markets. Unlike in the GMS or any land-based area where roads are a prerequisite for any trade routes, the maritime setting in BIMP-EAGA allows for a pervasive network of small- and micro-traders in small vessels, most of them unregulated. In spite of a long history of traditional and informal trading activities, formal trade among the countries in the subregion, as well as with the outside world, is still limited. Subregional production and transport networks in BIMP-EAGA are poorly organized, if available at all. Production activities are most of the time isolated or fragmented, despite the fact that countries manufacture similar products. Consequently, local businesses have a limited ability to consolidate production to achieve economies of scale or to integrate into established supply chains in importing markets. Challenges to the development of a subregional market include geographical constraints (poor connectivity of scattered islands), a weak regulatory environment, and the lack of incentives to support subregional production and transport networks.

Meanwhile, the transport network is also underdeveloped due to the low load factor of trade and its maritime geographic settings. Goods produced in the subregion usually get shipped to capitals for consolidation and export. The existing logistic arrangements are also a disadvantage to small-scale traders as they face higher operating costs, longer transit time, and limited availability of services compared to their large-scale competitors.

The BIMP-EAGA's experience in pilot transport routes indicates that low trade volume and cumbersome procedures made start-up transport services unsustainable, which, in turn, prevents formal trade flows or increases the costs of trade. This could be described as a vicious cycle of "low trade– no connectivity." Major constraints to the development of local transport networks are lack of appropriate incentive structures, facilitation measures, and relevant policies to support them as identified by local transport service providers.

In BIMP-EAGA, ADB therefore is considering broadened support for the development of a local trade network (including local supply chains and transport services) involving local small-scale businesses. These small-scale businesses can play an important role in economic growth and poverty alleviation, as they are a major source of employment creation and income. Such support aims to improve competitiveness, and therefore the commercial viability of small-scale local businesses to increase trade flows and break the "low trade–no connectivity" cycle.

Deconstructing National Level Issues. The discrepancy in compliance levels within each country is usually overlooked in international trade facilitation interventions. Countries may adopt international standards as national policy, but compliance is only the case in big national facilities. In less-developed areas, small facilities may be unable to comply due to resource or capacity limitations, which, in turn, constrains trade flows.

The BIMP-EAGA experience shows that compliance issues are more critical than policy issues in the subregion while it is usually easier to deal with local compliance

issues. This approach also indicates a stronger role for local governments in supporting trade facilitation reforms.

Lessons from the BIMP-EAGA case study for policy makers are as follows:

- (i) A diagnostic analysis, identifying critical constraints to trade and integration, is important for prioritization and sequencing of measures.
- (ii) In the case of BIMP-EAGA, the first step is supporting the consolidation of fragmented supply chains of similar products to achieve economies of scale and their integration into the established chains in the importing markets, followed by improvement of cumbersome and costly trade procedures. The lesson is that development of transport networks will become sustainable with appropriate improvement in the structure of local trade network and facilitation measures.
- (iii) Local government support to trade facilitation reforms is crucial to increase compliance and encourage formal trade. In the case of BIMP-EAGA, this is particularly important to existing small industries.

Linking Timor-Leste and Papua New Guinea with Indonesia: Potential Subregional Economic Corridors in the Pacific

Border areas in Timor-Leste and Papua New Guinea (PNG) face common challenges of geographic isolation, small size, a limited resource base, and a lack of human resource capacity compared to their neighbor Indonesia.¹⁰⁵ Some 44% of Timor-Leste's imports originate from Indonesia, while 70%–80% of Timor Leste total trade (import plus export) is with Indonesia through sea, air, and land routes. Timor-Leste's extensive border with Indonesia offer potential for expanded trade and tourism benefits for both the countries. PNG imports spare parts for trucks, rice, water, electronics, textile, and houseware from Papua province of Indonesia. Indonesia, on the other hand, imports beef, tuna, beer, cocoa, vanilla, snack foods, and betel nuts from PNG.

Timor-Leste and Indonesia signed the Agreement on Traditional Border Crossing and Regulated Markets in 2003. Currently, Timor-Leste and Indonesia are working on the issuance of border passes (IDs) to facilitate movement of people across the border. However, the implementation of the Agreement has been challenging due to poor and inadequate border infrastructure. In the case of PNG, despite renewed effort since 2006, it is unable to open its border posts for vehicle crossings due to lack of infrastructure and institutional capacity on border management.

Weak governance structures and policies are also significant constraints to cross border linkages, as they contribute to low efficiency and productivity, failures in service provisions, and constrain private sector development. The trade, investment, and movement of goods and people across borders need improved facilitation. Hence, a framework and plan of action that will (i) develop human resources skills and institutions for providing integrated border services comprising immigration, customs, quarantine, and security (ICQS); (ii) create an enabling policy and institutional environment for cross-border trade, investment, tourism, and other forms of cooperation; and (iii) strengthen and promote domestic infrastructure

¹⁰⁵ This case study is based on an interview with Mr. Mahfuzuddin Ahmed and his mission reports for Timor-Leste and Papua New Guinea (ADB, Pacific Department)

linkages with the cross-border trade and investment, multisectoral development and public private partnership will be crucial to enhance economic linkages across the borders of Timor-Leste with its neighbor Indonesia.

In Timor-Leste, the Ministry of Tourism, Commerce and Industries (MTCI) needs capacity to improve systems and regulations for traditional border markets, and provide policy and regulatory framework for trade and tourism development. Likewise, the Ministry of Infrastructure (MOI) has prioritized its investment in the border area. Two forthcoming ADB projects in Timor-Leste to be implemented by the MOI are expected to support road networks, and related infrastructure in the border provinces. Support to MOI will be required to develop investment plans for cross-border transport and trade infrastructure, and cross-border transport and communication policies and agreement.

In the case of PNG, the Border Development Authority (BDA) needs assistance to develop a border development strategy and assess the long term investment needs to build the northern economic corridors linking PNG with Indonesia. ADB's upcoming Pilot Border Trade and Investment Development Project is expected to build border infrastructure and provide policy frameworks for investment in the Sepik Province. The proposed Regional Capacity Development Technical Assistance will strengthen the capacity of the border agencies, and create further enabling environment for trade, investment and tourism development, thereby enhance economic corridors and linkages between PNG and Indonesia, and Timor-Leste and Indonesia.

Timor-Leste and PNG have so far responded to these issues by creating bodies to specifically address issues on border infrastructure, management and services (Part III, Chapter 3, Box 3.7). ADB has also supported these countries through previous technical assistance projects,¹⁰⁶ which identified at a preliminary level a range of potential investments in institutional strengthening and capacity building that would facilitate increased cross-border trade and investment. Further, an upcoming ADB Regional TA, headed by the Pacific Department, will focus on (i) enhancing institutional capacity for border management and border services; (ii) strengthen cross-border trade and tourism links; and (iii) strengthening capacity for developing and implementing cross-border transport links.

There are existing physical, institutional and policy constraints inhibiting growth of economic corridors between Timor-Leste, PNG, and Indonesia. Assistance for building capacity to establish systems, protocols and methods to facilitate cross-border trade, investment, transport and tourism in Timor-Leste and PNG is a first step in preparing the two countries to participate in economic corridor activities with their neighbor, Indonesia.

Logistics Services Liberalization: The Case of the Association of Southeast Asian Nations (ASEAN)

ASEAN economies have set themselves the ambitious goal of an integrated single market by 2015 in the form of the ASEAN Economic Community. Although logistics services are not included in the 11 priority sectors identified in the 2004 Framework Agreement for the Integration of Priority Sectors, they are singled out for special mention in Article 10. ASEAN members commit to expedite the development of

¹⁰⁶ TA No. 6379-REG: Supporting Strengthened Regional Cooperation Among Pacific Developing Member Countries and TA No. 6462-REG: Institutional Development for Enhanced Subregional Cooperation in the ASEAN Region.

integrated logistics services in the region by promoting transport facilitation, improving transport infrastructure, strengthening maritime services, and creating a policy environment conducive to private sector involvement, including through private–public partnerships.¹⁰⁷

More recently, ASEAN’s vision has evolved to treat logistics as part of the core integration agenda in its own right. The 2007 Roadmap for the Integration of Logistics Services effectively designates logistics as an additional priority sector. Preliminary analysis underlines the importance of logistics within the region, and the need for reform. More than 30% of total export logistics costs stem from regulation, with attendant delays reducing ASEAN trade by 30%–40%. Analysis of the Vientiane, Mukdaharn, and Laem Chabang and Danang logistics corridors suggests that road transport—a combination of infrastructure and regulation—is a major issue in both cases, as are import and export formalities.

Economic analysis makes clear that a holistic approach is required to deal with many factors that affect logistics performance. The roadmap recognizes this by identifying five core principles, which can then be developed into a detailed set of actions and time frames:

- (i) progressive liberalization of transport and logistics services sectors;
- (ii) enhanced competitiveness of ASEAN logistics service providers through trade and logistics facilitation;
- (iii) expanded capability of logistics services providers in ASEAN;
- (iv) development of human capacities in logistics; and
- (v) upgraded multimodal transport infrastructure and investment.

ASEAN’s approach is notable for its ambition. It covers both physical and regulatory infrastructure. It goes further by addressing the need to invest in sector-specific human capital as well. Each of the principles set out above is used as an organizing concept for a set of specific policy goals, each of which has a designated implementing agency within ASEAN and a set timeline.

Although the roadmap contains many elements necessary to enhance the competitiveness of the transport and logistics sectors, it will be important for stakeholders to closely track the implementation of these commitments over time. Experience suggests that implementation is likely to be a complex task, intensive in international and interagency cooperation. Part of the difficulty in pursuing reform of the logistics sector stems from the dispersion of logistics services throughout different parts of the UN Central Product Classification, the most commonly used international schema for classifying services. This dispersion is mirrored at the regulatory level in the number of distinct agencies responsible for various sectors. The roadmap makes a substantial effort to draw these sectors together into a coherent view of what constitutes logistics for policy purposes. It thus includes measures directed at maritime, air, rail and road transport, storage, courier, and packaging services, in addition to the customs and border control environment through which logistics service providers must navigate. Coordination at the national level will be vital to ensure that initiatives in all of these areas work together.

¹⁰⁷ Banomyong et al. 2008; Hamanaka. 2009; Vitasa. 2007.

ASEAN's experience in enhancing the performance of the logistics sector as part of a broader regional integration agenda suggests a number of useful lessons for policy makers, including the following:

- (i) An enhanced logistics sector has the potential to significantly boost regional and international trade.
- (ii) Reform of the logistics sector needs to be broad-based, covering sector regulations, infrastructure, and the general trading environment.
- (iii) General principles should be backed up by detailed, precise commitments; attribution of responsibility to implementing agencies; and verifiable timelines.
- (iv) Coordination of actors at the national and international levels is vital to the success of reforms, given the dispersion of responsibilities and expertise across agencies.

■ CHAPTER 5

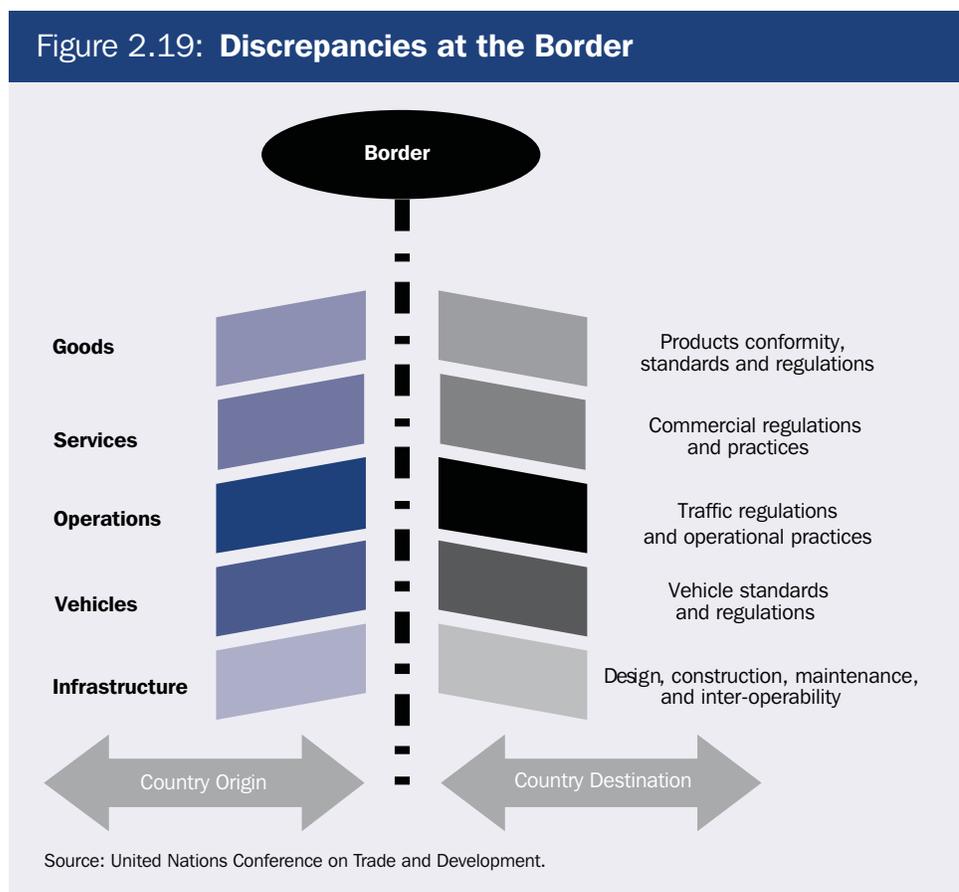
Transit Trade

Transit trade is a country's foreign trade that passes through a third country prior to reaching its final country of destination. Traffic in transit refers to the goods and means of transport passing through a third country on their way to the final country of destination.¹⁰⁸ Both the goods and the means of transport, as well as its operator, are subject to territory-specific laws and regulations, administrative requirements, commercial practices and operations, and technical standards. At the time of crossing the border between one territory and the next, the differences in the trade environment between the two create trade barriers (Figure 2.19). These barriers result in additional costs and delays that reduce the competitiveness of the delivered goods.

There are two categories of issues related to cargo in transit. One category relates to the goods themselves and the fact that customs authorities do not want to forego duties and excises in case the goods disappear while in transit (i.e., protection of customs revenues) and that concerned institutions (such as the Ministry of Interior or Ministry of Defense) do not want the cargo to harm the local population (i.e., national security). Considerations covering these issues are included in the WCO Revised Kyoto Convention, the Transport Internationaux Routiers (TIR) Convention and WTO trade facilitation measures under negotiation in the Doha Development Round. The other category relates to the modalities of the physical movement of goods through the territory (e.g., commercial transport services regulations, traffic regulations, and vehicle standards). These modalities constitute the basis for bilateral and regional transit (transport) agreements, together with customs-related provisions.

This chapter provides an overview of the state of play and importance of transit trade facilitation for landlocked countries in the region, and highlights basic principles and good practices. An introduction to bilateral and regional transit agreements and their negotiations is then featured, followed by a brief review of two regional transit agreements in the region.

¹⁰⁸ In the context of customs transit regimes, other parts of a journey such as inward transit (from a customs office of entry to an inland customs office), outward transit (from an inland customs office to a customs office of exit), and interior transit (movement of goods between the inland customs offices in the same country) can also be deemed as transit. See UNCTAD. 2009.



Transit Trade Facilitation: State of Play

Transit operations are severe obstacles, often generating significant additional transport and administrative costs for imports and exports of landlocked developing countries (Figure 2.20). The UN Economic and Social Commission for Asia and the Pacific (ESCAP 2006b) observed that the average distance of the landlocked countries in the world to the closest seaport is 1,370 km and that some of the most remote countries are in Asia and the Pacific. For example, the distance from Kazakhstan to the closest seaport is 3,750 km, from the Kyrgyz Republic it is 3,600 km, and from Tajikistan it is 3,100 km. Increasing the efficiency of transit is a key prerequisite for the landlocked developing countries to expand their trade. Nonphysical bottlenecks, particularly cumbersome transit procedures, additionally hamper the trade competitiveness of landlocked countries.

According to the trading across borders indicators of the World Bank's *Doing Business*, landlocked developing countries suffer from time-consuming procedures and extremely high costs for both imports and exports. In 2009, the time necessary to prepare export documents in most of the Central Asian countries is 2 to 3 times longer than in other developing Asian countries, and the duration of inland transportation and handling is about 12 times longer (Figure 2.21). Inland transportation and handling for export took even longer for Kazakhstan (from 26 to 46 days) and Uzbekistan (from 27 to 38 days) in 2012 compared against 2009. Considerable improvement is only evident in Tajikistan, from 58 days in 2009 to 45

Figure 2.20: Basic Sequence of Transit Operations for Imports

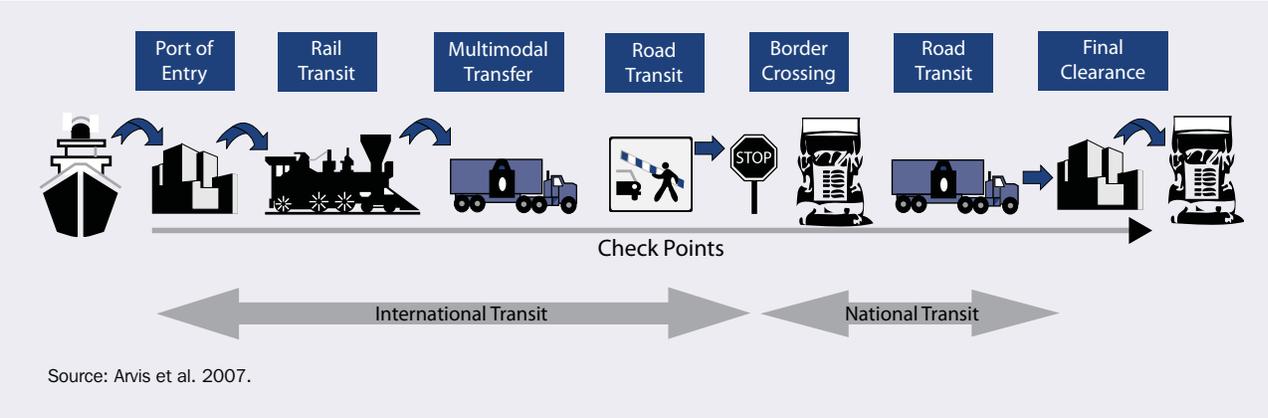
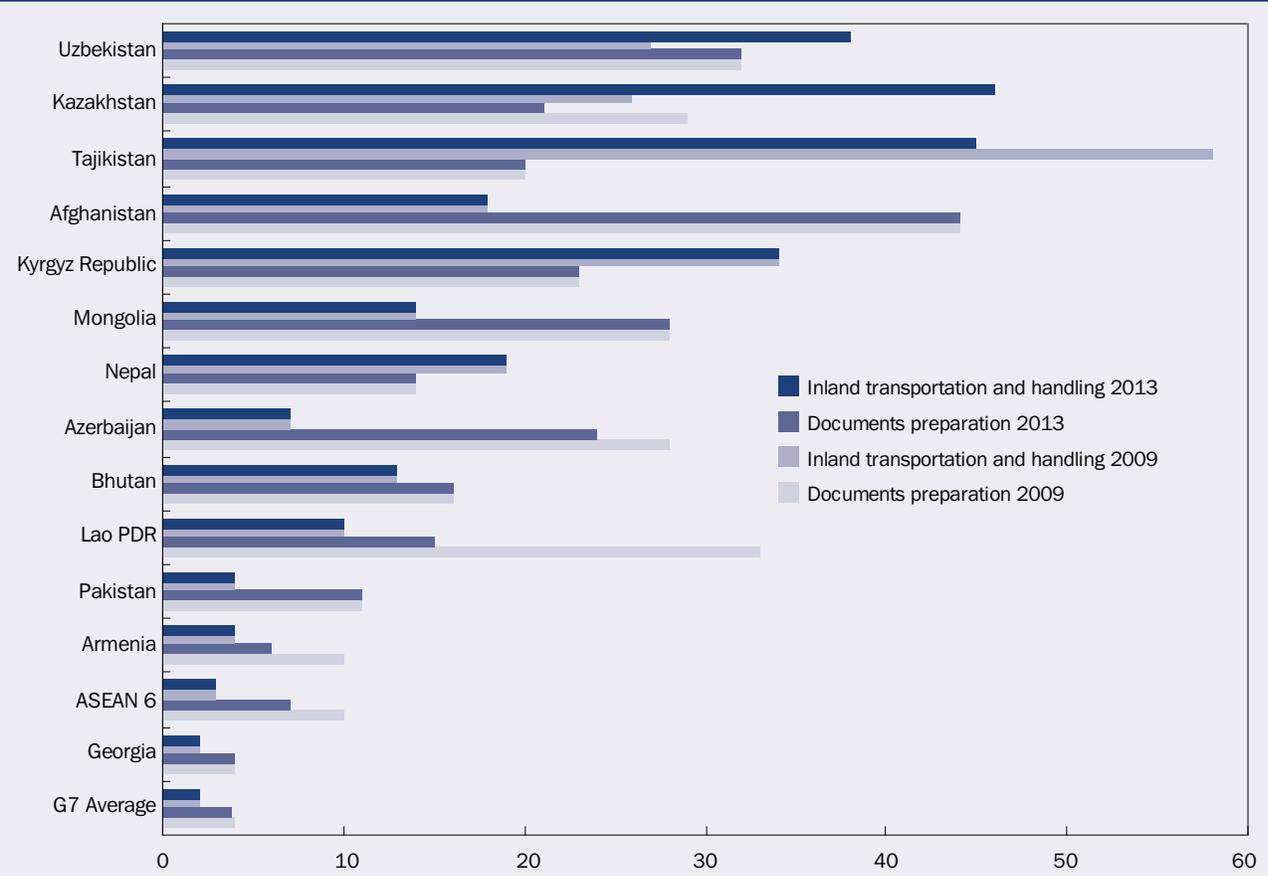
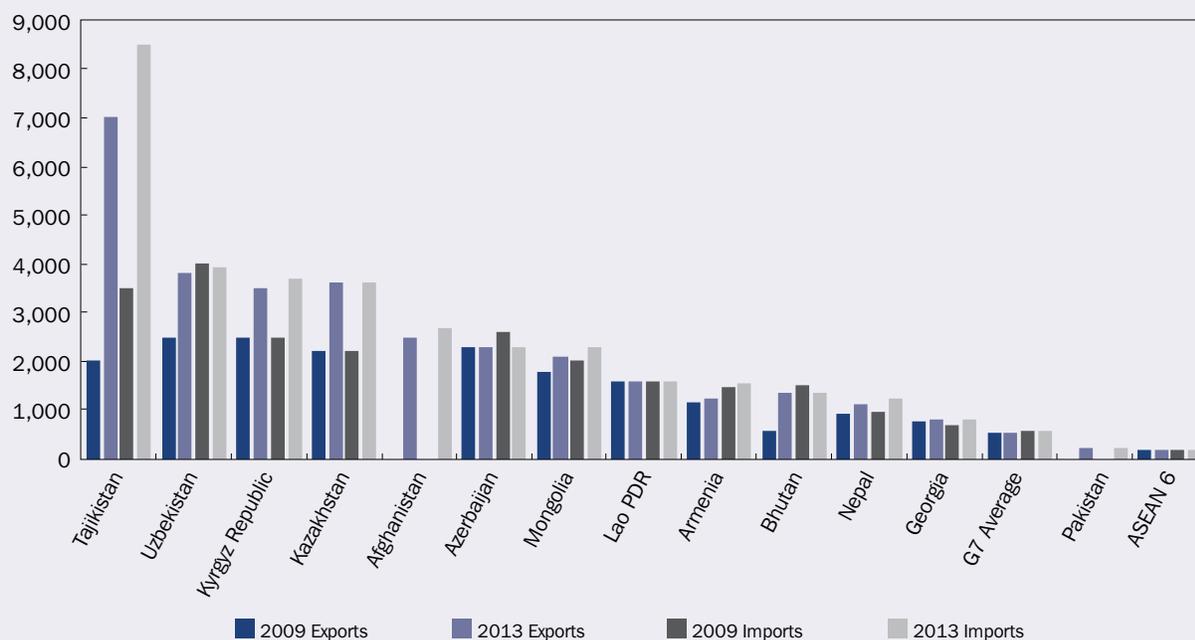


Figure 2.21: Duration of Document Preparation and Inland Transportation and Handling for Export in Landlocked Countries Compared with Coastal Countries



Source: World Bank *Doing Business*. 2009 and 2013.

Figure 2.22: Export and Import Costs of Inland Transportation and Handling in Landlocked Countries Compared with the Rest of Asia



Source: World Bank Doing Business. 2009 and 2013.

days in 2013. In terms of documents preparation, though still significantly higher than ASEAN9 and G7, there are considerable improvements observed for the Lao People's Democratic Republic (from 33 to 15 days), Kazakhstan (from 29 to 21 days) and Azerbaijan (from 28 to 24 days). In 2009, in countries such as Azerbaijan, Kazakhstan, the Kyrgyz Republic, Tajikistan, and Uzbekistan, traders need to pay more than \$2,000 for inland transportation and handling service when they export goods, about 14 times the average cost in ASEAN 6 (Figure 2.22). Except for the minimal cost reduction of import inland transportation and handling in Azerbaijan (from \$2,600 to 2,300), Uzbekistan (from \$4,000 to \$3,915) and Bhutan (from \$1,500 to \$1,350), both export and import costs of all other landlocked countries increased in 2012 and are still significantly higher than ASEAN6 and G7 averages.

Although not accounted for in the cost estimates presented in Figure 2.24, long waiting time at border crossings is a major contributor to high cost in transit transport operations. OECD (2006) observed that more than 50% of the time for moving a cargo from Almaty to Europe (through Moscow) is spent waiting at the border facilities. If this waiting time was reduced to a level of 5 hours at each border, transit time would be reduced by more than 50% (reduced to 5 days). The cooperation on transit is usually undermined by the mistrust between the public and the private sector as well as between neighboring countries. As a result, the physical inspection rates of traffic in transit in some developing countries remain very high. OECD (2006) estimated that the lack of cooperation can add 40% extra transit time, equivalent to adding 120% to the cost of transport. In addition to time costs, payments of unofficial rents are frequent and sometimes very large (Box 2.20).

Box 2.20: Barriers to Transit Trade: The Case of the Kyrgyz Republic

The efficiency of transit depends on many factors. Apart from geographical position, institutions and infrastructure play a considerable role. ADB (2008) analyzed the transit trade barriers for the Kyrgyz transit transport through Kazakhstan, and found the following major constraints that inhibit transit trade:

- weak legal framework;
- complex and outdated border procedures and documentation;
- lack of coordination among the border agencies;
- lack of mutual recognition of customs control procedures and customs seals and stamps;
- weak private sector stakeholders such as transport and trade associations;
- inadequate transit and guarantee systems; and
- inadequate customs and transport infrastructure.

As a result of these weaknesses, the unofficial payment of the Kyrgyz Republic transit goods was found to be as high as 140% of the price of fruits, 48% for vegetables, 13% for cotton fiber and 11% for tobacco. This unnecessary expenditure pushes the delivery cost very high.

Transport Costs for Different Cargoes

Item in Truck	Sale Price of Truckload (\$)	Kazakhstan Transport Cost (% of price)	Transport Cost That Can Be Eliminated (% of price)
Tobacco	8,686	15	11
Cotton fiber	7,767	17	13
Fruits	705	186	140
Vegetables	2,073	63	48

Source: ADB. 2008.

The quality and quantity of transport infrastructure, particularly roads and railways, have a direct impact on transport cost of goods in transit. According to the World Economic Forum's *Global Competitiveness Report 2008–2009*, the quality of overall infrastructure in developing countries such as the Republic of Korea, Malaysia, Thailand, Azerbaijan, the PRC, and Sri Lanka is above the world average while developing countries such as Mongolia, the Kyrgyz Republic, and Nepal are among the poorest in this respect. The report shows that the roads in Singapore and the Republic of Korea are among the best in the world while countries such as Mongolia, Nepal, Kazakhstan, Tajikistan, and the Kyrgyz Republic lag far behind other countries in terms of road quality. In terms of railroads, Armenia, Cambodia, and Nepal have the poorest railroad systems.¹⁰⁹ Arvis et al. (2007) found that aside from physical constraints, the main sources of costs are rent-seeking activities, governance

¹⁰⁹ Data on roads and railroads can also be found in the *World Competitiveness Yearbook* of the International Institute for Management Development, which assesses a country's land transport condition by using quantitative indicators such as the density of the road and railroad networks.

problems (Box 2.20), and the lack of implementation of effective transit systems to facilitate transit operations.

The Almaty Programme of Action, adopted during a 2003 international ministerial conference of landlocked, transit, and donor countries, aimed to address the special needs of landlocked developing countries within a new global cooperation framework between landlocked and transit countries.¹¹⁰ Though some progress has been registered by the landlocked developing countries since the Almaty Conference, a follow-up meeting held in Ulaanbaatar on 30 and 31 August 2007 found that a large number of bottlenecks related to trade facilitation were persistent, such as¹¹¹

- (i) non-transparency of trade and customs laws, regulations, and procedures, compounded by lack of institutional capacities and trained human resources;
- (ii) excessive numbers of documents required for export and import, complicated and nonstandard procedures for customs clearance and inspections, and lack of adjacent border controls;
- (iii) multiplication of scheduled and unscheduled roadblocks as well as unnecessary customs convoy requirements;
- (iv) insufficient application of information and communications technology, leading to poor or total lack of computerized customs procedures;
- (v) underdeveloped logistics services, lack of interoperability of transport systems, and absence of competition in the transit transport services sector; and
- (vi) low level of adherence to international conventions on transit transport.

These persistent trade facilitation issues not only increase time and costs but also greatly increase uncertainties in delivery times. Such uncertainties result in significant loss of business opportunities and may prevent altogether the participation of landlocked countries in global and regional production networks.

Guiding Principles and Good Practices

Many of the principles and good practices for transit facilitation are set out in GATT/WTO Article V (Freedom of Transit) and Annex E of the WCO Revised Kyoto Convention as well as in the TIR Convention.¹¹² The ongoing multilateral negotiations on trade facilitation provide a particularly useful source of principles and good practices on facilitating transit trade, as their scope includes clarification of GATT Article V.¹¹³

¹¹⁰ For details, see www.un.org/special-rep/ohrrls/lldc/Almaty_PoA.pdf

¹¹¹ Letter dated 9 October 2007 from the Permanent Representative of Mongolia to the United Nations addressed to the President of the General Assembly. www.unohrrls.org/UserFiles/File/LLDC%20Documents/MTR/AC2_62_4%20EN.pdf (accessed 8 October 2009).

¹¹² There are many other relevant international instruments relevant to transit trade and transport. For example, ESCAP members adopted a resolution (No. 48/11) on roads and rail transport modes in relation to facilitation measures, recommending adoption of the TIR Convention and seven other instruments including the Customs Convention on Containers (concluded in Geneva, Switzerland on 2 December 1972) and the International Convention on the Harmonization of Frontier Controls of Goods (concluded in Geneva on 21 October 1982). See www.unece.org/cefact/refer/comp/recm1.htm for a comprehensive set of facilitation measures relating to goods in international transit.

¹¹³ WTO (TN.TF/W/43/Rev. 17). 2009.

Freedom of transit is the core principle being promoted in GATT Article V and further clarified in the ongoing negotiations. Traffic in transit should be able to travel freely through the territory of a transit country and to travel by the most convenient route. Importantly, transit goods should be exempt from customs duties and only subject to reasonable charges for transportation (such as highway tolls) and/ or reasonable transit charges commensurate with the administrative expenses entailed by the transit or with the cost of the services rendered (e.g., transit escort services).

In addition, on the basis of the general principles of nondiscrimination, all traffic in transit should be treated equally and provided the same best treatment. For example, no distinction should be made based on place of origin, departure, entry, exit, or destination of the goods in transit, even their means of transport. Transit traffic should be treated no less favorably than domestic goods with respect to all charges, regulations, and formalities, including transportation charges. Finally, in line with the general principles of transparency and avoidance of unnecessary trade restrictions, a country taking restrictive measures on transit to protect health and security—allowed under GATT Articles 20 and 21—should inform partner countries of the objective and necessity of the restrictive measure, and provide relevant information to them upon request. The principles and practices introduced in Chapter 1 on publication and administration of trade regulations also apply to transit trade. Relevant transit-related laws, regulations, procedures, and fees and charges should be published and reviewed regularly.

Given the pass-through nature of traffic in transit, the following measures should be particularly considered:

- (i) *Grant traffic in transit expedited and simplified treatment at the border.* Trade facilitation measures discussed in Chapter 2 such as the use of risk management, pre-arrival processing of transit documents and data, use of commercially available documents and data, and establishment of authorized trader schemes should be applied to traffic in transit. Specifically, physical inspection of goods in transit should be limited and adjusted to suit the assessed risk level, particularly when goods are transported in sealed vehicles or containers accompanied by credible information and documents. Quality controls regarding compliance with technical standards should also not be applied unless there is a risk of contamination. Physically separated transit lanes may be made available and a single window facility may be established.
- (ii) *Establish an effective customs guarantee system for goods in transit.*¹¹⁴ Since the payment of duties and taxes is suspended during transit, a financial guarantee or bond may be required to safeguard the interest of the transit country until the transit goods are confirmed to have left its territory. Such guarantee should be reasonable (e.g., based on the nature and value of the shipment) and released promptly in full after the completion of the transit operation. To fully facilitate trade, the guarantees should be designed and applied on a regional or international basis. Such is the case between contracting parties to the TIR Convention (Box 2.21). This would typically involve harmonization of certain aspects of transit operations across several countries so that, for example, a uniform document or guarantee can be used for the entire transit operation. In addition, the guarantee system should be part of a customs transit regime that also contains provisions on the sealing of containers and vehicles and other security measures, such as standardized and required documentation

¹¹⁴ UNCTAD. 2009.

Box 2.21: Transports Internationaux Routiers Convention

Transports Internationaux Routiers (TIR) is an international customs transit system that allows goods to transit from a country of origin to a country of destination in sealed load compartments with customs control recognition along the supply chain. The TIR system facilitates the movement of goods in international trade while effectively protecting the revenue of each country through which such goods are carried. The TIR transit system relies on five main pillars: (i) use of secure vehicles or containers approved for use by customs; (ii) an international guarantee chain to secure duties and taxes in case of irregularities; (iii) mutual recognition of customs control such that goods carried under the TIR procedure in sealed road vehicles or containers will not, as a general rule, be examined at customs offices en route;^a (iv) controlled access to the system, limited to qualified authorized operators; and (v) the TIR carnet, a single harmonized manifest issued in the country of departure and serving as a control document in the countries of transit and destination.

The TIR carnet system has been devised to prevent the wasted time that occurs when long-distance vehicles are held up for customs inspection at every frontier. The idea is to provide a document upon entry to a transit country to give a solid evidence of the goods arriving in that country. When a vehicle reaches the border of a transit country, the customs officer at the point of entry only needs to examine the seals on the vehicle to ensure they have not been broken, and check the rest of the vehicle to ensure that the framework of the container, the tilt, or other external cover is intact. The vehicle is then sent on its way. At the point where it leaves the transit country, the vehicle surrenders a second copy of the carnet. When these two copies arrive at the central office they can be compared to show that the goods arrived in and later left the country, and therefore a duty is not payable. If the second copy does not arrive, duty is payable and a guarantor—the body authorized to issue carnets, usually a trade association—is required to pay the duty, and recovers it from the hauler whose staff was probably liable for the irregularity. If the country concerned is the country of destination, the goods will be liable to the import procedure for that country and duty will be collected from the appropriate person, usually the holder of the TIR carnet.

The United Nations has mandated the International Road Transport Union to manage the TIR Convention and issue TIR carnets to the national guaranteeing associations under conditions set out in a contractual commitment. Each association, in turn, issues the TIR carnets to carriers in its country in accordance with the conditions set out in the declaration of commitment signed by the carrier with the association.

The TIR Convention traces its origin to an agreement concluded by several European countries in 1949 to hasten the reconstruction of countries ravaged by World War II. The convention was formalized under the auspices of UNECE in 1959 and replaced by the current Customs Convention on the International Transport of Goods Under Cover of TIR Carnets (TIR Convention 1975). Amendments are introduced from time to time as agreed by contracting parties. The UNECE and the TIR secretariat maintain the TIR Handbook, which contains the convention agreement, succeeding revisions, and other practical information on the implementation of the TIR system.

Among recent initiatives are the worldwide application of the TIR system to include Asia and Middle East, and the computerization and adaptation of electronic data processing of the TIR system to provide faster cargo processing and security from fraudulent activities. As of 2008, there were around 66 contracting parties to the TIR system. From approximately 2.7 million TIR carnets issued in 2001, the number increased to 3.5 million in 2006 and more than 3 million in 2007.

^a This does not exclude the right of customs offices to carry out spot checks in cases where they suspect irregularities, but it is understood, and even stipulated in the convention, that such checks should be exceptional.

Source: UNECE data. TIR Handbook.

and mutual recognition of customs control and authorized traders, in line with the requirements of the TIR system or other relevant bilateral, subregional, or regional transit systems.¹¹⁵

- (iii) *Strengthen coordination and cooperation between authorities on both sides of the border.* Cross-border cooperation may first focus on critical but relatively simple issues such as coordination of hours of operation. More ambitious forms of cooperation may then be explored, such as a mechanism to eliminate duplicate inspections through the implementation of a common procedure to meet the requirements of authorities on both sides of the border (Part III Chapter 3). However, it is worth noting that effective coordination and cooperation among domestic authorities on each side of the border is a prerequisite to cross-border cooperation. Deeper cross-border cooperation may be promoted through bilateral and regional transit agreements.

While the measures and practices outlined above are certainly important for transit facilitation, transit operations are partly complex and other measures may need to be considered to tackle the underlying reasons for delays and inefficiencies. Competition among transport operators in transit and landlocked countries may need to be encouraged as a prerequisite for developing efficient logistics services. It has been estimated that, in some cases, allowing trucks of a landlocked country to operate in a transit country and vice-versa might save 30%–40% of transit transport costs.¹¹⁶ Although his conclusions are so far based on studies conducted in Africa, Raballand (2008) cited delays and unpredictability in ports, and bad practices from the private sector (e.g., customs brokers), as factors that would explain the higher trade costs of landlocked countries.¹¹⁷

Bilateral and Regional Transit Agreements

While a number of international conventions relevant to transit trade and transport exist, including the TIR Convention, developing countries have not always found them to be applicable to their specific situation. As a result, a consensus seem to have emerged among some of the WTO members on the need to promote bilateral and regional transit arrangements, taking full account of the existing international standards and instruments. Such agreements should generally aim to provide seamless operations along a corridor while maintaining sufficient control to ensure that the transit operations neither permits fiscal fraud nor discriminates against transport operators along the chain.

The movement of goods in transit between a landlocked country and a transit country can be based on a bilateral agreement on transit trade. The purpose of such an agreement is to facilitate each other's exports and imports in transit to and from a third country. Such an agreement can be done in accordance with the Convention and Statute of Freedom of Transit signed in Barcelona, Spain on 20 April 1921. However, this approach can become problematic, especially if neighboring transit countries are not signatories to this particular convention, as they will then not be bound by the convention requirements.

¹¹⁵ Revised Kyoto Convention. 2009.

¹¹⁶ UNCTAD. 2004; Arvis, Jean Francois, et al. 2007.

¹¹⁷ Raballand, G. 2008.

While negotiating bilateral transit trade agreements, issues related to the unimpeded transit of properly sealed cargo between the landlocked country and the transit country may be specifically addressed. The designation of transit routes and border points must often be agreed upon. This could mean that all transit traffic will have to be transported on designated transit routes by designated operators through designated border points. It is not unusual to see a landlocked country and a transit country agree on a dedicated transit port that will be authorized to handle transit cargo (e.g., the port of Tianjin, the PRC for Mongolian transit cargo). However, this could become a burden in the future, especially if the dedicated transit port is not located along major maritime corridors.

Negotiation of the bilateral transit agreement may also cover transport regulations in both the landlocked country and the transit country, particularly on issues related to transit market entry, operations, vehicle loads, and applicable tariffs. Transit traffic sharing ratios between the landlocked country and the transit country may also be included, although they are dependent on the level of bargaining power of each country.

The functional components of a transit agreement may include the following elements:

- (i) facilitation of the border crossing of cargo, including the cargo customs transit regime, the sanitary and phytosanitary (SPS) and/or quarantine regime, and definition of categories of prohibited or restricted goods;
- (ii) facilitation of the crossing of containers (a temporary admission customs regime), including measures related to the professional activity of transport operators,¹¹⁸ mutual recognition of transport operator licenses (access to the profession), and exchange of road traffic rights (market access);
- (iii) facilitation of the crossing of people engaged in transport operations (crew, drivers of commercial vehicles), including long-term multiple entry visas, health inspections, customs exemptions for personal effects, and recognition of driving licenses;
- (iv) facilitation of the crossing of commercial road vehicles, including registration, technical standards, roadworthiness certification, third-party motor vehicle liability insurance, and the customs regime for temporary vehicle importation;
- (v) infrastructure and equipment, including harmonization of road and bridge design standards and of road signs and signals;¹¹⁹
- (vi) coordination of border crossing infrastructure construction and equipment installation; and
- (vii) other facilitation measures related to transit including transparency (accessibility) of legislation, regulations, administrative procedures, and

¹¹⁸ If an agreement is only concerned with transit transport, the elaboration of a uniform cargo carrier liability regime may not be a high priority. However, the situation would be different if interstate transport is also included in the scope of an agreement. A model cargo carrier liability regime is provided by the Convention on the Contract for the International Carriage of Goods by Road (the CMR Convention, Geneva, 1956).

¹¹⁹ Another safety measure consists of compulsory rest periods for commercial vehicle drivers. The desirability of the harmonization of such measures may be considered. A model system is provided by the European Agreement Concerning the Work of Crews of Vehicles Engaged in International Road Transport signed on 1 July 1970.

documents; refraining from charging non-cost-related levies, duties, taxes, and other charges on transit operations; nondiscrimination and national treatment principles; preventing distortion of free competition; facilitation of border crossing formalities; use of a common language, measurement units, and software; resolution of border disputes; cooperation in combating customs fraud and tax evasion; and institutional arrangements (e.g., transit trade and transport coordination committee and national traffic police section).

The principles of bilateral transit agreements may be extended to regional transit transport agreements in the context of a broader economic integration type of agreement, such as a regional free trade agreement, to liberalize and facilitate trading between member countries. The objective of such an agreement on the facilitation of goods in transit should be to establish an effective, efficient, integrated, and harmonized transit transport system in the region, which will support the further integration of the region's economies and, as appropriate, the implementation of the free trade agreement.¹²⁰

The adoption of a transit agreement can be structured into a four-step process that may require considerable time. The drafting of the agreement is the end result of an intensive exercise with the following steps: study, analysis, planning, and negotiation. The first step is to study the existing situation of the transit traffic along the main transport corridors to obtain a clear and complete understanding of the transit operations. The second step is to forecast future transit traffic volumes and the corresponding transport requirements, with particular attention to the needs for change, expansion, and/or improvement in the present transit transport system. The third step, planning, addresses the need for negotiators to identify and address the real issues that will have to be considered during the negotiation of the transit transport agreement. Finally, each contracting country will then be able to define its negotiating position on various issues.

In this context, it is important to establish national working groups to review the substance of these issues. The composition of the working groups is very important; it must take into consideration the issues to be addressed and be balanced with representatives from the concerned government institutions and the private sector. It is essential that these working groups include representatives of the organizations that will be involved in or affected by the implementation of measures covered under the agreement. For example, representatives of local authorities and groups at relevant border crossings may be included in the working groups—or at least thoroughly consulted (Box 2.22).

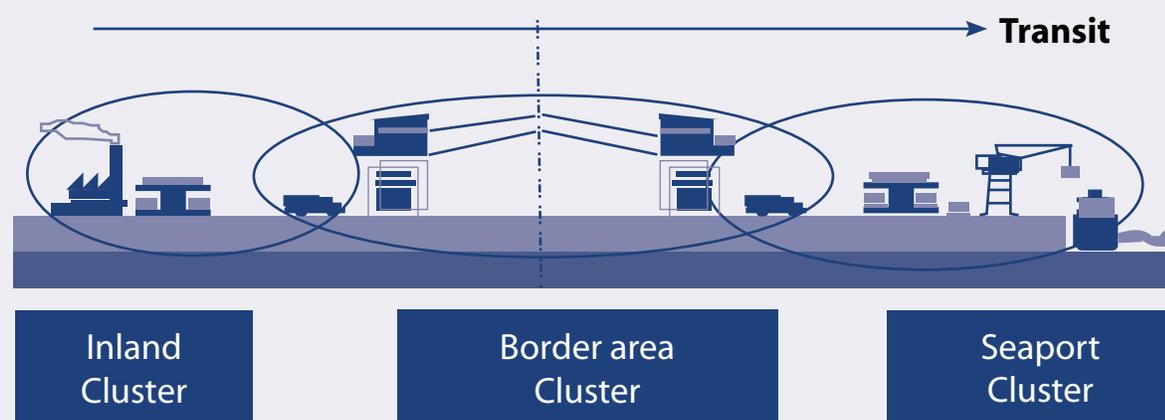
These national working groups should meet as often as required with similar working groups of the other contracting parties. These bilateral meetings would allow convergence toward the relevant issues to be included in the transit agreement negotiations. This process should result in directives from which separate protocols will be drafted. Each article or provision of the agreement should be discussed, assessed, and amended until a draft that is acceptable to all parties has been achieved. Negotiation of the separate protocols covering specific technical aspects of the main agreement could then take place.

¹²⁰ Other existing types of regional agreements that are designed to harmonize individual bilateral agreements among the member countries, particularly the harmonization of customs and immigration procedures.

Box 2.22: Transit Service Production: Importance of Local Knowledge

The most recent research in the field of transit transport corridor management recognizes the value of local knowledge. As a result, the United Nations Conference on Trade and Development (UNCTAD) initiated “trade and transport facilitation clusters.” Drawing on the role of economic and business clusters that establish a link between geographic locations and economic performance, trade and transport facilitation clusters bring together those most involved in everyday trade and transit operations along a particular corridor. They include both a broad range of government agencies—such as customs, fiscal, and transport authorities—and private operators such as importers, exporters, freight forwarders, and customs brokers.

This “cluster corridor value chain” approach introduces the concept of stakeholders’ collective ownership of the transit corridor. In such a vision, the corridor is seen as a transit service production line, and all business and government participants as providers of added value to the end product (i.e., the transit service). These clusters form a network through shared information systems that allow constant monitoring of the corridor operation and the design of improvements.



Source: World Economic Forum. The Global Enabling Trade Report. 2008.

Experience of Economies in Asia and the Pacific

This section emphasizes the importance of regional integration strategy for efficient and effective facilitation of transit trade, particularly in landlocked countries. The main reasons for high transit trade costs, such as waiting time at border crossings and uncertainties in delivery times, can be eased through regional efforts to harmonize transit operations and procedures and deepen cross-border cooperation. Lack of accession to international conventions that address transit issues led countries to resort to bilateral and/or (sub)regional agreements. This section asserts that (sub) regional cooperation is a more effective approach to transit issues than bilateral agreements for the following reasons:

- (i) wide geographic scope, and hence a wide range of transit issues to be covered;
- (ii) greater potential to maximize benefits from harmonization and consistency of transit operations and procedures throughout the (sub)region; and
- (iii) greater potential to increase trade volume, both via international and intra-(sub)regional trade. This is particularly important for landlocked countries and (sub)regions that experience geographical challenges and costly procedures in reaching out to markets outside the region.

In the absence of accession to international conventions on transit trade, (sub)regional integration, in the case of GMS, is necessary to facilitate cross-border movement of goods and people, at least in the short to medium term (see the following case study on the GMS Agreement for Facilitation of Cross-Border Transport of People and Goods). Bilateral agreements such as the India–Nepal Transit Agreement and the Kyrgyz–Kazakhstan Free Trade Agreement also have potential to improve facilitation of transit trade.

The Greater Mekong Subregion Agreement for Facilitation of Cross-Border Transport of People and Goods

The Great Mekong Subregion (GMS) Agreement for Facilitation of Cross-Border Transport of People and Goods¹²¹ and the annexes that are currently being negotiated is an extension of the trilateral agreement signed between the Lao People’s Democratic Republic, Thailand, and Viet Nam in 1999. This agreement, otherwise known as the GMS Agreement, has 20 annexes and protocols. With assistance from ADB, all six countries have signed all annexes and protocols. In order for these annexes to become effective, countries have to ratify them. To date, Cambodia, the PRC, the Lao People’s Democratic Republic, and Viet Nam have ratified all annexes and protocols. Thailand has ratified 11 out of 20.

The GMS Agreement is a multilateral instrument for the facilitation of cross-border transport of goods and people. Formulated under ADB technical assistance, the agreement provides a practical approach, in the short to medium term, to streamlining regulations and reducing nonphysical barriers in the GMS. It incorporates the principles of bilateral or multilateral action and flexibility to recognize procedural differences in each of the GMS countries. The GMS Agreement includes references to existing international conventions that have demonstrated their usefulness. It also takes into account, and is consistent with, similar initiatives being undertaken by ASEAN.

The GMS Agreement is a compact and comprehensive multilateral instrument, which covers in one document all the relevant aspects of cross-border transport facilitation. These include

- (i) single-stop/single window customs inspection;
- (ii) cross-border movement of people, goods, and vehicles (e.g., visas for persons engaged in transport operations);
- (iii) simplification and harmonization of border clearance formalities, procedures, and documents;
- (iv) transit traffic regimes, including exemptions from physical customs inspection, bond deposit, escort, and phytosanitary and veterinary inspection;
- (v) advance exchange of information requirements that road vehicles must meet to be eligible for cross-border traffic;
- (vi) exchange of commercial traffic rights; and

¹²¹ The GMS Agreement is formally known as The Agreement between and among the Governments of the Kingdom of Cambodia, the PRC, the Lao People’s Democratic Republic, the Union of Myanmar, the Kingdom of Thailand, and the Socialist Republic of Viet Nam for Facilitation of Cross-Border Transport of Goods and People.

(vii) infrastructure, including road and bridge design standards, road signs, and signals.

The GMS Agreement applies to selected and mutually agreed-upon routes and points of entry and exit in the signatory countries.¹²²

The India–Nepal Transit Agreement

The bilateral framework for trade and transit is provided by the India–Nepal Treaty of Trade, Treaty of Transit, and Agreement of Cooperation to Control Unauthorized Trade.¹²³

The *Treaty of Trade*, which is valid for 5 years, was renewed through an exchange of letters on 3 December 1996 and 5 March 2002, and automatically renewed for another 5 years in March 2007. Under the trade treaty, India provides, on a nonreciprocal basis, duty-free access to the Indian market for all Nepalese-manufactured articles barring a short negative list (cigarettes, alcohol, and cosmetics). Since March 2002, the Nepalese-manufactures are subject to the conditions that the exports meet the domestic value addition requirement of 30%, and that their Harmonized System classification is changed at the four-digit level in the course of manufacture or processing in Nepal. After the March 2002 revision, annual quotas have been prescribed for duty-free exports to India for four sensitive items: vegetable fats (100,000 tons), acrylic yarn (10,000 tons), copper products (10,000 tons), and zinc oxide (2,500 tons).

The *Treaty of Transit*, renewed every 7 years (last renewal in March 2006), provides for port facilities to Nepal at Kolkata/Haldia and specifies 15 transit routes between Kolkata/Haldia and the India–Nepal border. The international obligation is for only one transit route to the sea, but Nepal has also been offered facilities at the Mumbai Port and the Kandla Port for third-country trade. As requested by Nepal, a separate customs cell at Haldia became operational on 16 August 2004.

Nepal's traffic in transit is exempt from Indian customs duty and from all transit duties or other charges except for transportation. The treaty has considerably improved and simplified procedures for the transit of Nepalese cargo through the Indian territory.

Three inland customs depots (ICDs)— Bhairahawa, Biratnagar, and Birgunj—have been put in place to facilitate Nepal's transit trade through India as well as to facilitate border trade on the land route between India and Nepal. India has built a 5.3 km Raxaul/Birgunj broad gauge rail link for the movement of containerized traffic in transit to and from the internal container depot in Birgunj, Nepal. In addition, India has provided 22 entry/exit points along the India–Nepal border for bilateral trade and for India–Nepal transit.

India and Nepal signed a rail service agreement in May 2004 to extend cargo train service to the ICD at Birgunj, Nepal. The ICD was constructed with World Bank assistance of \$17 million while India constructed the rail tracks, which link the ICD with the Raxaul railway station in India. The ICD became operational on 16 July

¹²² Details of the agreement are available at www.adb.org/GMS/cross-border-transport-agreement.pdf

¹²³ More information can be obtained from www.south-asia.com/Embassy-India/indneprel.htm

2004. The Container Corporation of India, in a joint venture with Himalayan Terminal Private Ltd., is operating the ICD.

India also provides Nepal a rail route through Radhikapur for its trade with Bangladesh and for its overseas trade via Bangladesh, along with an additional transit route to Bangladesh through the Phulbari corridor.

The Government of India is committed to improving cross-border trade-related infrastructure. In addition to the mega-projects mentioned in the next paragraph, this endeavor includes (i) building an oil pipeline between Raxaul and Amlekhgunj through a joint venture between Indian Oil Corporation and Nepal Oil Corporation, (ii) upgrading approach highways to the border on the Indian side, (iii) upgrading and expanding the road network on the Nepalese side, and (iv) broad gauging and extending rail links to Nepal.

With a view to facilitating greater cross-border exchanges and bringing about qualitative transformation in cross-border connectivity between India and Nepal, a number of infrastructure megaprojects also form an important part of India's economic assistance portfolio to Nepal. The creation of integrated check posts at the four checkpoints on the India–Nepal border (Raxaul–Birgunj, Jogbani–Biratnagar, Bhairahwa–Sunauli, and Nepalgunj Road–Nepalgunj) is one of the most important endeavors for achieving this objective, agreed upon by the two governments. The two governments envisage world-class infrastructure at these border points for a smooth flow of people and goods across the border. In addition, the Government of India is also undertaking projects for the development of over 1,500 km of road network in Nepal's Terai region. The road network development would provide easy access between the India–Nepal border areas and Nepal's East–West Highway. A link road connecting Mahendranagar in Nepal's far west with Tanakpur in India will extend the connectivity beyond Nepal's East–West Highway into India. Similarly, a present project for cross-border rail links at five locations at the India–Nepal border (Jalpaiguri–Kakarbhitta, Jogbani–Biratnagar, Jaynagar–Bardibas, Nautanwa–Bhairahwa, and Nepalgunj Road–Nepalgunj) will significantly boost cross-border linkage and will be of immense value in promoting trade and commerce between the two countries. An intergovernmental committee on trade, headed by commerce secretaries, meets every year to consider policy, regulatory, and infrastructure issues in India–Nepal trade.

The Kyrgyz Republic–Kazakhstan Free Trade Agreement

The Agreement on Free Trade between the Government of the Kyrgyz Republic and the Government of the Republic of Kazakhstan was signed in Bishkek on 22 June 1995. It includes 17 articles on issues commonly found in free trade agreements. However, this bilateral agreement includes a specific article on “freedom of transit” with the following provisions:

- (i) Observance of the principle of freedom of transit shall be the most important condition for achieving the objectives of the agreement and shall be an essential element of the process of their attachment to the system of international division of labor and cooperation.
- (ii) Each Party shall provide free transit, via its territory, of goods originating in the customs territory of the other Party or third countries and intended for the customs territory of the other Party or in a third country. Each Party shall

provide exporters, importers, or carriers who carry out such transit with means and services available and necessary for ensuring transit on terms, including financial ones, not worse than those on which the same means and services are provided to exporters, importers, and national carriers of any third State.

- (iii) Parties shall not require payment for services of warehousing, transshipping, storing, and transporting goods in the currency of any third state.

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