Nearly a decade ago, the World Customs Organization (WCO) highlighted the importance of education for trade facilitation by advocating for knowledge-based services, training and capacity building. The World Trade Organization’s (WTO) Trade Facilitation Agreement (TFA) that entered into force in February 2017 further emphasized the importance of these instruments in trade facilitation. The WCO foresaw that the effective use of information and tools—such as electronic platforms and risk-based inspections—by customs professionals would help economies reduce the time and costs associated with trading across borders.1 In today’s globalized and highly-digitalized trading environment, however, the ability of trade professionals to reap the benefits of these tools depends heavily on training and communication. Indeed, the WTO cites training as one of the most important elements in the successful implementation of trade facilitation measures.2

Cross-border trade is a complex endeavor. According to the United Nations Conference on Trade and Development (UNCTAD), the average international trade operation involves between 20 and 30 parties. Trading includes not only government actors such as customs and port authorities but also brokers, commercial banks, vendors, insurance companies and freight forwarders.3 Customs clearance officials and customs brokers are two of the most important parties involved in a typical international trade transaction. They have different but interconnected roles with regards to education, training and communication since they are the providers and users of customs services, respectively. While the customs clearance official is an employee of the customs administration who acts on behalf of the exporter or importer. Customs officials perform several tasks on behalf of customs administrations including valuation, documentary checks, physical inspections of cargo and post-clearance audits. Customs brokers’ duties include preparing trade documentation, ensuring the proper transfer of cargo as well as advising on exporting and importing requirements. Given these tasks, communication and training on new trade processes, as well as on IT developments, are critical.

Doing Business data show that education and training, together with communication with customs clearance officials and customs brokers, play an important role in the successful implementation of trade-related reforms. Education and training facilitate the implementation of new policies as well as the development of the specific skills or knowledge...
required to make those policies operational. Training can target various staff levels—from senior to operational staff—and encompass different types of programs, including technical training on daily operations, training linked to programs, including technical training staff—and encompass different types of staff levels—from senior to operational.

Education, training and communication can support the successful implementation of trade-related regulatory reforms. Since trade facilitation catalyzes economic growth, educating stakeholders to adopt trade reforms effectively should be a central government priority. Bangladesh has identified its top priorities for trade facilitation as capacity building activities at ports and customs offices as well as communicating with relevant actors to ensure the proper adoption of regulations.

Education, training and communication can support the successful implementation of trade-related regulatory reforms (box 5.1). India has supported its ambitious reform agenda by providing regular training to both customs officials and private sector agents, as well as by establishing Customs Clearance Facilitation Committees which bring together actors involved in international trade at regular meetings. Similarly, the Islamic Republic of Iran has invested in training customs officials, setting up “expert pools” of customs officials with existing technical training who are responsible for electronic goods clearance, as assigned by the national single window.

Governments are tasked with designing and implementing their national trade facilitation programs. Because of this, they are often best placed to lead stakeholder education and communication strategies through their customs administrations and National Trade Facilitation Committees. They are also well positioned to provide standardized, harmonized training programs. Furthermore, governments have a stake in educating service providers and users, since the effective implementation of trade reforms will ultimately boost trade volumes. Providing adequate training—especially to firms with limited trading experience—can, for example, result in fewer errors when firms are completing customs documents, contributing to time savings and increased trade volumes. Governments provide trade-related training to customs clearance officials in 98% of economies measured by Doing Business and to customs brokers in 87%.

Significant improvements to Bolivia’s foreign trade regime in 1985 were systematically offset by administrative shortcomings including high levels of bureaucracy and opacity in the public service. To address these issues, starting in 1997 the government introduced a series of initiatives to strengthen public administration, including redesigning the customs administrative structure and implementing educational programs for customs officers. Of these initiatives, education-related policies had the greatest impact. The introduction of a new competitive selection model for customs officers, higher qualification requirements and technical evaluations through exams—as well as mandatory on-the-job training and a required minimum number of training hours—helped to further reduce customs clearance times. Furthermore, even while imports into Bolivia were declining, the effective tax rate increased, reflecting enhanced customs efficiency through corruption reduction and the implementation of new regulations.

Governments use a variety of mechanisms to communicate changes in trade processes to customs officials and customs brokers. Doing Business data show that a workshop is the most commonly-used channel followed by disseminating information on a website (figure 5.1). Interestingly, 65% of

THE ROLE OF GOVERNMENT IN EDUCATING AND COMMUNICATING CHANGE

Training policies typically require the support of the government to be successful, and training in customs is
BOX 5.1 Promoting reform implementation through education, training and communication

In recent years Doing Business has captured reforms that underscore the fundamental role played by education, training and communication in international trade processes. These reforms target not only the qualifications of the customs workforce but also the training provided to government officials and private sector agents when implementing new reforms, conducting pilot tests or communicating changes.

Well-trained customs professionals are more likely to navigate new trade procedures effectively. Doing Business data show that the share of governments providing regular training (at least once a year) to customs clearance officials is significantly higher in economies where reforms were implemented than in economies where they were not. A decrease in the time to clear goods at the border in El Salvador, for example, was associated with the 2017 recruitment and training of customs clearance officers. A lack of trained customs officers had previously hampered clearance efficiency, despite the introduction of numerous trade reforms.

| Customs officials are more likely to receive regular training in reforming economies |
| Training frequency of customs officials in reforming economies | Training frequency of customs officials in non-reforming economies |
| Regular training | Only with new processes/systems | One-time training | No training |
| 86% | 33% | 62% |

Source: Doing Business database.

Note: Reforming economies include 56 economies that implemented trade reforms in Doing Business 2018 and Doing Business 2019. Non-reforming economies include 132 economies for which no reform was captured in Doing Business 2018 or Doing Business 2019. “No practice” economies (Eritrea and the Republic of Yemen) are excluded from the sample. One-time training refers to providing training only once over the duration of service. Results hold when comparing economies within the same income group, with one exception in high-income economies; however, the difference is relatively small.

Training has been pivotal when introducing new electronic systems, such as customs management systems or national electronic single windows. Doing Business data show that many economies—including Afghanistan, Grenada and Jamaica in 2016, Cabo Verde and the Comoros in 2017 and Angola and Lesotho in 2018—have experienced reductions in the time to prepare documentation following training programs or pilot tests when implementing the Automated System for Customs Data (ASYCUDA) World, a customs data management system developed by UNCTAD. Brazil, Brunei Darussalam and Kenya also experienced positive results following the implementation of national electronic single window systems in 2017; by increasing awareness of the new platforms through training and seminars, they reduced documentary compliance time as measured by Doing Business.

A pilot test period, together with effective communication between government agencies, government officials and private sector agents, can also benefit reform implementation. The pilot period allows both for the testing and correction of a new system’s functionality ahead of full implementation and deepens user knowledge of the new procedures. Pilot testing can also serve to mitigate resistance to change among public and private actors. The phased implementation of ASYCUDA in Angola (2017–18) and Lesotho (2015–18) provide good examples of successful pilot test periods. In both economies, ASYCUDA was initially launched as a pilot, allowing customs administrators the opportunity to test implementation issues and traders to get accustomed to the new system before its full launch. Subsequently, ASYCUDA has been used effectively in Angola and Lesotho, decreasing documentary compliance time for exports and imports in both economies.
low-income economies use websites—only slightly below the 76% rate of high-income economies—even though the Internet penetration rate in low-income economies is just 12% (compared to a rate of 82% in high-income economies). This figure can be attributed to the fact that customs officials and brokers typically have greater access to the Internet than the average citizen.

Although governments remain the most important source of capacity-building training for customs officials and brokers, opportunities also exist for private sector involvement. In 2011 Mozambique implemented the Janela Única Electrónica (JUE), an electronic single window system, to streamline and harmonize its customs procedures. The JUE is managed by a private company which provided technical training on its use to all agents involved in international trade to ease the migration from a physical to an online system. Training sessions included specific modules for customs officials, brokers, freight forwarders, shipping line representatives, port operators, port authorities and banks. Additional training is available when new processes are launched or upon request.

### The Role of Customs Clearance Officials in International Trade

While customs agencies traditionally have been responsible for revenue collection, border management and fraud prevention, they are now also expected to streamline clearance processes while ensuring border security. The new “dynamic” role of customs agencies demands that customs clearance officials maintain a high level of efficiency, knowledgeability and accountability, underscoring the need for well-educated customs personnel.

Education and training support the professional development of customs clearance officials. Such training provides an opportunity for customs agencies to emphasize the importance of integrity at work, deliver anti-corruption messages and promote the agency’s code of conduct. Customs employees should meet the educational requirements defined by customs authorities to qualify for and effectively perform the role of clearance official. For their part, governments should take advantage of training programs offered by international organizations—both for newly recruited employees as well as for experienced customs officers and executives.

The future orientation of customs will require a transition toward a knowledge-based model. Greater investment in the education and skills development of clearance officials is important. The World Bank Group’s Customs Modernization Handbook 2005—which emphasized human resources management—identified the education and training of staff as the most important factor affecting customs performance, a view that has been reiterated by several recent studies.

Education also improves the transferability of skills and is key to building technology absorption capacity. Providing regular training to customs clearance officials is positively related to customs efficiency. Doing Business data indicate that the average time required to clear customs (for both exports and imports) is about 34% lower in economies where clearance officers receive regular training compared to those where no regular training is provided.
(figure 5.2). This trend holds in three of the income groups (upper middle income, lower middle income, and low income), but does not hold in high-income economies. Sub-Saharan Africa and the Middle East and North Africa are the two regions where the difference in clearance time is the most dramatic between economies where regular training is offered and where it is not. In Cabo Verde regular training of customs officials helped the country to successfully upgrade its automated customs data management system from ASYCUDA++ to ASYCUDA World in January 2016. Throughout 2016, Cabo Verde delivered training courses to customs officials, brokers and traders, enabling these actors to take full advantage of the new system, which reduced documentary compliance time by 24 hours for both exports and imports.

The Europe and Central Asia region has the highest share of economies that require a university degree to operate as a customs official (70%), followed by Sub-Saharan Africa (68%). At 29%, the OECD high-income group has the lowest share (figure 5.3). However, a comparison among regions of the average time for export clearance shows that requiring a college degree is not necessarily associated with better customs efficiency; many other variables impact the efficiency of customs procedures (such as technology, legal support, infrastructure, strong anti-corruption measures or membership in a trade agreement). Even though fewer OECD high-income economies require that customs officials have a university degree, candidates are required to complete customs clearance vocational training before their appointment. Furthermore, in economies in Sub-Saharan Africa where a university degree is not required, but regular training is provided to customs officials, the average customs clearance time for both exports and imports is approximately 44% lower than in those where a university degree is required, but no regular training is provided.

![Figure 5.2](image-url) Economies that offer regular training for customs clearance officials have shorter customs clearance times than those that do not

Source: Doing Business database.
Note: Doing Business identified 128 economies where regular training (defined as occurring more than once a year) is provided to customs clearance officials. Doing Business identified 58 economies where such training is not provided.

The experience of the Democratic Republic of Congo highlights the importance of training as well as communicating changes as catalysts to trade reform implementation in Sub-Saharan Africa. In 2016, the country introduced a single window for trade, which began as a pilot. The following year the government continued the implementation of the single window,

![Figure 5.3](image-url) Requiring customs officials to have a university degree is not necessarily associated with improved customs efficiency

Source: Doing Business database.
Note: The average customs clearance time for exports measures the number of hours needed to complete procedures required by customs authorities only and excludes the time for product-specific inspections such as phytosanitary or technical standard inspections. Regular training is defined as training provided at least once a year.
publishing information on new requirements and providing training workshops to the private sector. The government also opened trade facilitation centers equipped with Internet-connected computers to assist and train users. By implementing the single window together with the accompanying training and communication, the Democratic Republic of Congo reduced document preparation time by 122 hours for exports and 42 hours for imports; border compliance time was also cut, by 219 hours for exports and 252 hours for imports.

THE CUSTOMS BROKER: THE LIAISON BETWEEN TRADERS AND OTHER ACTORS INVOLVED IN INTERNATIONAL TRADE

In 156 of the 190 economies measured by Doing Business, customs brokers act as intermediaries between traders and other parties involved in moving goods internationally. Of these, only 56 economies mandate the use of brokers by law. Customs brokers play a pivotal role thanks to their in-depth knowledge of the industry, customs laws, tariffs and regulations; often, brokers are the only channel through which producers can sell their goods internationally. By hiring an agent, firms gain access to international markets without incurring the up-front costs and risks associated with searching for new markets or negotiating deals. Customs brokers are expected to also support the interests of governments by ensuring compliance with regulations and payment of duties and taxes. It is not, therefore, surprising that many economies require more than one qualification (for example a license and an exam) to operate as a customs broker. In turn, data show that it is more expensive to hire more educated customs brokers, particularly for imports (figure 5.4). Furthermore, in economies that do not require any qualification, high income per capita is not necessarily associated with more expensive brokers; instead, in economies requiring more qualifications, even with lower income levels,

![Figure 5.4: Customs brokers are more expensive in economies with greater qualifications requirements](image-url)


Note: Doing Business collects data on whether the following qualifications are required to operate as a customs broker: university degree, pass an official exam or obtain a license. “One qualification” means that only one of these qualifications is required; “three qualifications” means that a broker must have a university degree, pass an official exam and obtain a license. The average cost to hire a customs broker is calculated based on Doing Business data for 188 economies. Of these, 24 economies do not require any qualifications, 68 require one qualification, 68 require two qualifications and 28 require three qualifications. The "no practice" economies of Eritrea and the Republic of Yemen are excluded from the sample.
it is costlier to hire customs brokers. Market segmentation in the customs brokerage profession may also explain the higher cost for brokers in economies with lower income per capita, where a few large companies control a substantial market share.

Requirements for licensing, examinations and training for customs brokers are fundamental, as a lack of these can lead to delays in the clearance process. The WCO recommends that any customs reforms or modernization be accompanied by the necessary training and sharing of information between governments and brokers. Furthermore, the International Trade and Customs Broker Association recommends the establishment of capacity-building initiatives for brokers through certification programs and examinations. In 87% of economies measured by Doing Business, customs brokers participate in training programs organized by the customs administration. Among economies where the customs administration offers training to customs brokers, 45% offer training only when new processes or systems are launched; 36% offer training on a regular basis (figure 5.5). Doing Business data indicate that the average time for documentary compliance is 41% lower in economies that offer training to customs brokers compared to those where training is not available. This suggests that training could be beneficial in terms of familiarizing brokers with new regulations that could enhance their efficiency in complying with documentary requirements.

FIGURE 5.5 Most economies only provide training to customs brokers when new processes or systems are introduced

In 87% of economies measured by Doing Business, customs brokers participate in training programs organized by the customs administration.

NOTES
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1. WTO 2008.
2. WTO 2015.
5. McLinden and others 2011.
7. McKinnon and others 2017; Elnaga and Imran 2013.
15. Examples of training programs include those offered by the World Customs Organization, such as the Virtual Customs Orientation Academy (VCOA), the CLiKC! Customs Learning and Knowledge Community and integrity development workshops. For more information, see the WCO’s website at http://www.wcoomd.org. Similarly, the Inter-American Development Bank offers a course on Development of Management and Leadership Capacity for Customs Supervision and Control that can be taken online.
17. WTO 2015; Moïsé 2013.
22. WCO 2016.
23. Arvis and others 2011.