## PART 1

# Chapter 5

# **Costs and challenges**

This chapter highlights key costs and challenges in implementing trade facilitation reforms, from initial financial investments to the sustained policy commitment to adopt and maintain measures over the long term. It draws on reviews of experience in 24 developing and emerging economies to present evidence on the nature of the costs and how they compare with the benefits from implementing trade facilitation reforms.

# The costs of TFA implementation are manageable compared to the expected benefits

The cost to developing countries of implementing trade facilitation measures was a central issue in the WTO negotiations on trade facilitation. Unpacking the costs associated with trade facilitation reforms requires taking into the account not only the cost of introducing new measures, but also of sustaining reforms over the longer term. Upfront costs in diagnosing and designing what needs to be done need to be factored in, along with the costs and skills involved in changing laws and regulations. Reforms can involve investments in physical infrastructure, but these have to be accompanied by investments in training staff to operate new technology or perform new processes. A comprehensive and sequenced approach is important: for example, new equipment will not solve problems where policies still require cumbersome processes. Lastly, not all costs are financial: change management, and the associated challenges of changing organisational incentives and behaviours, are an important issue for trade facilitation reforms.

This chapter draws on country experience with implementing trade facilitation to identify and discuss the key cost components and challenges in implementing reforms. Based on work examining the experience of 24 developing and emerging economies, it highlights the extent to which trade facilitation processes can be undertaken in the framework of normal operating budgets and without additional resources, apart from donor support for the areas requiring more technically demanding and complex changes, and longer implementation and familiarisation periods. Overall, implementation and operating expenses are also seen to have been quite limited compared to expected benefits from the reforms.

## Assessing the costs of implementing trade facilitation measures

A number of issues arise in assessing the costs of implementation, not least where costs may be financially small but require challenging organisational or behavioural change. Some measures may be relatively inexpensive to put in place but challenging both in terms of enforcement in practice and sustainability over the long run. Translating the introduction of formal measures into changes in the day-to-day operations of border agencies and other participants (such as firms and traders) can require addressing entrenched behaviours and values or the desire to preserve rents. Overcoming resistance to change can require not only technical and financial assistance to improve technical and human capacity, but also political momentum and time to adjust.

Another important issue in assessing the costs of implementation is the distinction between capital expenditure and recurring costs. *Capital expenditure* relates to the introduction of automated systems for advance lodging and processing of data, risk management or single windows; the purchase of equipment, vehicles or buildings; or initial training on certain tasks or operations. *Recurring expenses* primarily concern salaries, but also the operation and maintenance of equipment and regular training to maintain

skills at the required level. Measures that entail a significant upfront investment are not necessarily costly to operate on an ongoing basis: Single Windows are a case in point. Yet the sustainability of reforms can also depend on building the capacity of local teams for strategic thinking and driving reforms, and to be able to diagnose and address new issues as they arise in the future.<sup>2</sup>

One challenge in assessing the costs of implementing trade facilitation reforms is that these annual operating expenses for reforms are difficult to separate from those related to the overall functioning of customs and other border administrations and are generally absorbed by these agencies' regular operating budgets. While it is important to ensure that budgets for maintenance of both equipment and skills are available in the long term to ensure the sustainability of reforms, experience also indicates that the efficiency gains from the reforms also enabled border authorities to do more with their existing resources. Private support can also be very valuable in providing know-how and complementing resources earmarked for reform. For example, Malaysia's Single Window was championed by the government, which ensured active and continuous involvement of various border agencies, but was established and run by the private sector.

Finally, it is not only the readiness of Customs but also of other agencies involved in the border process that need to be factored into assessments of the likely costs of reforms. In general, Customs are at the forefront of modernisation and facilitation, as the only government body that deals with all goods arriving in and departing from a country. Customs also tend to be the main beneficiaries of extensive financial and technical support from bilateral and institutional donors (Box 5.1) and specialised agencies, including the World Customs Organization (WCO). The upgrading and modernisation of the other agencies involved is gaining momentum but still has some way to go.

# Identifying the main cost components of trade facilitation reforms

The introduction and implementation of trade facilitation measures entails costs and challenges in one or more of the following areas: diagnostics, new regulation, institutional changes, training, equipment and infrastructure, and awareness-raising and change management. While equipment and infrastructure are often the most expensive, training appears to be the most significant, as trade facilitation is primarily about changing border agencies' ways of doing business.

Diagnostic and re-engineering costs: Identifying priority areas for reform and devising appropriate action plans can be complicated, especially for developing countries that may have limited experience with diagnostic and reengineering endeavours. Prior to the conclusion of the TFA negotiations, technical assistance was provided by the WTO Secretariat, with the support of Annex D organisations<sup>3</sup> and experts from Members' national administrations, to help developing countries participate more effectively in the negotiations and to assess their trade facilitation needs and priorities.<sup>4</sup> Diagnostics and planning for trade facilitation reforms has also formed part of capacity building initiatives such as the Diagnostic Trade Integration Studies (DTIS) for Enhanced Integrated Framework countries, or the Diagnostic Needs Assessments and Implementation Support under the WCO Columbus Program. In some countries, these diagnostic projects may also mobilise domestic expertise from academia and the administration.

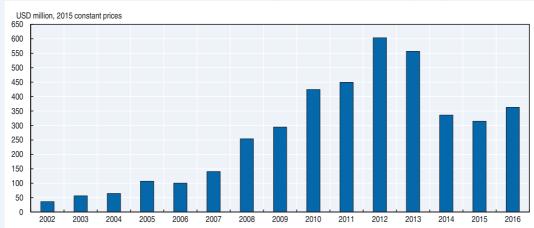
Regulatory costs: Trade facilitation measures may sometimes require new legislation, or the amendment of existing laws. Generally, these regulatory changes are undertaken in a

#### Box 5.1. Trade facilitation has attracted significant donor support

Many of the initial expenses for implementing trade facilitation reforms – such as purchasing equipment, training officials and putting in place new measures – have been financed by the increasing level of technical and financial assistance devoted to trade facilitation over the last decade.

Donor support directed to simplifying and modernising border rules and procedures reached USD 363 million in 2016, a fivefold increase over the 2002-05 base-line average. Donor support for trade facilitation was also relatively resilient during the global economic crisis; the decline experienced since 2013 may reflect difficulties related to ascribing assistance to the implementation of the WTO TFA while WTO Members' notifications of TFA Category B and C commitments were still at an early stage.

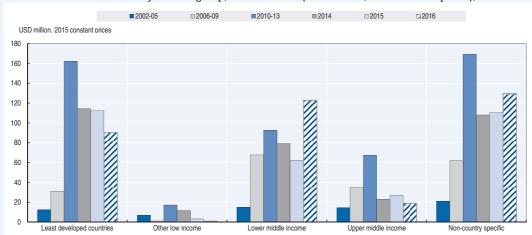
Figure 5.1. **Aid for trade facilitation has grown strongly since 2002** Total aid for trade facilitation, commitments (USD million, 2015 constant prices), 2002-16



Source: OECD-DAC (2018), Aid activities database (CRS), https://stats.oecd.org/qwids/.

The clear majority of donor assistance for trade facilitation reforms has gone to least developed countries, although assistance for Lower Middle Income Countries and global programs have been steadily increasing.

Figure 5.2. **LDCs remain the largest beneficiaries of aid for trade facilitation** Aid for trade facilitation by income group, commitments (USD million, 2015 constant prices), 2002-16

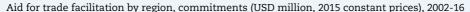


Source: OECD-DAC (2018), Aid activities database (CRS), https://stats.oecd.org/qwids/.

### Box 5.1. Trade Facilitation has attracted significant donor support (cont.)

The largest beneficiaries of assistance for trade facilitation are countries in Africa, which received USD 161 million in 2016, a 17-fold increase since 2002-05.

Figure 5.3. Aid for trade facilitation goes predominantly to countries in Africa and Asia





Note: Country groupings are those used by the OECD-DAC. Africa grouping: North Africa, Sub-Saharan Africa; America grouping: North and Central America, South America, Caribbean; Asia grouping: Middle East, Central Asia, South Asia, South and Central Asia, Far East Asia.

Source: OECD-DAC (2018), Aid activities database (CRS), https://stats.oecd.org/qwids/.

wider, customs modernisation context and are not narrowly confined to trade facilitation. They involve time and specialised staff in ministries, the centre of government and parliament. Preparatory work to assess the existing regulatory framework, ensure consistency and coherence with other domestic policies and identify potential unintended consequences on various users forms a significant part of this undertaking. Resources required for legislative and regulatory work differ depending on countries' legislative structures, procedures and frequency of changes in legislation. However, with the exception of major legislative changes, such as for electronic signatures, most changes pertinent to trade facilitation can be handled at the operational level and entail little additional cost. In countries with limited domestic expertise, support may be provided through international assistance. The TFA negotiation also generated a wealth of supporting material, produced by member governments and intergovernmental agencies, about the main regulatory and institutional aspects that need to be taken into account in reforming regulation.<sup>5</sup>

Institutional costs: Some trade facilitation measures require the establishment of new units, such as a post-clearance team, a risk management team or a central enquiry point, which may require additional human and financial resources. In terms of human resources, countries can either recruit new staff, which generally costs more, or redeploy existing staff, which may also entail costs related to training, physically relocating staff and forward planning. Relocation is not an uncommon management practice in customs,

so redeployment linked to new trade facilitation measures may simply be part of the general practice of relocation. However, redeployment may be less viable where it would create significant service disruptions or where sophisticated, specialised functions are being introduced.

Although not actually expensive, the clarification of border agencies' respective fields of responsibility and co-ordination around border services and controls may be institutionally challenging. Customs administrations may be responsible for the application not just of their own procedures and requirements but also those of a range of other authorities, particularly in terms of ensuring compliance with any documentary requirements (licences, certificates, etc.). The ability to delegate controls, or the requirement to co-ordinate border agency activities in a way that minimises the burden to users, may require strong direction from the centre of government.

Training costs: Training often appears as the most critical cost component of trade facilitation reforms. Countries may choose between: i) recruiting new, expert staff; ii) training existing staff in a training centre; iii) on-the-job training; and iv) importing trained staff through personnel exchange with other ministries/agencies. Option i) is the most expensive since it implies a budgetary increase, but may not succeed if the salary scale is too low to attract suitably qualified staff. Moreover, there may only be a limited pool of potential staff with the necessary customs-specific skills and expertise. Regular training is common practice in many customs administrations around the world, though varying in frequency and duration, and training on specific trade facilitation measures (option ii) is often part of more general training.<sup>6</sup>

On-the-job training (option iii) results in no additional cost for the administration, but may give rise to temporary costs for traders, in the form of disruption to some service operations and this, along with financial considerations, may constrain the ability to train large numbers of officials in new techniques, such as risk assessment. Option iv) may be relevant for cases such as post-clearance audit, where appropriate expertise may be drawn from the inland tax administration. Although this is a costless option for the state and for the customs administration, the loss of qualified staff from the tax administration may make it difficult to implement without sustained political commitment, even when customs and tax are under the same agency or department.

Equipment/infrastructure costs: Equipment and infrastructure are not always a prerequisite for trade facilitation reforms, although some measures, such as advance lodgement and processing of data, risk assessment or special procedures, are more readily implemented with appropriate equipment and infrastructure. Border agencies usually demand information and communication technology (ICT) products and infrastructure and scanners to enhance their control functions, and only incidentally in relation to trade facilitation measures. For example, while telephones make communication far easier and office automation can greatly improve performance, neither can be counted as direct costs of trade facilitation. Yet insufficient equipment and infrastructure will inevitably make some facilitation measures more difficult to implement.

Equipment and infrastructure should be viewed as implementation tools to be carefully combined and sequenced with regulatory, institutional or human resource changes. For example, as long as a country has not introduced modern risk management for targeting high-risk consignments and continues to examine unnecessarily large numbers of low-risk consignments, scanners will not do much to help reduce clearance

times or enhance control performance. Likewise, modern equipment and IT systems require a complementary investment in people, as any system can only be as efficient as the people who run it. Furthermore, purchasing implementation tools before elaborating the relevant policies (for instance introducing computer networks before modernising control and clearance procedures) runs the risk of reducing policy design options and making any subsequent changes lengthier and costlier.

Awareness-raising and change-management costs: The efficiency of a number of trade facilitation measures is also linked to capacity or willingness of the other economic actors with whom border agencies interact (such as firms and traders) to go along with new modes of operation. Awareness-raising activities can promote better understanding and the positive involvement of the private sector, and facilitate the introduction and enhance the sustainability of any new measures. Private stakeholders are frequently included in training and capacity building activities alongside customs and other government officials, possibly funded by the government or technical assistance programs. Lastly, the development of a communications strategy directed at both customs staff and other stakeholders, and the establishment of client service standards are important elements of change management.

# What does country experience tell us?

No study can generate hard and fast figures about how much each country should be spending to promote trade facilitation. Countries circumstances differ: trade facilitation and customs reforms have different starting points and some expenses are simply a function of the size of the administration. The approach and level of ambition for pursuing and implementing some measures, such as Single Windows, also varies. And diverse country circumstances mean that the application in practice of the same trade facilitation measures will differ across countries.

Reviews of country experience (initially in 2005<sup>7</sup> and updated in 2012) explored costs and challenges in implementing trade facilitation measures in 24 developing countries.8 The case studies show that trade facilitation measures have introduced new wavs to fulfil the traditional mandates of border agencies, often making them more efficient and effective by rationalising resource use. The reported costs of implementing trade facilitation measures were not high, both as regards resources to introduce the measures, as well as operating expenditures, with the exception of costs related to information and communication technologies (ICT). The costs of introducing trade facilitation measures were primarily related to recruitment and training of specialised staff and for equipment, but the time necessary for satisfactory implementation of the measures constitutes an additional challenge. Reported operating costs were mainly related to salaries. Although aggregate figures of total trade facilitation costs in one country will not be directly transposable to other countries, budgeted or estimated capital expenditure to introduce trade facilitation measures in the reviewed countries ranged between EUR 3.5 and 19 million. Annual operating costs directly or indirectly linked to trade facilitation did not exceed EUR 2.5 million in any of the reviewed countries that reported such expenses. In both cases, the stated figures concern much more than trade facilitation as several reforms are part of a broader customs modernisation agenda that also covers productivity and improved revenue collection.

# Some costly measures bring significant benefits

The costliest trade facilitation measures tend to be those related to the introduction and use of ICT. The single most expensive measure to introduce is generally Single Window mechanisms although, once in place, available evidence suggests that ongoing salary and maintenance expenditures are not necessarily very high. Other trade facilitation measures that rely on ICT include risk management systems and the ability to lodge and process documentation prior to arrival of the consignment. Yet in assessing the cost it is important to remember that the introduction of ICT concerns far more than trade facilitation and some costs, for instance those related in risk management and control selectivity, would have been incurred even in the absence of a trade facilitation agenda. Furthermore, an accurate cost assessment needs to factor in linkages between different elements of trade facilitation that cannot be correctly implemented in isolation, such as separation of release from clearance and risk management.

Overall, authorities in the reviewed countries seemed to devote more resources to trade facilitation implementation in 2012 than was the case in the 2005 case studies. However, the amounts were not particularly large compared to the budget and total staff of their Customs agencies. The costs of introducing and implementing trade facilitation measures also need to be seen in the light of their effectiveness and against the significant gains in terms of trade cost reductions (Part II).

In addition, a cost-benefit evaluation of implementing trade facilitation measures should be set against a specific time frame, as some measures may involve important one-off costs but deliver long-term benefits. Institutional reforms take time to implement, and to translate into visible and measurable results. Customs modernisation in particular will result in cost savings, through the ability of the administration to handle a growing number of trade declarations without need for additional staff and through shorter clearance time but more effective screening of cargoes.

#### Transparency and predictability measures

The most resource-intensive transparency measures seem to concern Internet publication and online enquiry points. The principal challenge of these measures, past the inception stage, which mainly calls for IT equipment and expertise, is to maintain information that is accurate, reliable and updated immediately when changes come into effect. This implies an efficient institutional mechanism for feeding all relevant information: co-ordination by the host agency is useful but can be too resource intensive and ineffective without a timely and proactive supply of information from other relevant agencies. Country experience indicates a disparity between Customs and other border agencies in this regard. Advance ruling mechanisms have become more prevalent over time (73% of the countries covered by the OECD TFIs provide for some type of advance rulings, most often on classification) and do not appear overly expensive to launch.<sup>10</sup>

## Procedural simplification and streamlining

Procedural harmonisation and streamlining includes harmonisation and simplification of documentary requirements; pre-arrival lodgement and processing of data; separation of release from clearance; risk management; post-clearance audits; and authorised economic operators.

Costs of automation are both overestimated and underestimated in terms of trade facilitation needs. They are overestimated because automation is generally part of a much larger customs modernisation effort, beyond trade facilitation; and underestimated because the full cost of measures supported by automation, such as risk management, across all concerned agencies are not necessarily captured.

While equipment purchasing and ICT are central for pre-arrival lodgement and processing of data or risk management, training and skills upgrading are critical for their effective implementation and sustainability. For example, one such project involved, in addition to infrastructure and equipment (which included backup generators and CCTV to monitor operations at border checkpoints), capacity building for Customs to effectively manage and maintain the system and its overall ICT infrastructure and network, including by progressively shifting responsibility for support and maintenance of ASYCUDA from UNCTAD staff to customs staff, gradual introduction of a risk management system and support for the design, development and integration of complementary ICT elements associated with the National Single Window.

Special procedures for Authorised Operators (AOs) rely extensively on the availability and efficient operation of risk assessment and audit techniques. They pose the additional challenge of the delicate balance between trust and impartiality in the relationship between the AO and the administration, particularly acute in countries with very small AO programs.

#### Co-ordination and co-operation between border agencies

As documented in Chapters 3 and 4, co-ordination and co-operation between border agencies and the establishment of Single Windows are currently the most challenging areas for progress in the implementation of trade facilitation reforms. The varying levels of expertise and capacity between border agencies and the reluctance to relinquish controls or abandon previous modes of operation are significant hurdles in the path of reforms. A further challenge is the difficulty of sustaining co-ordinating bodies during their early years of operation. Co-ordination and co-operation with neighbouring countries requires unwavering political will across the border and strong ties and good relations between the parties.

Single Windows are probably the most sophisticated instrument supporting the co-ordination of controls between border agencies, and the single most expensive trade facilitation measure – but also a very significant contributor to reducing trade costs. Beyond the purely financial constraints of purchasing the necessary equipment and software, the main challenges of introducing Single Windows relate to the complex interactions between the multiple entities involved, with each having their own work culture and wishing to retain their *modus operandi*. The task of mapping out each of the processes to be subsumed under the Single Window mechanism can also be complex and time consuming.

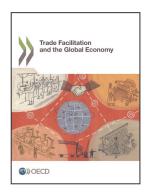
#### Notes

1. The TFA negotiating modalities contained in Annex D of the 2004 WTO General Council Decision stipulated that the negotiations "shall also address the concerns of developing countries related to cost implications of proposed measures".

- 2. For example, in Lao PDR the Second Trade Development Facility Project has included a subcomponent of USD 600 000 for building the capacity of senior and middle managers in all the involved agencies to lead and sustain trade facilitation reforms.
- 3. International organisations invited by virtue of Annex D of the 2004 WTO General Council Decision "to undertake a collaborative effort ... to make technical assistance and capacity building more effective and operational and to ensure better coherence" were since referred to as Annex D organisations. They include the IMF, OECD, UNCTAD, WCO and the World Bank.
- 4. Between September 2007 and December 2010, 94 needs assessments were undertaken, with another round of assessments launched after the conclusion of the negotiations to help countries prepare their special and differential treatment (SDT) notifications and determine their technical assistance needs (as of June 2017, 78 such assessments had been undertaken by the WTO Secretariat).
- 5. These include, for example, the WTO material for National Self-Assessments of Trade Facilitation Needs and Priorities, UNCTAD Technical Notes on Trade Facilitation, the WCO World Customs Centre of Learning, and the extensive list of country case studies on various topics of trade facilitation reform presented by WTO Members.
- 6. The development of a comprehensive human resource development capacity in Lao PDR was assessed at USD 850 000 in the ongoing World Bank Customs and Trade Facilitation Project, covering the establishment of a Customs training centre, endowed with the necessary equipment, the conduct of competency assessments, and the development of a comprehensive training curriculum and training materials, including the translation of WCO e-learning modules into Lao PDR
- 7. "The Cost of Introducing and Implementing Trade Facilitation Measures" in Overcoming Border Bottlenecks, The Costs and Benefits of Trade Facilitation, OECD 2009.
- 8. Argentina, Barbados, Burkina Faso, Cambodia, Chile, Colombia, Costa Rica, the Dominican Republic, Jamaica, Kenya, Lao PDR, Latvia, Malaysia, Mauritius, Mongolia, Morocco, Mozambique, Philippines, Senegal, Sierra Leone, Tanzania, Thailand, Uganda and Zambia.
- 9. Expenditure to establish a Single Window mechanism ranged from EUR 17 million in Mongolia to EUR 3 million in Burkina Faso, with system upgrades costing between EUR 350 000 in Kenya and EUR 960 000 in Costa Rica. However, annual operating expenses ranged from around EUR 33 000 in Mongolia, to EUR 625 000 in Costa Rica. Between 80% and 90% of these amounts were devoted to salaries and the rest to computer equipment maintenance, supplies, insurance and marketing.
- 10. For example, the introduction of an advance rulings mechanism ranged between EUR 20 000 in Sierra Leone and Mongolia and EUR 25 000 in Kenya.

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