Non-Tariff Measures Cost-Effectiveness Toolkit

Handbook for ASEAN

Adapted from UNCTAD's 'Non-Tariff Measures Cost-Effectiveness Toolkit'



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The ASEAN Secretariat Jakarta

The Association of Southeast Asian Nations (ASEAN) was established on 8 August 1967. The Member States are Brunei Darussalam, Cambodia, Indonesia, Lao PDR, Malaysia, Myanmar, Philippines, Singapore, Thailand and Viet Nam. The ASEAN Secretariat is based in Jakarta, Indonesia.

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Executive Summary

As tariffs have fallen over the decades, non-tariff measures (NTMs) have taken a central role in regional trade policy. These are measures other than ordinary customs tariffs which can affect international trade in goods, either by changing quantities traded, or prices, or both (UNCTAD 2019). NTMs are generally divided into "technical" measures and "non-technical measures". Technical measures cover sanitary and phytosanitary (SPS) measures and technical barriers to trade (TBT), which are product-specific requirements and related conformity assessments for public policy objectives such as public health, environmental protection, or national security. Examples of technical measures are packaging requirements, maximum residual limits of chemicals, inspections, and certification. Non-technical measures refer to a wide array of trade-related policies such as quotas, non-automatic import licensing or price control measures. Of these two types, the incidence on technical measures is becoming increasingly prominent. Businesses must comply with numerous procedures and requirements when exporting and importing. Even when not targeting trade related objectives, NTMs can alter the volume, direction, and product composition of international trade. As such, the need to streamline NTMs for facilitating trade and reducing business costs has gained traction in recent years. However, when it comes to discussions surrounding NTMs, there are always two sides to the coin – while NTMs can be costly and trade restrictive, they can be necessary for achieving other social or development goals. Thus, there is a need to strike a careful balance the costs of NTMs and their regulatory benefits.

Acknowledging the importance of addressing NTMs to further enhance trade, ASEAN has introduced various initiatives. NTMs issues are regulated, in principle, in the ASEAN Trade In Goods Agreement (ATIGA) and further emphasized in the ASEAN Economic Community 2025 Trade Facilitation Strategic Action Plan, as well as the Good Regulatory Practice (GRP) Core Principles. Notwithstanding the comprehensive sets of initiatives, progress on the ground is uneven and limited due to various reasons. To accelerate the progress, in 2018 ASEAN endorsed the Guidelines for the Implementation of ASEAN Commitments on Non-Tariff Measures on Goods with a focus on managing future NTMs. However, the NTM Guidelines may not sufficiently address the need to review the barrier effect of the existing NTMs.

To support ASEAN's endeavour, the Economic Research Institute for ASEAN and East Asia, together with UNCTAD, has constructed the first comprehensive NTMs in ASEAN database. The data has been shared with ASEAN member states to serve as a resource for NTMs review. As the next step, ERIA is tasked by the ASEAN Trade Facilitation Joint Consultative Committee, ASEAN's focal point for trade facilitation agenda, to work with ASEAN Secretariat on a follow-up document to address the existing NTMs. As a response, ERIA together with UNCTAD proposed the development of the NTM Cost-Effectiveness Tool Kit for consideration.

The Non-Tariff Measures Cost-Effectiveness Toolkit- Handbook for ASEAN is designed to provide ASEAN policy makers a framework to evaluate the effectiveness of NTMs, including some tools and templates. The toolkit is designed on three pillars – Design, Implementation and Compliance. The Design pillar evaluates how suitable the NTM has been/can be for meeting the stated objectives; Implementation assesses the efficacy of procedures and costs of implementing the NTM; and Compliance measures how burdensome the NTM is on the private sector. The toolkit relies on active engagement with the stakeholders who have to comply with the NTMs and oversee its day-to-day implementation. The goal at all points is to streamline NTMs to achieve public policy objectives at the lowest possible cost.

The toolkit is written for reviewing NTMs applicable to a single intermediate input for a value chain/sector of national economic and political interest but can be extended to several sectors or products. By doing so, the toolkit also entails increasing competitiveness and value addition in the identified sector as well as creation of regional value chains (RVCs). A summary of the underlying objectives of the toolkit, its rationale and procedures are provided below.

What are NTMs?

Non-tariff measures (NTMs) are policy measures, other than ordinary customs tariffs, that can potentially have an economic effect on international trade in goods by changing quantities traded, or prices or both (UNCTAD, 2019). Most NTMs are designed to achieve public policy objectives, such as food safety, consumer protection, or protection of the environment. However, they can be *de facto* distortive, imposing significant costs on firms who must comply with them, thus negatively impacting international trade; consumers in the form of high product price; and the society at large.

Why review NTMs?

NTMs can increase the cost of doing business through increased compliance costs, thus reducing productivity growth. Poorly designed and inefficiently implemented NTMs can create administrative and financial burden for the private sector as well as government agencies. This makes it necessary to review NTMs with the objective of minimizing compliance costs, improving design, and making implementation processes more effective.

What is the rationale of the NTM cost-effectiveness toolkit?

The NTM Cost-Effectiveness Toolkit provides a step-by-step implementation procedure and certain tools that can be used to review NTMs applicable to intermediate inputs within critical value chains. It is meant to enable users to review NTMs in terms of compliance, implementation, and design – the three main pillars of the toolkit. The end goal of the toolkit is to encourage good regulatory practices.

How does the toolkit approach NTM review?

The toolkit follows a **5-step approach** to reviewing NTMs. It begins with **value chain assessment** to identify imported intermediate inputs within a value chain of interest and mapping the applicable NTMs using the UNCTAD Trains Database. The next step is to **identify key stakeholders** i.e., government agencies responsible for designing and enforcing the NTMs under consideration; the regulated firms; as well as other relevant government agencies. This is followed by **engaging with the stakeholders** through surveys, focus group discussions, in-depth interviews and detailed compliance and implementation cost assessment. Interview and survey guidelines are provided to facilitate a comprehensive analysis of NTMs. The discussions with the stakeholders are then **synthesized and analyzed** to identify issues and challenges regarding compliance, design, and implementation. Insights drawn may be substantive or procedural. The toolkit concludes with **generating policy options** to address the identified problems to drive an NTM reform agenda.

What "tools" does the toolkit provide?

To facilitate implementation, the toolkit provides tools to aid stakeholder engagement: a sample survey, in-depth interview guidelines, guidelines for focus group discussions, a detailed cost assessment spreadsheet, potential approaches for analyzing stakeholder input, and ways of generating suitable policy options. It also provides other resources for planning and delivering workshops and hiring the implementing staff.

How long does it take to implement the toolkit?

The toolkit envisages an average implementation period of six to twelve months. This will also depend on the number of products, number of NTMs, and the number of firms/agencies to be interviewed.

What are the expected end results?

The findings from the toolkit should enable users to generate policy options towards implementing well-designed NTMs that meet economic and non-economic policy objectives. The reform itself is beyond the scope of this toolkit, as it will depend upon the country's political decision. However, activities can be designed to accompany and facilitate the process, as an extension of the implementation of the toolkit.

Overall, the design of the toolkit is flexible, and users are free to adapt the implementation based on their needs, available time and budget, and political interests. In a nutshell, the toolkit provides a systematic approach and easy to use tools to review NTMs from multiple angles in a way that can highlight the efficacy and costs of each NTM.

1. Introduction

Non-tariff measures (NTMs) are policy measures, other than ordinary customs tariffs, that can potentially have an economic effect on international trade in goods by changing quantities traded, or prices or both. (MAST, 2008)

While the relative importance of tariffs as an instrument of trade policy has declined over the years, the role of NTMs has become increasingly important. NTMs can cover a broad range of measures including traditional trade policy instruments, such as quotas or price controls or technical regulatory measures such as sanitary and phytosanitary (SPS) measures and technical barriers to trade (TBT). These measures which have become critical determinants of market access conditions may include a license or a permit required prior to importation/exportation; or testing, certification, and packaging requirements for imported or exported goods. The emergence of these measures can be attributed to non-trade, public policy objectives such as demand for high quality products or protection against hazards from genetically modified foods, unhealthy foods, environmentally damaging products and fraudulent pharmaceuticals. In certain cases, however, NTMs can be used as a protectionist tool. Either way, NTMs could increase trade costs, limit access to varieties of imports and hurt domestic producers. This holds true especially if these NTMs are inefficiently designed and enforced.

Evidence shows that NTMs can make foreign sourcing costlier thus reducing productivity growth and making a country uncompetitive in the export market. In the context of international production network, this extra cost is accumulated across borders. As such, NTMs also impede the creation of regional value chains (RVC) which restricts an economy's ability to effectively make use of the region for boosting their competitiveness and producing/exporting higher value products (UNCTAD 2018). In a world where 70% of global trade involves global value chains (GVCs) and the emphasis on RVCs is significant, particularly for the less developed and developing economies, addressing NTMs on intermediate imported inputs deserves much attention - not "as a *concession to trading partners, but as a domestic issue driven by a concern for enhanced competitiveness*" (World Bank, 2012).

The increasing use of NTMs is also observed in ASEAN, one of the most dynamic and integrated regional blocs. Within three years, the number of NTMs in ASEAN has increased by 15 percent, affecting approximately 70 percent of member states' trade value. In sectors with strong value chain participation such as food products, machinery and electrical, around 80 to 90 percent of trade is subject to NTMs (Doan, Rosenow and Buban, 2019). Whilst the increase in NTMs reflects legitimate need to protect human, animals and the environment, the prevalence of NTMs indeed has generated non-trivial trade costs. Shepherd (2020), for example, finds that ASEAN-average effective rate of protection, i.e., the ad valorem equivalent rate taking into account both costs on inputs and final good, has doubled when NTMs are included, compared to the estimate with tariff per se.

Acknowledging the importance of addressing NTMs to further enhance trade, ASEAN has introduced various initiatives. NTMs issues are regulated, in principle, in the ASEAN Trade In Goods Agreement (ATIGA) and further emphasized in the ASEAN Economic Community 2025 Trade Facilitation Strategic Action Plan, as well as the Good Regulatory Practice (GRP) Core Principles. Notwithstanding the comprehensive sets of initiatives, progress on the ground is uneven and limited due to several reasons. This slow progress in addressing NTMs could be attributed to certain extent to several factors, such as the lack of knowledge and expertise of government officials discussing the technical issues inherent in NTMs; the seeming lack of independence and impartiality of officials in prioritizing and resolving NTMs related issues brought to their attention; and even perhaps the current mechanism or approach needs to be enhanced to effectively address barriers effect of NTMs. For instance, there has been certain concerns from the private sector on the slow progress in resolving issues brought to the attention of ASEAN bodies such as the Coordinating Committee for the Implementation of the ATIGA (CCA) on the Matrix of Actual Cases (MAC) containing the NTMs related issues. The lack of technical knowledge and understanding of the issues may have prevented officials from thorough discussion and in most cases resorting to reiterating the arguments given by their respective regulatory agencies. To accelerate the progress, in 2018 ASEAN endorsed the Guidelines for the Implementation of ASEAN Commitments on Non-Tariff Measures on Goods with a focus on managing future NTMs. However, the NTM Guidelines may not sufficiently address the need to review the barrier effect of the existing NTMs.

To support ASEAN's endeavour, the Economic Research Institute for ASEAN and East Asia, together with UNCTAD, has constructed the first comprehensive NTMs in ASEAN database. The data has been shared with ASEAN member states to serve as a resource for NTMs review. As the next step, ERIA is tasked by the ASEAN Trade Facilitation Joint Consultative Committee, ASEAN's focal point for trade facilitation agenda, to work with ASEAN Secretariat on a follow-up document to address the existing NTMs. As a response, ERIA together with UNCTAD proposed the development of the NTM Cost-Effectiveness Tool Kit for consideration.

The NTM Cost-Effectiveness Toolkit- Handbook for ASEAN is designed to aid AMS in reviewing NTMs on *imported intermediate inputs* for their *design, enforcement and compliance*, with a view of promoting domestic value addition by focusing on creation of RVCs. The 'Toolkit' Is a practical approach that enables review of NTMs in terms of design, enforcement, and compliance– its three main pillars. The end goal is to encourage the adoption of good regulatory practices in the interest of simplifying import requirements and procedures, to ultimately boost value addition and export competitiveness.

This handbook provides a step-by-step guide to implementing the toolkit. It discusses the rationale for each step, the approach to implementation and provides reference to several tools which may be used for implementation.

2. Motivation, Rationale and Objective

It can be difficult to determine the overall impact of an NTM – positive or negative, as that would require a counterfactual on what would have happened if the NTM did not exist. Yet, it is possible to assess its effectiveness by understanding how the NTM was designed, is being implemented as well as challenges that private sector faces when complying with them.

A consideration of the following examples will throw light on the problem at hand:

- A national government imposed mandatory fumigation requirements on imported sugar to ensure that it was pest-free. While the objective was legitimate, this requirement was over and above those recommended by Codex Alimentarius, the international standard on food products. Further, the decision was not based on scientific assessment of the alternative procedures such as irradiation or other treatments which may have been more suitable, safer or environmentally friendly.
- An inspector responsible for physically inspecting imports lacks training on handling inspection samples and appropriate inspection methods. This results in long clearance time and the risk of sub-standard quality of cotton entering passing through the border may increase.
- A small-scale importer of fertilizers is unclear about the documentary requirements for import and has to spend considerable time and effort to liaise with the relevant government agencies.

The above are respectively cases where the NTM design is flawed, its implementation process is ineffective, and its compliance imposes cost and time burden on the private sector. An ill-designed and poorly implemented NTM will fail to meet the intended objective, creating a situation wherein costs could easily outweigh its benefits. NTM implementation itself can be an expensive process requiring significant investment in infrastructure, technology or even day to day administration. The costs incurred by government agencies in the NTM design and implementation process are ultimately passed on to the private sector in the form of import charges or certificate/license fees. This can make compliance with NTMs both financially and administratively burdensome for the private sector, increasing the overall cost of doing business, reducing competitiveness, and negatively impacting the ability to participate in global or regional value chains. This holds particularly true for small and medium enterprises (SMEs).

In the face of this and the trade-off between policy objectives and trade effects that NTMs present, it is crucial that the NTMs in place be cost-effective. This toolkit proposes a process of thorough review and assessment with the government agencies and the private sector to gauge the level of NTM effectiveness. The goal is to promote good regulatory practices. The resulting NTM reform or simplification in procedures can help strengthen regional value chains and boost export competitiveness.

More specifically, the key objectives of the toolkit can be broken down as follows:

- To assess the NTM **design** with a view of ascertaining if the NTM is required as well as to streamline the design process in a way that makes NTMs more effective and beneficial to the society at large.
- To assess the NTM **implementation** process with a view of making it more effective and efficient, such that costs on private and public sectors are kept minimal.
- To identify the challenges faced by private sector when ensuring **compliance** with NTMs with a view to assessing main costs and procedural obstacles.

The three main pillars of the NTM review process that the toolkit emphasizes are (i) design and (ii) implementation and (iii) compliance, summarized in Box 1.

Box 1: Key Pillars of NTMs Cost-Effectiveness Toolkit

NTM Design

The benefits of an NTM critically depend on the design process. For an NTM to successfully attain policy objectives relating to health, safety or security, the design process should start with clearly defining the problem to be addressed. Considering policy options, international standards, views of experts and stakeholders is essential to ensure that an NTM achieves its objective and is beneficial for all parts of society. It may be hard to quantify the benefits of an NTM but following good regulatory practices in the process of designing NTMs will go a long way in ensuring that benefits are achieved at the lowest possible economic cost.

NTM Implementation

A well-designed NTM may still fail to meet the desired goals if it is not enforced well. Implementation agencies need to have a clear understanding of what the NTM objectives are and then plan its implementation by allocating the necessary resources – financial, human and technological. An ill planned approach to implementation and lack of proper monitoring of implementation processes can become a source of frustration for businesses. Sometimes, the implementation itself can be an expensive process requiring significant investment in infrastructure, technology or even day to day administration. At all points, the objective must be to ensure that the requirement to comply with an NTM does not become an unnecessary burden on those regulated i.e. the private sector, but also to the enforcing agency.

NTM Compliance

Compliance with an NTM can be demanding on businesses – financially and procedurally. Businesses may be required to buy new equipment, introduce new production processes, hire and train additional staff, or pay a high fee for obtaining a license or permit prior to import. In addition, the administrative costs for making notifications, publishing information and record keeping can become an added source of pressure for the private sector. As such, the need to assess these compliance related challenges becomes critical to improving NTM design and implementation and to ultimately eliminate procedural obstacles and minimize costs.

To better address its objectives, NTM Cost-Effectiveness Toolkit is designed to analyze **NTMs applicable to** *"imported* intermediate inputs" at **6-digit level of the Harmonized System nomenclature (HS6-digit)** that are relevant for a specific value chain of interest as these have important implications for market access, international competitiveness and **regional value chains (RVCs)**.

Note: Users may simultaneously assess the cost-effectiveness of export NTMs applicable to the final, exported HS6 product in question, following the same approach as the toolkit proposes for NTMs applicable to imported intermediate inputs. Often, export NTMs account for a non-trivial fraction of the total number of NTMs in place. The need to comply with these NTMs when exporting the final product can severely impact the cost of doing business and streamlining such NTMs can further boost export competitiveness within a value chain. However, the importers of identified intermediate inputs may or may not be the exporters of the final product. Instead, they may be exporters of other intermediate products within the value chain, all subject to a distinct set of export NTMs. As such, a review of export NTMs applicable to each of the HS6 digit product will widen the scope of the toolkit substantially. Hence, the decision to review export NTMs should be based on a careful consideration of the sectoral context, budget and the overall feasibility.

3. Deployment Framework and Procedure

The toolkit is designed based on insights drawn from the OECD literature on Regulatory Impact Assessment, World Bank literature on NTMs, ITC business surveys as well as other national government programs and academic literature. While the OECD guidelines address regulations more broadly, this toolkit adapts its underlying principles to specifically address regulations affecting trade i.e., NTMs. An overview of all the core dimensions on which the toolkit is built may be accessed in <u>Appendix VII</u> Dimensions of Stakeholder Engagement.

The framework of the toolkit involves the following:

- Identify a value chain in which the country seeks to strengthen competitiveness, select an imported intermediate input within this value chain, and ascertain all import NTMs that the input is subject to;
- Identify relevant stakeholders i.e., the agencies responsible for designing and implementing the NTMs; as well as private sector firms and associations who are required to comply with them;
- Engage with these stakeholders to understand challenges associated with NTM design, implementation, and compliance; based on a 4-tier stakeholder engagement process;
- 4. Synthesize and analyze stakeholder inputs to summarize key findings;
- 5. Generate policy options focused on addressing these findings through enhancing good regulatory practices.

While users may exercise flexibility in the deployment of this toolkit and adapt the main tools can be adapted based on country and sector contexts, the underlying principles on which the toolkit is based remains the same. The timelines for deployment will also depend on the resources at hand, sector and country contexts. Figures 1 and 2 provide an overview of the toolkit framework and a potential time frame for its deployment.



Figure 1: Step wise Approach to Toolkit Deployment and Key Outputs







Main Activity/Month	1	2	3	4	5	6	7	8	9	10	11	12
Identification of a coordinating agency												
Value chain assessment												
Selection of intermediate input(s) of interest												
Validation of NTMs data												
Stakeholder identification												
Administration of tier I preliminary surveys												
Organization of tier II inception workshop												
Administration of tier III in-depth interviews and tier IV detailed cost- assessment												
Synthesis and analysis of findings												
Pre-validation of findings and securing policy-level buy in												
Preparation of final assessment report												
Validation												

Figure 2: Proposed Timeline for Implementation

3.1. Toolkit Step 1 – Intermediate Input Selection and NTM Mapping

Selecting a value chain, an intermediate input(s) input and mapping the applicable NTMs is the starting point of implementation.

The recommended approach for this step is outlined below:

(i) Identify a value chain/sector of interest

Value chain selection must ensure that the NTM review process can ultimately drive competitiveness in a strategic sector. The following options may be used independently or in combination to accomplish this goal:

- The toolkit user may already have in mind a specific value chain for which it would like to review imported intermediate inputs NTMs.
- A desk review involving a quantitative and qualitative assessment of a few potential sectors from an economic and political standpoint.
- Joint consultations with stakeholders including government agencies, business associations and policy makers.

(ii) Identify imported intermediate inputs within the value chain

Perform a value chain analysis to identify the key intermediate inputs that are strategic to the selected value chain, their total import value, and their regional import value. The following methods may be used independently, or in combination:

- Consultations with exporters of the downstream product on the most important intermediate imports for the value chain
- Rigorous secondary research using government websites and documents, academic papers, websites of industry associations, publications of international organizations etc. to assess all intermediate inputs essential for a value chain.
- Consultations with relevant government departments with expertise on the value chain.
- Hiring a sectoral expert to identify the strategic intermediate inputs within a value chain. For example, a textiles engineer may help list out all inputs required for textiles production.

iii. Identify all applicable NTMs for the identified intermediate inputs

Map the applicable NTMs to the inputs identified, using UNCTAD's TRAINS database which provides the list of all NTMs applicable on products at the HS6 digit level. Since NTMs are frequently updated, the identified NTMs must be validated¹ with the help of a national ministry or department in charge of maintaining a database of national regulations, or the agencies in-charge of the implementation of the NTMs.

From all the intermediate inputs identified, the next step is to shortlist the most critical ones, for which the NTMs will be reviewed. To ensure that the benefits of implementing the toolkit can justify the costs, the following three factors may be considered critical when selecting the inputs:

- The overall import value is significant
- The regional import value is significant
- The input is subject to multiple NTMs by multiple agencies

<u>Appendix I</u> provides a detailed step by step *"Procedure for Identifying Imported Intermediate Inputs"*, and <u>Appendix II</u> provides a stepwise approach to *"Using UNCTAD TRAINS Database for Mapping NTMs"*.²

The user of the toolkit may choose to review NTMs associated with a single, or multiple intermediate inputs.

Note: Sometimes, the intermediate input identified in the value chain analysis may be generic in nature i.e., critical for several value chains. In such cases, the total import value cannot be used to determine the input to be selected. For instance, fertilizers may be

¹ The intention of validation is to ensure the information on the NTM is current for purposes of implementing the tool kit.

² This is only a suggested approach to assessing value chains to identify the key intermediate inputs. It is optional and users may adopt suitable alternate approaches where required.

imported for use in cocoa or cotton production. In such cases, consultations with either the private sector or relevant government departments such as the ministry of trade or agriculture, or the national cocoa or cotton board to estimate the value of the intermediate input imported solely for use in the value chain under consideration, are recommended.

3.2. Toolkit Step 2 - Stakeholder Identification

Once the intermediate input(s) of interest has (have) been identified, the next step is to map out a list of key stakeholders. A careful mapping of stakeholders is the foundation for the implementation of the toolkit. Stakeholder identification serves three objectives:

- Obtaining the necessary political support to drive the implementation of the toolkit
- Ensuring that views and opinions of all relevant parties are accounted for, and the findings and insights are robust such that no important information is missed out.
- Bringing on board all key influencers who can and will positively push for reforms based on proposed policy options.

Only a strong political commitment can ensure a result-oriented implementation that leads to the adoption of the policy options generated. Key stakeholders in implementation of the toolkit are indicated in Figure 3 and a more detailed overview is provided below.



Figure 3: Key Stakeholders

i. Coordinating agency

An agency that has the political mandate and is willing to drive the NTM review agenda will be ideal for coordinating the toolkit implementation. This agency will provide support at different stages of the implementation process, such as selection of value chain and most relevant intermediate input(s). The coordinating agency will also facilitate exchange with and bring together the stakeholders into full participation in the process. This agency may also have a role in the implementation of policy recommendations.

For a coordinating agency, the following criteria may be relevant, but is not mandatory. What is of utmost importance is for the agency to be aligned with the goals of the toolkit. Indeed, a Ministry responsible for the regulation of the sector under analysis may also implement it with the objective of streamlining the NTMs it implements.

- a. Impartiality, such that the does not have a direct interest in the product under review. For instance, in New Zealand, the Treasury department is responsible for reviewing regulations.
- **b.** Clear mandate and political support, such that it is able to conciliate between relevant public authorities and proposing procedures for conducting the review or soliciting participation of the relevant public authorities and firms.
- **c. Technical competence**, such that it can provide a focal point for the purpose of implementation, i.e. someone with a knowledge and understanding of NTMs and international trade in general.

ii. Focal points in NTM implementation agencies

Government agencies responsible for design and implementation of the NTMs under review are critical stakeholders. For example, for SPS and TBT measures, these would be the plant or animal health inspection services or quarantine departments, biosafety authorities or national standards bureau. Within each agency, it is necessary to identify a focal person who has knowledge about the various facets of NTM design and implementation. At the same time, it is essential to involve those who directly oversee the day-to-day implementation of the NTMs and have a direct contact with the private sector. Outreach by the coordinating agency will be useful in facilitating exchanges with such agencies and the focal points.

iii. NTM focal points in regulated firms

Importers of the identified intermediate inputs who use the inputs for further value addition³ are the other most critical stakeholders in this process.⁴ Again, it will be necessary to have a focal point, who has a good understanding of the NTM procedures and costs, and its impact on their business operations. Here as well, the coordinating agency in the public sector must reach out to the private sector and get them on board the toolkit.

Where the number of importers of the selected intermediate inputs is large, samples may be drawn. The sample size may be determined keeping in mind the budget, time constraints, and the target degree of precision needed. Several online tools are available for calculating an ideal sample size based on population, confidence interval and margin of error. However, a statistically significant sample size, while ideal is not necessary for implementation of the toolkit. Valuable insights can be drawn without having a rigid sample size. Where samples need to be drawn from a population comprising of a diverse set of firms, they must be representative to the extent possible. The sampling process should ensure diversity of firms. Different firms may face different challenges. Small and medium enterprises, for instance, may find it harder to allocate adequate resources to regulatory compliance. At the same time, cost of compliance may be different for firms located near ports vis-à-vis those farther away. As such, sampling process should account for these differences. Based on a study of several sampling techniques, Box 2 provides some guidance on what may or may not be appropriate in a given situation.

³ Importers include not only manufacturers but also traders. Ideally, both should be interviewed as they both have to comply with certain NTMs, albeit the set of NTMs could be extended for manufacturers.

⁴ Where desirable and feasible, the users of the toolkit may also choose to engage with domestic producers of the HS6 intermediate input under consideration. This will help ascertain how domestic regulations and standards affect such producers. This information may then be used for drawing comparisons between how differently such measures affect importers and domestic producers. Another layer of analysis can be added to include those firms who purchase the intermediate inputs indirectly. Understanding their issues, purely from a price perspective can indicate how NTMs can indirectly affect even the firms who do not have to comply with them.

Box 2: Recommendations on Sampling Techniques

Quota sampling: This method would require dividing the entire population of firms into sub-groups based on location, size, scale of operations, total value of imports, etc. and then identifying the proportion of these sub-groups in the population. The same proportions are then applied in the sampling process. This non-random method allows for adequate representation in sample selection.

Cluster sampling: Similar to quota sampling, this technique requires dividing the entire population of firms into clusters based on a key criteria such as location, size and scale of operations, total value of imports, etc. and then randomly selecting an equal number of firms from each of this sub-group. This method is random, while allowing for some degree of representativeness.

Simple random sampling: This sampling method involves selecting firms at random. It allows every single firm an equal probability of being chosen to be a part of the sample. While it is time and resource efficient, this method will not allow for adequate representativeness in sample selection and can lead to skewed results. However, random sampling may be used if the population of firms is not diverse.

Convenience sampling: In this method, firms are selected based on how easy it is to get in touch with the respondents. Again, this method may not allow for adequate representation especially when the population of firms is diverse. However, the technique may be used when there are serious time and resource constraints.

iv. Other government agencies:

Other government agencies like the Ministry of Economic Planning or the Ministry of Law/Legal Affairs, who have no direct stake in the design or implementation of the NTMs in question but have an interest in the intermediate input(s) or in trade and NTMs in general, can certainly add value to its implementation. This will depend on the sectoral context. For instance, a government department overseeing national exports could help encourage the toolkit adoption from an economic standpoint. A government division in charge of research and policy for the chosen sector or intermediate inputs can help validate intermediate inputs identified. Further, since the toolkits will conclude a set of policy options based on findings, it may also be a good idea to involve policy makers who can provide inputs on the findings prior to final validation. Their involvement may help push for a high-level policy reform. and buy-in from them can add value to the final validation.

3.3. Toolkit Step 3 - Stakeholder Engagement

The process of engagement with all stakeholders serves the following objectives:

- To align expectations and explore the feasibility and desirability of the toolkit and how it can be adapted to suit their needs and requirements
- To obtain insights and data into the various dimensions of NTM design, implementation, and compliance.

Figure 4: Dimensions of stakeholder engagement

Design

Objectives Design and review process

Implementation

Enforcement process and time Enforcement cost Enforcement strategy Transparency Stakeholder coordination Resource allocation Facilitating smooth compliance Effectiveness

Compliance

Administrative formalities Time constraints Transparency Quality of enforcement staff Agency support Compliance costs Compliance benefits The toolkit recommends a 4-tier process to stakeholder engagement involving both one on one exchanges and focus group discussions. A brief description of all these tiers is explained in Box 3. Figure 5 indicates a stepwise approach to stakeholder engagement. **Further, a more detailed overview of each of these tiers, in terms of the rationale, supporting tool, and approach is also provided.**

<u>Appendix VII</u> "Dimensions of Stakeholder Engagement" comprises some broad points of focus during the stakeholder engagement process. They form the basis of all tiers of stakeholder engagement. The stakeholder engagement process seeks to study these dimensions.

Box 3: 4-Tier Approach to Stakeholder Engagement Process

Tier I Preliminary Survey - The preliminary survey (Appendix III) is a short questionnaire (10 minutes) to get a first level, big picture overview of NTM cost effectiveness from the implementation agencies as well as the regulated firms. The goal is two-fold – (i) to assess the extent to which a full-fledged NTM review is required, and (ii) to set a foundation for further engagement on assessing NTM cost-effectiveness by providing a preliminary insight into what is working and what is causing challenges.

Tier II Inception Workshop – While all other tiers involve one on one engagement with each agency or firm, this is the one that brings all stakeholders together. The inception workshop will explain the project goals, needs and methodology to the stakeholders. This will be a platform to start a dialogue where agencies and firms can discuss issues or concerns with each other. Moderated by someone with experience on procedural and technical aspects of NTMs, the inception workshop will also provide a bird's eye view of loopholes in NTM design and implementation and help adapt the next step in the stakeholder engagement process, i.e. in-depth interviews. Guiding questions for inception workshop are provided in <u>Appendix IV</u>.

Tier III In-depth Interviews - The in-depth one-on-one interviews (Appendix V) are the most critical component of the 4-tiered approach comprising of detailed, open-ended questions. The goal is to get a thorough insight into the three pillars of the toolkit, through semi-structured interviews. The synthesis and analysis of these findings would complement insights from previous two tiers and help generate meaningful policy options. While the interviews will seek to establish if the NTMs impose a high cost burden on the firms or government agencies, quantification is not necessary at this stage.

Tier IV Detailed Cost Assessment - Where the firms and government agencies are able to quantify costs of compliance and implementation, the interviewer will proceed to fill the detailed cost assessment spreadsheet (<u>Appendix VI</u>). This will allow for quantification strengthen the analysis and policy recommendations. Execution of this step is not mandatory and will depend on the country and sector context as well as the nature and size of the firms being interviewed. However, it is critical to note that quantifying costs will help bolster an argument in favor of, or against any given policy recommendation, adding more dimension to the issues identified.

Figure 5: Implementing 4-Tier Stakeholder Engagement



Tier 1 Preliminary Surveys

For the **firm level survey**, the main objectives are to ascertain whether and to what extent do the NTMs impose a cost burden, the level of satisfaction with the NTM implementation, the level of understanding of NTM objectives by the firms as well as NTM benefits for firms.

For **agency level surveys**, the surveys seek to ascertain the level of clarity on measure objectives among the implementation agency, whether the NTM and its impact is reviewed regularly, perceived benefits of the NTM and the costs of NTM implementation.

<u>Appendix III</u> "*Stakeholder Engagement Tier I – Preliminary Survey*" provides sample surveys for firms as well as agencies.

The surveys must be administered with the person in charge of day-to-day NTM compliance (in case of firms) or implementation (in case of agencies).

Tier II Inception workshop

The workshop seeks to align expectations and explore the feasibility and desirability of the toolkit and to understand stakeholders' assessment of the NTMs under consideration. Most importantly, it will be a platform to start a dialogue on the need to improve NTM design and implementation and to simplify compliance, by bringing together all the key stakeholders identified so far.

In specific, the inception workshop should serve to fulfil 5 broad objectives.

- i. **To provide a general overview of NTMs and their relevance,** while discussing the costs and benefits associated with them, as well as their impact on export competitiveness.
- ii. To present overall project objectives, methodology and workplan with the aim of seeking stakeholder buy in. The workshop is designed to discover a point of consensus or shared motivation to ensure investment in a meaningful outcome. It provides a platform to secure political support and commitment of all present stakeholders.
- iii. To discuss findings of the tier 1 preliminary surveys and the objectives of the tier 3 in depth interviews.
- iv. To start a dialogue on the NTMs under consideration through an interactive session that provides government agencies an opportunity to discuss the NTM design and implementation processes, and the firms to talk about compliance related challenges, thereby entering a constructive discussion.
- v. **To facilitate further development and adaptation of the toolkit** by greater knowledge sharing at the workshop and garnering stakeholder inputs and suggestions.

<u>Appendix IV</u> *"Tier II - Inception Workshop Guiding Questions"* provides a list of questions to facilitate the interactive session. The interactive session should take the form of focus group discussions, led by a skilled moderator, and not exceed 60-90 minutes to make it productive without losing out the opportunity to fully explore the topic. Someone from a neutral agency is ideal to assume this role. The moderator should allow the discussion to take the turn that the stakeholders desire, making sure that the views of all agencies and firms are given equal weight. The moderator and allow for response patterns to develop, even though a good starting point would be the insights drawn from the tier I preliminary surveys.

Tier III In-Depth Interviews

As a core component of the NTM cost effectiveness toolkit, the in-depth interviews are designed to serve the following objectives -

- i. The **firm-level interviews** aim to get an insight into NTM compliance related challenges covering compliance costs and procedural obstacles.
- ii. The agency level interviews seek to evaluate NTM design and implementation. Evaluating the design process helps establish whether government agencies can provide sufficient evidence that a given NTM is in fact the best way of achieving the desired policy objectives and that the design process has accounted for the same. Evaluating implementation process helps identify the operational barriers to the NTM achieving its objectives and correcting them to facilitate smooth compliance.

<u>Appendix V</u> "Stakeholder Engagement Tier III – In-Depth Interview Guidelines (Firm and Agency Level)" provides guidelines for the interview.

The interviews are designed to be semi-structured i.e., they use an interview protocol to help guide the interviewer to obtain all necessary information during the interview process. The structure enables the interviewer to obtain information systematically while allowing an opportunity to probe the participant for additional details. As such, it offers a great deal of flexibility for the interviewer. While the interviewer may choose to record the interviews, making notes is highly recommended as this will help capture most important points first-hand and simplify the analysis. The notes can be transcribed to make them more systematic.

These interviews are meant to be rigorous and can thus be time consuming – anticipate about 1-2 hours for an interview. Broadly speaking, the idea should be to build a story surrounding the three pillars of the toolkit. It is important to highlight that the responses to interviews will remain anonymous.

Note 1: Often, focus group discussions may be more feasible given the intensity and extent of issues to be discussed. Toolkit users then use the provided interview guidelines to conduct focus group discussions. However, one-on-one interviews have an added advantage of allowing respondents to express themselves more freely and talk about issues in detail, and at ease. If desirable, the users of the toolkit may choose one over the other based on sample size, available resources and time, sectoral and national contexts, and policy interests. Where the user chooses both, the focus group discussions and oneon-one interviews should be implemented in a manner that they complement each other. In such cases, the focus group discussions should be more general and precede the interviews. The insights drawn should then be used to guide the tone of the interviews, focusing on the most pressing issues.

Note 2: The interviewer should be able to map the issues raised to the list of NTMs at hand by probing further. This also implies that the interviewer must study all NTMs in detail prior to the interview and keep them in mind during the interview process. For instance, if the respondent states that the NTMs are very costly, then the interviewer must probe into which specific aspect is most costly – for instance, the fee for a phytosanitary certificate, or the documentary procedures for getting shipments cleared. At the same time, firms may be able to provide the names of the certificate that take most time to be issued or the agency that is most demanding in terms of checks and inspections. The interviewer must be able to immediately map the issue raised to the relevant NTM. The interview guidelines account for this.

Tier IV Detailed Cost Assessment

The next step after the detailed interviews is to proceed with quantifying the information received. The Tier IV Detailed Cost Assessment is designed to aid this. Quantification of costs is an important dimension of understanding the problems faced by firms and agencies. Such an assessment will complement and supplement the findings of the interviews with quantitative data helping bolster the argument in favor of proposed policy options. It will strengthen the overall quality of policy options and provide the support needed to obtain buy in for effecting any action.

<u>Appendix VI</u> "Stakeholder Engagement Tier IV Detailed Cost Assessment" provides a template for the NTM compliance (Tab 1) and implementation costs (Tab II) spreadsheet. This spreadsheet focuses on the "compliance" and "implementation" pillar of the toolkit and is intended to serve the following objectives -

- The firm level spreadsheet focuses on identifying 3 categories of compliance costs
 (i) fee/charges payable to agencies, (ii) one-time/fixed costs and (iii) recurring costs of compliance, and its various sub-components.
- ii. The **agency level** spreadsheet assesses two categories of implementation costs (i) one-time/fixed costs, and (ii) recurring costs.

The implementation of this tier is facilitated by an easy to fill spreadsheet. It is designed:

- I. to allow for flexibility to either provide the aggregate total costs incurred where available or provide other information that can help calculate it, for instance, wage rate of employee performing a compliance related task and the number of hours worked. Further, the respondent also has the flexibility to provide wage rate in hourly, weekly, or monthly format. The wage rate itself may be provided based on recalling the designation of the employee performing the task. This helps compute the total costs incurred in complying with the NTMs. The spreadsheet is best filled by an accountant or finance department personnel.
- II. to make it convenient to fill. It does not require respondents to dissect specific cost categories associated with each NTMs. It rather gives an opportunity to provide cost data in broad terms which can later be used to map to the individual NTMs.

As in case of in-depth interviews, the interviewer must be able to map the cost figures to the relevant NTM. If it is not possible to provide precise monetary value for the cost, an approximate order of magnitude could also be useful.

3.4. Toolkit Step 4 – Stakeholder Input Analysis

Once relevant information and insights from the surveys, inception workshop and interviews are obtained and data is collected, the next step is to synthesize and analyze it. The analysis should allow for identification of challenges with respect to the 3 key pillars of the NTMs being reviewed. Accurate identification of problems is essential to generating suitable policy options.

<u>Appendix VII</u> "Approach to Stakeholder Input Analysis" provides a checklist matrix based on the interview, as well as some examples of coding.

This section provides some potential options for analyzing the information and data collected across the 4 tiers of the stakeholder engagement process.

A. Analysis of Preliminary Surveys

The analysis of the preliminary survey data may be done in the following manner.

- i. For **firm level surveys**, descriptive statistics could be prepared. The use of survey tools can simplify this process by enabling the user to extract a summary of the data and generate graphs showing cross tabulations, frequency, mean, median or variance. This helps understand data in a more systematic and a meaningful way and can help understand patterns.
- ii. For **agency-level surveys**, the process may be simpler. Since different agencies surveyed may be responsible for a different set of NTMs, the responses to each survey will have to be viewed independently. As such, descriptive statistics may not be necessary. Responses to each survey will thus be viewed as a means of drawing preliminary insights and adapting the interviews accordingly. Where a given NTM is implemented by more than one agency, the analysis must also cover the level of coordination among them.

B. Analysis of inputs from Inception Workshop

When transcribed, the discussions from the inception workshop may be summarized and analyzed with the following in mind

- How group members collaborate on some issue, how they achieve consensus (or fail to), and how they construct shared meanings
- The time spent on discussing each issue. This provides clues to how much the participants care about an issue
- The intensity of expression
- Issues that may have higher impact on the economy

Based on this, a classification or a code for main topics and issues raised should be developed.

C. Analysis of in-depth interviews

Analysis of the in-depth interviews looks to dissect the 3 pillars of the toolkit. It can be done based on the following 4 steps in the order they are mentioned. However, this is only an example approach. The inputs of the stakeholders may be analyzed in several different ways.

i. Checklist Matrix

Based on information and insights received from the interviews, the interviewer may start organizing the information using a simple checklist matrix.

<u>Appendix VIII</u> provides a *"checklist matrix"* that can be used as a starting point for scoring each interview. It comprises simple yes-no answer type questions that can help systematically organize insights and information from the interviews. Scores for each interview can then be compiled to understand the bigger picture.

ii. Grouping of Responses and Descriptive Analysis

Once information is more systematically organized using the checklist matrix, the next step may be to identify common themes running across the responses. This would involve selecting issues most commonly raised such as – what the most burdensome border procedure is as highlighted by the firms; which documentary procedures are indicated as being most cumbersome by the majority of the firms; etc. The most commonly highlighted issues and concerns can then be listed alongside the statistics. Thereafter, a descriptive analysis may be provided for each listed issue to highlight the specific details of the information received directly from the firms.

Appendix VIII provides an example of this.

To systematize the data, nuance the findings and organize thoughts, mind-maps may be drawn using software like MindView and Mindmeister.

iii. NTMs Mapping

Once the coding and descriptive analysis is prepared and issues and challenges are identified, they must be mapped to the corresponding NTMs. While the mapping is usually very clear in the agency-level interviews (design and implementation pillars), information from company-level interviews (compliance pillar) needs to be disentangled to assess the challenges of each NTM independently. The descriptive analysis produced in the "Data Coding" step will facilitate this. Further, the interview guidelines (<u>Appendix V</u>) are designed in a way to encourage the respondents to point out the specific agency/requirement or procedure where the issue is most pronounced, making it easy to map NTMs.

For analyzing the agency level interviews, no aggregation or descriptive analysis may be required because each agency has a separate mandate and designs/implements different NTMs. As such, the responses can be analyzed as based on a checklist matrix for each agency and preparing a descriptive analysis.

3.5. Toolkit Step 5 - Policy Options

This step allows for the generation of policy options based on the key findings from stakeholder engagement and input analysis. These should aim at encouraging good regulatory practices in NTM design, implementation, and compliance. Figure 6 presents a menu of potential policy options addressing NTMs. While these can provide a direction towards generating policy options, the overall goal of tailoring these options to specific issues raised, targeting individual NTMs, should be the key.





Policy options can be generated using the following approaches:

i. International best practices or international standards

The use of international comparisons and international case studies can help scan the horizons for interesting approaches to a problem, provide valuable guidance on practical scenarios and whether something has worked or not. Awareness of current practices and developments in other countries can help incorporate comparative information and evidence. The OECD and the World Bank have several such case studies on good regulatory practices in developing and developed countries. Another approach could be to refer to national government websites. It is also necessary here to view international

standards by the International Plant Protection Organization (IPPC), the World Organization for Animal Health (OIE), the Codex Alimentarius or the International Standards Organization (ISO).

ii. Incorporating regional perspectives

Incorporating regional perspectives may provide insights into what could be the suitable option to address the problem at hand. For instance, if the issue of lack of cooperation between cross border agencies comes to light, then a potential idea would be to meet with regional agencies and get their perspective on this. Likewise, regional harmonization of standards and regulations is always a good strategy to simplify conformity assessment processes for regionally traded goods. ASEAN has already established forums or arrangements that could be useful, e.g. ACCSQ.

iii. Consultations with relevant experts

Generating policy options must also involve cultivating networks of contacts at a senior policy level, nationally, and in relevant international organizations and the academic research community, as well as local universities and private sector associations This provides a more technical perspective on the problem at hand. Environmental experts, experts in food safety and plant protection, etc. in the academic community as well as in international organizations can be reached out to. Likewise, senior policy makers in agricultural or trade ministries may be engaged with.

iv. Review of existing research

A study of existing research on the common themes generated during stakeholder engagement can also help generate some policy options. Trainings and research conducted by international organizations in other countries, academic research, national governments or NGOs can be a good starting point to generating policy options. For instance, UNCTAD offers documentation on trade facilitation and lowering cost in NTMs through regional integration, the World Economic Forum provides guidance on simplifying border procedures, and the OECD literature provides literature on designing effective regulations.

4. Concluding the Implementation

Once the analysis is complete and potential policy options generated, a report of findings and proposed options must be shared with all stakeholders with the following key objectives in mind -

- i. To conduct a second-round of discussions Follow up on previous respondents to discuss the main findings to ensure that nothing is mis-reported. It also provides an opportunity to clarify/obtain additional information. This step will cover up nuances in understanding and help triangulate results better.
- ii. **To reach out to new or previously missed stakeholders** If any stakeholders were previously missed or unavailable, this would be a good time to get in touch with them and incorporate additional information and insights to complement the findings.
- iii. To secure senior policy level buy-in Discuss findings and policy options with policy makers at a senior level to strengthen policy proposals and plan an implementation strategy in terms of what can and cannot be done, and what the specific next steps should be. This will pave the way for the next phase where the recommendations from the toolkit are put into implementation.

Once the report is final, a validation workshop whereby all stakeholders come together to finally validate the report, as well as brainstorm and agree on the way ahead. Potential international partner organizations who could support implementing the policy options may also be invited.

The cost-effectiveness toolkit is an effort to review NTMs for their design, implementation and compliance and to provide a platform for the various stakeholders to express and share their views and opinions on them. It is an exercise that seeks to highlight the relevance of good regulatory practices to facilitate trade, boost competitiveness and encourage regional integration. The implementation of the toolkit will bring as an output, detailed policy recommendations that are based on stakeholder input analysis. The objective of putting forth these recommendations is to encourage reform associated with NTM design, implementation or compliance. The reform process itself is not included in the toolkit, as it will depend on the country's political decision. However, this can be considered an extension of the implementing project and ad-hoc activities can be designed to accompany and facilitate the process.

References

- Cadot, Olivier, Mariem Malouche, and Juan Sebastian Saez (2012). *"Streamlining Non-Tariff Measures: A Toolkit for Policy Makers"*, Washington, D.C.: World Bank Group.
- Cadot, Olivier, Michael J. Ferrantino, Julien Gourdon, and José-Daniel Reyes (2018). *"Reforming Non-Tariff Measures: From Evidence to Policy Advice"*, Washington, D.C.: World Bank Group.
- Cadot, Olivier; Malouche, Mariem (2012). "Non-Tariff Measures: A Fresh Look at Trade Policy's New Frontier (English)". Washington, D.C.: World Bank Group.
- Deighton-Smith, Rex, Angelo Erbacci, and Céline Kauffmann (2016) "Promoting Inclusive Growth through Better Regulation: The Role of Regulatory Impact Assessment". OECD Publications.
- George Mason University (2014). *"Regulatory Cost Calculator"*. Mercatus Center Research Paper Series.
- Government of Australia (2014). *"Regulatory Burden Measurement Framework Guidance Note"*. Office of Best Practice Regulation, Department of the Prime Minister and Cabinet.
- Government of Canada (2014). *"Counting Administrative Burden Regulatory Requirements"*. Secretariat, Treasury Board of Canada.
- International Trade Center. "ITC Series on NTMs | NTM BUSINESS SURVEYS."
- OECD (2014). "OECD Best Practices Principles for Regulatory Policy, the Governance of Regulators". OECD Publishing, Paris.
- OECD (2014). *"OECD Regulatory Compliance Cost Assessment Guidance"*. OECD Publishing, Paris.
- OECD (2015). "Regulatory Policy in Perspective". OECD Publishing, Paris.
- OECD (2018). "OECD Regulatory Enforcement and Inspections Toolkit". OECD Publishing, Paris.
- OECD (n.d). OECD Trade Topics. "Tariffs are the tip of the iceberg: How behind the border issues impact trade".
- UNCTAD (2018). *"Identifying Regional Value Chains in Leather and Leather Products in Africa"*. United Nations, New York and Geneva.
- UNCTAD, The World Bank Group (2018) "The Unseen Impact of Non-Tariff Measures", United Nations, New York and Geneva.
- UNCTAD (2019). "International Classification of Non-Tariff Measures 2019 version", United Nations, New York and Geneva.
- World Bank (2019). "Trading across Borders Good Practices Doing Business" Washington, D.C.: World Bank Group.
- World Bank (n.d.). "Global Indicators of Regulatory Governance", Washington, D.C.: World Bank Group.
- WTO (2017) "Legal Texts Agreement on Trade Facilitation".

Appendices

Appendix I

Procedure for Identifying Imported Intermediate Inputs

This appendix summarizes the procedure to identify intermediate imports of strategic importance for a country, as defined at the harmonized system at 6 digits (HS6), to be used to measure the cost-effectiveness of applicable non-tariff measures. To provide context, we refer to a study done in Ghana where possible. It is to be noted that this is only a suggested procedure. Where the government already has a value chain in mind, step 1 and 2 may be skipped. Likewise, where the government already has an intermediate input in mind, step 1 - 5 may be skipped.

Step 1: Identify major HS6 exports products with a domestic value chain

Our goal is to identify 3-4 value chains which are most relevant for the country from an export perspective. To start with, we use UN COMTRADE export data at the HS6 level to identify the major export products for the country concerned. To this end, we rank all HS6 export products based on their export value, from highest to lowest. We then focus on all high value HS6 exports with the aim of zeroing in on a value chain.

For an example, if we spot HS6 Products *610413* Women's or girls' suits, ensembles, jackets, blazers, dresses, skirts, divided skirts, trousers, bib and brace overalls, breeches and shorts (other than swimwear), knitted or crocheted – made of synthetic fibers; 610910 *T-shirts, singlets and other vests, knitted or crocheted, of cotton; 611011 Jerseys, pullovers, cardigans, waistcoats and similar articles, knitted or crocheted of wool; 611120 Babies' garments and clothing accessories, knitted or crocheted; amongst the top most exported goods, then the textiles and apparel value chain would likely be an important value chain.*

The HS6 products could be raw materials, intermediate inputs or final consumer goods. Where the high export value product is a raw material, one may have to ascertain whether a high value-added product from the same value chain also belongs to the country's export basket. For an example, figure 1 shows the top 12 exported HS6 products for Ghana between 2014-2016. HS6 product *180100 – Cocoa Beans* is the product with the highest export value that is likely to form a value chain with even high value-added HS6 products i.e. *180310, 180400* and *180500* belonging to Ghana's export basket. This is relevant since promoting value addition is an important element of toolkit deployment. The <u>World Integrated Trade Solution (WITS)</u> provides a classification of product groups at the HS6 digit level based on "stages of processing".
HS6 Product Code	HS6 Product Name	Export Value (USD Million)	HS2 Product Classification	HS4 Product Classification
710812	Gold; Other unwrought forms	5,713	Natural or cultured pearls, precious or semi-precious stones, precious metals, metals clad with precious metal and articles thereof; imitation jewellery; coin.	Gold
710813	Gold; Other semi- manufactured forms	3,716	Natural or cultured pearls, precious or semi-precious stones, precious metals, metals clad with precious metal and articles thereof; imitation jewellery; coin.	Gold
180100	Cocoa beans; whole or broken, raw or roasted	2,227	Cocoa and cocoa preparations.	Cocoa beans
270900	Oils; Petroleum oils and oils obtained from bituminous minerals, crude	1,22	Mineral fuels, mineral oils and products of their distillation; bituminous substances; mineral waxes.	Petroleum oils
080131	Nuts, edible; cashew nuts, in shell, fresh or dried	590	Edible fruit and nuts; peel of citrus fruit or melons.	Coconuts
180310	Cocoa; paste, not defatted	371	Cocoa and cocoa preparations.	Cocao paste
180400	Cocoa; butter, fat and oil	211	Cocoa and cocoa preparations.	Cocao butter
160414	Fish preparations; tunas , skipjack and bonito (Sarda spp.), prepared or preserved, whole or in pieces (but not minced)	165	Preparations of meat, of fish or of crustaceans, molluscs or other aquatic invertebrates.	Prepared
260200	Manganese ores and concentrates, including ferruginous manganese ores and concentrates with a manganese content of 20 % or more, calculated on the dry weight	150	Ores, slag and ash.	Manganese ores
440399	Wood; in the rough, whether or not stripped of bark or sapwood, or roughly squared, untreated, n.e.s. in heading no. 4403	884	Wood and articles of wood; wood charcoal.	Wood in the rough
760110	Aluminium; unwrought (not alloyed)	849	Aluminium and articles thereof.	Unwrought aluminium
180500	Cocoa powder; not containing added sugar or other sweetening matter	803	Cocoa and cocoa preparations.	Cocoa powder

Figure 1: Ghanaian Exports, average between 2014-2016

Note that we did not select HS6 product 710812 – *Gold* or *80131* – *Coconuts* since our desk research indicated that neither undergoes extensive processing in Ghana.

Step 2: Account for National and International Industry Factors

To generate domestic buy-in in the country concerned, we evaluate the identified value chains against a series of other factors – in addition to its export importance. We consider the following factors for each value chain:

Nationally:

- (i) Share in total exports
- (ii) Key export destination markets
- (iii) Contribution to GDP
- (iv) Contribution to employment (with a gender perspective)
- (v) Contribution to export earnings
- (vi) Production trends
- (vii) Value chain growth rate
- (viii) Value chain policy initiatives
- (ix) Other factors, if relevant

Internationally:

- (i) The country's share in global exports
- (ii) Past and projected global growth rates of value chain
- (iii) Largest global exporters
- (iv) Basis of competition: price-based, quantity-based, product differentiation etc. (qualitative information)

Step 3: Identify key value chains stages for the country

Once we determine the most important value chains in a country, we identify the stages in each value chain. This will provide us an idea of all the steps required to convert the raw material into the processed final export product. A useful source to this end is the value chain analysis done by the international organizations. For instance, Food and Agriculture Organization (FAO) and the World Bank have published various countryspecific value chains. Another useful source is the Duke University – Global Value Chains Centre which conducts industry centric research on global value chains. Next, we identify the stages of the value chain in which the concerned country has capabilities. Together, both information will help us identify key intermediate imports for each value chain. A part of this was already done in Step (1) when before selecting a product, we checked if a value chain is important enough for the country. However, while in the Step (1), our attempt was to clean data based on the product HS codes, in this step, we define value chains stages and allocate the chosen products to various stages in a value chain.

Step 4: Identify intermediate imports at HS6 used in the selected value chains

Next, we analyze each value chain in terms of the following -

(i) Intermediate inputs used: We prepare a list of all intermediate inputs that are strategic to each identified value chain. To this end, we draw from desk research, referring to government websites and documents, academic papers, websites of industry associations, publications of international organizations etc. While there is no such repository of value chain analysis, organizations like the World Bank and FAO often analyze relevant value chains for many countries which can be useful for the purpose of identifying intermediate inputs. Again, the studies identified in Step (3) are useful examples. For instance, cocoa production requires fertilizers,

processing of fish requires a specific kind of machinery and sawing of wood requires specific tools. Attribution is a key factor to bear in mind when evaluating the importance of a particular input. This entails assessing the proportion of the identified intermediate input imported for use in the value chain under consideration, as a given input may be used in several value chains.

(ii) Key stakeholders: We then identify all the stakeholders involved in each value chain: farmers, associations of traders, businesses, involved government agencies etc. This will require a careful study of government websites and documents, academic papers, websites of industry associations, publications of international organizations etc. The rationale for identifying the key stakeholders is as follows - (i) to validate our research and analysis of the value chain with them and (ii) to involve them at the various stages of the project so as to enable increased awareness and understanding of NTMs among them and help achieve their cooperation in fleshing out the way forward in addressing the NTMs.

Step 5: Identify key imported inputs at HS6 level

We see if the country imports any of the inputs identified in Step (4) using UN COMTRADE import value data at HS6 level and identify the import value and share for each of these inputs. We make sure to bear in mind the following -

- (i) Import share: If the imported HS6 product accounts only for a very low share in total imports, we may ignore this input.
- (ii) Attribution: A specific imported HS6 product may be attributed to the value addition of various HS6 exports.

HS6 Product Code	HS6 Product Name	Export Value (USD Million)	HS2 Product Classification	HS4 Product Classification
310520	Fertilizers, mineral or chemicals; containing the three fertilizing elements nitrogen, phosphorus and potassium	68,59	Fertilisers	Mineral

Figure 2: Fertilizer Imports, Ghana – 2016

In Figure 3, for example, HS6 Product 310520 *Mineral or chemical fertilizers containing the three fertilizing elements nitrogen, phosphorus and potassium* is a key input in cocoa production. However, this does not imply that all imported quantities of this fertilizer are used for cocoa production. In fact, the same fertilizer may be used for other products as well. Since it will not be possible to evaluate how much of these imports are attributed to the selected imported HS6 product through desk research, we anyway include this in the list, for further consideration when in contact with stakeholders. Figure 4 summarizes the key intermediate HS6 inputs for cocoa production in Ghana.

HS6 Code	HS 6 Product (Imports)	HS4 Sub-Sector	Import Value in 2016 (USD Million)	Share of total imports
	Insecticides Herbicides, anti- sprouting products and plant-growth			
380893	regulators	Insecticides	80.61	0.6%
	Mineral or chemical fertilisers containing the three fertilising elements nitrogen, phosphorus and			
310520	potassium	Mineral	68.59	0.51%
380891	Insecticides Insecticides	Insecticides	46.60	0.34%
380892	Insecticides Fungicides	Insecticides	13.62	0.10%
380899	Insecticides-Other	Insecticides	3.43	0.02%
380894	Insecticides—Disinfectants	Insecticides	1.50	0.01%

Figure 3: Key Intermediate Inputs for Cocoa Production in Ghana

Step 6: Identify NTMs associated with imported HS6 inputs

For each of these imported HS6 inputs, we check if the country imposes any NTMs. To this end, we rely on UNCTAD's TRAINS database (see <u>Appendix II</u>). We identify the number of NTMs applied to imported HS6 inputs, respective NTM codes, the measure description for each NTM and the issuing agency for each NTM. We also make note of any NTMs which are horizontal in nature, i.e. applicable to all products for the country concerned, since it may be more difficult to phase these out, as compared to other product specific NTMs.

Note: There may be instances where the analysis of a certain value chain does not yield useful results. This may be because not many of the intermediate HS6 inputs are imported or not many NTMs are imposed on the imported intermediate HS6 input. In such cases, it is important to continue to identify more value chains, provided they fulfill all necessary criteria as defined in Step 1 and 2.

Step 7: Prepare the final summary

Finally, we synthesize the information for each value chain, structuring it as follows: (i) a brief context (based on research under Step 2), (ii) Export Statistics (based on research under Step 1 and Step 3) (iii) Intermediate Inputs and Applicable NTMs (based on research under Step 4(i), 5 and 6) and (iv) Key Stakeholders (based on research under Step 4(i)).

Appendix II

Using UNCTAD TRAINS Database for NTM Mapping

This appendix seeks to assist users to map NTMs on the identified intermediate inputs using the UNCTAD TRAINS Database.

The web portal TRAINS is an application for retrieval of UNCTAD NTMs TRAINS data, and a data analysis tool for integrated analysis. The TRAINS application allows users to display NTMs data by measures, affected products, countries applying the measures and trading partners affected. A detailed query can also be performed based on a user's defined criteria. The application is publicly available athttps://trainsonline.unctad.org/. The landing welcome page is shown in Figure 1.

In specific, the quick search feature allows getting data easily and quickly for one destination market, exporting economy and one product or product group.



Figure 1: Snapshot of Web Application TRAINS Landing Page

The following steps can help users of the toolkit to map NTMs applied to the identified intermediate input -

- In the "Home" tab (Figure 1), select the following from the dropdown menu
 - a. **NTMs from which country(ies)** This is the source country i.e., country applying the NTM in this case, the country where the toolkit is being deployed
 - b. Which market(s) are affected This is the country to which the NTM is applied. For the toolkit, this option may be left blank. Leaving this option blank will yield all NTMs applied to all countries
 - c. **Products affected** This is the HS6 digit intermediate input for which NTMs need to be identified
- Once all options have been specified, click the "Search" button to display a detailed overview of all applied NTMs (Figure 2).

	S	·		HOME EXPLORE DATA	NTMS AND SDGS ABC	DUT RESOURCES -	
Detailed sear	ch	Show/Hide Colu	mn(s)	Show/Hide Filters		🛃 Download	
NTMs from which country(ies)?		Country imposing N Ntm Cod		Measure Description	Hs Code	Regulation Title	Im
Indonesia	-	Indonesia	P31	Article 5: Processed a	26011110(Iron concentr	01/M-DAG/PER/1/2017	Jai
• Which market(s) are affected	2	Indonesia	C1	Pre-shipment inspect	25231010,25231090,252	07/M-DAG/PER/1/2018	Fe
		Indonesia	El	Authorization require	25231010,25231090,252	07/M-DAG/PER/1/2018	Fe
All countries	*	Indonesia	B84	Article 9A: (1) The Dire	84151010,84151090,841	The MoT regulation N	Fe
Products affected		Indonesia	B859	Traceability requirem	25231010,25231090,252	07/M-DAG/PER/1/2018	Fe
All products	-	Indonesia	El	Authorization require	25231010,25231090,252	07/M-DAG/PER/1/2018	Fe
		Indonesia	B31	Article 3: (1) Obligatio	84145110(Except with	The MEMR regulation	Jai
Type(s) of NTMs		Indonesia	B7	Article 2: (1) The oblig	84145110(Except with	The MEMR regulation	Jai
All NTM Types		Indonesia	B82	Article 6: (1) Director G	84145110(Except with	The MEMR regulation	Jai
 Exclude measures affecting AL 	L products	Indonesia	B83	Attachment IID states	84145110(Except with	The MEMR regulation	Jai
		Indonesia	A89	Article 13 - self-declar	10059090	The MoT regulation N	Jai
Date(s)		Indonesia	A859	Article 14: (1) Importer	10059090	The MoT regulation N	Jai
From 🔳 🛗 🛛 To	⊠ ∰	Indonesia	E112	Article 4: (1) The impo	10059090	The MoT regulation N	Jai
		Indonesia	HII	Article 3: (1) Import of	10059090(Corn for fee	The MoT regulation N	Jai
Import or Export NTMs		Indonesia	A15	Article 3: (1) Import of	10059090	The MoT regulation N	Jai
Import E	xport	Indonesia	P169	Article 2: Any media c	010620(only turtles),0	50/PERMEN-KP/2017	Jai
Multilateral or Bilateral NTMs		Indonesia	P163	Article 4: (1) Every Imp	010620(only turtles),0	50/PERMEN-KP/2017	Jai
Multilateral Bil	lateral	Indonesia	A83	Article 4: (1) Every Imp	010620(only turtles),0	50/PERMEN-KP/2017	Jai
							-

Figure 2: Snapshot of the NTMs search results tab

Source: Indonesia data accessed through TRAINS Database (2020)⁵.

 Click the "Download" icon on the right corner of the results table (Figure 2) to export the NTMs data.

Appendix III

Data Collection Tier I – Preliminary Survey

The survey questionnaires in this appendix, both firm and agency level, are meant to be the first attempt to obtain an overview of NTMs under review and associated challenges in terms of their design, implementation (for agencies) and compliance (for firms). As the first tier of stakeholder engagement process, the surveys are designed to help establish if an in-depth review of the NTMs is required.

⁵ Available at:

https://trainsonline.unctad.org/detailedSearch?imposingCountries=104&imposingCountriesGroupSelection =&imposingCountriesAll=false&imposingCountriesGroup=0&affectedCountries=1,2,4,5,6,7,190,3,8,10,16,15 3,11,12,9,13,14,15,17,34,18,26,59,19,20,21,155,22,32,4,25,273,27,29,30,31,242,33,38,35,36,37,39,40,42,2 66,43,44,46,47,48,49,51,53,54,55,56,152,57,58,250,110,52,60,79,61,62,63,234,64,65,67,68,215,66,69,70,72 73,75,76,77,78,80,82,81,84,85,86,88,89,90,91,92,93,236,94,179,95,96,97,98,99,100,101,102,103,104,105,1 06,107,238,108,109,111,112,237,274,114,113,115,87,277,118,119,120,123,121,122,124,125,126,127,128,1 29,233,130,131,132,133,134,135,168,136,137,138,50,139,167,275,142,140,141,143,144,145,146,32,148,14 9,150,151,254,256,156,158,159,160,161,162,163,116,165,164,147,257,170,169,83,171,259,172,173,174,17 5,176,177,178,181,182,184,185,186,183,187,188,189,191,192,193,194,247,195,196,278,197,198,199,272,2 00,201,202,154,203,205,28,206,207,71,117,210,209,41,211,264,213,214,216,217,218,45,219,239,220,180,2 21,222,223,224,226,227,228,229,230,265,231,232,225,235,240,166,269,241,243,244,157,245,204,276,246, 212,248,263,271,249,208,74&affectedCountriesGroupSelection=&affectedCountriesAll=true&affectedCount riesGroup=0

A. Firm level survey

- 1. Please identify all the procedural/documentary requirements that your firm needs to follow in order to import the given [intermediate input]
- 2. Do you understand the rationale behind these requirements?
- Yes, all of them
- Yes, but only for some of them
- No, I do not understand the rationale behind any
- 3. According to you, how relevant these requirements are in achieving policy objectives?
- Very useful
- Somewhat useful
- Not very useful
- Not useful at all
- 4. How satisfied are you with the implementation of these requirements?
- Very satisfied
- Somewhat satisfied
- Neutral
- Somewhat dissatisfied
- Very dissatisfied
- 5. Which of the following issues do you most commonly encounter when complying with these requirements?
- Large amount of paperwork
- Lack of clarity on requirements
- Long waiting time, at the border
- Long waiting time to obtain certificates or permits
- Difficulty in dealing with government staff
- The need to pay bribes
- Technological constraints
- Lack of adequate testing capacity
- Others, please specify
- 6. Do these requirements have any negative impact on your business operations
- No negative impact
- Slows down operations
- Reduces domestic sales
- Reduces exports
- Others. Please specify
- 7. Please select from the below mentioned options the extent of the impact of these requirements on the costs of doing business.
- Very significant
- Significant

- Neutral
- Almost insignificant
- Insignificant
- 8. Please provide compliance cost information.
- 9. Do you find these requirements beneficial for your firm in any way?
- The requirements benefit us in at least some ways
- We do not understand any way in which these requirements benefit us.

B. Agency level survey

- 1. What public policy objectives does this measure intend to address?
- Plant protection
- Animal health
- Food safety
- Environmental concerns
- Protect territory from pest damage
- Improved product quality/safety
- Enhanced customer satisfaction
- Others, please specify
- 2. When was this measure developed and when was it last revised
- 3. How expensive was the regulatory design process i.e. the entire process of NTM design, starting from its inception to stakeholder consultations to final publishing.?
- Very expensive
- Reasonable expensive
- Very inexpensive
- Don't know/can't say
- 4. How would you explain the larger benefits of s NTM on -
- The society at large _____
- The firms _____
- The consumers _____
- On a scale of 1 5 (5 being the worst), how would you rate your level of satisfaction with the following aspects of NTM implementation –
- Transparency (For the private sector)
- Presence of trained staff
- Implementation budget
- Technical capacity for implementation

- 6. How long does the process of complying with this NTM take for the private sector (Processing a permit, conducting inspections, etc.) Is there a government policy like a "citizen's charter" that mandates the agency a period to process permits/conducts inspections?
- 7. Does the implementation of these measures impose a high cost burden on the agency?
- Yes
- No
- Can't say
- 8. Do you implement any NTM in collaboration with another government agency?
- Yes
- No
- 9. If yes, how easy, on a scale of 1 5 (1 being the easiest), is the level of coordination with the other implementing agencies?

Appendix IV

Stakeholder Engagement Tier II - Inception Workshop Guiding Questions

This appendix serves as a guide to facilitating discussions in the inception workshop. The following guiding questions can be used by the moderator.

Project related

- 1. After going through the project goals and proposed methodology, what is your general perception about subject matter of this project?
- 2. What is your perception regarding the feasibility of the project i.e. its alignment to your interests?
- 3. What are your expectations vis-à-vis the end results of the projects?
- 4. What additional parameters can make the project more meaningful for you, as firms and implementing agencies?

NTM related

1. Given the intermediate input and NTMs under consideration, to what extent does the toolkit interest you?

2. For firms:

2.1 Please elaborate on your experience in dealing with NTMs applicable to importing the product under consideration. What problems do you face when complying with the NTMs?

3. For agencies:

- 3.1 Please provide some insights into the NTM design process.
- 3.2 Please provide some insights into the NTM implementation process.
- 3.3 Would you say that the NTM is meeting the objectives it is designed for? How can you say that?
- 4. Given the product and NTMs under consideration and the issues discussed, how can this toolkit be adapted/implemented to make the results meaningful?

Note – The interactive session must also include a discussion around the specific insights obtained or pressing issues identified in the Tier 1 Preliminary Surveys.

Appendix V

Stakeholder Engagement Tier III – In-Depth Interview Guidelines (Firm and Agency Level)

The Interview Guidelines form a core component of the NTM cost effectiveness toolkit. They are a set of questions that should be used by the interviewer in engaging with the main stakeholders i.e. the government agencies responsible for NTM implementation and the regulated firms. It provides an opportunity to probe deeper into NTM design, implementation and compliance and get firm and agency perspectives on the same. The set of questions are not binding. Neither are they complete. The interview is designed to be semi-structured and the interviewer must exercise judgement to delete, or add any questions or probe deeper depending on the sectoral and national context.

Key topics of interest	Question theme		Probe questions
Administrative	Are administrative	•	Please indicate all documents you are required to
formalities	processes and		file/submit prior to import? At the time of import?
	requirements	•	Is the process of preparing and submitting these documents
	streamlined?		complicated? Which documents do you find most
			challenging to furnish or file?
		•	Are there any overlaps/duplications in documentary
			requirements? Please indicate where? Is there any single window?
		•	How many checks/inspections do you have to go through at
			the border? Is there any duplication in these
			checks/inspections? Do single windows exist?
Time constraints	Do firms face any	•	How many hours do you spend in preparing the
	time constraints		documents/paperwork? Is this time reasonable for you?
	when complying		Which documents are most challenging to furnish? Why?
	with the NTMs?	•	How many hours does the responsible government
			agencies take for processing your documents or
			applications? Does the amount of time affect your business
			operations in any way? Have there been any unusual
			delays? What was the reason for such delays and with
			which agency/for which requirement?
		•	Do you think that the checks/inspections at the border are
			carried out smoothly and efficiently? Please indicate the
			average time taken. Are there any unusual delays? What
			was the reason for such delays?
Transparency	Is the private sector	•	Was your firm involved in the process of designing (or
	fully aware of all		reviewing) this NTM? Which regulation/agency was this?
	NTMs, their		What about the others? Please explain how your views
	rationale and		were taken into consideration and if there were any
	procedural		conflicts? Were you satisfied with the end results?
	requirements for	•	Are you clear about all requirements and procedures you
	compliance?		are required to meet when importing the product? Which
			ones are particularly unclear?

Firm-Level Interview Guidelines

	1		
		•	Do you understand the rationale behind these NTMs?
			Which ones are uncertain?
		•	Have the concerned agencies made available all necessary
			requirements necessary for compliance available online? If
			yes, can you provide a link to the website? Which agency is
			the most difficult to deal with?
		•	Is the information available in an easy to understand, non-
			technical format? What challenges do you face when trying
			to familiarize yourself with these requirements? Which
			particular regulations are most challenging to comprehend?
		•	Have you ever encountered any discrepancies in the
			published and the actual requirements? Please elaborate.
		•	Are there frequent changes in the regulatory requirements?
			Are you updated about any such changes in a timely
			manner? Do they publish such changes in a website? For
			which agency/case is the problem most severe?
		•	Is it easy to reach out to the government agency in case of
			questions or concerns? Is there a help desk that you can
			contact? Can you please explain the process and share
			experiences? Which ones are particularly hard to contact?
Quality of	Is the	•	Is the process of dealing with government agency staff
Implementation	implementation		smooth? What are the key issues faced? With which
Staff	staff professional		agencies?
	and competent?	•	Can you recount any bad experience during the last one
			year where the staff lacked professionalism or behaved in
			an arbitrary manner?
		•	In your opinion, is the staff conducting inspections at the
			border well trained and has the necessary knowledge and
			expertise on the product being inspected? Can you explain
			why you do or don't believe so? Have you faced any bad
			experience? Please explain.
Agency Support	Is the firm receiving	•	Have the concerned government agencies conducted any
	adequate support		reviews on the barriers your firm is facing with respect to
	from responsible		the requirements? Please identify cases.
	agencies to	•	Has the government agency provided any checklists or
	smoothen		guidelines to make it easy for you to comply with these
	compliance?		requirements? Which agencies have/have not?
		•	Are you familiar with any mechanisms for registering
			complaints? If yes, please provide a reference and share
			any experience. If no, please indicate if the absence of such
			a platform is an issue for you? For which requirement is the
			problem most pronounced?
		•	Are procedures like filing applications, paying fees
			automated? Does that make the process more convenient
			for you? Please recount specific challenges.
		•	Have you encountered any cases wherein technological
			constraints hindered the NTM implementation? Please
			elaborate.
Compliance costs	To what extent do	•	Is complying with these NTMs costly for your firm? How
	these NTM impose		would you rate these costs? Please choose an option from
	a high cost burden		below –
	on the firm?	0	Very high
		1	- / 0

		o High
		o Average
		 Not very high
		 Insignificant.
		• Do you make use of any third party services to handle the
		import process? To what extent do they handle the
		regulatory procedures? Are they transparent about the
		regulatory compliance costs? Do you consider the fee they
		charge as being reasonable?
		Please indicate and elaborate which of the following cost
		elements are most burdensome and indicate the
		corresponding requirement?
		 The fee/charges payable to agencies
		- One time
		- At the time of import
		 One-time costs
		- Asset, equipment, software purchased
		- Fines and legal disputes
		- Cost of third-party services, legal or technical
		 Recurring costs
		- Education
		- Administrative (Notification, publishing of documents,
		record keeping)
		- Employee training costs
		- Costs of internal inspections
		- Others
		• Overall, do these NTMs result in a higher input or
		production costs for your firm?
		• If these NTMs did not exist, what else would your business
		have done with the money spent on ensuring compliance?
		• Are these costs an obstacle to importing the product? How
		is your firm dealing with it?
		• Can you provide detailed estimates of these costs? (Refer
		to Tier 3 of Data Collection)
Benefits	Does the firm see	• Do these NTMs benefit your firm in any way? Please
	any benefits arising	share some examples or experiences, while taking into
	to it from the	consideration the following –
	NTMs?	
		• Reduction in workplace accidents
		 Improved product quality
		 Increased sales
		• Ease of accessing export market
		• Avoiding wastage in production process
		• Accountability for CSR objectives

Key topics of interest	Question theme	Probe questions
NTM objectives	Are NTM objectives clearly defined? Has the NTM been designed carefully through a consultative process and by accounting for international standards?	 Please define the problem or risk (a market failure) that the NTM was designed to address? What was the underlying motivation/concern? Why was government action necessary? Through what mechanisms can the NTM address the policy objectives it is designed to address. Did you have any scientific evidence to substantiate this? How serious is this problem or risk under consideration? Who will be affected and what will be the nature of the impact on each group? Can you quantify this? What is the likelihood of occurrence of the primary risk that the measure intends to address? How serious would be the consequences if the risk occurred? When do you last recall the risk occurring – After the measure was put in place For all NTMs: When did this NTM come into force? For old NTMs: When was the measure last reviewed? If yes, how were these updated and on what basis? How did the risk/problem that the measure intends to address the problem/risk under consideration discussed? Were alternative approaches to address the problem/risk under consideration discussed? Did you take into consideration discussed? Did you take into consideration the ability of the government to implement this NTM effectively? Were all necessary stakeholders involved in the measure design (or review) process? This includes – private sector, other relevant ministries/agencies, customs, independent experts, NGOs. Please indicate, along with reasons, situations of any conflict with these stakeholders and how these were addressed? Is the regulation based on any international regulation or law? or any regional standard? Or any other country's standard? Please identify the relevant baseline standard and how the national standard
Implementation process	Is the step wise procedure for Implementation clearly defined?	 compares to it? Please explain the step wise process for enforcing this measure. Please identify the different documents as well as the various steps the private sector requires to ensure compliance.
Implementation time	How efficient is the Implementation process?	 What is the average time taken to inspect each shipment?

Agency-Level Interview Guidelines

	(For NTMs related to		Have there been instances of unusual delays? For
		•	Have there been instances of unusual delays? For
	inspections and testing)		what reasons? What steps have you taken to minimize
			delays?
		•	For each consignment inspected during the last one
			year, please indicate if any specific obstacles were
			faced and the reasons thereof.
		•	Did these issues lead to rejection? Please elaborate on
			the specific case and the amount of loss.
Implementation	How efficient is the	•	What is the average number of hours taken to process
time	Implementation process?		a new license, certificate or permit?
	(For NTMs related to	•	Have there been instances of unusual delays? For
	license/permit/certificate		what reasons? What steps have you taken to minimize
	processing)		these delays?
		•	For all applications/renewals processed during the last
			one year, please indicate any issues encountered.
			These may concern with such factors as –
		0	Incomplete applications
		0	Late applications
		0	Non-receipt of application fees in time
Implementation	Does the NTM	•	Is enforcing this NTMs costly for your agency? How
costs	Implementation impose		would you rate these costs? Please choose an option
	a high cost burden on the		from below –
	agency?	0	Very high
		0	High
			Average
			Not very high
		0	
			cost elements are most burdensome?
			One-time costs such as investments in fixed assets
		ľ	such as machinery, laboratory equipment or a specific
			software
		0	Recurring costs -
		_	Publicizing NTMs and updates to them
		_	Assessing and approving applications and processing
			renewals
			Conducting inspections
			Recruitment and training of Implementation staff
			Managing and resolving private sector complaints
			Others
			Can you provide cost data for all expenses pertaining
			to the Implementation of this NTM for the specific
			imported product? (Refer to Tier 3 of Data Collection)
Implementation	How does the access	•	
-	How does the agency determine the nature		Do you inspect all imported consignments? What is
strategy			the probability of an import consignment being
	and extent of the NTM's		inspected at the border?
	Implementation?	•	Where does the inspection take place – only at the
	(Applies to Inspections		border, in the warehouse/storage, or anywhere during
	Only)		transit from the border after clearance to the final
			destination?

			· · · · · · · · · · · · · · · · · · ·
		•	How do you decide what to inspect and what not to?
			Do you have risk management systems in place to
			determine this?
		•	How do you adapt your approach based on
			experience?
Transparency	Has the agency taken	•	Is the NTM, its rationale and the relevant compliance
	adequate measures to		requirements clear and readily available to the private
	ensure that the regulated		sector? How? Is this information available online? If
	firms are fully aware of		yes, on which website?
	the NTM, its rationale,	•	Have you taken any other steps to ensure that the
	and procedural		private sector is made aware of the requirements and
	requirements for		where these can be found?
	compliance?	•	Is this information available in easy to understand,
			non-technical language?
Stakeholder	Is the measure	•	Please explain how your activities and objectives
coordination	implemented in		relate to those of the customs or any other
	coordination with other		government agencies?
	relevant government	•	How do you coordinate with these agencies?
	agencies such that	•	Please indicate any instances of, reasons for, and
	duplication can be		consequences of poor coordination with either of
	avoided?		these agencies in the past one year?
Resource	Has the government	•	Do you have a well-defined budget for enforcing the
allocation	agency allocated		NTM?
	adequate resources for	•	Have you encountered a situation in the past where
	smooth Implementation		there was a shortage of funds for properly
	of the NTM?		implementing the budget? Please explain the situation
			in detail.
			Do you have adequate staff to implement the NTM –
			conduct inspections, monitor compliance or process
			applications for licenses, permits or certificates?
			What is the hiring process for the staff?
			Do you provide generic trainings to the staff on
			ensuring professionalism and transparency in their
			work? How frequently are such trainings provided?
			Can you share some content or material?
			Do you provide technical trainings to the staff to
			impart skills necessary for conducting inspections?
			How frequently are such trainings provided? Can you
			share some content?
Facilitating	Is the government	•	Do you have any toolkit or checklist to aid the private
smooth	agency taking adequate		sector in complying with the NTM?
compliance	measures to identify and	•	Please indicate if and to what extent are the
	eliminate any		compliance and implementation procedures
	bottlenecks to ensure		automated? (This includes permit processing, filling
	compliance by the		application forms, screening of applications, revenue
	regulated firms and		collection, etc.)
	putting in place systems	•	Are there established mechanisms for registering
	that make compliance		complaints?
	easier?	0	What are these mechanisms?
	1	17	

	1		
		0	What is the process of monitoring and addressing such complaints?
		0	How frequently are they used by the private sector?
		0	How many complaints were received during the last
			one year, their nature, and how these were resolved?
		•	As an agency, have you taken any steps to ensure
			compliance by either promoting, incorporating
			controls, or imposing sanctions for non-compliance?
		•	Please indicate the number of instances of non-
			compliance with the NTM noted during the last one
			year. What were the specific instances for the non-
			compliance and the reasons thereof? How were these
			issues resolved?
		•	Please indicate the total percentage of consignments
			rejected due to non-compliance, during the last one
			year?
Effectiveness	Is the NTM achieving the	•	Would you say that the NTM is achieving the
	objective it is designed		objectives it was designed for? Can you substantiate
	to?		how?
		•	If the NTM was recently put in place (during the last
			five years): can you provide an estimate of the
			potential harm mitigated between when the NTM did
			not exist and after?
		•	If the NTM is old (put in place over five years ago):
			How do you assess whether the NTM is meeting its
			intended objectives? Have there been instances where
			the primary risk that the measure intends to address
			occurred? How many such cases can you recall in the
			last one year? Has there been any change?
		•	Please indicate the key stakeholders who have
			benefitted from this NTM? How? Please refer to
			intermediate consumers, final consumers as well as
			the society at large

Appendix VI

Stakeholder Engagement Tier IV – Detailed Cost Assessment

This appendix provides a template to be used for filling detailed cost-related information associated with –

- **i. NTM compliance for firms** covering (i) Fee/charges payable to implementation agencies, (ii) Fixed/one-time costs and (ii) Recurring costs.
- **ii. NTM implementation for agencies** covering both (i) Fixed/one-time costs and (ii) Recurring costs.

A ready-to-use spreadsheet is provided in the excel link below

[Cost Assessment Spreadsheet]

Appendix VII

Dimensions of Stakeholder Engagement

This appendix provides an overview of the main dimensions around which the 4-tier stakeholder engagement process is designed. These dimensions provide a basis for probing deeper into the 3 pillars of the toolkit, I.e. compliance, design and implementation.

Firm-Level – Compliance

1. Administrative formalities

Are administrative processes and requirements streamlined?

The requirement to prepare and submit many documents and to undergo multiple inspections and checks at the border can be extremely burdensome for regulated firms. From preparing applications for the purpose of obtaining or renewing certificates, licenses or permits; to making multiple trips to get a shipment released - the need to fulfill administrative formalities may require firms to dedicate a substantial amount of human and financial resources. What makes this even more challenging is when there are several government agencies to deal with, each requiring different documents with distinct filing or submission procedures, or multiple agencies inspecting the same shipment in pursuit of different goals. While these requirements may be put in place to fulfill legitimate objectives, unplanned and haphazard execution can make the process of compliance difficult and costly. A firm's ability to meet these administrative requirements with ease can have an important bearing on the overall cost of operations. As such, this dimension is a critical pillar of assessing bottlenecks to NTM compliance. Simplification of documentary requirements and procedures for imports, establishment of single windows and facilitation of joint inspections can help avoid overlaps and duplications making these requirements less difficult to comply with for the firms.

2. Time constraints

Does the private sector face any time constraints when complying with the NTMs?

Documentary compliance may require businesses to devote a substantial amount of time to obtain, prepare, process, present and submit documents before and during clearance and inspections at the port or during border handling. At the same time, responsible government agencies may take a long time to process applications and issue necessary permits or certificates. Further, businesses often complain about how sometimes, shipped goods may remain at the port of entry for several weeks before finally being released by the inspections staff. There may be several reasons behind such delays – inadequate, inefficient or incompetent implementation staff or technological challenges such as system outages. Such delays may require firm personnel to keep following up with the relevant agencies and end up becoming a source of frustration. The time lost can impede the firm's ability to comply with the NTM. Thus, assessment of NTM compliance must account for time taken for businesses to comply with NTMs in order to identify unnecessary steps and procedures. Government agencies must closely assess the reasons behind such delays and work to minimize them.

3. Transparency

Is the private sector fully aware of all NTMs, their rationale and procedural requirements for compliance?

From the point of view of regulated firms, transparency can be viewed from 2 angles. First, their involvement in NTM design process. The process of NTM design should be consultative and feedback should be sought from all stakeholders. This includes the private sector who will be most affected by the measure. Their views should be taken into consideration and it should be ensured that they are able to understand and appreciate the rationale for the measure. This reduces the possibility of any confusion or unnecessary frustration among the regulated firms at a later stage. Secondly, all necessary information about the NTMs, its objectives, rationale, the procedural and documentary requirements must be made available to the firms to eliminate any bottlenecks to compliance. This information should be published in simple, non-technical terms and any updates to the NTM should be made available to the private sector in a timely manner.

4. Quality of Implementation staff

Is the implementation staff professional and skilled?

Regulated firms have to deal with a wide range of government staff when importing. This may be for the purpose of obtaining permits, submitting documents, paying fees, cooperating in conformity assessment procedures, getting sample tests, etc. This makes it essential that dealing with the government agency staff is smooth. First, and most basic, the implementation staff must be professional in their interaction with the private sector. Second, staff carrying out more technical tasks, such as inspections or testing must be skilled in doing so. For instance, If the product being inspected may carry a pest or a disease, yet the inspections staff does not understand the scientific properties of the product and relies simply on physical inspections, may create more problems for the importing firms.

5. Agency support

Is the private sector receiving adequate support from responsible agencies to smoothen compliance?

On a regular basis, government agencies should review barriers to NTM compliance and take necessary action to ensure that compliance is as smooth as possible. A few recommendations to accomplish this goal may be –

- i. Making available checklists and guidance to speed up compliance
- ii. Using electronic systems for filing, processing and submitting applications and documents; making payments; and managing exchange of information. When implemented effectively, such systems can help save time and money by eliminating the need for multiple trips to government offices, long waiting times as well as the need to pay bribes.
- iii. Setting up mechanisms for registering private sector complaints. This provides an opportunity to government agencies to assess barriers that the private sector is facing in complying with the NTM, and taking necessary steps to resolve the issues raised

6. Compliance Costs

To what extent do the NTMs impose a high cost burden on the private sector?

A key agenda of the NTM review process is to assess the costs of NTM compliance and to what extent does it impose a high cost burden on the firm. The stakeholder engagement process stresses on the need to focus on the following potential costs arising from complying with NTMs.

i. Fees and charges payable to responsible government agencies

These costs include administrative charges such as licence and permit issuance or renewal fees; levies; and mandatory insurance premiums payable to the government. At the same time, it also includes mandatory charges per shipment/consignment payable prior to import or at the border or any fee paid for testing product samples.

ii. One-time Costs

a. Fixed asset investments

Often, regulated firms may have to undertake investments in a specific equipment or software in order to ensure that it is in compliance with NTMs. This may be required for such purposes as treating emissions. This cost category covers the purchase price of these items as well as the cost of financing the purchase.

b. Fines and legal charges

Fines for failing to comply with an NTM, as well as legal fees arising from a related dispute may also form a substantial part of overall cost of compliance and hence must be accounted for when calculating them.

c. Costs of third-party services

Where technical or legal expertise is required to comply with an NTM, business may have to engage third parties to ensure NTM compliance. These could include independent consultants, legal or IT experts, or engineers and availing their services could come at a high cost to the firm.

iii. Recurring costs

a. Education costs

Businesses have to incur costs for keeping up to date with regulatory requirements, familiarizing themselves with new or amended NTMs, developing in-house compliance strategies and allocating responsibilities to the staff who will be responsible for the day to day compliance procedures.

b. Administrative costs

Administrative costs are one of the most significant cost components of complying with NTMs. They can cover a wide range of cost categories – visiting government offices, maintaining records of paperwork, making notifications to the government, publishing documents, etc. A large proportion of these costs are associated with wages or salaries paid to labor/staff for completing the activities required to ensure regulatory compliance.

c. Employee training costs

Sometimes, complying with an NTM may require special training to be given to employees, say in cases where the NTM in question deals with technical requirements such as monitoring emissions or assessing compliance with smoking laws. A firm may have to invest in training of such staff on a regular basis.

d. Costs of internal inspections

Businesses may have to spend time and money to carry out inspections or testing to be in compliance with an NTM. While some of these inspections may by default form an integral part of regular business operations, some may simply be regulatory requirements, otherwise unnecessary from a business standpoint. In such cases, the costs incurred on these internal inspections and testing are an extra cost for firms and must be accounted for when assessing compliance costs.

7. Benefits

Does the private sector see any benefits arising to it from the NTMs?

While complying with NTMs can be an expensive and a time-consuming process for business firms and ineffectively designed and implemented NTMs can cause the cost of doing business to mount up significantly, NTMs can also benefit firms in several ways. By requiring importing firms to comply with high product standards, NTMs can help firms improve the quality of finished products, thus increasing consumer confidence in both domestic and export markets. In fact, compliance with NTMs has been shown to also have

a positive impact on exports under certain circumstances. NTMs requiring firms to conduct pest risk analysis, use superior quality inputs or control emissions can also have a positive impact on the private sector by reducing workplace accidents or wastages in production. Reviewing NTMs must thus account for any such potential benefits to firms, and firms must be encouraged to view these NTMs, not just in terms of the obstacles they present, but also in terms of the benefits they bring.

Agency-Level – Design and Implementation

1. NTM objective

Are NTM objectives clearly defined?

The first step to putting in place an NTM is to establish a justification for it. This requires clearly defining the market failure or the primary risk that the measure seeks to address. All technical NTMs must be designed to serve specific policy objectives. Institutions with a mandate to establish an NTM must be able to delineate the harm or risk that the NTM will mitigate or the positive outcomes it will contribute towards. This also includes accounting for the likely impact if the NTM did not exist and the possible alternative policy option to achieve a similar goal. At the same time, adequate evidence must be provided to show that the risk under consideration can have a serious, irreversible impact. The justification for putting in place an NTM must be based on a consideration of the nature and the size of the policy problem that the NTM intends to solve; who and how many will be/are being affected in its absence, how large and long lasting will the effects be. This is important to ensure that the costs of the measure can justify its benefits. Of course, it can be hard to observe a counterfactual in such cases, but to the extent possible, the responsible parties must substantiate or give a valid justification for why the NTM is needed at all. The regulators must also analyze the mechanisms through which the NTM can address the problem or risk at hand. For instance, if an institution states that an NTM is meant to prevent the spread of a disease, an evidence-based, scientific justification for the same must be provided. The inability to define the objectives clearly can create a high cost burden on the implementers and restrict incentives to improve approaches and methods to achieve better results. More importantly, it makes it difficult to properly assess the effectiveness of the NTM in achieving the objective it intends to.

Ensuring that NTMs are properly targeted also necessitates that the mandate of each government institution is clearly defined in terms of its vision and mission. The mandates can be set in a variety of ways (generally through primary or secondary legislation, but they can also be supplemented through strategy documents approved by the supervisory board or ministry etc.).

2. NTM design (and review) process

Has the NTM been designed carefully through a consultative process and by accounting for international or regional standards, or those of other developed countries?

The NTM design process must incorporate a careful assessment and comparison of the different approaches or policy tools that may be used to address the problem under consideration, for instance – self-regulation by the private sector. Of course, national governments may differ in their technical and financial resources to carry out such an analysis. Yet, to the extent possible, it is essential to weigh the pros and cons of the different possible means of achieving the desired policy objectives. This ensures that the NTM is put in place only if it is the best way to achieve the desired end results. At the same time, the ability of the government to implement the regulations effectively must be accounted for.

Another key to designing effective NTMs is to involve all relevant stakeholders in the design process. This includes government agencies with similar or overlapping mandates, private sector firms who will be affected by the NTM, as well as independent experts, for instance, environmental experts. A consultative NTM design process ensures that a platform is offered to those impacted by the NTMs to voice their points of view, share their expertise and engage in constructive discussions to make the NTM and its implementation more effective. It also reduces the possibility of duplication and the administrative burden the NTM may cause on the private sector. A consultative process also provides the stakeholders, particularly the regulated firms, an opportunity to understand and appreciate the rationale for the measure, thus enhancing transparency. Belize is an interesting case in point. Per the Economic Development Council (EDC) Act of 2017, the Government of Belize established a regulatory body to promote partnership and collaboration between public and private sectors, fostering a better business climate in the country. The regulatory body is made up of five representatives from the public sector and five representatives from the private sector. It commends line ministries, departments and regulatory agencies to initiate and support regulatory reform. The Council incorporates inputs from the private sector into recommendations for regulatory reforms presented to the Prime Minister.

Another important consideration when designing NTMs is to look at international standards like those of Codex Alimentarius, International Plant Protection Organization (IPPC) and the World Organisation for Animal Health (OIE). Before designing an NTM, responsible government institutions should examine whether a relevant international standard exists and whether it can be adopted or adapted to the national context.

As critical as the NTM design process, is the NTM review process. NTMs should be reviewed regularly by assessing their outcomes against rationale, and be updated, adjusted or eliminated based on changing circumstances and situations. The review process must involve looking into the challenges that the regulated firms have been facing when complying with these regulations and taking steps to simplify the procedures.

3. Implementation Process and Time

Is the step wise procedure for implementation clearly defined? How efficient is the implementation process?

All responsible agencies must have a well-defined process for enforcing any given NTM. From the point where a regulated firm applies for a license or a permit to the point of final inspection of the imported product, every step should be clearly defined and systematically implemented. The number of documents required, the timeline for obtaining them, the related fees, the inspection time for getting lab tests or for physical inspections at the border – all should be established in advance by the responsible agencies and made available to the regulated firms.

The fee for obtaining or renewing certificates and permits imposes a high cost burden on firms, especially when they have to comply with NTMs issued by multiple agencies. What adds to the challenge is having to deal with unnecessary paperwork, administrative delays, multiple inspections – at the borders or in the hinterlands, etc. This is an addition to the cost of doing business.

In view of this, all responsible agencies must ensure that

- The procedures followed and the paperwork required to verify compliance by firms are clearly laid out. The processes should be simplified to the extent possible by removing red tape or other bottlenecks to ensure compliance.
- The time taken to issue and renew permits or licenses and to carry out inspections is minimized. Causes of frequent delays are carefully scrutinized and minimized.
- The fee and charges payable by regulated firms are kept minimal and commensurate with the value of the shipment. Further, the fee payable by firms to different government institutions is set in coordination where possible.

4. Implementation cost

Does the NTM implementation impose a high cost burden on the agency?

NTMs do not only impose costs on the regulated firms, they also put financial pressure on the responsible government agencies who may have to invest in necessary infrastructure such as setting up and maintaining testing labs or incur labor and overheads costs for enforcing the measure effectively. Poorly implemented NTMs can result in an unnecessary increase in these costs for the agencies, who will in turn pass it on to the private sector in the form of high fees and charges to be paid to ensure compliance. As such, it must be ensured that the cost of enforcing NTMs is not burdensome for the implementation agencies. Often, this would mean having a well-defined budget for the specific department enforcing the NTM. In specific, NTM implementation costs can include -

i. One-time costs

a. Fixed asset investments

Often, agencies may be required to undertake investments in a specific equipment or software or an infrastructural facility for enforcing the NTM. For instance, the plant health inspectorate in any country may be required to set up a testing lab and purchase equipment and machinery for the same. At the same time, devising and implementing inspections or licensing systems may require significant investments.

b. Recurring costs

Other variable costs associated with enforcing NTMs may include costs of -

- Publicizing NTMs and any updates to them
- Assessing and approving applications and processing renewals
- Conducting inspections
- Recruitment and training of implementation staff
- Managing private sector complaints

5. Implementation Strategy

How does the agency determine the nature and extent of the NTM's implementation?

NTM implementation should be risk-based. This implies incorporating a systematic procedure for deciding what to inspect since it may not always be possible to inspect all shipments of an imported product. The decision to inspect or not should be proportional to the nature and the extent of risk that the imported product poses, and should be grounded in data and evidence. Often, implementation agencies are unwilling to reduce their discretionary power, and thus resist the introduction of risk-based approaches. This imposes high costs on regulated firms. The decision should be based on factors such as whether there have been any violations in the past, whether these violations are part of a pattern, whether the violations create serious risks for the public welfare (safety, health, environment etc.), the magnitude of these risks, etc. An official guidance on how to ascertain risks or on how implementation decisions should be taken can be a good approach to incorporating a risk-based NTM implementation strategy.

6. Transparency

Has the agency taken adequate measures to ensure that the regulated firms are fully aware of the NTM, its rationale, and procedural requirements for compliance?

NTM implementation will not be effective unless regulated firms are made fully aware of how compliance will be verified and provided an opportunity to understand the rationale behind a given NTM. At the same time, their involvement in forums where they are provided a chance to openly discuss their opinions or concerns are critical to securing their support towards the regulatory agenda. One of the primary concerns for the private sector as far as NTMs are concerned is the lack of complete knowledge about the applicable regulations, the responsible agencies and the costs associated with compliance. Further, NTMs are frequently updated without adequate and timely notification to the regulated firms. This creates a high amount of uncertainty, particularly for SMEs. Transparency and compliance go hand in hand and should be promoted through the use of toolkits and checklists for the private sector in simple, non-legal text, made easily available and accessible.

7. Stakeholder Coordination

Is the measure implemented in coordination with other relevant government agencies such that duplication can be avoided?

Implementation of an NTM should be coordinated with other relevant government agencies - particularly the customs and other border agencies. Overlaps and duplication such as multiple government institutions requiring firms to furnish documents serving more or less the same purpose, or inspecting the same consignment without coordinating goals with other border agencies is a waste of public resources and can create a high unnecessary cost burden on the regulated firms. Agencies should strive to maintain open channels of communications with other government agencies, work on establishing coherent implementation practices and prevent emergence of areas of conflicting competence. This may be achieved by joint examination of shipments, data harmonization, document alignment, integrated risk management, sharing of facilities and equipment such as IT systems and single windows for trade, or even conducting joint trainings. Such coordination and cooperation among agencies at the border can help reduce compliance and implementation costs, resulting in efficiency gains and lower operating costs.

8. Resource Allocation

Has the government agency allocated adequate resources – financial and human - for smooth implementation of the NTM?

An important requirement for effective, efficient, transparent and professional implementation of NTMs is to allocate adequate and appropriate resources towards it. This includes putting in place a well-defined budget for implementation so that the NTM can be administered and implemented smoothly, as well as making sure that sufficient and suitable staff is available for the implementation. Every government agency responsible for enforcing NTM must have adequate implementation staff for the purpose of processing licenses or certificates and for inspecting consignments. Inadequacy of staff may lead to unnecessary delays for the importers, thus having a negative impact on the cost of doing business. At the same time, agencies must ensure that the rules and processes to be followed by staff responsible for enforcing and implementing an NTM are clearly laid down, and the responsible staff is trained to facilitate smooth implementation. This is particularly important for NTMs that relate to inspections, where the staff may require more technical, skill-based training. Trainings prior to and during staff tenure, and off and on the job, are all equally critical. Often, importers complain that the staff inspecting the shipment lacks the necessary knowledge and expertise on the scientific properties of the product being imported. This leads to an unreasonable amount of inspection time or an unnecessary rejection of the consignment, both equally detrimental for the firm concerned.

The responsible agencies must ensure that the staff is well equipped to perform its duties by -

- Defining and publishing the role, duties and obligations of the staff
- Imparting necessary technical skills to inspections staff, and
- Training them on the importance of professionalism and transparency

9. Facilitating smooth compliance

Is the government agency taking adequate measures to identify and eliminate any bottlenecks to ensure compliance by the regulated firms and putting in place systems that make compliance easier?

Government agencies responsible for enforcing NTMs must take adequate steps to ensure that the regulated firms are able to comply with the requirements as easily and smoothly as possible. This includes making use of information and communication technologies to submit applications or revenue collection to minimize continuous back and forth between the government and the private sector, providing mechanisms for the private sectors to register complaints and even providing easy to understand toolkits or checklists to ease compliance.

In order to avoid the likelihood of non-compliance, steps must be taken by government agencies to actively promote compliance, rather than assuming that everyone should

know the law. This links to transparency, which is the foundation for ensuring compliance. Responsible agencies must regularly assess barriers to compliance, provide necessary advice and guidance to the private sector and engage with the private sector more actively, setting up deterrents to non-compliance and other strategies must be adopted to ensure that the private sector is not only monitored but also encouraged to comply.

10. Effectiveness

Is the NTM achieving the objective it is designed to?

Once an NTM has been in force for a reasonable amount of time, it is important to compare the objectives and rationale with the actual results achieved. Given the time and financial resources that go into designing, enforcing and complying with any given NTM, it should at least be justified by carrying out an assessment and substantiating as to how the NTM has led to any positive outcomes or has mitigated any potentially negative outcomes. An important element of this is to assess the main beneficiaries of the NTMs which may be the firms, consumers or the societies at large. Governments may adopt a variety of suitable methods of assessing this - doing a before and after analysis or making comparisons with similar sectors or countries. Being able to rationalize the existence of an NTM is an important responsibility of government institutions. Such an analysis will help identify NTMs which must be retained, adjusted or eliminated. The overall process of review can help in NTM improvement and help build greater confidence in the regulatory system.

Appendix VIII

Approach to Analyzing Stakeholders Inputs

This appendix presents an approach with some examples to analyzing data and information collected during the in-depth interviews, one of the most critical tiers of the stakeholder engagement process, for (i) Firm level interviews and (ii) Agency level interviews

A. Firm level interviews analysis

1. Checklist Matrix

			Firm 1			
Dimension	Question	Yes	No	n/a		
Administrative	Does the firm complain for lack of knowledge					
Formalities	of all the necessary documentary requirements for importing?					
	Does the firm complain that the process of					
	preparing and submitting documents is					
	complicated and burdensome?					
	Does the firm complain of any duplications or					
	overlaps in documentary procedures?					
	Does the firm find the inspections to be					
	cumbersome?					
Time constraints	Does the firm complain of any unusual delays in					
	processing of applications?					
	Does the firm complain of any unusual delays in					
	border checks and clearing of shipments?					
Transparency	Does the firm complain that it was not involved					
	in NTMs design process?					
	Was the firm dissatisfied with the outcomes of					
	the design process?					
	Is the firm unclear of the procedural					
	requirements for ensuring compliance?					
	Is the firm unclear about the rationale behind					
	the measure?					

	Does the firm complain of difficulties in accessing all information about the NTM online?		
	Does the firm find it difficult to understand the available information?		
	Does the firm complain that it does not receive updates on changes in the requirements in a timely manner?		
	Does the firm find it difficult to reach out to responsible agencies in case of issues or concerns?		
Quality of Implementation	Does the firm complain the process of dealing with government agency staff as being smooth?		
Staff	Does the firm complain that the agency staff is unprofessional?		
	Does the firm complain that the agency staff is incompetent?		
	Does the firm complain the process of dealing with inspectors at the border as being smooth?		
	Does the firm complain that the inspection staff is unprofessional?		
	Does the firm complain that the inspection staff is incompetent?		
Agency Support	Does the firm complain that the government agencies have not taken any measures to assess barriers to compliance?		
	Does the firm complain that the government agencies have not provided any guidance or other documents to simplify compliance?		
	Does the firm complain that it is not aware of any mechanisms for registering complaints?		
	Has the firm had an issue where a complaint was not resolved promptly?		
	Does the firm complain about the processes for filing applications and payment of fees not being automated?		

Costs	Does the firm find compliance with these NTMs		
	to be costly?		
	Which of the following are particularly costly		
	from the point of view of the firm?		
	- One-time fee/charges		
	- Shipment specific fee/charges		
	- Cost of assets/equipment/machinery		
	- Fines and legal disputes		
	- Education		
	- Administrative		
	- Third party services		
	- Employee training		
Benefits	Does the firm state that it does not see any		
	benefits arising from the NTM?		

2. Coding and Descriptive Analysis

2.1. Identify common themes in interview responses and prepare descriptive statistics

Example -



2.2. Prepare descriptive analysis of interview responses identified in step 2.1

Example

Common Theme	Percentage of firms which this is an issue	Descriptive Analysis of the Problem
Absence of mechanism to file complaints	90%	Firms say that it has been hard in the past to report any issues causing delays in shipment clearance at the border. Often, it takes several weeks for goods to clear, but it has been difficult to find a platform – online or otherwise- where they can directly reach out to the concerned agencies and report their concerns.
Lack of cross-border agency cooperation	75%	Firms complain that there are 3 agencies at the border who inspect goods prior to release. Often, the inspections staff of all agencies conduct similar procedures, and ask similar questions. This repetition results in long clearance times.

B. Agency level interview analysis

Checklist Matrix

Dimension	Question	Yes	No	n/a
NTM Objective	Can the agency identify the problem that the NTM intends to address?			
	Can the agency provide evidence to show that the problem is serious or irreversible?			
	Can the agency provide the main mechanism through which the NTM will meet the desired objective?			
NTM design and review process	Were multiple approaches to addressing the primary problem considered when designing the NTM?			
	Did the design process incorporate views from main stakeholders?			
	Is the NTM in line with international standards?			
	Is the NTM regularly reviewed?			

Process and Time	Can the agency provide a step by step implementation process for the NTM under consideration?		
	Can the agency provide the exact number of the documents required and the fee payable for complying with the NTM?		
	Can the agency provide an exact timeline for NTM implementation?		
	Has the agency adhered to the mentioned timeline in at least 90% of cases i.e. minimal delay?		
	Is the fee charged from the firms reasonable i.e. commensurate with the value of shipments?		
	Does the agency report the implementation costs as being high?		
	Which of the following are particularly costly from the point of view of the firm?		
	Investments in fixed assets		
Cost	Assessing and approving applications and processing renewals		
	Conducting inspections		
	Recruitment and training of implementation staff		
	Managing and resolving private sector complaints		
	Are all shipments inspected?		
Strategy	Is the decision to inspect risk-based?		
	Is the agency able to explain whether the inspections are either risk-based on random?		
Transparency	Are compliance requirements and procedures made available online?		

Stakeholder coordination	 Does the agency make any effort to ensure that the private sector is kept up to date with any changes in NTMs? Does the agency communicate with other border agencies on the issue of NTM implementation? Do any mechanisms for carrying out joint inspections exist? Is there any sharing of facilities or equipment among inspections agencies? Have any efforts been made to harmonize documentary requirements? Do single windows exist? 		
Internal Staffing	Does the agency carry out generic staff trainings for implementing staff? Does the agency carry out technical staff trainings for those responsible for carrying out inspections? Is there a document laying out the roles and responsibilities of implementation staff?		
Facilitating smooth compliance	Can regulated firms make applications for licenses or certificates online? Can regulated firms pay fees and charges online? Are there mechanisms for the private sector to register complaints? Does the government agency take any steps to promote compliance? Do there exist sanctions to penalize non- compliant firms? Can the agency provide any instances where barriers to compliance were assessed, through		

	a stock take of complaints or by engaging with the private sector?		
	Has the agency carried out any assessment to show that the NTM achieved the desired objectives?		
Effectiveness	Does the agency believe the NTM is achieving the desired objectives?		
	Can the agency provide any evidence to show that the objective is being achieved?		
	Can the agency identify who the beneficiaries of the NTM have been?		

Note - In the case of agency checklists, the response for each NTM must be viewed independently for its design and implementation. As such, there is no need for assigning values, calculating scores, or coding. In this case, problems and issues must be assessed and recorded for each NTM separately and a descriptive analysis should be prepared accordingly. Policy options should target individual NTMs.

Appendix IX

Terms of Reference for Implementing Staff

In keeping with all the steps of the NTM cost-effectiveness toolkit, this appendix provides the terms of reference for the consultants/staff who will be responsible for implementing the toolkit. The toolkit proposes two categories of staff, (i) senior trade policy expert, responsible for mostly the substantive matters, and (ii) assistant trade policy expert/analyst responsible for providing support on substantive matters and managing administrative matters. Users may however choose to divide the work as they deem fit and even hire multiple specialists for specific tasks. The list of tasks and required skills may also be adapted.

A. ToR – Trade Policy Expert

Title:

Trade Policy Expert

Tasks:

In general, the expert must study in detail, the cost-effectiveness toolkit to understand its objectives, design and implementation procedure; and identify all the necessary steps required to be performed. For the performance of each of these steps, the NTM cost-effectiveness toolkit provides several tools as well as suggestions on the different steps. The consultant must be able to adapt and modify the approaches based on national and sectoral contexts to promote further development of the toolkit.

In specific, the consultant must -

- Perform value chain analysis: For the 3-4 value chains of interest identified by the [ministry], the consultant must analyze them to identify critical intermediate inputs and map/validate the applicable NTMs from the UNCTAD TRAINS Database or and by working with relevant national government agencies, based on a pre-established procedure.
- **2. Stakeholder identification:** For the final intermediate input selected, map the relevant stakeholders including government and private sector.
- 3. Stakeholder engagement: Meet with all identified stakeholders to briefly explain project objectives and conduct tier I preliminary surveys, present/moderate the inception workshop, and conduct in-depth interviews post inception workshop, as well as present and disseminate the final assessment report during the validation workshop.
- 4. Stakeholder input analysis: Based on the surveys, inception workshop and in-depth interviews, analyze the information and insights received by using descriptive statistics, coding and estimation of NTM compliance and implementation costs, to

prepare a list of preliminary findings/user-friendly fact sheets + seek clarifications where necessary.

5. Policy Options: Generate a list of potential policy options based on the preliminary findings and identify and meet with additional senior level policy makers to discuss and develop them further as well as obtain their buy in for putting them into action and present them during the validation workshop. Coupled with further potential bilateral meetings, the workshop has two goals: First, to validate the information summarized in the factsheet with stakeholders. Second, to increase stakeholders' awareness and understanding of NTMs and flesh out the way forward in addressing them.

Deliverables:

- 1. Value chain assessment document
- 2. NTMs mapping
- 3. Tier I preliminary survey results
- 4. Tier II Inception workshop findings and key insights
- 5. Tier IV detailed cost assessment analysis
- 6. Document of preliminary findings
- 7. Final assessment report with policy options

Skills:

- 1. Advanced university degree in economics, international trade law or related subject, or equivalent work experience;
- 2. At least 3 years of progressive work experience in domestic trade policymaking and an ability to manage relationships with government officials;
- 3. At least 2 years of progressive work experience with private-sector associations (e.g. chamber of commerce; association of manufacturers);
- 4. Experience in designing, developing and conducting surveys and interviews
- 5. Experience in using survey instruments for (electronic) data collection (Open Data Kit) and data analysis;
- 6. Excellent project management and organizational skills; meticulous attention to detail
- 7. Pro-active, flexible, independent, self-motivating, ability to manage multiple tasks efficiently and work under pressure.

B. ToR for Analyst

Title:

Assistant Trade Policy Expert

Tasks:

- 1. Liaise with stakeholders: Reach out to the identified stakeholders to schedule meetings for surveys/ in-depth interviews or otherwise, as well as to invite them for the inception and validation workshop along with the Trade Policy Expert.
- 2. Assist in surveys and interviews: Assist the Trade Policy Expert in stakeholder engagement and interviews by taking notes, transcribing and analyzing them.
- **3. Prepare and help run inception workshop:** Facilitate the planning and organizing of the inception workshop including logistical arrangement, take notes during the interactive session and transcribe them.
- **4. Prepare and help run validation workshop:** Facilitate the planning and organizing of the validation workshop including logistical arrangements, take notes as necessary.

Deliverables:

- 1. Transcripts of surveys
- 2. Transcripts of inception workshop
- 3. Transcripts of in-depth interviews
- 4. Others, as required from time-to-time.

Skills:

- 1. University degree in economics, international trade law or related subject, or equivalent work experience;
- 2. At least 1 year of progressive work experience in domestic trade policymaking and research
- At least 2 years of progressive work experience in documentation and recordkeeping
- 4. Excellent communication skills when interacting with government and private sector staff
- 5. Pro-active, flexible, independent, self-motivating, ability to manage multiple tasks efficiently and work under pressure.

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