The Why & How of Performance Measurement Contracts

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Introduction

This WCO document describes an innovative approach to targeted improvements in Customs controls applied at the border, using data extracted from Customs clearance systems, measurement, and performance contracts between Customs leaders and frontline officers. As evidenced by its successful implementation in several countries, Performance Measurement and Contracting (PMC) is useful in identifying inefficiencies in Customs procedures and corrupt activities, with a view to improving the situation. Reducing inefficiencies can directly benefit Customs objectives, such as revenue collection and trade facilitation. The PMC tool can be used by national administrations and experts to implement this approach in order to pursue effective and efficient reform and modernization.

Scope

Countries where Customs reforms and modernization are difficult to carry out due to several factors (e.g. inefficient procedures, corruption, bad practices, informality).

Definitions

In this document:

- "Measuring performance" means that the Customs authority regularly analyses data extracted from automated Customs clearance systems to describe and understand the activities and practices of a specific entity (frontline Customs officers, importers, etc.) in connection with Customs procedures;

- "Target indicators" mean quantitative ceilings that will be used as a reference to evaluate the work and progress of officers and bureaus;

- "Information asymmetry" means that, within the same administration, different groups of civil servants (senior management, officers at headquarters and operational staff) do not share all the information about their activities and may not be aware of the same realities, thus creating a disconnect within the administration. For instance, a Director General may not be informed of the daily practices of their field officers.

- "Contracting" means that a Customs administration, Director General, or Bureau formalizes an agreement with individual people or entities (frontline Customs officers, importers, etc.), where the latter agree to have their performance measured coupled with the understanding that good results will be rewarded and bad results will be penalized.

Background

The PMC pioneer was the Customs Administration of Cameroon. Cameroon Customs launched an exhaustive Customs reform in 2007 with a view to reducing corruption within Customs, which had been a constant stain on the reputation of the administration and hindered the fulfilment of its objectives. The reform began with the installation of UNCTAD's automated Customs clearance system (ASYCUDA). Automation enabled the administration not only to track the processing of each consignment, but also to measure a number of criteria relevant to the reform. The information extracted was shared with senior management, thus allowing management and frontline officers to share the same reality thanks to
data provided by the performance indicators that measured how the reforms initiated were applied. After a period of two years, it was decided to go a step further and to introduce individual performance contracts for Customs officers from two Customs offices operating in Douala Port. Indicators extracted from ASYCUDA were used to measure their behaviour and activities. The rationale for choosing Douala Port was that its activity generated most revenue. Therefore, focusing this approach on a core group of officers responsible for 80% of the revenue collected in Cameroon Customs made a lot of sense from an effectiveness point of view.

The preparation and deployment of the performance contracts lasted a few months. Inspectors and their managers were involved in all stages of the preparation (drafting contracts, choice of indicators, performance reviews). Only a few weeks after its implementation, PMC gave positive results in terms of 1) revenue (generated by duties and taxes and by disputed claims), 2) deadlines, 3) Customs activities and inspector behaviour.

The indicators that were tested in Cameroon are reproduced in Chapter 5 of this Guide.

The Cameroon experiment and the results obtained have been published in several books and journals and presented in various WCO committees and forums. This prompted other countries such as Togo and Liberia to seek assistance to implement the PMC approach.

Whereas Cameroon benefited from an in-house expert to assist the administration, Togo and Liberia relied on remote assistance and on a series of 1 to 2-week missions in the country.

**Content**

PMC is more than a tool to fight corruption and enhance effectiveness and efficiency; it is a way for a Customs administration to carry out its reform at different levels. Using indicators to produce quantitative data can indicate if the reforms put in place are beneficial, and if some Customs processes need reviewing; it also highlights the reform actors who may be hindering the reform process. This will be described and illustrated in this document.

The document is divided into 8 sections.

**Section 1**

This section describes the situation Directors General of Customs may be facing at the time of engaging a reform process and why they can face disappointment when – despite their demonstrable political will – their initiatives are not leading to the expected results. To some extent, the information asymmetry between Directors General and their operational officers (who may be engaged in corrupt activities) is so high that it fuels a vicious cycle of reform. This section will explain why PMC can help break this cycle so that it is possible to enter a virtuous cycle.

**Section 2**

Section 2 provides some theoretical background to help Directors General and reformers demonstrate that this approach is historically and theoretically founded, even if it has its own specificities.
Section 3

This section describes the practical framework of the approach: the prerequisites, the human and material resources needed, the expertise required, the global time frame, etc.

Sections 4 - 8

These sections describe each sequence, following the same pattern, i.e. prerequisites, steps, examples and expected results, risks and gained experience.
1. Measuring performance and contracting – what for?

This section describes the situation Directors General of Customs may be facing at the time of engaging a reform process and why they can face disappointment when – despite their demonstrable political will – their initiatives are not leading to the expected results. To some extent, the information asymmetry between Directors General and their operational officers (who may be engaged in corrupt activities) is so high that it fuels a vicious cycle of reform. This section will explain why PMC can help break this cycle so that it is possible to enter a virtuous cycle of reform.

1.1. The context of reform is often difficult

Reforms often take place in a difficult context, even if there are already elements in place that can have a beneficial effect on the reform.

*Positive points usually encountered*

- Most reform plans suggest the need for automation. Consequently, most Customs administrations have automated their Customs clearance process from arrival of the goods to departure of the goods.

- Because reforms focus on many aspects of Customs activities and on those of other related institutions, there are already many “reformers” at all levels of the administration – from general management to operational services – who are actively working towards implementing the reform plan.

- International standards and best practices developed by organizations such as the World Customs Organization have been adopted by Customs administrations and disseminated throughout the administrations so that they are well known by most Customs officers. This does not mean that such standards and best practices are fully implemented.

- Most Customs administrations already benefit from capacity building programmes, including technical assistance and support from donors and international organizations. This aspect is important because it usually means that advice, financial support and financial resources are available.

*Difficulties that need to be addressed*

- Information asymmetry
  There is often a strong information asymmetry between the decision-makers, those who have designed the reforms and those who are implementing the changes, such as operational staff. Operational staff are fully aware of the way in which they carry out their activities and of practices in the field. However, for a series of reasons (e.g. resistance to change, illegal practices or informal arrangements between users and operational staff allowing the latter to reach the targets assigned to operational units), senior management is not aware of such practices and thus may wonder why some reforms do not produce the expected results.
The “informal” practices mentioned (sometimes related to corruption) generate an equilibrium between users and Customs, and neither the private sector nor field officers are interested in challenging this equilibrium in the short term because of the risks that may represent (such as potential loss of revenue, a switch to a neighbouring port, or social and political pressures). The fact that such risks are difficult to evaluate makes things even more complicated.

Despite the political will that may exist at the level of senior management, implementation of the reforms, for the reasons expressed above, usually generates resistance from the staff that have to implement them. Therefore, the reforms are perceived as an imposition from outside and local staff do not own the process, thus leading to a drift in implementation that can hinder the reform effort.

Due to the existing asymmetry of information and the lack of objective evaluation, decision-makers are not informed of the actual level of ownership of the decisions taken. Instead, rumours and perceptions are used to feed the overall assessment discussion, which can challenge a reform that was well intentioned.

- Failure to take the local context into account
  International experts who assist Customs administrations to design their reform often fail to spend enough time in a country to understand the local context. Therefore, the reforms advocated do not take account of reality but are based on a standard approach or model that is neither appropriate in a given context, nor relevant to local conditions, leading to a failure in the implementation of the reform.

- Lack of proper evaluation
  In addition to the difficulties mentioned above – in particular, the failure to take the local dimension into account – it is rare for evaluation of the reform process to provide the necessary feedback to carry out adjustments and review reform policies.

All the difficulties mentioned above contribute to creating a vicious cycle of reform, thus giving the impression that the reform has failed or remains unfinished. This is not very encouraging for a Director General, who may be wrongly accused of having insufficient political will. In addition, donors and international institutions may be reluctant to provide additional funding or assistance because they feel that the reform is not producing positive results.

**Why support from outside is not always efficient**

For the reasons expressed above, external technical expertise cannot take into account all the realities. In addition, expert missions are often too short, which makes it difficult for experts to understand the local context and the realities. Also, donor actions can be very prolific and hence not easy for the Customs administration to co-ordinate. It has been observed that many donors can be involved in similar aspects of the reforms, and the quick succession of expert missions and workshops/seminars negates the impact of the training or assistance provided.
Expertise is usually limited to training local staff or informing them of existing standards, and may not meet the initial expectations of the Customs administration in relation to the assistance requested. Because international expertise is often highly regarded, a Customs leader may be reluctant to question the expertise provided in view of their expectations.

The political authority does not systematically perceive the technical difficulties faced by Customs administrations for two reasons. First, the political representatives do not have the necessary technical knowledge and tend to rely on evaluations conducted by the private sector (for instance, specific studies conducted by business unions on smuggling, or inspection companies contracted by governments to evaluate and certify goods), and/or international organizations (which rely on the private sector too, through surveys, in order to carry out benchmarking). Second, given its developmental role and aims, the political authority has short-term objectives for Customs administrations (revenue collection, fighting against a specific type of fraud or commercial fraud). Reforms may sometimes be perceived as costly and risky due to the sensitive role of Customs in the functioning of the State, and due to the reform process providing results in the mid to long term, rather than quick results. This is part of the reason why a political authority may not be supportive of Customs reforms and favour other types of reforms instead.

1.2. What do “measuring performance” and “contracting” mean?

PMC’s emphasis is tackling information asymmetry. In the sub-sections above, we have seen that information asymmetry (the fact that information/knowledge on what really happens in the field is not shared across the whole administration) plays a negative role that is two-fold. First, it is difficult to design reform in terms of real practice and, as a consequence, reforms are usually based on models that are not adjusted to local conditions. Second, when evaluating the reform, the feedback which should fuel the adjustments is not robust. For instance, some reforms have been stopped and new procedures cancelled just because one specific fraud case has been showcased by those opposed to the reform – even though there has been no global assessment of the impact of the reform. Globally, PMC tries to solve these issues.

Examples of target indicators that can feature in contracts

All contracts with frontline inspectors usually balance two main objectives: accelerating clearance and improving the effectiveness of enforcement. The following provides an example.
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1. Measuring performance and contracting – what for?

<table>
<thead>
<tr>
<th>Target indicators</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Accelerate clearance</strong></td>
<td></td>
</tr>
<tr>
<td>Percentage of declarations assessed the day they are lodged</td>
<td></td>
</tr>
<tr>
<td>Percentage of declarations assessed within 5 days or more after lodgement</td>
<td></td>
</tr>
<tr>
<td>Percentage of non-assessed declarations</td>
<td></td>
</tr>
<tr>
<td>Percentage of declarations in the yellow channel adjusted via an offsetting entry by the inspector who carried out the assessment out of the declarations</td>
<td></td>
</tr>
<tr>
<td><strong>Improve the effectiveness of enforcement/frontline controls</strong></td>
<td></td>
</tr>
<tr>
<td>Percentage of the amount of adjustments relative to the amount of declarations entered in the system</td>
<td></td>
</tr>
<tr>
<td>Percentage of adjustments greater than X (amount expressed in local currency) relative to the total number of adjustments of declarations in the red channel</td>
<td></td>
</tr>
<tr>
<td>Percentage of adjustments less than Y (amount expressed in local currency) relative to the total number of adjustments of declarations in the red channel</td>
<td></td>
</tr>
<tr>
<td>Percentage of declarations rerouted from the yellow channel to the red channel which have been adjusted</td>
<td></td>
</tr>
</tbody>
</table>

**Example of an incentive scheme**

<table>
<thead>
<tr>
<th>Incentives</th>
<th>Sanctions</th>
</tr>
</thead>
<tbody>
<tr>
<td>- Financial bonuses</td>
<td>- Transfer to minor bureaus/units</td>
</tr>
<tr>
<td>- Congratulations letters</td>
<td>- Special mention in the officer’s personal file</td>
</tr>
<tr>
<td>- Public official ceremonies with the press where the Director General gives awards to the best inspectors</td>
<td></td>
</tr>
</tbody>
</table>

The two principles of PMC are the following:

- Objectivity: the data used is extracted only from the available IT systems (Customs IT system, port authority or pre-shipment inspection (PSI)/destination inspection (DI) company). No data is collected manually, nor is it the product of a subjective judgment by an officer, expert or authority. Consequently, either some practices will not be measured, or procedures and practices will be changed to make them measurable.

- Regularity: indicators are produced regularly (e.g. monthly) and the results of contracts (i.e. whether targets have been reached or not) are reviewed regularly (monthly, quarterly, etc.).
Indicators and targets: measuring and contracting – a twofold approach

What is the link between “measuring” and “contracting”? What is meant by “indicators” and “targets”?

Basically, measuring or producing indicators on the one hand, and contracting or evaluating the achievement of targets on the other hand, are part of two different and successive periods of the reform: first, there is a descriptive period where measurement takes place and, second, a prescriptive period that is used to start contracting.

The final outcome is the signature of contracts to improve the performance of Customs officers and other entities such as shipping lines, importers and brokers. One must bear in mind that contracts are strongly prescriptive and may affect individual careers or the economic activity of private companies. Consequently, contracts are only implemented when the Customs authority considers that there has been a change in professional culture and that Customs staff have become familiar with the use of quantitative data. To make this change happen, an initial period during which staff receive and use figures is necessary. This period is called “descriptive”: during this period, performance is measured and indicators are produced, disseminated and discussed. The length of the period will vary according to the capacity of a Customs administration to assimilate the new “culture”. The signature of contracts inaugurates the “prescriptive” period, during which staff and the stakeholders concerned must reach specific targets. This sequence is developed in sections 4 to 8.

1.3. A virtuous cycle

Reforms often follow a vicious cycle, for the reasons expressed earlier in this chapter. Performance measurement and contracts make it possible to enter a virtuous cycle of reform. The analysis of the data provided through the use of indicators reduces the information asymmetry between the Director General, operational services, the private sector and the political authority. Contracts help stabilize a minimum level of expectation and cause it to evolve by assessing the actual level of ownership of the reform.

All stakeholders “speak the same language” as they know which are the indicators used and what they are “saying”. They agree on the same reality, based on the figures produced, instead of relying on a dialogue focusing on exceptional cases and unquantifiable rumours. Since the evaluation of the performance of each entity is openly shared (at least internally), each entity will want to be assessed as accurately or positively as possible. This leads it to share information related to the difficulties and constraints it has encountered when carrying out its activities. This “forced” feedback feeds the debate on the reform with more accurate information, thus leading to a more realistic evaluation of the modernization process.

“Performance measurement” enables a Customs administration to assess the effects of the reform as it is on-going and to report regularly to the government, international organizations and donors, without having to wait for mid to long-term results, as described earlier. The other advantage is that staff knows the objectives they are expected to meet and that the evaluation rules are clear to them, thus empowering the internal career policy.
Examples of practical results: eradication of some practices, and positive results

Prior to the implementation of contracts, some examples indicate that “performance measurement” has contributed to eradicating bad practices, improving revenue collection and reducing delays:

- When the results of individual bureaus and frontline inspectors had been shared internally with the Director General, it was noted that the proportion of declarations that had not been assessed within normal deadlines by individual inspectors decreased, thus contributing to increasing the revenue collected each month.

- Using performance measurement revealed the reason behind some delays: one of the bottlenecks observed was due to the fact that manifests were not being registered in the Customs IT system within the time limit. The performance of the shipping lines which were partly responsible for these delays was assessed and published. This led to a series of meetings with shipping lines, where discussions and negotiations took place to accelerate the registration process. In one specific country, delays in clearing home consumption cargos decreased by 50% (days) because the manifest registration process was no longer blocking the whole Customs clearance process.

After implementation of the contracts, other improvements were noticed:

- In Cameroon, post-entry adjustments were reduced dramatically after the launch of contracts for inspectors. The inspectors changed their working habits and started to perform “real” controls, as they should have been doing from the start, before the assessment of frontline officers. This change of behaviour generated less competition amongst inspectors. This “competition” had previously served to attract more users in order to get a larger share of the revenue/fines collected. The change of behaviour also led to a more equal distribution of declarations amongst frontline officers and therefore reduced some bad practices.

Amongst the positive global results registered after the implementation of PMC were:

- increase in revenue;
- increase in the average amount of taxes and duties per declaration, counterbalancing the decrease in port activity (Togo);
- the increase in revenue collection went beyond GDP growth (Cameroon and Togo);
- reduction in delays.
2. A brief theoretical framework

The objective of this section is to briefly describe the theoretical background that inspired the approach described in this document and, in particular, the way in which this approach deals with the usual elements of public sector reform: the role of quantification, the ability to experiment in public services, and the role of external experts. The specificities developed by the current approach should be kept in mind at the time of implementing reforms: they mainly rely on pragmatism and empiricism. This does not mean that there is no limit as to what can be done; it is just an intellectual observation to prevent experts and organizations from placing too much confidence in "models", and encourage them to be guided instead by objective quantification when conducting their reforms.


The quantification of public action has its roots in the 1970s with the implementation of new administrative reforms in Western countries, especially in the United States of America. These reforms are usually embedded in the concept of New Public Management (NPM), which assumed that public sector management should be inspired by private sector methods giving public administrations more autonomy and providing the general public with more control and transparency of bureaucratic processes. Quantifying, applying numeric targets and objectives, and evaluating results from a cost perspective were some of the techniques supporting NPM.

The current proposed approach does not share the same intellectual background as NPM. Quantification techniques enable a public administration to animate the public dialogue among stakeholders, especially at the border. In this New Public Service approach, the Customs administration organizes and animates the relationships between all stakeholders at the border, rather than "manage" them (NPM) or apply formal rules without any negotiation or flexibility (Weberian ideal type). Quantification conducted by Customs and applied to their own institution, as well as to all institutions and stakeholders working at the border, is an opportunity for Customs to be at the heart of public dialogue. For instance, implementing performance contracts with importers which focus on delays and compliance will change the usual relationship between importers and brokers, between importers and shipping lines, and importers and the banks. As facilitation of Customs processes is included in contracts with importers, this forces them to improve their internal Customs-related procedures vis-à-vis their usual service providers (banks, brokers, etc.). Measurement and contracting conducted by Customs thus confirms its leading role in initiating discussion in the public sphere, as all stakeholders at the border claim to be working for the public good but also have to satisfy their own private interests and work to their own benefit.
2.2. Experimenting in public services

Usually, “experimentation” in public services is limited to fixing technical issues emerging during the “pilot” phase of projects before they are deployed more widely. This approach states that the administration must experiment with any process/procedure/change, under the condition that such experimentation is subject to an ongoing and shared quantified evaluation. Instead of applying a “concept” or a “technique” that has been developed elsewhere, the proposed approach using quantification is pragmatic (the reform is considered in terms of its effects, rather than through implementation of a given model) and empirical (the reform is thought of as a cyclical and measurable process).

2.3. The role of experts

The initial assumption – a situation where reform is difficult – infers asymmetry of information between the different hierarchical levels. It also infers difficult, sometimes conflicting, relationships within the administration, and between the administration and the political authority and the private sector. The role of external expertise is therefore to provide helpful neutral analysis and perspectives, as experts presumably have no ambitions to obtain a good position within the local administration.

This being the case, and given the important financial stakes related to any Customs reform on the one hand, and the significant power inherent in the design and leadership of the performance policy on the other, it is recommended that non-local experts collaborate in the project, even if the technical skills are available locally. This will avoid a situation where local officers implementing the performance policy come under serious pressure or are subject to rumour.

Expertise, however, should not be prescriptive. External experts should take part in the dialogue as equal partners with internal experts, sharing knowledge and providing technical experience gained in other countries. Decisions should always rest with the local officers who are leading the project. However, whilst experts and the local administration usually claim that this is the case, on the ground, experts influence local decisions in many ways. Such decisions often stem from the unequal relationship between experts and local officers, who assume that the experts’ advice is always best. Thus, it is crucial that experts be aware of this image they may have and refrain from exerting non-explicit influence on local officers.

It is important to build a relationship between experts and local officers which is based on equality of judgment. Trust is particularly crucial in quantification projects given that, during the project, experts will acquire an in-depth knowledge of how the local administration actually functions. However, experts are sent by international organizations and donors and/or from other Customs administrations. The very fact that an expert is tied to one or several non-local institutions has three consequences. First, confidentiality and agreement on what should be disclosed outside the administration should be clarified at the very beginning of the project. Second, experts should also act as trusted intermediaries between the authority they are linked to and the local Customs administration. Third, the role of intermediary may be extended to include the relationship between the local administration and other stakeholders: the experts will ensure that results and information are not shared to generate conflicts between different entities.

For this reason, and from an experimental perspective, experts should ensure that all decisions are assessable and should specifically work on that evaluation as it is a neutral and crucial part of the project.
3. Practical framework: what does it mean and how long does it take?

3.1. Prerequisites

The minimum initial requirement is to have a Customs IT system in place that processes all Customs procedures, ideally from the cargo’s arrival at the border to its exit after Customs control. In the absence of an IT system, objective and regular measurement is not possible. Any quantification based on data collected manually is unreliable, time-consuming and inefficient, and should not be pursued in the context of a genuine reform.

3.2. Human resources

All configurations are possible in terms of human resources: having a team dedicated to performance measurement, or using an existing structure that takes this new task on board. Regardless of the structural configuration, what is essential is that the team be composed of:

<table>
<thead>
<tr>
<th>Grade</th>
<th>Number</th>
<th>Specific skills/abilities</th>
<th>Main tasks</th>
<th>Full-time or part-time?</th>
</tr>
</thead>
<tbody>
<tr>
<td>Senior Customs officer</td>
<td>1</td>
<td>Direct and legitimate access to DG</td>
<td>Team management</td>
<td>Either</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Presentation of the results</td>
<td></td>
</tr>
<tr>
<td>Customs officer</td>
<td>2-3</td>
<td>Field experience</td>
<td>Writing reports and making presentations</td>
<td>Full-time</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Competence to handle simple software (Excel, Word, PowerPoint)</td>
<td>Writing</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Writing</td>
<td>Writing</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Networking (optional)</td>
<td>Development of indicators and contracts</td>
<td></td>
</tr>
<tr>
<td>IT expert</td>
<td>2-3</td>
<td>SQL programming</td>
<td>Development of indicators</td>
<td>Full-time (at least 1)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Creating simple software</td>
<td>Automating the production of indicators and outcomes of contracts</td>
<td>and part-time</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Customs database expert</td>
<td>Networking indicators and results of contracts</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Networking (optional)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Statistician (optional)</td>
<td>1</td>
<td>Providing data analysis to explain the trends when presenting the indicators and the results of contracts</td>
<td></td>
<td>Part-time</td>
</tr>
</tbody>
</table>

This information illustrates that putting in place a performance policy (indicators and contracts) does not require a large number of staff. Nevertheless, four conditions are necessary:
i) The senior executive team leader must benefit from the full confidence of the Director General and have direct and legitimate access to them. Indeed, this senior officer will be a key element of the reform because they will provide information to the Director General on actual practices, lead the design of indicators and contracts (choose to shed light on specific areas/services/practices), interpret the results, and participate in the changes. As they will embody the reform, they will be particularly vulnerable in their administration.

ii) Two executive Customs officers at least should be dedicated full-time. These officers will ensure that indicators and outcomes of contracts are prepared regularly on a given date. It may be difficult to motivate Customs officers to execute non-field tasks; a specific financial incentive scheme should therefore be adopted.

iii) Human resources dedicated to the project should combine Customs and IT skills (and a minimum of simple descriptive statistics if possible). IT experts cannot design indicators alone. Any programming has an empirical component that should be pursued and tested with Customs experts.

iv) IT staff (at least one) must have a comprehensive knowledge of the Customs IT database structure. Several elements can be considered later in the project:

- Training for IT staff on Web technologies (Java, PHP, etc.) to conceive software that will automatically calculate the indicators and the results of contracts, and will make them available to internal and external audiences on the Intranet/Internet.

- Training Customs officers who are part of the team to use a database programming language (SQL) so that they can program their own data mining queries and produce their own analysis to support the analysis of indicator trends.

3.3. Material resources

Material resources are basic: the project team must have a dedicated standalone server which replicates all or part of the database of the Customs IT system, to test indicators and programming. This server does not need the same characteristics as the main production server in terms of response time, processor and memory capacity. In most cases, a normal but modern PC can be used as a server.

3.4. Global time frame and external expertise

The estimated duration of operational performance contracts is from 18 to 24 months. The sequence for creating them is described in the sections below.

Within this timeframe, experts should be available to carry out 6 missions lasting 2 weeks each.

It is possible to provide remote expertise between missions as PMC is based on the Customs IT database. This entails sharing raw data with experts.

It is not recommended to accelerate the process for three reasons:

i) Positive results may be assessed within the first 6 months of implementation of the performance indicators. What is important is that it is a cycle: implementation of indicators will highlight bad practices that will be amended, progress will be measured by means of the
indicators, and progress in one field/part of the Customs process will make bad practices visible in other fields, in turn providing an opportunity to design new indicators, and so on.

ii) This approach changes the professional culture, which implies two constraints:

The project team itself must gain experience in a field where it has none. The team must produce reliable figures, which is never the case at the beginning since adjustments are always needed. The team will therefore have to take time to check the numerical results it has produced and make sure that the figures are accurate. This is important so that it does not undermine its own reputation or that of the services whose activities are being measured.

Customs officers who are not part of the project team must have time to assimilate the results presented, before becoming involved by proposing their own adjustments and using the numerical results to change practices on the ground.

(iii) External expertise is not necessarily always available, given that each mission lasts at most 2 weeks.
4. Phase 1: Analysing (3 months)

The objective of this phase is that i) the main actors in the project (Director General, project team, experts) share the same understanding of the project, and ii) experts and the local team build/represent/establish an "initial situation" as a baseline for assessing progress during the following phases of reform implementation and of performance measurement deployment.

The major material output is a preliminary report that analyses the situation in Customs through data mining of its IT system. This analysis aims at i) detecting problems at the level of practices and procedures, and ii) evaluating the IT system’s capacity to measure exactly what happens on the ground and real work practices.

At the end of this phase, proposals are made to i) classify problems/dysfunctions and their effects, and ii) change Customs procedures and/or the Customs IT system configuration so that the reality on the ground can be captured in the form of data that will be used in the following phases.

4.1. Prerequisites

The prerequisites are:

- a Customs IT system that is operational for the entire Customs clearance process,
- a group of external experts who have the confidence of the Director General,
- a project team and IT resources as described in section III.

Customs should agree to share its IT system data with the experts. A Memorandum of Understanding can be signed to ensure data confidentiality and non-use of data by experts outside the scope of the project. Specific clauses can ensure that the data shared does not include any personal data on private operators.

4.2. Steps

**Kick-off meeting between the Director General, the project team and the experts**

During this meeting, the Director General and experts agree on the outline of the project and on an overall agenda. The Director General sets out i) their institutional priorities (revenue collection, trade facilitation, reduction in delays, costs of Customs clearance, deployment of staff), ii) problems regarded as politically important (delays, corruption, fraud, etc.), iii) offices and/or Customs procedures on which a particular effort should be made (home consumption, transit) and iv) their time constraints on reform related to the government’s objectives.

Experts are informed of existing IT capabilities and ongoing technical projects, and discuss feasibility and the conditions for success.

Finally, the Director General and experts may mutually undertake to address the issue of data confidentiality.
4. Phase 1: Analysing (3 months)

**Extracting data from the computer system and sending it to experts**

The contact point and the experts agree on the nature and format of the data.

In terms of the nature of the data: there should not be any restrictions, except for information that identifies users. Generally, computer systems consist of databases with multiple tables. All the tables should be provided: manifests, bills of lading, Customs declarations, release notes, inspection certificates, tariffs, exemptions, etc.). It is important to provide raw data, as it is recorded in the IT system. Indeed, in the event that data is fraudulently manipulated (for instance, deletion of declarations), cross-checking data from different tables will allow experts to trace declarations still present in one table but not present in other tables.

In terms of the format of the data: experts should rebuild a database from the tables provided in a specific server; this rebuilt database will be regularly updated during the project. To reduce costs, free software such as MySQL can be used: such database engines are as effective as commercial software for the simple data mining deployed in this type of project.

In terms of the sample size: analyses should be conducted of at least the two or three previous years. All computerized Customs bureaus should be included in the sample. Indeed, it is important from the beginning of the project to anticipate traffic diversions that any reform may cause.

The data extracted can be provided in CVS format.

**Remote analysis experts and first report**

Experts analyse the data and produce an interim report that the head of the project team comments on and amends. A final joint report closing this first phase is sent to the Director General.
The analysis focuses on five specific points.

<table>
<thead>
<tr>
<th>Proposed framework for the first report (phase 1)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Data consistency</strong></td>
</tr>
<tr>
<td>Analysis of data consistency by cross-checking tables, identification of suspicious data or suspicion of missing data.</td>
</tr>
<tr>
<td>Identifying inconsistencies does not mean making accusations against Customs officers or Customs IT staff. This section should only raise inconsistencies within the data. What is «inconsistent» from an expert’s perspective may be explained simply by a specific configuration due to local legal practices, or by specific IT problems (such as a system breakdown for a short period of time). The revision of the interim report by the contact point is necessary.</td>
</tr>
<tr>
<td><strong>Structure of the Customs activity</strong></td>
</tr>
<tr>
<td>Description of the distribution of Customs activities, by Customs procedure, bureau and regime, and seasonal activity.</td>
</tr>
<tr>
<td>Statistical description of the actors involved in the clearance process (shipping agents, Customs brokers, Customs clearance warehouse managers) and their different market shares (in terms of container volumes, mass and number of transactions). Statistical description of the importers and the commodities that provide the major share of revenue.</td>
</tr>
<tr>
<td>Statistics on the main offices, their staff (number of inspectors, the average daily work period, the average number of days controlled by declarations), the median/average tax yield per declaration (by Customs regime).</td>
</tr>
<tr>
<td><strong>Delays</strong></td>
</tr>
<tr>
<td>The Customs procedure is divided into segments whose duration is measured in the IT system to identify time-consuming procedures, from the arrival of vessels to the release of goods and their exit from the area under Customs control.</td>
</tr>
<tr>
<td>The measurement of time thus concerns all stakeholders: shipping agents, Customs brokers, importers/exporters, Customs warehouse managers, Treasury/Customs administrations.</td>
</tr>
<tr>
<td>Unprocessed declarations, outstanding in the system (non-assessed by Customs or not paid by users), are evaluated.</td>
</tr>
<tr>
<td><strong>Enforcement</strong></td>
</tr>
<tr>
<td>Enforcement/control forms the core of Customs activity and of ethical issues, and must therefore be precisely assessed.</td>
</tr>
<tr>
<td>Analysis measures efficiency of controls, related delays and the structure of disputed cases (description of fraud disputes by type of recovered taxes and duties per case), the share of different control channels (red, yellow, green lines) and their efficiency.</td>
</tr>
<tr>
<td><strong>Specific practices</strong></td>
</tr>
<tr>
<td>Many Customs officers' practices are legally discretionary. The performance measurement policy will allow this but will monitor them so that they do not provide opportunities for fraud or corruption, such as the rerouting of one control circuit to another by the auditor, the reallocation of a declaration to another inspector by the team leader, or passage by means of a specific control (e.g. scanners).</td>
</tr>
</tbody>
</table>
Expert mission to cross-check data mining results and field realities

A purely statistical and descriptive analysis of data extracted from the Customs IT system has the advantage of being objective. However, it can lead to misinterpretations. Experts must therefore spend time in the field to refine their analysis:

- the draft report is discussed with the head of the project team,
- at the border post, experts follow the Customs clearance process specifically, step by step,
- experts and the project team propose changes to procedures and/or the IT system to make the overall clearance process measurable via the system,
- experts and the project team issue the final report to the Director General.

4.3. Examples and results

This section does not give an exhaustive list of issues that may be identified through this type of analysis, but deals with only a few of the cases encountered.

Analysis can raise concerns about fraudulent actions in the Customs IT system and trigger in-depth investigations. The cross-checking of two tables dealing with Customs declarations helped in obtaining missing declarations references. Alerted by the report, headquarters conducted an investigation to look at specific fraudulent acts of Customs professionals who had tried to erase Customs declarations in the system. Sometimes, inaccuracies in the Customs IT system may be due to bad implementation/use of the system in the field, which has to be corrected prior to taking any measurement. This occurs when part of the Customs clearance is not computerized, including the exit of the goods from Customs warehouses/areas: computer workstations at the exit gates were not operational, forcing Customs officials to enter data after the exit, when they could access the computers in a different office. This was detected through the analysis of exit hours and days that were very similar for major samples of declarations.

In terms of enforcement and corruption, this preliminary analysis prompted several discussions on Customs procedures that were deployed and extended during subsequent phases. For instance, the number of dispute cases raised by frontline officers was high, but the amounts recovered by litigation were very low, attracting the attention of management on potential focal points for corruption. Thanks to indicators, management was able to pay special attention to the disparities in the amounts recovered by bureaus in the same area, and by frontline inspectors in the same bureaus. A second example is that the analysis showed that the documentary control channel was more efficient in terms of litigation than the physical control channel. Monitoring a comparison between control channels provided the necessary information to consider the inspectors’ efficiency.

As to corruption, many Customs declarations for home consumption remained unprocessed in the system: they were registered by the broker and assigned to inspectors who did not clear them in the system. This observation made it possible to detect an issue in the configuration of the Customs IT system that allowed collusion between brokers and inspectors. When registered, the declaration was automatically assigned to an inspector by the system but, if the broker was not “satisfied” with the assigned inspector, he could repeat the operation until the declaration was assigned to a “good” inspector, because the system did not reserve/block the bill of lading related to the commodities that were declared. As a result, many declarations remained unprocessed in the system. By configuring the Customs IT system more stringently, this problem detected through data mining was resolved.
This preliminary analysis can also help initiate discussion with users on how to improve procedures. For instance, when goods were in transit to countries of the hinterland, the Customs IT system did not link the manifest to the declaration, which forced the team to manually reconcile the information. This could be detected by focusing on the clearance of bills of lading of the goods in transit. The Customs IT system was not at issue: to clear goods in transit to foreign countries, officers had chosen a Customs regime for export that allowed no automated link between manifests and declarations. The Customs procedure was changed by creating a specific transit regime to provide automatic clearance of the manifest, thereby reducing the number of procedures for users.

A second example relates to shipping agents who delayed the registration of the manifest within the Customs IT system. This delayed the whole Customs procedure for many days, as registration of the manifest is a necessary first step before the Customs declarations are registered. Shipping agents argued that their commodities came from neighbouring countries and that they did not have enough time to lodge the manifest prior to the vessels’ arrival. Moreover, they argued that they had many compliance checks to deal with before recording their manifests. The analysis showed that these arguments were not valid: on the one hand, many shipping agents had direct lines from distant ports; on the other hand, the analysis demonstrated that they were used to asking for numerous changes in the manifests after their registration in the system. This analysis prompted an objective dialogue between Customs and shipping agents, resulting in a protocol establishing the shipping agents’ responsibilities concerning delays, and global dwell times have decreased.

A third example relates to the structure of imports, which showed a large number of unidentifiable taxpayers using a “casual importer” identification tax code that did not allow any identification or monitoring of users for delays and enforcement analysis. Corrective measures were taken to educate inspectors to control the declarations fields related to users’ identification, and another set of measures was taken to force more individual importers to be identified as taxpayers.

A fourth example relates to the fact that the manifests recorded in the Customs IT system did not indicate at all the arrival date of the vessel, thereby preventing measurement of the performance of shipping agents (time between the vessel’s arrival and the manifest registration). The system configuration was changed so that the arrival date field was mandatory to lodge a manifest.

4.4. Risks and gained experience

Sharing raw Customs data with experts is not a trivial matter for Customs administrations. By doing so, administrations increase their transparency and may be exposed to criticism. Trust between the Director General and the experts is, therefore, crucial and provides tangible evidence of the Director General’s political will.

At this stage, developing a detailed and complex action plan is not recommended. Reform is, above all, an individual commitment by the Director General, their team and the experts. In this respect, it is enough to have in mind a clear vision of the four major steps and deadlines. Each phase may be developed through very short-term and simple action plans which fit with the timing of the expert missions: what must be prepared before the mission? What will the experts do during their mission? What must be done before the next mission? The main goal of these projects is to reduce the information asymmetry between the Director General and the operational units. At this stage, however, not all bad and inefficient prac-
practices and dysfunctions have been exposed. Obviously, the project will expose practices and situations calling for action that could not have been envisaged when it started. The main steer will be the quantitative indicators that will provide information on the evolution of the project’s main objectives: impact on delays, revenue collection, and enforcement efficiency.

During this first phase, the most important point is that the Director General’s expectations and constraints are consistent with the experts’ agenda and evaluation of the initial situation. At this stage, the preliminary report should not place blame on operational services and should propose as few changes as possible. Producing an objective and factual initial report should continue to be the main goal, despite the temptation to immediately remedy any problems identified.

At the end of this phase, the Director General should have:

- a clear vision of the project which aims at: i) strengthening the reporting relationship between headquarters and operational services, ii) changing the inefficient practices of Customs and Customs private sector partners, iii) quantitatively measuring the effects of decisions and procedural changes, iv) sharing the results with government, the private sector, the public and donors;
- a precise and quantified assessment of the efficiency of the Customs clearance process and a classification of problems through their measured effects in order to prioritize actions;
- instructed the IT services to make the necessary configuration changes;
- instructed the operational services to adopt new techniques to make the Customs clearance process fully measurable;
- been informed that the project will change the professional culture of Customs officials, and be aware that this is a complex and lengthy process that they will have to supervise personally.
5. Phase 2: Developing performance indicators (3 months)

The objective of this second phase is to build a set of quantified indicators that will be presented regularly to operational services. This phase marks the progressive involvement of the technical project team to achieve these indicators in co-operation with experts.

5.1. Prerequisites

The prerequisites are:

- the final analytical report is accepted by the Director General,
- the project team is operational,
- IT tools have been presented at section 3 installed and accessible.

5.2. Steps

Different tasks will be carried out during an expert mission in order to help the project team produce a first "Monthly Performance Report".

This mission can be carried out following the steps below:

Experts’ interviews with operational services staff (heads of services and inspectors)

These interviews aim to initiate reflection and discussion on Customs performance in order to:

- understand the meaning of performance in the existing professional culture, before the establishment of indicators,
- individually inform operational staff that their activity will be measured, and take into account the problems that may arise,
- test with operational services the relevance of potential indicators and assumptions regarding the quantification of their activity.

Providing any precise interview guide would be useless. The interview conditions are the most important thing: field officers must feel free to express their views on performance, their concerns about the current functioning of their service, and their ideas on what needs to be improved, unreservedly and without the suspicion that their words could be used against them. These interviews should be conducted by experts, individually and anonymously, if possible without the presence of senior management or the project team. On the other hand, it must be made clear that the experts are working for and on behalf of the Director General. In some situations, field officials may be tempted to use experts to "denounce" practices they attribute to their hierarchy, so experts must state clearly that the unusual situation of anonymous interviews has nothing to do with inspection or external audit. The main idea is simple: collecting direct information without hierarchical interference is crucial for assessing how performance measurement will be received and what problems
can be resolved, including those in hierarchical relationships between heads of office, front-line inspectors and headquarters.

As a suggestion, the interviews could start by asking the inspector for a personal, subjective description of the position they hold and a short biography. The aim is to assess the global experience of the service whose performance will be measured. One could also ask about the practical problems the inspector encounters as part of day-to-day activity. Then, interviews could continue with a discussion of what “performance” means from the perspective of the position of inspector, considering the demands and expectations of the hierarchy where performance indicators may help. Hierarchical relationships are often imbued with subjectivity and mid-level officers such as inspectors are interested in tools that may produce an objective and fair representation of their activities.

**Choice of indicators**

The experts and project team propose indicators, initially without taking into account the overall consistency between the indicators. Any problems identified during the first phase and the interviews should be addressed. At this stage, ruling out a problem raised by the Director General or operational services could reduce confidence in the project. During the following phase, some indicators will be deleted, changed or aggregated to make the whole set of indicators more consistent.

All indicators must be described:

- verbally, in simple and accurate sentences, and
- mathematically, with a formula.

Each indicator must be meaningful and easily interpretable in that it deals with a limited and specific question.

**IT training**

As appropriate, IT officials in the project team may take two types of training:

- training in the IT programming language adapted to the system database they have chosen to work with,
- training in the structure of the clearance database system. This training is probably the most important because it determines the ability of the IT staff to program indicators that specifically meet the demands of the project manager. The training can be provided by the supplier of the computer system and consists of a description of the tables, their links and the data structure.

**Development of indicators**

Indicators are written in computer language (SQL) and tested on existing data. One option to make sure of the programming may be for two IT officials in the project team and/or an expert to write the same indicators separately and then test them together to check that they produce the same results. This method may ensure that computer programming is fair and consistent with the chosen indicator.
### 5.3. Examples and results*

<table>
<thead>
<tr>
<th>Indicators of activity</th>
<th>Details</th>
</tr>
</thead>
</table>
| **Customs bureaus**                                   | By Customs regime:  
- number of declarations registered, declared values and amount of duties and taxes (assessed)  
- paid and unpaid declarations (number of declarations, amount of taxes and duties, raw values and shares) |
| **Imported containers, 20 ft equivalents**            | Monthly number of imported containers in 20 feet equivalents  
Global and by office and Customs regime (inland import/transit) |
| **Taxation categories**                               | Monthly total value and mass by taxation category  
Usually, tariffs have 3-4 taxation categories, groups all products which have the same duty rate |
| **Monthly imported mass**                             | Monthly and for each Customs office, provides:  
- the net mass of items (all import declarations) and  
- the net mass of items for home consumption declarations (IM 4 only 4000) |
| **Indicators for placement of goods under Customs control** | Monthly and for each shipping company provides:  
- number of cargo manifests (without the date of arrival)  
- number of Bills of Lading (BLs) (from manifests data and from BLs table)  
- number of packages (from manifests data, BLs table and declarations data), net mass (from declaration idem) |
| **Manifests/BLs**                                     | Number of registered manifests from beginning of current year and per month  
Number of BL per type (import, export, transit) |
| **Brokers**                                           | For every office or section, per Customs broker:  
- number of declarations  
- total amount of Duties and Taxes (D&T) paid  
- maximum (and minimum) number of declarations per year and per month  
- biggest D&T amount for a month  
- average time delay for payment (standard variation)  
- ratio (in number and in D&T amount) of anticipated declarations (SAD registered before the arrival of the vessel)  
- declarations assessed in 0 day (registration and assessment same day)  
- declarations paid in 0 day (assessment and payment same day) |
| **Goods**                                              | For each office, monthly, the top 10 revenue-providing commodities (share of revenue provided by commodity). List may be presented monthly to detect new products. |
| **Exit**                                               | Number of exit notes registered monthly |

* These examples are extracted from a joint project between the WCO and UNCTAD.
## Indicators of Delays

<table>
<thead>
<tr>
<th>Category</th>
<th>Description</th>
</tr>
</thead>
</table>
| **Shipping lines/maritime agents/shipping companies** | For each maritime agent, number/share of manifests/BLs registered:  
- after due time (when there is a legal limit related to ship arrival)  
- prior to ship arrival  
- more than X days after ship arrival (X is calculated after examining the results of analysis conducted during phase 1)  
For all stakeholder:  
- the average/median time delay (days) between the ship arrival date and the lodging of the manifest in the system |
| **Customs brokers** | For each Customs broker:  
- average/median time delay between manifest registration and Customs declaration registration  
- average/median time delay between assessment and payment  
- average/median time delay between payment and exit  
- number of declarations and amount of taxes and duties registered prior to ship arrival (raw values and shares of registered declarations)  
- number of declarations and amount of taxes and duties registered more than X days after manifest registration (raw values and shares of registered declarations)  
- number of declarations and amount of taxes and duties paid the same day as assessment (raw values and shares of assessed declarations)  
- number of declarations and amount of taxes and duties paid X days after assessment (raw values and shares of assessed declarations)  
- number of declarations and amount of taxes and duties not paid but since assessed by Customs (raw values and shares of registered declarations) |
| **Pre-arrival declarations** | Ratio in number and amount of declarations registered prior to ship arrival |
| **Customs bureaus - monthly assessment time delays** | Monthly time delays between registration and assessment of the declaration, and additional information on not assessed.  
Add the medians and two classes, one for very short time delays and a second for very long ones.  
Time delays between the date of registration of the declaration and the date of assessment per quarter, average and standard deviation  
Calculation should include: medians, maximums and minimums |
| **Customs bureaus - time delay between ship’s arrival and exit of the goods** | Monthly, for a list of selected importers, provides the:  
  i) average time delay between the arrival of the ship and the exit of the goods (and standard deviation)  
  ii) ratio in number of goods not yet exited |
| **Time delay between registration and assessment (Quarterly)** | Quarterly, provides a comparison between the average/standard variation of the time delay between the registration and the assessment of a declaration, compare year to year |
| **Time delay between registration and assessment (Daily)** | Daily by section provides the average time delay between the registration and the assessment of a declaration, taking into account when Customs offices are closed (bank holidays and w/e) |
5. Phase 2: Developing performance indicators (3 months)

<table>
<thead>
<tr>
<th>Indicators of delays</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Loss of revenue (late collection)</td>
<td>Monthly difference between amount of D&amp;T registered and paid during the same month</td>
</tr>
<tr>
<td></td>
<td>Difference between total amount of taxes registered and paid in the same month, excluding paid in month m but registered in m – 1</td>
</tr>
<tr>
<td>Registration of the declaration</td>
<td>Monthly classes of time delays for the time delay between registration of the declaration and ship arrival (same day, X days prior to arrival, D+ 1, etc. &gt; J+30)</td>
</tr>
<tr>
<td>Monthly time delay between assessment and payment</td>
<td>For each bureau</td>
</tr>
</tbody>
</table>
### Indicators of revenue and enforcement

| **Customs bureaus** | - ratio (in number and D&T amount) of unpaid declarations  
|                     | - ratio (in number of cases and recovered D&T amount) for declarations modified with increased amount of D&T  
|                     | - ratio (in number and D&T amount) of declarations sent to physical inspection channel  
|                     | - ratio of D&T amount per country of origin  
|                     | - ratio of D&T amount per country of origin (per HS 4 or 6 codes)  
|                     | - ratio of D&T amount per crossing (HS, origin) to identify the consistency of broker’s transactions. |

| **Yield of declarations** | Yield of declarations for a pre-defined list of importers with monthly comparison (M-1, M, M-12). Yield/– total duties and taxes and number of declarations. Median, average and standard deviation, min and max. For all offices or 1 office:  
|                           | 5 sets of parameters:  
|                           | 1. Year. Result should include the previous year.  
|                           | 2. For 1 importer, a list of importers or all.  
|                           | 3. HS Code or country of origin or both.  
|                           | 4. Exemptions  
|                           | 5. Type of control channels. |

| **Yield of declarations – exemptions** | Monthly, by section, calculates the average amount of D&T per declaration excluding the declarations benefiting from an exemption (partial or total) |

| **Efficiency of enforcement** | By Customs office, the increase in revenue resulting from the controls, in numbers, total amount of D&T recovered, the average amount of D&T recovered for every declaration corrected.  
|                              | Difference between total amount of first registered declaration and last assessed/post-entered version (at least paid once). Should be at least re-registered or post-entered.  
|                              | 5 sets of parameters:  
|                              | 1. Yearly, global or monthly and dates interval.  
|                              | 2. For 1 importer (capture), a list of importers or all.  
|                              | 3. HS Code or country of origin or both.  
|                              | 4. Exemptions.  
|                              | 5. Type of control channels. |

| **Efficiency of enforcement** | Provides for a list of importers the monthly corrections in numbers, and amount of D&T recovered in absolute and proportional values |

| **Efficiency of enforcement** | For a year, a month or a section provides the global figures:  
|                             | - % of number of declarations corrected, % of recovered D&T  
|                             | - global figures for nil or negative modifications  
|                             | - figures by ratio classes of modifications (% of recovered D&T compared to assessed D&T)  
|                             | - figures by classes of recovered D&T |
### Indicators of revenue and enforcement

#### Efficiency of enforcement
Provides monthly:
- declarations assessed and paid the same month as they were registered (absolute figures and percentage in number and recovered D&T)
- declarations registered the previous month and not yet paid
- the classes of assessment delays according to the control channel
- the efficiency by control channel

#### Exemptions
Total amount exempted compared to total amount registered. Date interval, monthly and N months of the year.

### Indicators on practices

#### Variation in workload
For every office and section, monthly:
- the smallest number of declarations processed by an inspector
- the biggest number of declarations processed by an inspector

#### Efficiency of change of the selectivity channel (rerouting)
For every office and section, monthly:
- total number of declarations in yellow and red channels
- total number of declarations rerouted from yellow to red
- number of corrections for these declarations and recovered amounts in number and percentage

By inspector and total amount of declarations.

#### Identification of post entries and modifications
For every office, monthly:
- total number of declarations
- total number of declarations selected for control of documents
- total number of declarations corrected
- total number of declarations corrected in modification
- total number of declarations corrected in post entry by the inspector who made the assessment

#### Monthly work duration
For each inspector and by month, calculates the average delay per day between the first and last declaration assessment

#### Reassignments
For every office, provides the number of reassignments from one section to another and the number of reassignments within
- who made the reassignment
- initial and destination inspector
- amount of D&T
- number of cases

#### Assignment of inspectors by section
Percentage of declarations processed by section and examiner
Take shifts into account

#### Modifications of Bills of Lading (BLs)
Number and type of modifications of BLs per month
After registration of manifest (transit, location, transshipment, manual discharge, split, block, etc.).

#### Workload
Monthly for each examiner, calculates the number of processed declarations, the ratio to the expected average (total number of declarations/number of active examiners), average yield
5. Phase 2: Developing performance indicators (3 months)

### Indicators on practices

<table>
<thead>
<tr>
<th>Control between modification and post entries</th>
<th>Monthly for each section provides the corrections made:</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>- prior to the assessment</td>
</tr>
<tr>
<td></td>
<td>- in post entry</td>
</tr>
<tr>
<td></td>
<td>- in post entry, done by the examiner who assessed the declaration</td>
</tr>
</tbody>
</table>

| Control of the selectivity channels | Provides, for a selectivity channel, the number of modified declarations and the amount of D&T recovered by corrective operation |

### 5.4. Risks and gained experience

When designing indicators, experience has shown that the open interview phase is essential for experts to learn about local working conditions. Experts usually hold discussions with one hierarchical level – general management – but all the reforms are primarily applied (or not) in the field, by operational staff. Understanding their working conditions and concerns reinforces the neutral and objective role of experts that is the main principle of the measurement projects.

Knowledge was acquired regarding calculation.

First, indicators should be expressed following the local common timeframe used in Customs, which is usually monthly and quarterly, to evaluate the achievement of the revenue targets. Nevertheless, from time to time (every 3-6 months), a global evaluation should be conducted to compare the impact with that on a wider period of time, for instance, comparing one median delay of the years prior to implementation of the measurement policy with the current period.

Second, some administrations may want to produce synthetic indicators to reflect a global measure of efficiency/performance of actors (e.g. "performance of a Customs bureau" or "performance of Customs brokers") by aggregating into a single indicator a set of specific indicators on time and fraud with specific weightings. **This aggregation is not recommended** during this phase: at this stage, indicators must sustain reform by creating transparency and objectivity, and not rank stakeholders globally without any precise understanding of the reasons/meanings of the ranking. Each indicator should, therefore, keep a precise meaning, related to a specific issue which is easily identifiable.
Third, it is recommended to express each indicator in different ways to mitigate biased analysis. Accordingly, several questions may be raised when designing the indicators:

- Should the indicator be expressed in absolute or relative terms? Using relative terms (%) is important because it is often more accurate and fair. However, absolute values are also important to understand the real effect of a phenomenon (for instance, a bad practice is less important when applied to a very small number of declarations, while a small increase in the average yield of taxes and duties per Customs declaration may represent a significant increase in Customs revenue).

- Should an indicator be expressed as a median or an average? The use of the mean is sensitive to extreme values, which can be problematic in accounting for changes in practices when a small proportion of officials/agents continue to have extreme practices (e.g. in the case of dwell times, average delays are always affected by some importers who use port yards as warehouses). The use of the median may more accurately reflect a situation and its evolution.

- Similarly, is it useful to segment the quantification of a phenomenon into classes and monitor specific classes? For example, this could mean defining classes of time, each having a specific meaning for analysis: 0 day between registration and assessment of the declaration, 5 days (1 week) between the two steps, fraud cases involving less than X euros of taxes and duties recovered.

- To which periods of time should the monthly/quarterly indicator be compared? Figures can be presented from the beginning of the year or monthly, during the 12 past months, or during the last month, with a comparison with the month before and/or the same month of the year before.
6. Phase 3: Using performance indicators (descriptive phase, 6 months to 1 year)

The main objective of this phase is the institutionalization of quantification in the administration. During the last two phases, the project team took ownership of the measurement principles and calculation processes. This third phase extends the culture of quantification to operational services and senior management, which is a necessary step before moving on to the performance contracts phase. During this phase, discussion of indicators will lead senior management to take decisions on necessary changes. In addition, the project team will confirm its technical achievements, take into account operational services’ advice and comments, and add new indicators, as appropriate, when new procedures are decided.

6.1. Prerequisites

The prerequisites are:

- a set of indicators covering all the issues raised in Phase 1,
- these indicators are programmed in a computer language, or even integrated in a software tool – or, at least, subject to a minimum of automation.

6.2. Steps

The institutionalization of a measurement culture will be achieved by increasing the circulation of figures around the administration. This process will be done by “monthly performance review meetings” chaired by the Director General and attended by the heads of department in headquarters and operational services. The review meetings should be held no later than on the 10th of each month and focus on the performance of the previous month. Such a stringent time constraint encourages all services, including the project team, to take steps to prepare for the discussion. The main steps are as follows:

*Development of a procedure to transfer data from the production server to the project team’s server*

The database tables used for measurement should be transferred from the production server to the project team’s server, in order not to risk any service interruption or damage the production server.

Given that some indicators deal with fraud cases and delays, it is recommended to work on a data sample up to the fifth day after the end of the month measured. For example, some indicators provide information on the declarations registered in the month, and assessed or not, X days after registration.

Finally, tables must be transferred to the server for analysis as a whole. Indeed, during the month measured, operations (assessment, cancellation, payment, modifications) may have been performed on the declarations of the previous months, and some indicators for the month measured will be impacted by these changes.
Ideally, the transfer process between the two servers is automated. If this is not the case, IT experts should implement simple scripts to manually launch the process. However, given the IT resources present in the country, it is always better to start this phase with manual procedures rather than to wait for a fully automated procedure which would require additional training on the software database.

The objective is that, on the 5th of the month, all the data of the previous months is transferred to, or updated on, the project team’s server.

**Development by the project team of a series of documents on monthly performance**

From the time of the data transfer onto the project’s team server to the time of the monthly performance review meeting, the project team has only 5 days – a short period – to prepare and distribute meeting documents. Standard documents must, therefore, be prepared in advance, so that SQL queries just have to be run to obtain the results of indicators to be put in the documents. Three documents are required and each model is developed by the project team with the support of experts.

The main document is a monthly performance report that compiles all the indicators, one indicator per page, without comments. The project team may build a simple interface to issue all the results as a single PDF document. Automating this step is essential if one is not to lose time, but is not crucial: as previously stated, it is better to start manually rather than wait for the whole process to be automated.

The second document is an executive summary of 2-3 pages maximum, highlighting positive and negative facts/trends based on a review of the indicators. The summary should be sent to the Director General in order to help discuss matters with the field services during the meeting.

The third document is a quick PowerPoint type presentation in a standard format for each indicator. Although operational services receive the monthly report electronically, experience has shown that it is necessary to review the indicators collectively.

**Issuing a note on the “monthly performance review meetings” for the Director General and senior Customs officials**

The administrative note should introduce the monthly meetings and state that:
- monthly reports will be distributed electronically by the project team to the Director General and operational senior officials a few days before the meeting,
- during the meeting, participants will be invited to comment critically and suggest amendments to the indicators, as well as to present their results and discuss potential procedural improvements.

**Monthly performance review meetings**

Expert missions should be planned for experts assisting in the preparation of monthly meetings and attending the meetings.

The meeting can follow at least two different formats:

- The Director General gives the floor to each operational manager to talk about their per-
formance. The Director General has the summary note issued by the project team and may question each head of service on specific issues raised by the examination of the indicators.

- The project team presents the indicators one after the other and, after each indicator, participants are invited to comment. This may lead to either i) improving the indicator to better reflect reality in the field, or ii) a discussion on how to change a regulation or procedure in order to mitigate a problem made explicit by the indicator.

In particular early on in the process, participants at the meeting should be encouraged to comment critically on the indicators to improve their relevance. This is the best way to improve ownership and to institutionalize measurement through co-production.

**Presentation to frontline inspectors**

After a few monthly review meetings with senior officials, the project team and experts organize a presentation to all inspectors, as inspectors will be part of the following phase involving performance contracts.

**Meeting with the private sector on the problems identified**

Some indicators describe the activity of professionals involved in the Customs clearance process (brokers, shipping lines, warehouses). Indicators empower the Customs administration to discuss with these professionals the conditions for enhancing their performance in order to improve border crossing overall.

Moreover, all professionals and importers/exporters must be informed that the Customs administration will publish information on the performance of all stakeholders who are part of the Customs clearance process. That information relates to global performance and to performance of private companies (brokers, shipping lines) in relation to their obligations.

**6.3. Examples and results**

Monthly performance meetings are an opportunity to carry out an objective review of clearance problems, and to depersonalize issues in the working environment, where bad practices and dysfunctions may cause competition among senior officials. Through sharing figures, headquarters and operational services share a common reality that will serve as the basis for discussing the reform. Experience has shown that these meetings lead to the resolution of small technical issues through solutions whose application is monitored and evaluated. The simple fact that some technical changes have been made possible creates a more virtuous cycle of exchange between headquarters, operational services and users.

In terms of bad practices and corruption, the main fact observed during this phase is that progressive ownership by senior officials generates self-regulation within the bureaus. Operational managers, knowing that they are evaluated and that this evaluation is made available to all officers during the meeting with the Director General, disseminate information to their officials, and self-regulatory phenomena quickly appear: some practices or failures tend to disappear.

It is possible from one meeting to another to assess and discuss the effects of a decision taken collectively at a previous meeting. Thus, specific changes have been decided and executed that have actually improved the operation of frontline services.

In addition, Customs are better equipped to hold discussions with the private sector. For ex-
ample, finding significant delays associated with shipping companies, Customs negotiated Memoranda of Understanding to determine the precise conditions under which they could apply sanctions. In exchange, maritime companies were required to speed up the registration of their manifests in the Customs IT system, thereby expediting the whole Customs clearance process.

Finally, these meetings are also useful to strengthen the position of Customs in their dialogue with government. Customs Directors General inform their ministers of the launch of a performance measurement policy and regularly use indicators to reply to Ministers’ requests for information.

6.4. Risks and gained experience

The main risk is that the heads of operational services might not take ownership of the new quantification culture or trust its viability and sustainability. This is why the "monthly performance reviews" chaired by the Director General are crucial. They constitute an opportunity to objectively discuss very specific and technical issues, tackle them and evaluate the impact of the decisions during the following months. The link between the monthly review of figures and concrete changes in the field should be explicit and clear.

The second risk relates to the deterrent effect of reform on user behaviour: when a new procedure is applied, companies may prefer to clear their imports through other neighbouring countries, to clear them through a bureau that is not under performance measurement, or to declare their goods under specific Customs regimes such as transit. The project team should check that the reform does not have a deterrent effect by:

- comparing the evolution of the activity from one month/year to another (taking into account seasonal effects) to detect abnormalities due to fraudsters adapting their behaviour to the reform (e.g. diversion of traffic, increased activity in bureaus that do not apply the same new procedures as the others, increased activity in specific Customs regimes such as transit);
- ensuring that Customs services (such as those in charge of controlling the physical exit of goods) use the IT system in a proper way.

Meeting deadlines is essential to ensure the credibility of the project team. Producing and distributing monthly reports in less than 5 days is a demonstration of the project team’s professionalism to the Director General and operational services, and enhances their confidence in the numbers that are produced.

The presence of experts during the first few monthly meetings is essential. Quantification sometimes represents a novelty in professional Customs culture. It may be seen as an original innovation, or not taken seriously enough. The head of the project team can be the target of criticism from colleagues who think that they are monitoring their activities in order to secretly report their bad practices to the Director General, sometimes without understanding the constraints they face in the field. The technical support and physical presence of experts at the monthly meetings enhances the credibility of the project team when faced with questions aimed at discrediting the entire reform.

Globally, experience has showed that the use of numbers very quickly builds a new culture among reformers (Director General, project team and others). They directly experience the strengths of quantification when talking with donors, private companies and operational
services. In order for indicators to carry weight when used within discussions, they must be as accurate as possible. Consequently, during the first few months of this phase, the project team should explain that indicators are constantly improving and that the project team is “experimenting” with a new way of working. If numbers have an important effect, it is no less true that inaccuracies in the calculations have a very negative effect.

More precisely, in terms of dialogue, the following two conclusions were reached:

- publishing details about the performance of the private sector (shipping agents, brokers) is very effective in changing the perception of importers/exporters regarding the role of the Customs administration in delays,
- using the activity indicators is effective in evaluating the arguments of frontline officers when they explain/justify the variations in their revenue collection.
7. Phase 4: Performance contracts with customs inspectors (1 year)

The aim of this phase is to implement performance contracts with the Customs officers in charge of clearing declarations at the border (frontline officers). This phase is sensitive because measurement opens a new dimension. During the previous phases, measurement was used to describe situations and practices which encouraged transparency and self-regulation. In the current phase, measurement is used for prescriptive functions: to measure individual results against the targets to be achieved. Careers, individual reputations and individual incomes are at stake.

7.1. Prerequisites

The prerequisites are:
- the project team fully understands how to produce indicators,
- operational managers receive and comment on quantitative indicators,
- inspectors who will be under contract have been informed of the performance policy.

7.2. Steps

Study of existing incentive systems and preparation of communication

The experts and project team analyse the existing system of incentives and consider how it can match with the measurement of performance and the contracts envisaged. Several ways can be explored:

- The bonus system. Customs often have their own system of distributing wage bonuses. These bonuses can be i) allocated by the government when revenue targets are achieved, ii) paid by operators when Customs officers clear goods outside the office or outside official office opening hours, and iii) a share of the fines in fraud cases. The measurement of individual performance can be partly linked to the existing system of bonuses by allocating bonuses in accordance with individual performance.

- Code of ethics. Many Customs administrations have adopted codes of ethics that set up internal committees to monitor (and sometimes investigate) the quality of the service provided by officials, without necessarily having the capacity to assess it objectively, positively or negatively. Performance measurement and contracts can be linked to the code of ethics and the internal ethics committees, which can base their decisions on the objectives results measured by the performance contracts.

- Career management. All Customs administrations have their own career management procedures and structures that can be linked to the performance contracts (examples follow).

- Finally, external communication directed towards the general public is an essential component in environments where Customs have a bad reputation. Promoting good professionals is a way of raising the administration’s profile and a fair means of ensuring reformers in the field that they are supported by HQ.
7. Phase 4: Performance contracts with customs inspectors (1 year)

Design of performance contracts

Whatever form it takes, the contract is a document signed individually by frontline inspectors.

The following section provides two examples that might serve as inspiration for governments. Overall, existing contracts include the following sections:

- an explanation of the general patterns of the measurement policy, stipulating that contracts contribute to an objective evaluation of officials;
- a description of the indicators and thresholds to be achieved, and the calculation method and form of evaluation (monthly, quarterly, etc.);
- a description of the means provided by Headquarters (including the project team) to inspectors to monitor their performance regularly;
- a description of incentives and sanctions.

The key planks of this design task are choosing the indicators, setting ceilings and designing the mode of evaluation.

The evaluation criteria (indicators chosen) must be few in number (between 5 and 10 maximum), and accurate enough to be explicitly associated with a specific practice. In some existing contracts, two types of indicators have been proposed: indicators that encourage inspectors to work quickly (mainly processing times and untreated declarations), and indicators that encourage enforcement (for instance, by rating the share of fraud cases and distinguishing the types of cases to promote significant cases). Indicators should be adapted to local situations and their weighting (encouraging facilitation or control) in the final assessment modified. Ultimately, however, the indicators reflect the main Customs mission: to perform controls whilst not disturbing legal flows unnecessarily. By combining these two contradictory constraints – speeding up flows and detecting fraud – inspectors are supposed to use their personal experience and expertise to select and deepen the controls that lead to litigation. The indicators on facilitation will constrain them to clear non-suspicious items quickly, thereby reducing the chances of any possible user harassment in the national context. Moreover, indicators on fraud detection are crucial to incentivize officers who are corrupt to instigate fraud cases.

In terms of the evaluation mode, there are two ways to evaluate agents: to compare them, individually, against numerical thresholds, or to compare each of them against the collective results by ranking them. For both modes, incentives and sanctions are similar: in the first case, they are triggered depending on whether thresholds are reached or not; in the second case, incentives are linked to the highest and lowest rankings.

The sections below provide technical examples, but any mathematical process is conceivable provided that it takes into account this principle: the results of each indicator must be converted into a comparable and usable numerical form to assess individuals within their group and on the basis of the practices of this group over time. It is therefore usual:
i) to convert the raw score for each indicator into a number so that this number will keep the same scale from one indicator to another, for instance:
   a) a percentage of completion of the indicator;
   b) the officer’s position in the ranking related to the indicator;
   c) a level of achievement in a discrete sequence of numbers reflecting the achievement of a threshold (1 = good, 2 = average, 3 = poor)

ii) then to assign a weighting to the number expressing the indicator because the Director General may want to pay more attention to a particular sector or practice included in one or more indicators;

iii) and then to add the weighted results to obtain an overall final number for each inspector.

Section 8 describes the two types of contracts and methods of calculation.

Introductory meeting with inspectors

The project team and experts organize an introductory meeting for all inspectors. During this meeting, they explain and describe the process, sharing both the general principles and the technical calculations. They also provide simulations based on previous months.

This first meeting is a critical moment for explaining the principles behind contracts, and for assuring inspectors that their technical concerns will be taken into account and that nothing will be released until every question has been answered. The simulation should also be an opportunity to explain precisely the method of calculation so that the inspectors are certain that the evaluation is entirely objective.

Launch of a pilot phase

In the case of a monthly evaluation of contracts, an experimental phase should last a few (3) months so that at least 3 meetings can be organized to implement a feedback cycle as follows:
- the project team presents the indicators and the individual results to the whole group,
- inspectors become familiar with new policies and share specific cases, practices or procedures that are not taken into account in the calculation of indicators and bias assessments,
- the project team takes into account the inspectors’ remarks and makes the necessary adjustments,
- the project team makes sure that the indicators are programmed accurately.

Launch of contracts

Following the pilot phase, contracts are officially launched and a regular evaluation process is established.

During the first week of each month, the project team meets the inspectors and their managers to present the individual results of the previous month. All the results are sent to the Director General, with a note summarizing individual performance from previous months.

A meeting is held quarterly (or every six months) and chaired by the Director General to promote the best inspectors and to report on the new performance measurement policy.
Development of a communications policy

The development of a communications policy is essential. If any reform generates resistance internally within the administration, the Director General will find external political support and legitimacy outside the administration, by communicating the measurement policy and its results to government, the donors and the public.

The communications policy, more than other aspects of performance policy, heavily depends on the local context. However, some general guidelines can be drawn.

In the case of open communication to the public:

- communication must be comprehensive and cover both the performance of the Customs administration and the performance of the professionals involved in the Customs clearance process (shipping lines, brokers, etc.);
- the targeted media should be diverse: newspapers, internet, television, and radio;
- press conferences should be held;
- all communication should be made by the Director General, either directly (e.g. press conference, seminars) or indirectly (Director General’s foreword in a publication or on a website, etc.);
- communication must be regular, especially for publications such as Customs journals;
- the emphasis should be on free publications easily accessible to consumers of news.

The project team should send private sector partners their individual results electronically at the end of the month, while preserving business confidentiality (e.g. proprietary information, processing times of each professional or the number of disputes for the whole port or border community. However, no information on volumes should be disclosed by Customs).

7.3. Examples and results

By way of reminder of the previous section: there are at least two approaches to the design of contracts with objectives and indicators. The first sets objectives which are identical for all inspectors and which correspond to an expected improvement in the existing service. The target to be achieved individually can, for example, be the median of the indicator. The second approach is to rank inspectors according to the objectives.

Taking the example of a simple goal such as “to assess a maximum of declarations on the day of their registration by the registrant”.

Application of the first method

- the median percentage of declarations assessed on the day of registration is calculated, for all inspectors, over the last 3 years,
- to reach this median, an individual monthly target is set for this indicator,
- a percentage of achievement is calculated based on this goal, which is the final individual score related to this indicator.

Application of the second method

- the monthly percentage of declarations assessed on the day of their registration is calculated for each inspector,
- the inspector who has cleared the highest percentage has a score of 100 for this indicator,
and the inspector who has cleared the lowest has a score of 0. Other inspectors have scores of between 0 and 100, to give their individual ranking.

Common to both methods (targets and ranking)

In the end, for each indicator:

- the first method gives a percentage for contract completion, by inspector,
- the second method provides a ranking of the inspectors.

In both cases:
- an indicator can be weighted in the final assessment,
- positive and negative incentives are possible. For the first method, these may relate to failure to fulfill 100% of the contract for several consecutive months; for the second method, they may relate to the fact that an inspector has been ranked in the last (first) 10% percent for several consecutive months.

Types of contract – standard sections

All contracts should include the following sections

<table>
<thead>
<tr>
<th>Contracting parties</th>
<th>Specifies the contracting parties (Director General/Head of bureau, inspectors, project team, etc.).</th>
</tr>
</thead>
<tbody>
<tr>
<td>Objectives of the performance policy</td>
<td>Reminder of the reform objectives (increase efficiency of frontline controls, punish corruption, sanction inefficient practices) and of the role of contracts within the dialogue between Headquarters and the field services, that will be empowered by objective and regular evaluation.</td>
</tr>
<tr>
<td>Performance measurement and methods</td>
<td>List of indicators, making simple distinctions:</td>
</tr>
<tr>
<td>Objective 1. Facilitation</td>
<td>Indicator 1, Indicator 2, ....</td>
</tr>
<tr>
<td>Objective 2. Enforcement</td>
<td>Indicator 5, Indicator 6, …</td>
</tr>
</tbody>
</table>

See the sub-sections below for a more detailed description, depending on the type of contract.
| **Resources at inspectors’ disposal** | This describes the commitment made by the Director General, as the counterpart to the inspectors’ commitment.  
Commitment made by the Director General to provide resources to inspectors under contract to them so that they can monitor their performance, dispute the results, receive training to understand the calculation methods, etc.  
Commitment made by the head of bureau to organize weekly meetings to circulate information on fraud, examine individual cases, etc.  
Commitment by the project team to provide individual results on time and monitor that the IT system is working fairly by taking into account all the inspectors’ claims. |
| **Incentives** | Positive incentives: bonuses; personalized career management through individual interviews with the Director General, where the best inspectors can discuss their careers; letters of congratulation to be attached to individual records; publication of the names of the best inspectors; special awards ceremonies for the best inspectors, to which the media are invited; special training given to the best inspectors.  
Negative incentives: the contract must provide a scale of sanctions ranging from a warning, to the transfer of the inspector to a minor bureau. All the existing sanctions are generally compliant with the existing legal framework and the Director General’s powers.  
The crucial point is to establish the specific procedure for sanctions, based on two parameters and bearing in mind that individual assessment is done on a monthly basis.  
The first parameter is to decide on the numerical threshold below which an inspector’s performance is “poor”. It is recommended to combine both the achievement of contracts (below 100%, the contract is not completed) and the ranking, depending on the type of contract and minimum thresholds for each indicator. For instance, in the case of target contracts, the global individual score can exceed 100% through the achievement of an excellent result for one indicator that compensates for a bad result for another. However, the latter indicator may be crucial in terms of fighting corruption and fraud. The same situation may happen in the case of ranking contracts: the final ranking of an inspector may be “good”, but they may have very poor raw results for one indicator.  
The second parameter is to decide on how many episodes of non-achievement in the year/quarter, or how many consecutive months of non-achievement, trigger penalties. In countries that have used these contracts, it was decided to wait for 3 consecutive months. |
**Target contracts – example of a calculation method**

Considering the following indicators:

**Objective 1: Accelerating clearance**

- Indicator 1: percentage of declarations assessed within 0 days
- Indicator 2: percentage of declarations assessed within 5 days or more
- Indicator 3: percentage of non-assessed declarations
- Indicator 4: percentage of declarations in the yellow channel adjusted via an offsetting entry by the inspector who carried out the assessment out of the declarations

**Objective 2: Improving the effectiveness of enforcement**

- Indicator 5: percentage of the amount of adjustments relative to the amount of declarations entered in the system
- Indicator 6: percentage of adjustments greater than $X$ relative to the total number of adjustments of declarations in the red channel
- Indicator 7: percentage of adjustments less than $Y$ relative to the total number of adjustments of declarations in the red channel
- Indicator 8: percentage of declarations rerouted from the yellow channel to the red channel which have been adjusted.

The first step is to set thresholds.

The medians of these indicators have been calculated for the 3 years immediately preceding the implementation of performance contracts. These medians thus constitute reliable ceilings based on thousands of observations.

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1. $X$ refers to the national currency
2. $Y$ refers to the national currency
The second step is to define the rating allocated to each indicator, based on the median.

<table>
<thead>
<tr>
<th>Rating scale</th>
<th>Poor=1</th>
<th>Average=2</th>
<th>Good=3</th>
<th>Very good=4</th>
</tr>
</thead>
<tbody>
<tr>
<td>Indicator 1</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Indicator 2</td>
<td></td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>Indicator 3</td>
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<td>Indicator 4</td>
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<td>Indicator 5</td>
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<td>Indicator 6</td>
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<td></td>
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<td>Indicator 7</td>
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<td></td>
<td></td>
<td></td>
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<tr>
<td>Indicator 8</td>
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<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

The second step is to define the rating allocated to each indicator, based on the median.

- Poor = <median
- Average = between median of the past 3 years and median + 5%
- Good = median + 5% to median +15%
- Very good = median + 15%

The third step is to establish the method to calculate the completion of the contract.

The contract has been completed 100% if all the indicators reach level 3 (good).

<table>
<thead>
<tr>
<th>Rating by indicator</th>
<th>Level considered for completion of contract</th>
<th>Percentage of completion of contract</th>
</tr>
</thead>
<tbody>
<tr>
<td>Indicator 1</td>
<td>3</td>
<td>C1 = A1/3</td>
</tr>
<tr>
<td>Indicator 2</td>
<td>3</td>
<td>C2 = A2/3</td>
</tr>
<tr>
<td>Indicator 3</td>
<td>3</td>
<td>C3 = A3/3</td>
</tr>
<tr>
<td>Indicator 4</td>
<td>3</td>
<td>C4 = A4/3</td>
</tr>
<tr>
<td>Indicator 5</td>
<td>3</td>
<td>C5 = A5/3</td>
</tr>
<tr>
<td>Indicator 6</td>
<td>3</td>
<td>C6 = A6/3</td>
</tr>
<tr>
<td>Indicator 7</td>
<td>3</td>
<td>C7 = A7/3</td>
</tr>
<tr>
<td>Indicator 8</td>
<td>3</td>
<td>C8 = A8/3</td>
</tr>
<tr>
<td>Percentage of completion of contract (C9)</td>
<td></td>
<td>C9 = average (C1-C8)</td>
</tr>
</tbody>
</table>

An important point to be mentioned in the contracts: these tables (and in particular the medians) will be revised every year for all inspectors in the same office in order to take account of office performance trends.

**Ranking contracts – example of a calculation method**

Considering the following indicators:

**Objective 1: Accelerating clearance**

Indicator 1: percentage of declarations assessed by the inspector more than 5 days after they were lodged
Indicator 2: percentage of declarations not assessed by the inspector

Objective 2: Improving the effectiveness of enforcement

Indicator 3: percentage of the number of fraudulent declarations relative to the number of declarations assessed by the inspector

Indicator 4: percentage of recovered taxes and duties relative to total taxes and duties of the declarations assessed by the inspector

Indicator 5: percentage of physical inspection notes completed relative to the total number of declarations in the physical inspection lane

The final ranking between inspectors is done as follows:

- each inspector is ranked for each indicator,
- the rankings for each inspector are weighted then added, and the sum is his/her individual score,
- the final ranking of inspectors is the ranking of these individual scores.

The weightings are as follows:

<table>
<thead>
<tr>
<th>Indicator</th>
<th>Weighting</th>
</tr>
</thead>
<tbody>
<tr>
<td>Indicator 1</td>
<td>1</td>
</tr>
<tr>
<td>Indicator 2</td>
<td>2</td>
</tr>
<tr>
<td>Indicator 3</td>
<td>3</td>
</tr>
<tr>
<td>Indicator 4</td>
<td>4</td>
</tr>
<tr>
<td>Indicator 5</td>
<td>1</td>
</tr>
</tbody>
</table>
7.4. Risks and gained experience

This phase is the riskiest one because it impacts on individuals and not on services.

The first risk relates to calculation mistakes. If the indicator calculations are wrong, the credibility of the whole project is affected. The precision and accuracy of calculations were not crucial in the previous phases as the indicators were not prescriptive. It was stated and recognized that these earlier phases were preparatory, both for operational services and for IT experts. When the contractual phase is launched, individual careers are at stake and therefore the calculations must be accurate. To this end, the project team must implement an appeal procedure before publication of the results at the monthly meeting.

The second risk relates to the loss of credibility of the policy itself. If contracts do not result in any sanctions or positive incentives after a few months (less than one year) of implementation, the whole reform is no longer credible. This means that the Director General will sanction and incentivize some inspectors, whether by transferring “bad performers” to minor bureaus/units, or by promoting “good performers” to senior positions.

Generally, performance contracts are welcomed by the majority of the inspectors a few months after the start of this phase. The reason for this is that contracts provide inspectors with a practical framework of action: inspectors know precisely how they are evaluated. This positive feedback was often received in the field, including from inspectors who were not employed under contract and wanted to be.

However, there is also a risk that inspectors will adapt their actions, by acting with reference to the contracts rather than to their immediate supervisor, who often does not decide on their appointment or transfer. Therefore, the heads of bureaus often urge the project team to include at least one indicator in the contracts that will allow them to express a subjective judgment of the inspectors and factors in the assessment of the inspectors. **It is strongly recommended not to grant this request:** contracts and performance measurement should be a purely objective assessment of clearance activities and practices. Should some practices not be captured by the indicators, then consideration must be given to either i) modifying the IT system/procedures to capture new practices/situations and exploit the data for new indicators or changes in existing indicators, or ii) encouraging field managers to write their personal assessments directly, in addition to those of the contracts.

The main conclusion is that contracts are a powerful tool for revealing and reducing less visible practices. This is based on the assumption that i) within a professional group, not all officials are comfortable with bad practices, ii) corruption generates a highly competitive working environment between officers, and iii) making bad practices visible allows agents eager to work better to be recognized positively by their superiors and the general public. Generally, frontline inspectors take ownership of the contracts by following at least three successive steps that must be allowed to deploy fully.

The first step takes place very quickly. Two to three months after the signing of contracts, the most visible and sometimes controversial individual practices are abandoned or strongly reduced by the large majority of inspectors. The results are therefore very quick and communicable to the outside world. This phase creates an initial distinction between those in the frontline group who refuse to understand and/or welcome the new working environment, and those who support it.
During the second step, operational services and inspectors challenge some indicators’ legitimacy. The major effort made during the first step means that the “easiest” indicators have been tamed and related ceilings regularly achieved. However, some indicators are still problematic, particularly those related to the fight against fraud and to hierarchical relationships. This includes, for instance, the effectiveness of controls by inspectors, and the measurement of the effectiveness of their choice when they decide to enhance the level of control automatically set by the IT system. Inspectors under contract may dispute the relevance of some indicators. For example, they may argue that the percentage of recovered taxes and duties depends on the “quality” of declarations received from the system (if you receive many declarations registered by multinational companies, you have few chances to detect fraud, etc.), or that the rerouting from one control level to another has been ordered by a chief officer. All these challenges must be treated seriously and positively by the project team, and used as opportunities to adjust the indicators and to make visible and transparent those practices that previously were not. At the monthly performance meetings, discussion of the calculation and legitimacy of indicators generates new information: because they are objectively evaluated, inspectors have to share information about their own practices when they want to explain why an indicator is not relevant or has been miscalculated. This is an opportunity to reduce the asymmetry of information between the field services, who apply the reform, and the Director General, who is publicly informed of some bad practices and becomes aware of how some – previously invisible – practices can block the reform. It is an opportunity to take into account this information when deciding on new reforms.

The third step is the creation of a routine involving the monthly performance meetings and the individual objections that precede them: inspectors are informed about their individual results prior to the meeting and can go to the project team to complain/dispute the results. Any individual claim must be treated specifically and seriously. These individual objections have revealed some of the bugs in the IT system; other objections have highlighted exceptional circumstances which have led to programming of a new indicator. In many cases, there is no specific problem, and the objection is an opportunity for the project team to explain to the individual inspector how an indicator was calculated.
8. Phase 5: Performance contracts with private sector partners

The objective of this phase is to identify those importers/exporters to whom the Customs administration may provide facilitation benefits in exchange for an improvement in the way they handle their Customs declarations.

The importers who are likely to benefit from Customs facilitation benefits are often large companies whose departments in charge of "transit" are small. As a consequence, these companies make little effort to improve their handling of Customs declarations, and this phenomenon is exacerbated when they entrust their entire clearance process to a single Customs broker.

The objective of the Customs administration is to collect revenue and accelerate the clearance process for some importers in trade environments where very few companies are eligible for Customs facilitation: most importers consist of small companies which have poor compliance and which Customs are unable to control after exit of the goods.

8.1. Prerequisites

The prerequisites are:
- the project team has total control/mastery of the production of indicators,
- the Customs administration has launched its communications policy on performance measurement.

8.2. Steps

*Producing an analysis to set compliance criteria for importers and identify expected benefits for Customs and importers*

The analysis may start by selecting a sample of the 20-50 main importers and their declarations over 3 years. As a first step, the Customs administration and the experts should examine what risks mean in the national environment.

The first constraint and risk for Customs is fraud. Increased payment delays are only a secondary risk. The main methodological point is that fraud detected by Customs remains an exceptional event for these importers and is therefore not easily analysed through statistics. Evaluating importers only on the basis of detected fraud cases is not possible. Moreover, reducing the level of control, as envisaged in the contracts, will change the conditions for imports, whereby the possibility that fraud may increase with a lower level of control cannot be ignored. There is, therefore, a need to envision operator risk as a whole, and not only through detected fraud cases.

The second parameter is the importer’s consistency. This consistency is historical (a continuous activity during the year, depending also on the importer’s business strategies or
The third parameter is finding facilitation benefits that are general enough to benefit all importers, but detailed and flexible enough to be adapted to each of them. In other words, a simple 10% reduction in the rate of physical inspection does not create the same incentive for importers who have 60% of their imports physically inspected, as it does for importers who have 10% of their imports inspected.

The fourth constraint is that the system developed must take into account the complexity and diversity of all importers’ situations, but also be simple enough for the project team to manage on a daily basis.

The overall methodology to evaluate importer risk and select importers who may be eligible for contracts is as follows:

- selection of criteria based on risk and expected profits for Customs,
- weighting of each criterion,
- order importers for each of these criteria,
- general classification with application of the weighting,
- determination of importers’ classes and linking with the respective facilitation benefits.

These analyses do not rule out other checks that may be conducted, especially with enforcement services, private inspection companies (if any) or the tax administration. These checks should either be incorporated quantitatively in the previous method as risks, or constitute a non-objection to the granting of certain facilitation benefits.

Six basic criteria may be taken into account, based on assumptions of risk/benefit that classify importers accordingly.

Criterion 1: Customs revenue. The assumption is that the more taxes and duties paid by the importer, the higher the risk taken by the Customs administration.

Criterion 2: The average taxes and duties generated per declaration. The assumption is that the greater the number of declarations, the more difficulties the Customs administration will face in monitoring flows. Thus, the higher the average fiscal yield (average taxes and duties per declaration paid by the importer), the easier it will be for Customs.

Criterion 3: The share of pre-arrival declarations (declarations lodged before the arrival of the goods at the border). The assumption is that the more declarations the importer registers before the disembarking of commodities, the easier it is to organize any control, and the faster duties and taxes will be paid.

Criterion 4: The rate of litigation. The assumption is that an importer who is sanctioned more than others must be monitored until the level of litigation declines.

Criterion 5: The consistency of the importers’ flow of goods. The assumption is that Customs can easily grant facilitation benefits to an importer if it has a strong flow and the impact of facilitation will be significant for the importer.

Criterion 6: The speed of payment by the importer. The assumption is that the more diligent the importer is when paying duties and taxes, the more they will be sensitive to facilitation measures and the less effort they will have to make to comply with the contracts’ objectives.
Importers are classified by these criteria, which are calculated with raw data extracted from the Customs IT system, and some are selected for an experimental contracting phase.

**Designing the operators’ performance contracts**

Contracts with operators offer a fast clearance channel without controls, based on the criteria above. In exchange, importers commit to accelerating their own internal procedures, including the payment of duties and taxes. Each importer gains the opportunity for a share of its operations to pass through the fast clearance channel, this share being proportional to its “performance”, assessed quarterly in accordance with objective indicators calculated from the Customs IT system.

The contract must specify that i) the share of facilitated imports will vary according to the level of compliance with the contract objectives, and ii) below a certain ceiling for some indicators, the importer will no longer be eligible for facilitation.

**Organizing regular meetings with importers to assess the results**

The project team organizes regular meetings (monthly at the beginning of the experiment, then quarterly) to share the results with the importers under contract.

**8.3. Examples and results**

Possible indicators are as follows:\(^3\):

1. The disputed amount rate (percentage of the volume of recovered duties and taxes/amount of duties and taxes assessed);

2. Recurrence with respect to disputed amounts (percentage of the number of adjusted declarations/number of declarations recorded by the same operator during the period);

3. Promptness of payments by importers (percentage of the amount of duties paid on the day on which the declaration is assessed/total amount of duties assessed during the period);

4. The share of projected declarations (percentage of the amount of duties and taxes indicated on the declarations recorded, at the latest, on the day of the vessel’s arrival/total amount of duties indicated on declarations recorded during the period);

5. Outstanding payments (amount of outstanding payments five days after the assessment date/total amount of duties assessed for declarations from the same operators during the same period);

6. Revenue from each declaration (amount of duties assessed, all taxes included/number of declarations assessed, all taxes included);

7. Homogeneity between authorized Customs brokers and importers (identity of the authorized Customs brokers used by the same operator during period \(n\)/identity of the authorized Customs brokers used during period \(n-1\)). This indicator is used purely for statistical purposes and will not be used for assessing the performance of enterprises.

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3 See Libom et al. (2011).
The effects of these contracts have been described in a publication. Simple descriptive statistics showed time savings throughout the supply chain clearance for importers, without loss of revenue for Customs. Quantitatively, the accurate assessment of the effect of contracts is complex. It is part of a general problem of measuring the effects of a new procedure. RCT (Randomized Controlled Trial) is not applicable to Customs for reasons of equal treatment of users and because of the reduced number of Customs offices. The evaluation of the effect of a decision on clearance is nevertheless essential in a reform. However, econometric analysis is still possible.

Qualitatively, the benefits are many:

- importers under contract find a new way to share practical experience and learn from each other during the monthly meetings,
- importers have direct access to the Customs administration, which can put pressure on border stakeholders to solve problems for importers and reduce dwell times,
- identification and interpretation of delays is more accurate due to dialogue with importers, who are topically and directly informed about the clearance process by the Customs administration and not through broker intermediation,
- contracts increase transparent competition among professionals working for importers in the clearance process (banks, brokers, shipping lines), with some importers changing bankers and brokers as a consequence of contracts,
- importers under contract reorganize their internal processes for importing. Contracts have had an impact on the entire procedure and importers have reorganized even their clearance chain before payment in order to prepare payments more quickly.

8.4. Risks and gained experience

The main risk is that few importers may be convinced of the expected benefits of the contracts. This also happens in Authorized Economic Operator (AEO) contracts because the reduction in controls is of small advantage to importers who are already rarely controlled by Customs. In developing countries, many importers are reluctant to contract with Customs for different reasons:

- they already have their own informal channels for accelerating the process,
- they are badly informed by their brokers, who blame Customs administrations for delays,
- they are not interested because they are not able to assess in concrete terms the financial benefits of reducing their delays, as many importers benefit from agreements with warehousing companies to reduce the fees related to storing goods for extra time,
- their structure is so complex that the department in charge of Customs procedures has no influence in convincing management to reschedule internal procedures to smooth border crossing procedures.

In response to this reluctance, the Customs administration should launch statistical studies and communication events which give satisfied importers under contract the opportunity to express their views.

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4 See Cantens et al. (2012).
5 Chalendard (2013).
The second risk is to generate expectations without being able to satisfy them. For instance, calculations and statistics provided by Customs may raise problems that can be solved only by political decision, through a complex and long legal process that does not depend on Customs’ action.

The overall aim and benefit of these contracts is that they enable Customs to talk directly with those who actually pay Customs duties and taxes, and not only with intermediaries such as brokers and shipping lines. The main conclusion is that these contracts have totally changed the relationship between importers under contract and Customs officials and are leading to increasing trust, as well as private sector involvement in support of Customs reform.
Conclusion

A few words of caution....

As its name indicates, this WCO publication is a “guide” to be used as a source of inspiration for reformers who are keen to assess the effects of the reform process as it is being implemented. Its purpose is to explain the rationale behind performance measurement, the context in which it is particularly useful, to show the advantages of being able to “speak the same language” and be aware of the same reality.

The Guide cautions experts on their role which is to provide helpful neutral analysis and perspectives. External expertise should not be prescriptive but rather should take part in the dialogue as equal partners with internal experts, sharing knowledge and providing technical experience gained in other countries. It is worth reminding that decisions should always rest with the local officers who are leading the project, as they are the ones who will mainly be held accountable for its implementation, and because it increases the chances the project will be a success.

For external expertise to be efficient it should have a good understanding of the local context. Given that experts will acquire an in-depth knowledge of how the local administration actually functions, they will have access to sensitive information, therefore, trust between external expertise and the local administration is crucial for a quantification project to be successful.

The PMC Guide gives some general principles that have been tested through a series of experimentations in Cameroon, Togo and Liberia. Countries and Customs administrations share common realities but each country and each Customs have their specificities in terms of procedures, relations with the hierarchy, organizational structures and reporting mechanisms. In other words, each administration has its own history and professional culture that experts must take into account.

It is important to note that even if performance measurement in this context is often described as a “project”, the ultimate goal is that measuring performance quantitatively and contracting become part of the Customs culture. This can take some time, therefore the importance of seeing this as a long-term approach.

The experiments carried out in Cameroon, Togo and Liberia Customs indicate that performance measurement has placed Customs in the centre of the private-public dialogue. It has empowered the Customs Director General and Customs as a whole, in particular in its relation with the competent Ministry. Performance measurement is a “dual use good”: it is applied also to measure the impact of performance measurement policies.

The PMC Guide is not prescriptive but rather invites those who have used it to carry out Customs reforms and to share their experiences with the overall Customs community.
References


Cantens Thomas, Robert Ireland and Gaël Raballand (2013), Reform by Numbers: Measurement Applied to Customs and Tax Administrations in Developing Countries, World Bank, Washington, DC.


