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# **An Overview of Performance Measurement in Customs Administrations**

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## **Abstract**

This paper discusses *Performance Measurement* in the Customs context from both conceptual and practical perspectives. In particular, the paper considers four broad approaches, *Customs Data Mining*, *Service Charters*, *Perception Indexes*, and *Monitoring Mechanisms*. The paper concludes that performance measurement should primarily be about improving the effectiveness and efficiency of Customs administration functions and that secondarily it can be beneficial for attracting donor funding.

## **Key words**

Performance Measurement, Data Mining, Service Charters, Perception Indexes, Monitoring Mechanisms

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## 1. Introduction

Performance measurement (PM) is a contributory tool for successful modernization. The main underlying idea of PM is to help decision making using data which is as objective as possible.

Some Customs administrations have implemented PM because they were facing budget constraints. They are thus most interested in efficiency: for instance the correlation between costs and results of Customs houses or technological means. This is why they are applying PM at the organizational level in order to drive their strategy of deploying human and material resources on the ground. Some administrations are also using PM to develop transparency and users-oriented policies of organizations in order to comply with global democratic norms. Some administrations are implementing PM in evaluating individual work as part of the human resource management system. PM can be also a tool to fight against corruption since corrupt practices means weaker performance of customs functions. This is why they are using PM both for "structural" and "individual" measurement. It should be noted, however, that measuring performance may create anxiety for some because of fear they will receive a poor evaluation.

It is essential to enhance knowledge of this diversity to i) ensure that approaches are not "copied and pasted" where it will not be beneficial or appropriate and ii) understand under which conditions PM of one kind or another may be relevant and effective. To be successful, **Customs performance measurement** must take into account the varying aims of the Customs service and the specific political, social, economic, and administrative conditions in their country.

In terms of capacity building, PM is useful too, and in some cases required for attracting donor funding. This is especially true in an era where many policymakers in donor countries are embracing austerity in budgets following the global financial crisis of 2008. There is currently comprehensive international support for the use of measurement in aid. Most prominently, the 2005 Paris Declaration is an international agreement committing to increased "efforts in harmonisation, alignment and managing aid for results with a set of monitorable actions and indicators." A key building block of the Declaration is "Results - Developing countries and donors shift focus to development results and results get measured."<sup>1</sup>

## 2. Scope of paper

This paper discusses PM in the Customs context from both conceptual and practical perspectives. In particular, this paper will consider four broad approaches, *Customs Data Mining*, *Service Charters*, *Perception Indexes*, and *Monitoring Mechanisms*:

- 1) **Customs Data Mining** relates to the collection and analysis of quantitative data, either by observation or extracted from Customs automated systems;

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<sup>1</sup> For more information on the Paris Declaration, see OECD, Paris Declaration and Accra Agenda for Action, available at [http://www.oecd.org/document/18/0,3343,en\\_2649\\_3236398\\_35401554\\_1\\_1\\_1\\_1,00.html](http://www.oecd.org/document/18/0,3343,en_2649_3236398_35401554_1_1_1_1,00.html)

- 2) **Service Charters** relate to Customs treating economic operators as clients rather than the regulated;
- 3) **Perception Indexes** relates to the aggregation of subjective survey responses submitted by stakeholders on the quality of service delivered by Customs or other government agencies; and
- 4) **Monitoring Mechanisms** are regular processes which aim to institutionalize PM both at temporal, national and/or international levels. They may be applied on the three approaches above, or provide depositories of information on performance.

### 3. Customs Data Mining

In a December 2010 Communiqué,<sup>2</sup> the WCO explained the extent of Customs access to data. Customs possesses information on supply chains and can identify patterns emerging from its vast stock of movement data that can lead to actionable intelligence. This range of knowledge and authority places Customs in a unique position to analyse transaction data. Two leading examples of where the WCO has encouraged use of transaction data are the WCO Time Release Study (TRS) and the blending of data with performance contracts.

**The WCO TRS** is a methodology to measure the time taken to release cargo. TRS can be used to measure Customs cargo release time or the cargo release time of all border agencies. TRS can identify bottlenecks and seeks opportunities for further improvement in border procedures and logistics.

The WCO has supported its Members to regularly use the TRS based on the WCO TRS Guide and many Members have used this approach. The revised Guide, which was presented at the March 2011 PTC, includes 7 national practices of Australia, Cameroon, Japan, Korea, New Zealand, Serbia, and Uganda. It is also reported that a number of other Members have conducted the TRS, including China, Indonesia, Jordan, Kenya, Lesotho, Malaysia, Philippines, Rwanda, Tanzania, Thailand, and USA.

At the 2010 October session of the PTC, the World Bank reported many TRS operations for identifying bottlenecks, assessing the change, monitoring time-sequential progress, and estimating the country's position, and revealed its continuous engagement to the TRS in the future.<sup>3</sup> Many TRS projects will be conducted in the near future with the support of the WCO. More will be expected since the current WTO trade facilitation negotiating consolidated text<sup>4</sup> includes a provision on "*Establishment and publication of average release [and clearance] times*" (WTO, 2011), which explicitly refers to the WCO Time Release Study.

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<sup>2</sup> WCO (2010), *Communiqué from the International Customs Community: Air Cargo Security*, 7 December 2010, Shanghai, available at: <[www.wcoomd.org/press/?v=1&lid=1&cid=7](http://www.wcoomd.org/press/?v=1&lid=1&cid=7)>

<sup>3</sup> World Bank (2010), *Possible issues for discussions - TRS Guide review*, presentation at WCO Permanent Technical Committee, Brussels, October 2010.

<sup>4</sup> WTO (2011), *Draft Consolidated Negotiating Text*, WTO Negotiating Group on Trade Facilitation, TN/TFW/165/Rev.7, 25 February 2011.

A recent paper written by World Bank and WCO researchers, which examined container clearance/release times in gateway African Ports, is another example of analyzing data extracted from Customs IT systems (Refas and Cantens, 2011). Researchers used original and extensive data on container imports in the Port of Douala, taken from the Customs IT system. This study provided information on why clearance/release times “are widely recognized as a critical hindrance to economic development. It also demonstrates the interrelationships that exist between logistics performance of consignees, operational performance of port operators and efficiency of customs clearance operations” (*idem*). Moreover, in this paper, Customs data mining made the authors able to identify and describe clearing and forwarding agents, shippers and shipping line strategies and their impact on time release.

An experiment conducted by Cameroon Customs with support from the WCO and the World Bank showed that data extracted and analyzed from a Customs clearance system combined with the use of **performance contracts** can reduce frontline officers’ bad practices and foster the best ones. In February 2010, Cameroon Customs introduced a system of performance contracts signed between the Director General and a number of front-line officers in a major seaport. The core of the performance contracts is an agreement that the practices of the Customs officers will be recorded and reported to the Director General. After four months of their implementation, initial results include lower corruption, higher revenue collection, and shorter clearance times, and may point to the birth of a new professional culture (Cantens, Raballand, and Bilangna, 2010).

Data mining can also be used related to institutional objectives in the national economic context. For instance, revenue collection performance is an important indicator for many Customs administrations. But revenue collection analysis cannot be static. Its effectiveness must be related to and measured in comparison with economic activities’ evolution and changes in Customs conditions (e.g. tariff structures, trade policy).

A “gold standard” in terms of measuring impact is randomization (Duflo and Kremer, 2004; Banerjee and Duflo, 2011). The randomized experimental-design approach means applying a capacity building treatment to an experimental group, not applying the new procedures/ treatment to a control group, and measuring the pre-treatment and post-treatment outcomes to evaluate the impact. This however, is not always possible in Customs administrations due to limited samples of stakeholders and officials or ethical issues in terms of equality of fiscal treatment. The second best approach is, in a non-randomized experiment, applying the treatment to one group and measuring the pre-treatment and post-treatment outcomes.

Beyond this, PM can be useful if conducted on a regular and systematic basis especially if backed by this idea of experimenting new Customs processes in limited periods of time and areas, and measuring accurately their impact.

#### **4. Service Charters**

**Service charters** were first used in the UK in the 1980s. McGuire (2001) describes service charters “as a New Public Management (NPM) strategy intended to change the culture of public service delivery to focus on the needs of the users, identified as 'clients' or 'customers'. The objectives are to make service providers more responsive to users by guaranteeing specific standards for service delivery, providing a

substitute for competition and a benchmark for measuring service quality.” During the expansion of service charters to other developed countries, and then to developing countries, it became apparent that different countries used very different *contents* and *motives* for their service charters (Drewry, 2003). Building trust between citizens and public services should be a key criterion in the development of service charters (Torres, 2005).

Due to their NPM heritage, service charters may raise local criticism (Clark, 2002). By turning economic operators into clients/customers, they impact the State’s representations and have political and social influence. Consequently, local context and empiricism are very important.

In the Customs context, clients or customers can be assumed to be the economic operators. Some Customs administrations have rolled-out Service Charters (Table 1). For example, Singapore Customs’ Service Charter constitutes various service standards to promote timely responses. In its Citizens’ Charter, Indian Customs has committed to achieving minimum compliance level of 80% of 7 time norms for Customs services related to remit drawback, clear import/export goods, release, seized documents, acknowledging complaints, and communications.<sup>5</sup> Other countries are in the process of developing service charters: for example, Algeria Customs is conducting research with academia on the relationships between users and officials to design service charters as a way to improve Customs efficiency and compliance.<sup>6</sup>

Table 1: Examples of Customs Service Charters<sup>7</sup>

Country	Agency Name or Acronym	Title of the document
Angola	Serviço Nacional das Alfândegas	Service Standards
Australia	Customs and Border Protection Services	Client Service Charter and Standards
Canada	CBSA	CBSA Service Standards
India	CBEC	Citizens’ Charter
Jordan	Customs Department	Strategic Plan 2008-2010
Korea	KCS	Customs Service Charter
Mauritius	MRA	Corporate Plan 2011-2013
New Zealand	Customs Service	Statement of Intent
Singapore	Customs Service	Singapore Customs Service Charter
South Africa	SARS	SARS Strategic Plan 2011/12-2013/14

A key component in this process relates to the institutional capacity to continuously measure performance. Several Customs administrations have published annual or other reports as part of their civil service regulations. Some of these reports contain target and actual figures on key performance indicators, as observed in the Annual Report of the Australian Customs and Border Protection Service.<sup>8</sup>

<sup>5</sup> See Indian Customs’ presentation at the WCO PICARD Conference 2010, Abu Dhabi, 23-25 November 2010, available at <[http://incu.org/docs/Day\\_3\\_-\\_06-Kameswari\\_Subramanian\\_EN.pdf](http://incu.org/docs/Day_3_-_06-Kameswari_Subramanian_EN.pdf)>

<sup>6</sup> For more information on the Algerian Customs initiative, see <[www.doune.gov.dz](http://www.doune.gov.dz)> (in French).

<sup>7</sup> For references see Appendix 1.

<sup>8</sup> Australian Customs and Border Protection Service (2010), *Annual Report 2009-10*, available at: <[www.customs.gov.au/site/page4283.asp](http://www.customs.gov.au/site/page4283.asp)>

## 5. Perception Indexes

Several institutions have developed various **perception indexes** to rank national competitiveness based on business perception. Perception indexes are essentially “an aggregated indicator built by adding a varying set of component measures” (Urrea, 2007) and thus have been described as a “poll of polls” (*idem*). Examples include the World Bank’s *Doing Business (DoB)* and *Logistics Performance Index (LPI)*, World Economic Forum’s *Enabling Trade Index (ETI)*, and Transparency International’s *Corruption Perception Index (CPI)*. As elements of the indexes, some directly relate to Customs, such as the “*Customs score*” of the LPI, and “*Burden of customs procedures*” of the ETI.

While perception indexes may have some value as a snapshot, they have been subject to criticism. Arndt and Oman (2008) raised doubts about their efficacy and future by critiquing “the limitations of the most-widely used indicators with respect to comparability over time, transparency and actionability and the increased resistance from developing countries towards ‘Western governance indicators.’” Urrea (2007) states that the CPI has been widely criticized “in the terms of inaccuracy, inconsistency and real impossibility to assess what a particular given degree of corruption means for a country.”

Because perception indexes appear to be quantitative (but are not), they imply and thus mislead some into thinking they are quantitative, when what is being presented is subjective qualitative information. Moreover, perception indexes aim to benchmark countries on very complex issues without taking into account the national context.

Nevertheless, it is less their capacity to classify countries than their political impact which may be particularly relevant for Customs administrations. It is worth noting that national decision-makers, economic operators and civil servants have often a strong awareness of their country’s classification and indicators mainly based on perceptions enlightens users’ exasperation locally, which may be an important leverage. Moreover, business perception may be improved through enhanced Customs-Business partnerships. In this regard, the motivation to raise a ranking may generate the launch of or improvements in Customs-Business partnerships, which is a key strategy for successful Customs modernization and reform.

## 6. Monitoring Mechanisms

As measurement intends to provide a better understanding of change, PM requires continuous **monitoring mechanisms**, both internally and peer-reviewed. Two ways of monitoring can be distinguished. International organizations have developed and published monitoring mechanisms that contain some elements related to Customs performance. For instance, the WTO has developed the Trade Policy Review mechanism where Members are requested to report on a regular basis their adherence to WTO standards and commitments.

The WTO and OECD have published monitoring surveys on the Aid-for-Trade initiative. According to the OECD, “the biannual survey collects data from donors and developing countries, as well as case studies to enable us to assess trends and identify

lessons that can help others stimulate trade more effectively.<sup>9</sup> The monitoring survey also includes a compilation of case stories on the impact and effectiveness of Aid-for-trade programs from WTO Members/Observers, international financial institutions, multinational/regional organizations, the private sector, civil society, and academia. Its main objective is to highlight concrete examples of success and failure in specific Aid-for-Trade project/programs at a national and regional level. The case studies will be categorized into six themes: trade facilitation, infrastructure, policy support, technical assistance and capacity building, regional agreements, and aid to the private sector, and will be open to the public.<sup>10</sup>

## 7. Conclusion

PM is a way to quantify public action and provide figures about the real functioning of Customs administrations and private sector connected to international trade. Nevertheless, one should keep in mind that the more quantification one administration develops, the more qualitative analysis (historical, political, social) is required to give sense to figures.

PM could be advocated through 4 main summarizing lines of reasoning:

- 1) PM is a tool for assessing progress, giving an historical, local and social dimension to modernization and departing the representation of failure in which public aid and capacity building is often trapped. It is an opportunity for stating a reform's success both with donors, experts and civil servants concerned by change during a project's design;
- 2) PM is a way of reducing asymmetry of information between decision-makers (e.g. heads of Customs) and grassroots officials who apply reforms. PM makes it possible to objectively check that reforms which have been decided at the political level are actually implemented on the field;
- 3) PM is a way to empower administrations when talking with the private sector, by establishing who is responsible for which delays and costs and providing tools for dialogue on a commonly shared reality; and
- 4) PM is a condition to experiment new procedures and technologies before extending them to the whole administration, merged with qualitative methods within a full empirical approach.

PM in the context of Customs is already mainly conducted by donors and other experts. It gives birth to many data points, indicators, and classifications which are publicly disseminated. It is time Customs administrations commit themselves in order to be not only objects of measurement but also agent and part of it.

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<sup>9</sup> For further information, see OECD/WTO (2011), *Monitoring Aid for Trade Initiative*, available at <[http://www.oecd.org/pages/0,3417,en\\_21571361\\_46750445\\_1\\_1\\_1\\_1\\_1,00.html](http://www.oecd.org/pages/0,3417,en_21571361_46750445_1_1_1_1_1,00.html)>

<sup>10</sup> Ibid.

## **Appendix 1. Service Charters by country**

Angola, *Service Standards*, <[www.alfandegas.gv.ao/servicos.aspx](http://www.alfandegas.gv.ao/servicos.aspx)>

Australia (2009), *Client Service Charter and Standards*,  
<[www.customs.gov.au/webdata/resources/files/ClientServiceCharterDL-WEB.pdf](http://www.customs.gov.au/webdata/resources/files/ClientServiceCharterDL-WEB.pdf)>

Canada (2011), *CBSA Service Standards*, <[www.cbsa-asfc.gc.ca/services/serving-servir/standards-normes-eng.html](http://www.cbsa-asfc.gc.ca/services/serving-servir/standards-normes-eng.html)>

India (2008), *Citizens' Charter*, <[www.cbec.gov.in/whoweare/citzn-chtr-e.pdf](http://www.cbec.gov.in/whoweare/citzn-chtr-e.pdf)>

Jordan (2008), *Strategic Plan 2008-2010*,  
<[www.customs.gov.jo/pdf/Plan\\_E\\_2008\\_2010.pdf](http://www.customs.gov.jo/pdf/Plan_E_2008_2010.pdf)>

Korea, *Customs Service Charter*,  
<[http://english.customs.go.kr/kcsweb/user.tdf?a=common.HtmlApp&c=1501&page=/english/html/kor/about/about\\_06\\_01.html&mc=ENGLISH\\_ABOUT\\_CUSTOMS\\_010](http://english.customs.go.kr/kcsweb/user.tdf?a=common.HtmlApp&c=1501&page=/english/html/kor/about/about_06_01.html&mc=ENGLISH_ABOUT_CUSTOMS_010)>

Mauritius (2011), *Corporate Plan 2011-2013*,  
<<http://www.gov.mu/portal/sites/mra/download/MRACorporatePlan20112013.pdf>>

New Zealand (2010), *Statement of Intent*,  
<[www.customs.govt.nz/library/Accountability+documents/default.htm](http://www.customs.govt.nz/library/Accountability+documents/default.htm)>

Singapore (2011), *Singapore Customs Service Charter*,  
<[www.customs.gov.sg/NR/rdonlyres/0107DA14-34A8-4629-AE6A-9D7F745C1AB8/0/ServiceCharter\\_Feb2011\\_.pdf](http://www.customs.gov.sg/NR/rdonlyres/0107DA14-34A8-4629-AE6A-9D7F745C1AB8/0/ServiceCharter_Feb2011_.pdf)>

South Africa (2011), *SARS Strategic Plan 2011/12-2013/14*,  
<[www.sars.gov.za/home.asp?pid=286](http://www.sars.gov.za/home.asp?pid=286)>

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<[www.wcoomd.org/press/?v=1&lid=1&cid=7](http://www.wcoomd.org/press/?v=1&lid=1&cid=7)>

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<[http://www.oecd.org/pages/0,3417,en\\_21571361\\_46750445\\_1\\_1\\_1\\_1\\_1,00.html](http://www.oecd.org/pages/0,3417,en_21571361_46750445_1_1_1_1_1,00.html)>