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## ***Defining a 10% Improvement: Giving Concrete Meaning to the Key SII Objective***

Final report

Prepared for

Continuous Improvement and Centre of Expertise  
Innovative and Quality Services Division

**Treasury Board Secretariat**

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# ***Defining a 10% Improvement: Giving Concrete Meaning to the Key SII Objective***

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## ***INTRODUCTION***

The key objective of the 2000 Government of Canada Service Improvement Initiative is to reach a minimum 10% improvement in client satisfaction over the five years of the Initiative (by 2005) for each key service to the public. Another commitment of the SII Policy Framework is to "report within the existing annual RPP (reports on priorities and plans) and DRP (departmental performance reports) planning and reporting process on: [...] annual improvements in client satisfaction [and] progress toward five-year satisfaction targets".<sup>1</sup>

This report discusses the following issues in relation to these commitments:

- which metric should be used to report the level of client satisfaction?
- which aspects of service should be included in the reporting of client satisfaction?
- which clients and services should be included in the reporting of client satisfaction?
- which benchmark should be used to measure improvement?

<sup>1</sup> A Policy Framework for Service Improvement in the Government of Canada, June 2000, page 4.

## **METHODOLOGY**

This study is based primarily on a series of in-depth interviews conducted with representatives of lead departments and agencies. The following organizations were consulted:

- Atlantic Canada Opportunities Agency;
- Canada Customs and Revenue Agency;
- Canada Post;
- Human Resources Development Canada;
- Parks Canada;
- Passport Office;
- Veterans Affairs.

Official documentation, research literature and the expert opinion of the project manager were considered in the development of this report.

## **OPTIONS/CONSIDERATIONS**

### **Scale Conversion**

The SII Policy Framework states that "in order to conduct similar and comparable surveys, the Common Measurement Tool (CMT) has been identified as the standard tool for measuring client satisfaction".<sup>1</sup> The CMT proposes a five-point scale for satisfaction measurement.<sup>2</sup> The five points are labelled as follows: very dissatisfied, dissatisfied, neutral, satisfied, very satisfied.

Some of the people consulted in the preparation of this report have indicated that they believed that the full distribution of answers using each of the five points is required in order to fully depict the state of client satisfaction. They described how strategies differ if the organization's purpose is to convert a "very dissatisfied" client to a "neutral" client or if it is

<sup>1</sup> *Op. cit.*, page 9

<sup>2</sup> Faye Schmidt with Teresa Strickland, *Client Satisfaction Surveying: Common Measurements Tool*, Citizen-Centred Service Network and Canadian Centre For Management Development, December 1998

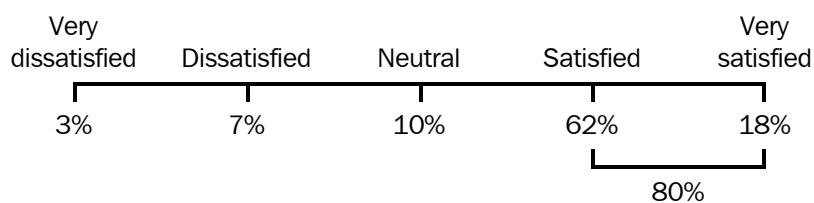
to bring a "neutral" client into the "satisfaction" zone. While this position certainly has merit in the context of developing service improvement programs, it is not in sync with the public communication and accountability objective which is stated in the SII Policy Framework. Communication of service improvement results must be commensurate with the fact that this aspect of organizational performance is one of several raised in RPPs and DPRs; it must, therefore, aim for simplicity and ease and understanding.

If client satisfaction must be summarized into a single figure, two options exist: the percentage of clients who expressed satisfaction and a weighted average of all answers provided.

**Percentage expressing satisfaction**

A common approach to summarizing client satisfaction has been to report, in aggregate, the percentage of clients who indicated that they were "satisfied" or "very satisfied" — the so-called top-two box approach. For example, if the answers were distributed as follows, the aggregate satisfaction figure would be 80%.

**TABLE 1 • Hypothetical survey results**



This approach offers a number of significant advantages:

- it is easy to understand — it requires no computation other than summing two percentages;
- it relates directly to the SII key indicator of client satisfaction;
- it has been in use for years in a number of public and private organizations; therefore it is relatively easy to compare with other organizations' performance;
- several federal departments and agencies have already reported client satisfaction using this metric;

- it tends to paint a favourable picture of organizational performance.

It also has a number of drawbacks:

- because it melts "satisfied" and "very satisfied" ratings equally, this approach hides levels of satisfaction: a "very satisfied" client has the same value as a "satisfied" client<sup>1</sup>;
- by reporting only on the right side of the scale, this figure also hides levels of dissatisfaction;
- it tends to inflate the reported level of satisfaction and to leave little room for measured improvement (in Table 2, shifts between "satisfied" and "very satisfied" do not affect the 80% performance rating);
- it is not comparable to the *Citizen First* index.<sup>2</sup>

Overall, this measure presents a very low level of sensitivity to variations in patterns of satisfaction. Table 2 contains several distributions of client satisfaction which would all summarize to the same 80% of satisfaction. Arguably, the situations depicted in Table 2 are different from one another and deserve an aggregate figure which will distinguish among them. The top-two boxes approach does not provide this level of sensitivity.

<sup>1</sup> Some authors consider that this is an important reason why many client satisfaction improvement strategies have not worked out. See Thomas O. Jones and W. Earl Sasser jr., "Why Satisfied Customers Defect", *Harvard Business Review*, November-December 1995.

Some of the people consulted considered this a positive feature of this approach, arguing that the SII policy aims at improving the percentage of client satisfaction, not the proportion of "very satisfied" clients.

<sup>2</sup> Erin Research, *Citizens First*, for the Citizen-Centres Service Network and the Canadian Centre for Management Development, October 1998; Erin Research, *Citizens First 2000*, for the Public Sector Service Delivery Council and the Institute of Public Administration of Canada, 2001.

**TABLE 2 • Hypothetical survey results totalling 80% of satisfaction**

Very dissatisfied	Dissatisfied	Neutral	Satisfied	Very satisfied
3%	7%	10%	62%	18%
20%	0%	0%	62%	18%
3%	7%	10%	18%	62%
0%	0%	20%	0%	80%

***Weighted average of all answers***

The principle behind weighted averages of answers is that the "intensity" of client feelings should be depicted in the summary figure. For example, the summary should be different if all clients indicated that they were "satisfied" versus all clients being "very satisfied".

The arithmetics of the weighted average are simple. Each point on the five-point scale is given a value which is multiplied by the percentage of clients having chosen that scale point. The summary figure is the sum of these weighted figures. Table 3 presents an example of a calculation using simple weights of 1 to 5 for the scale from very dissatisfied to very satisfied.

**TABLE 3 • Example of a weighted average calculation**

	Very dissatisfied	Dissatis- fied	Neutral	Satisfied	Very satisfied
	3%	7%	10%	62%	18%
Weight	1	2	3	4	5
Multiplication	0.03	0.14	0.30	2.48	0.90
Sum					3.85

Various weighting schemes are possible. The most common ones are presented in Table 4.

**TABLE 4 • Common weighting schemes**

	Very dissatis- fied	Dissatis- fied	Neutral	Satisfied	Very satisfied
Point rating	1	2	3	4	5
Adjusted point rating	20	40	60	80	100
Two-pole rating	-100	-50	0	50	100
100-point rating	0	25	50	75	100

The "point rating" scheme has no particular appeal; it is simply an off-shot of the simple coding used by computer programs to record answers into data bases. It is difficult to interpret in the absolute.

The "adjusted point rating" is a close parent of the "point rating". It is simply 20 times its value. While its interpretation may seem more intuitive, it has a minimum value of 20 which makes no particular sense.

The "two-pole rating" acknowledges the fact that the left side of the scale really depicts a negative feeling — dissatisfaction is not the absence of satisfaction but rather the presence of a negative reaction. On this scale, "neutral" is the absence of satisfaction and, correspondingly, the two-pole rating scheme assigns it a value of zero. While conceptually accurate, this scheme is not easy to communicate — few people received negative marks while going through school.

The "100-point rating" scheme has many advantages over the preceding weighting schemes as well as over the percentage of satisfied clients option:

- it takes every answer into account;
- it is sensitive to changes in the intensity of client feelings — Table 5 reproduces the weighted average for the Table 2 scenarios which were all considered equivalent under the percentage option;
- it leaves organizations more room to measure improvement;
- it depicts changes away from dissatisfaction zone as well as changes into and within the satisfaction zone;

- it is comparable to the *Citizens First* calculation and reporting.

The 100-point scheme has some disadvantages as well:

- since it requires computations, it may not be as easily understood as the percentage of clients choosing one of the two top satisfaction boxes on the scale;
- it represents a break from the recent practice of several departments and agencies which have been reporting the top-two box percentage.

**TABLE 5**  
**Weighted averages for hypothetical survey results**  
**totalling 80% of satisfaction**

Very dissatisfied	Dissatisfied	Neutral	Satisfied	Very satisfied	Weighted average <sup>1</sup>
3%	7%	10%	62%	18%	71.25
20%	0%	0%	62%	18%	64.50
3%	7%	10%	18%	62%	82.25
0%	0%	20%	0%	80%	90.00

<sup>1</sup> Using the 100-point rating scheme

### ***Meaning of a 10% Increase***

The remainder of this report deals with the meaning of the 10% objective set up in the Policy Framework. Let us first examine what this 10% meant according to the Policy document.

The SII Policy Framework states that:

*The Service Improvement Initiative policy framework commits those departments and agencies which have significant direct service delivery activities for Canadians to: [...] establish targets for improved client satisfaction in key services to the public (minimum 10% improvement by 2005 compared to*



*2000 Citizens First survey results, or the organisation's own year 2000 baseline surveys).*<sup>1</sup>

There are several key pieces of information in this citation:

- the Policy applies to departments and agencies with "significant" direct service delivery activity;
- the targets relate to "key services";
- the minimum objective is 10% improvement compared to year 2000;
- the default yardstick is *Citizens First*; departments and agencies may use their own surveys.

The meaning of the "10%" is also in question. Another citation from the Policy Framework may help: "The resulting improvements have increased passenger satisfaction from 68 percent to 84 percent. This 16% increase in satisfaction can be attributed to focussing improvements in the service areas most important to the passengers".<sup>2</sup> If the document calculates that the change from 68% to 84% is a 16% change (arguably a 16 percentage point improvement, not 16%), then the 10% objectives must read as an expectation to move the *Citizens First 2000* rating of 51<sup>3</sup> to 61 by 2005.

The Policy may be seen as presenting the 10% increase as an expectation for each department and agency involved. This interpretation would not be sensitive to the fact that improvement is much easier from a low score starting point than from a high score starting point. If the 10% objective is interpreted as a government-wide objective — the achievement of which can be assessed through *Citizens First*-type studies — then the expected contribution of each department and agency should be modulated according to each organization's starting point. Table 6 lays out our proposal for the expected improvements in relation with the organizational benchmark figure.

<sup>1</sup> *A Policy Framework...*, *op. cit.*, p. 8.

<sup>2</sup> *Idem*, p. 9.

<sup>3</sup> *Citizens First 2000*, *op. cit.*, p. 14

**TABLE 6**  
**Expected improvements based on organizational benchmarks**

2000 Benchmark	Expected increase by 2005	Expected 2005 level
40	25	65
50	20	70
60	15	75
70	10	80
80	6	86
90	2	92

**Baseline for a 10% Increase**

Should the baseline figure from which the improvement will be measured be the overall satisfaction figure, the average satisfaction with core items<sup>1</sup> or some other arrangement of several satisfaction indicators<sup>2</sup>?

Let's distinguish the goal of the SII and the means to attain the goal. In order to reach the improvement objective, organizations will have to develop service improvement strategies which will take into account the importance that their clients attach to various aspects of service as well as the areas associated with lower satisfaction ratings. Service improvement strategies require detailed data on core items and on an array of aspects of service.

However, the ultimate goal of the SII Policy Framework is not to improve satisfaction with any particular aspect of service but rather to increase the sense of satisfaction that citizens derive from federal government service. Hence, the best indicator of the achievement of this objective is the overall satisfaction attached with service delivery.

<sup>1</sup> A set of ten key aspects of service were identified by Treasury Board Secretariat as core elements of service, following the analysis of the 1998 data from *Citizens First*. They are most clearly laid out in the *How-to Guide for the Service Improvement Initiative*, March 2001, page 63 and erratum.

<sup>2</sup> In some contexts, satisfaction indicators can range from answers to the CMT-type satisfaction scale to the likelihood of returning for additional service to comparisons with other public or private organizations.

This conclusion is supported by recent literature<sup>1</sup> indicating that single-item measurement (much like the global satisfaction question from the CMT) can be a reliable and cost-effective method of summarising multifaceted objects like client satisfaction.

### **Scope of the 10% Improvement Target**

Should the improvement objective be applied to all client groups or should certain target populations be defined? Again, it is important to distinguish between the development of a service improvement strategy and reporting on the achievement of the 10% goal.

Within an organization, the development of the service improvement strategy will likely be segmented according to management accountability schemes. An organization structured geographically will probably request that regional managers develop region-sensitive strategies; another organization structured according to channels of service will probably think through their strategy according to this breakdown. Programs, regions, channels of service, client types, etc., any classification relevant to an organization will do in terms of developing the improvement strategy.

It is also quite possible that some organizations will uncover pockets of clientele which are particularly pleased or displeased with their service. They may want to treat them in some special way.

But these comments are related to the service improvement strategy, not to reporting on accomplishments. The SII Policy Framework states that the service improvement should focus on key services to the public. While some services may be key because of their strategic nature, we can presume that key services will tend to be those which are addressed to the widest audiences. Hence, the measurement of satisfaction improvement should focus on the programs and services dealing with the largest client groups.

<sup>1</sup> See John P. Wanous and Michael J. Hudy, "Single-Item Reliability: A Replication and Extension", *Organizational Research Methods*, vol. 4, no. 4, October 2001, pp. 361-375; John P. Wanous, A.E. Reichers and Michael J. Hudy, "Overall job satisfaction: How good are single-item measures?", *Journal of Applied Psychology*, vol. 82, 1997 pages 247-252; John P. Wanous and A.E. Reichers, "Estimating the reliability of single-item measure", *Psychological Reports*, vol. 78, 1996, pp. 631-634.

Among the people consulted as part of this study, the strategy has been to take benchmark measurements as wide as possible under the circumstances. Most gauged the satisfaction of virtually all of their clienteles (that could represent upwards of 90% of all clients, on the basis of samples, of course) or planned to do so. Some were leery of imposing systematic measurement on top of other types of consultation mechanisms — although they may not be in a position to report on satisfaction improvement as a consequence of this hesitation.<sup>1</sup>

The reasoning used in the previous section which led us to conclude that satisfaction reporting should deal with overall satisfaction applies here as well. It leads to the conclusion that satisfaction reporting should reflect the perceptions of the largest client groups and that it should take the form of an aggregate figure — much like a GPA for a student. This is not to say that organizations should not or may not report accomplishments with small populations or portions of their mandate. Simply, achieving the SII objective means effecting change that can be measured at the level of the public service and, hence, at the level of the organization.

### **Source of Benchmark Information**

The SII Policy Framework indicates that organizations' service improvement should be measured against the 2000 *Citizens First* survey results or against organizations' 2000 baseline surveys. There are issues associated with each of these sources.

In the judgement of many of the people consulted in the context of this study, *Citizens First 2000* data constitute a useful global picture allowing comparisons among levels of the public sector and between the public and the private sectors — on top of permitting macro analyses such as the ones which led to the identification of the five key drivers in 1998. The same people indicated that these data are not however, in their view, a reliable source of information to gauge the performance of their

<sup>1</sup> Interestingly, the only organizations where it was not possible to complete in-depth interviews during the study period were those that have the most decentralized management structures. In these organizations, responsibility for client satisfaction measurement and for the development of service improvement strategies were diffused and no single person was able to report on the department's realisations to date and plans to conform with the Policy.

organization. They raised issues with sampling, question wording, event selection, etc.. Moreover, they considered that *Citizens First*-type data are more likely to be influenced by government-wide communications strategies (over which they exercise no control) than by individual department and agency service improvement strategies. For these reasons, these informants were not keen on using *Citizens First* as a benchmark for the measurement of the improvement in their service.

The option to using *Citizens First 2000* results is to base improvement reporting on surveys conducted in 2000 by the organizations themselves. Unfortunately, very few organizations conducted such surveys in 2000. In fact, the Policy itself was published in June 2000 and the related How-to guide was made available in March 2001. Some departments and agencies were able to complete baseline surveys in 2001 but many are planning them for 2002 — the standing offer for these research services will be in place in and around June 2002.

## **RECOMMENDATIONS**

On the basis of the preceding analyses, it is recommended that:

- departments and agencies be requested to report satisfaction ratings using a weighted average based on a 0 to 100 scale;
- Treasury Board Secretariat communicates to departments and agencies that organization-level five-year improvement expectations are for larger change for organizations with lower benchmark scores than for organizations with higher benchmark scores;
- the overall satisfaction score be the key reporting element for all departments and agencies;
- organizations be invited to document service improvement results in specific areas, such as aspects of service or particular client groups, while recognizing that the SII improvement goal refers to the overall satisfaction of largest possible pool of clients within key programs and services.