

METHODOLOGY: OBSERVATIONS OF SERVICE BY E-MAIL FOR THE 2013–2014 REPORT CARDS

OBJECTIVE

The observations of service to the public made by the Office of the Commissioner of Official Languages (Office of the Commissioner) are among many tools used to measure the performance of federal institutions with respect to Part IV of the *Official Languages Act* (service to the public). The Office of the Commissioner observed three types of service offered by institutions: in-person, telephone and e-mail. This document explains the methodology used for e-mail observations.

E-mail service is evaluated in order to prepare report cards. The objective is to compare e-mail response rates and times in both official languages.

SCORING

The points awarded for e-mail service account for 5% of the overall report card rating and are broken down as follows:

1. Response rates are comparable in both official languages (2.5%)
2. Response time is comparable in both official languages (2.5%)

METHODOLOGY

The methodology was established in cooperation with Statistics Canada, which also participated in the interpretation of results.

Identical e-mails in English and French were sent to each institution during the summer and fall of 2013 to compare response rates and times. The results are therefore representative of that time period.

Unlike observations in person and by telephone, the results of which indicate service availability in the official language of the linguistic minority, e-mail observation results compare response rates in both official languages.

Note: It was not possible to evaluate e-mail service from the Canada Post Corporation or the Canada Revenue Agency. The Canada Post Corporation does not respond to information requests by e-mail unless the correspondent has an active claim or a file number. The Canada Revenue Agency does not correspond with taxpayers by e-mail.

1) Comparable response rates

The response rates in both official languages make it possible to determine whether the institution provides comparable service in English and French.

i. Calculating response rates in English and French

Response rates in English: $(\text{Number of English responses received} \div \text{Number of English e-mails sent}) \times 100 = x\%$

Response rates in French: (Number of French responses received ÷ Number of French e-mails sent) × 100 = x%

ii. Determining the score

Comparable response rate score: Parity score - Difference in the response rates in both official languages = x%

Parity score = 100%

The parity score represents the ideal case where the response rate for English e-mails is the same as the response rate for French e-mails.

Take, for example, VIA Rail Canada, which provided a response in English or French for each e-mail during the observation period. Based on the calculation formula, there is no difference (0%) in the response rate, resulting in a score of 100% for comparable response rates (score equivalent to 2.5% of the overall report card rating—see Appendix A).

Another example is the Royal Canadian Mounted Police (RCMP), whose response rate was 90% in English and 40% in French. By subtracting the difference between the response rates in both official languages from the parity score, a score of 50% is obtained for comparable response rates (score equivalent to 1.25% of the overall report card rating—see Appendix A).

2) Comparable response times

The average response times for English e-mails and French e-mails make it possible to compare response times in each official language. To do this, a score is assigned that represents the proportionality or equivalency of the average response times in both official languages. Consequently, the closer the value of the proportionality coefficient is to 1, the higher the score.

i. Calculating average response times

In order to reduce the effect of excessive response times on the average, the Winsorization estimation method is used, which involves determining a limit¹ (e.g., 200 hours for VIA Rail) based on the assumption that a response time exceeding that limit is the result of something other than a question of language. Therefore, any response time exceeding the limit is rounded off to that number for the purposes of calculating the average response times.

a. Calculating the average response times for English e-mails and French e-mails

Average response times (hours) = Average response times total (hours) ÷ Number of responses received

¹ Because response times vary for each institution, the limits also vary: RCMP = 400; VIA = 200.

b. Calculating the difference in average response times for English e-mails and French e-mails

Difference between the two average response times (hours) = |Average response times for English e-mails - Average response times for French e-mails|

ii. Determining the score

The score is the proportionality coefficient expressed as a percentage. That value is obtained based on the average response times for e-mails in each official language. When the value is equal to 1, it means that the average response times for English e-mails is equal to the average response times for French e-mails. In other words, the smaller the difference between the average response times in each official language, the closer the proportionality coefficient is to 1 and the higher the score.

a. Calculating the proportionality coefficient

If β (the shortest response time) is proportional to Ω (the longest response time) and μ is the proportionality coefficient, then $\mu = \beta \div \Omega$, with $\beta = \mu \times \Omega$ and $\Omega = (1 \div \mu) \times \beta$.

b. Calculating the score

Comparable response time score: $\mu \times 100 = x\%$

Difference between the two average response times: $(\text{Difference between the two average response times} \div \Omega) \times 100 = x\%$

Consider the RCMP, for instance, for which the average response time is 75.2 hours for English e-mails and 163.9 hours for French e-mails. This results in a proportionality coefficient of 0.46, which corresponds to a score of 46% ($75.2 \div 163.9 \times 100 = 46\%$). The difference of 88.7 hours between the two averages corresponds to a proportional difference of 54% ($163.9 - 75.2 = 88.7$ hours; $88.7 \div 163.9 \times 100 = 54\%$). The weight of this score in the report card is 1.15% ($46\% \times 2.5\% \div 100 = 1.15\%$) out of 2.5% (see Appendix A).

As another example, consider VIA Rail, for which the average response times is 62.7 hours for English e-mails and 83.3 hours for French e-mails. That results in a proportionality coefficient of 0.75, which corresponds to a score of 75% ($62.7 \div 83.3 \times 100 = 75\%$). Furthermore, the difference of 20.6 hours between the two averages corresponds to a proportional difference of 25% ($83.3 - 62.7 = 20.6$ hours; $20.6 \div 83.3 \times 100 = 25\%$). The weight of this score in the report card is 1.9% ($75\% \times 2.5\% \div 100 = 1.9\%$) out of 2.5% (see Appendix A).

**E-MAIL SERVICE OBSERVATIONS
2013–2014 REPORT CARDS**

Institution	Service Availability				Response Times						Overall score out of 5% (in report card)	
	Response rate in English	Response rate in French	Service availability score	Score out of 2.5% (in report card)	Average response time in English	Average response time in French	Difference between average response times (hours)	Difference between average response times (%)	Response time score	Score out of 2.5% (in report card)		
Canada Post Corporation	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Canada Revenue Agency	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Correctional Service Canada	100%	100%	100%	2.5%	100.9 hours	153.8 hours	52.9 hours	34%	66%	1.65%	4.2%	
Public Health Agency of Canada	100%	100%	100%	2.5%	222.7 hours	213.8 hours	8.9 hours	4%	96%	2.4%	4.9%	
Royal Canadian Mounted Police	90%	40%	50%	1.25%	75.2 hours	163.9 hours	88.7 hours	54%	46%	1.15%	2.4%	
Statistics Canada	100%	90%	90%	2.25%	38.2 hours	42.9 hours	4.7 hours	11%	89%	2.23%	4.5%	
VIA Rail Canada	100%	100%	100%	2.5%	62.7 hours	83.3 hours	20.6 hours	25%	75%	1.9%	4.4%	