

Decision on the criterion to be adopted for assessment of achievement of the performance targets associated to quality of service indicators calculated through samples

By determination of 12 July 2018, the Board of Directors of the Autoridade Nacional de Comunicações (ANACOM or National Communications Authority) approved the decision on the quality of service parameters and performance targets associated to the provision of the universal postal service, for the period 2018-2020 (hereinafter “Quality Decision”).

Pursuant to this decision, non-compliance with the performance targets associated to the defined quality of service indicators (QSI) gives rise to the application of a mechanism for compensation of users.¹

Non-compliance with any quality of service indicator exist when its value, in a particular year, is below its established performance target.

For some quality of service indicators² the ascertained value corresponds to an estimate obtained by sampling.

In these cases, “acceptance” errors can occur when the sample provides a “false positive” (false compliance - where measurement of the sample indicates compliance with the target, although this is not complied with in the universe, i.e. in reality), as well as “rejection” errors, when the sample provides a “false negative” (false non-compliance - meaning non-compliance in the sample when there is not the case for the universe as a whole).

Thus, it could happen that in a particular year, CTT – Correios de Portugal, S.A. (CTT) has been not compliant in the universe (in reality) with the target of a particular quality of service indicator and, in a certain proportion of the measurements (sample) of this QSI, it CTT is considered compliant, with ANACOM taking the decision that the performance target was achieved. Or, conversely, it could happen that in a particular year, CTT has been compliant

¹ With the exception of the quality of service indicators related to higher than expected transit time for intra-community cross-border mail.

² This is the case of the quality of service indicators for standard mail (QSI1 and QSI2), priority mail (QSI3 to QSI6), newspapers and periodic publications (QSI7 to QSI12), standard bulk mail (QSI21 and QSI22), and waiting time at postal establishments (QSI23 and IQS24).

in the universe (in reality) with the performance target and, in a certain proportion of the sample is declared non-compliant by ANACOM.

This situation does not arise in the case of quality of service indicators whose measurement is based on the universe (for the real postal items of the users), as is the case of the registered standard mail and standard parcels.

Considering that:

- a) in the case of QSI whose method of calculation is through samples, the value ascertained for each IQS is an estimate obtained by sampling, which, thus, in addition to a margin of sampling error, has an associated level of confidence; and
- b) in the Quality Decision, ANACOM eliminated the minimum values associated to the QSI, henceforth establishing only performance targets, whose non-compliance gives rise to the application of a compensation mechanism,

ANACOM, in the Quality Decision, indicated that, in the verification of the level of achievement of the performance target of each QSI, it would also assess the impact of the sampling error associated to the estimated value of the observed QSI.

Here, the main concern is to reduce, to reasonably minor probabilities, the existence of “false negatives” (false non-compliance) which have consequences for those that can be penalised (unduly) due to non-compliance. In the specific case of the QSI, the concern is to reduce to reasonably minor probabilities, the taking of decisions by ANACOM that penalise CTT, via the application of the mechanism for compensation of users, due to the occurrence of “false non-compliance” with the performance targets.

A solution, based on the sample measurements, consists of using confidence intervals with a high level of confidence, to take decisions on compliance or non-compliance with the targets in the entire universe. Accordingly, if the upper limit of the confidence interval for p percentage of items not delivered within the stipulated time limits (or people not attended within the established waiting time) is greater than or equal to the percentage to be achieved (performance target) stipulated for the QSI, the target is considered to have been achieved.

For example, considering a particular QSI whose performance target is 99.9%, for a sample size of 5000 items, based on simple random sampling, the observation of a percentage of

99.84% of items within the stipulated time limit (D+X) implies a confidence interval of 95% for p between 99.73% and 99.95%. As its upper limit (99.95%) is higher than 99.9% (the target value), the target is considered to be achieved.

It should be noted that sampling errors can vary according to a number of parameters:

- a) the observed value in the sample;
- b) the sample size;
- c) the established confidence level³.

Moreover, it should be noted that the opposite can also occur, meaning that ANACOM could take decisions that benefit CTT due to the existence of “false positives”, i.e. “false compliance”, without CTT being penalised. However, in this case, the solution would be to consider the lower limit (instead of the upper limit) of the confidence interval for the p percentage of items that are delivered within the stipulated time limits (or people attended within the established waiting time). Only if this lower limit is greater than or equal to the performance target stipulated for the QSI shall the target be considered as achieved. This would imply that CTT would have as its reference (to be achieved) a value above the stipulated target value, which would thus be, in practice, the value that it should achieve in order to not be considered as non-compliant.

Considering

- a) the above;
- b) that, by determination of 26 March 2020, the Board of Directors approved the draft decision on the criterion to be adopted for assessment of achievement of the performance targets associated to quality of service indicators through samples, which was submitted to:
 - i. hearing of CTT – Correios de Portugal, S.A. (CTT, pursuant to articles 121 and 122 of the Code of Administrative Procedure (CPA));

³ For example, 95%.

- ii. hearing of the organisations representing the consumers, under article 43 of the Postal Law;
 - iii. public consultation of the users in general, under subparagraph d) of number 1 of article 124 of the Code of Administrative Procedure;
- c) the comments received, whose analysis is presented in the «Report on the prior hearing and public consultation to which the draft decision on the criterion to be adopted for assessment of achievement of the performance targets associated to quality of service indicators, calculated through samples, was submitted», which is an integral part of the present decision,

the Board of Directors, in pursuing ANACOM's duties established in subparagraphs h) and i) of number 1 of article 8 of its Statutes, approved by Decree-Law 39/2015 of 16 March, in exercising its powers conferred by subparagraph b) of number 1 of article 26 of the same Statutes, in view of the provisions in number 1 of article 13 of the Postal Law (Law 17/2012 of 26 April, as currently worded) and the provisions in the «Quality of service parameters and performance targets associated to the provision of the universal postal service», stipulated by determination of ANACOM of 12 July 2018 for the period of 2018-2020, and under number 1 of article 45 of the Postal Law, determines the following:

1. ANACOM considers that the performance targets of the QSI have been achieved in relation to standard mail (QSI1 and QSI2), priority mail (QSI3 to QSI6), newspapers and periodic publications (QSI7 to QSI12), standard bulk mail (QSI21 and QSI22), and waiting time at postal establishments (QSI23 and QSI24), applicable in 2019 and 2020, when the upper threshold of the 95% confidence interval of the observed value is higher than or equal to the target value established for the respective QSI.
2. For purposes of number 1, CTT send ANACOM the 95% confidence interval of the observed value of each one of the aforesaid QSI, rounded to two decimal points, as well as all the calculations made to determine them.
3. The information referred to in number 2 shall be sent to ANACOM, relative to the year of 2019, within the period of 10 business days after having been notified of the present decision and, relative to the year of 2020 simultaneously with the reporting of the annual quality levels recorded in that year.