

**REPORT ON THE QUALITY INDICATORS OF INTERNET IN THE CARS SERVICES
ASSOCIATED TO MACHINE TO MACHINE SERVICES PROVIDED BY TATA
Communications (Italy) Srl**

YEAR 2023

This document illustrates the quality indicators of internet in the car services associated to machine to machine services provided by TATA Communications (Italy) Srl, pursuant to and for the purposes of Article 10 of AGCOM Resolutions n.179/03/CSP and n.154/12/CONS and following amendments.

With regard to each indicator, the following data are indicated:

- a. the measurements made;
- b. the final reports for the semester (for the indicators for which the half-yearly final reports are also provided) and for the year 2023;
- c. the definition of the indicator;
- d. the explanatory notes on the methods by which the measurements are made;
- e. the survey periods.

1. COMPLAINTS REGARDING CHARGES

Indicator	Measure	Target	Results 1st semester 2023 (from January 1 to June 30, 2023)	Results 2th semester 2023 (from July 1 to December 31, 2023)	Results year 2023
Complaints regarding charges	Ratio of the number of complaints concerning charges on SIMs received in the period of detection and the average number of SIMs active in the same period	1,20%	0%		0%

Definition: the ratio between the number of complaints (relating to prepaid SIMs charges) received in the period of detection and the average number of SIMs active in the same period.

Note:

- the detection system allows to include all cases of complaints for charges received (regardless of their validity or not), including complaints about roaming charges and those relating to charges for additional / premium services.
- active SIM means a SIM that allows access to internet in the car services associated to machine to machine services provided by Tata Communications (Italy) Srl.

Periods of detection:

1st semester: from January 1st, 2023 to June 30th, 2023.

2nd semester: from July 1st, 2023 to December 31st, 2023.

Annual: from January 1st, 2023 to December 31st, 2023.

2. PROBABILITY OF TRANSFER OF SMS TO SMS CENTER

Indicator	Measure	Target	Results 1st semester 2023 (from January 1 to June 30, 2023)	Results 2th semester 2023 (from July 1 to December 31, 2023)	Results year 2023
Probability of transfer of SMS to SMS Center	Percentage of SMS taken over by SMS-C with respect to all the messages arrived to SMS-C.	99%	99,69%	99,70%	99,695%

Definition: the probability that an SMS message sent by the user (Mobile originated) be actually delivered to the SMS collection and management center (SMS-C).

Note:

- the survey is census;
- the data have been collected for each network cell;
- the data have been collected 24 hours a day every day for the periods of detection of the year 2023;
- SMS not originating from or not delivered to a number for mobile and personal services are excluded from the survey.

Periods of detection:

1st semester: from January 1st, 2023 to June 30th, 2023.

2nd semester: from July 1st, 2023 to December 31st, 2023.

Annual: from January 1st, 2023 to December 31st, 2023.

3. TIME OF DELIVERY OF SMS AT THE FIRST ATTEMPT

Indicator	Measure	Target	Results 1st semester 2023 (from January 1 to June 30, 2023)	Results 2th semester 2023 (from July 1 to December 31, 2023)	Results year 2023
Time of delivery of SMS at the first attempt	Arithmetical average of daily times of delivery of the SMS at the first attempt in the period considered	7''	3,69 sec.	3,71 sec.	3,70 sec.

Definition: arithmetic average of daily delivery times of the SMS at the first attempt in the period of detection.

Note:

- the survey is census;
- the data have been collected for each network cell;
- the data have been collected 24 hours a day every day for the periods of detection of the year 2023;
- SMS not originating from or not delivered to a number for mobile and personal services are excluded from the survey.

Periods of detection:

1st semester: from January 1st, 2023 to June 30th, 2023.

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