

EETS performance indicators

1. Definitions

“Toll declaration” means a structure of messages provided by the EETS Provider to the Toll Charger, which includes the detected charge object.

For the key performance indicator “Information compatibility and authenticity of toll declarations” this refers to the APDU message for declaration of toll data under ISO 12855. For all other performance indicators, this applies to the integral ADUs for declaration of toll data. Each specific ADU toll declaration contains only one detected charge object. Messages are defined in [Appendix 2, Requirements regarding the format and content of the files exchanged via the interface bus under protocol EN ISO 12855:2015].

“Toll declaration with correct syntax and authenticity” is a “Toll Declaration” with syntax that was successfully processed by the Electronic Toll System with a recognised authenticator. This definition is not intended to clarify the subsequent processing processes by the Electronic Toll System.

“Correct Toll Declaration” means a “Toll declaration with correct syntax and authenticity” which can also be successfully assessed by the Electronic Toll System and therefore used for the calculation of a toll (charging).

“Detection of a Charge Object” means the moment when the road vehicle enters a toll segment. This is reflected in the time-stamp “TimeWhenUsed” of the detected charge object in the data structure of the “Toll Declarations” declaration of tolls.

“Received in a timely manner” means the time difference between the “Detection of a Charge Object” and the acceptance in the interface of the Toll Charger is less than “N1”.

“N1” is a parameter that determines the duration of the break time after which “Toll declarations with correct syntax and authenticity” are no longer accepted.

2. General Provisions

The agreed maintenance time frames (system upgrades or other planned interventions) are excluded from the measurement and reporting of the key performance indicators. Disaster recovery is excluded from the measurement and reporting of the key performance indicators. No type of error can result in a simultaneous sanctioning in a multiple of key performance indicators.

3. Frequency of reporting the key performance indicators

The total amount of key performance indicators is formed on the basis of the total accumulated values per month. The month is defined as a calendar month beginning at midnight, 00:00 o'clock (UTC +/- 0) on the 1st day and ending on the last calendar day of the month at 11:59 p.m. This results in 12 reporting periods per calendar year.

For the key performance indicators: “Frequency of generation of correct toll declarations”, “Time frame for delaying correct toll declarations”, “Delay frequency of toll declarations”,

“timeWhenUsed” (in UTC +/-) is the decisive attribute for determining the reporting period (one calendar month).

For the key performance indicator “Information compatibility and authenticity of toll declarations”, “.apduDate” (in UTC +/-) of the received toll declarations APDU messages is the decisive attribute for determining the reporting period (one calendar month).

4. Reporting subject/entity

Each key performance indicator for the EETS Provider shall be measured by the Toll Charger.

Each party shall provide the other party with the necessary data to enable the other party to verify its data.

5. Calculation of the key performance indicators

Calculations of the key performance indicators are only considered valid when the number and events are high enough to have statistical significance.

6. Sanctioning for non-compliance with the key performance indicators

Failure to comply with the key performance indicators shall be subject to a penalty, where the sanctioning party provides the key performance indicators received in due time to allow the sanctioned party to review and receive feedback.

7. Key performance indicators (Table 1)

Table 1

Key Performance Indicators	Description and Requirement
Frequency of generating of correct toll declarations (FGCTD)	<p>This indicator measures the semantic correctness of “Toll declaration with correct syntax and authenticity” which is/are “received in a timely manner”.</p> <p>FGCTD is formed by dividing the number of the “Correct Toll Declarations” by the number of the “Toll Declarations with correct syntax and authenticity” that are received in due time, except for processing errors attributed to the Toll Charger.</p> <p>FGCTD must be greater than 99.5%.</p>
Timeframe for delaying correct toll declarations (TDCTD)	<p>This indicator measures the timeliness of the “Correct Toll Declaration”, where timeliness is the difference between the time of “Detection of a charge object” until the time of receipt of the corresponding “Toll Decoration” by the Toll Charger.</p>

	<p>First-type TDCTD – it is formed as the number of “Correct Toll Declaration” received within 30 minutes after “Detection of the charge object” divided by the number of the “Correct Toll Declarations” received.</p> <p>The first-type TDCTD must be greater than 80%.</p> <p>Second-type TDCTD – it is formed as the number of each “Correct Toll Declaration” received within 90 minutes after “Detection of the charge object” is divided by the number of the “Correct Toll Declarations” received.</p> <p>The second-type TDCTD must be greater than 95%.</p>
Toll Declarations Delay Frequency (TDDF)	<p>This indicator measures a “Toll declaration with correct syntax and authenticity” that arrives too late to be used for charging.</p> <p>The TDDF is formed as the number of “Toll declaration with correct syntax and authenticity” received later than N1 after “Detection of the charge object”, excluding processing errors attributed to the Toll Charger divided by the number of the “Toll declarations with correct syntax and authenticity”.</p> <p>TDDF must be lower than 0.5%.</p> <p>Note: Toll declarations received after N1 are not accepted and are therefore not considered as correct toll declarations. The value of N1 should be higher or equal to 120 minutes.</p>
Information compatibility and authenticity of toll declarations (ICATD)	<p>This indicator measures the proportion of toll declarations arriving in the proper form and with valid authentication.</p> <p>ICATD is formed by dividing the number of the “Toll declaration with correct syntax and authenticity” by the number of “Toll Declarations”.</p> <p>ICATD must be higher than 99.5%.</p>
Accessibility of the Communication Link (ACL)	<p>This indicator measures the accessibility of the Service Provider's system during each communication made by the Toll Charger to the Service Provider.</p> <p>The ACL is formed by dividing the number of all successfully transmitted messages by the amount of the number of all successfully transmitted messages and all</p>

	<p>messages that have exhausted the number of reiterations.</p> <p>ACL must be higher than 99.5%.</p>
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