

QUALITY PARAMETERS FOR THE PROVISION OF EETS

ANNEX NO. 13 OF THE EETS DOMAIN STATEMENT

ANNEX NO. 5 OF THE CONTRACT FOR THE PROVISION OF THE EUROPEAN ELECTRONIC TOLL SERVICE

This document forms and Annex of the EETS Domain Statement.

Upon conclusion of the EETS Contract between the Toll Collection Administrator and the EETS Provider, it shall become an integral part of the EETS Contract as Annex 5 thereto.

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1. GENERAL PROVISIONS

This Document regulates the Toll Collection Administrator's requirements for the EETS quality and performance of the EETS Provider, which are measured using the Key Performance Indicators (KPIs). The Toll Collection Administrator is authorized to unilaterally change the Key Performance Indicators (KPI) and prescribed SLA values in justified cases.

2. MEASURING THE QUALITY AND PERFORMANCE OF EETS

2.1. KPI MEASUREMENT AND SLA EVALUATION

1. The quality and performance of the Provider's EETS shall be assessed through the KPIs defined below.
2. The obligation of the EETS Provider is to provide EETS in the prescribed quality, which is expressed in individual KPIs and prescribed values of SLA parameters.
3. KPI parameters are evaluated by the Toll Collection Administrator. In doing so, Toll Collection Administrator shall:
 - a) carry out periodic review and independent measurement of KPIs as defined in this document,
 - b) evaluate the fulfilment of SLAs,
 - c) prepare regular reports on the fulfilment of KPIs and SLAs by the EETS Provider at the intervals specified in the EETS Contract and/or in the EETS Domain Statement.
4. The EETS Provider shall provide the Toll Collection Administrator with reasonable assistance in relation to the verification of the quality and performance of the EETS. If the EETS Provider does not raise any objections to the KPI and SLA report within 5 (five) working days from its receipt, it shall be deemed that the values stated in the KPI and SLA report are correct, and the KPI and SLA report is considered closed.
5. The Toll Collection Administrator is entitled to entrust a third party with the measurement of KPIs and the evaluation of SLAs. In such a case, the Toll Collection Administrator is obliged to impose the following on the person in charge of measuring the KPIs and evaluating the SLA:
 - a) the obligation to maintain the confidentiality of all facts of which he/she has become aware in connection with the measurement of KPIs and the evaluation of SLA, except for those that are publicly available;
 - b) the obligation to protect from unauthorised use all information received by it in connection with the performance of its duties from the EETS Provider and/or the Toll Collection Administrator, irrespective of the form in which such information is received.

2.2. SCORING AND PENALTIES

6. Failure to comply with the prescribed SLA values will be assessed by awarding penalty points according to the criteria set out in the definition of each SLA. Penalty points shall be used for the purpose of calculating the contractual penalty under the EETS Contract. One penalty point is equivalent to a contractual penalty of EUR 4,000 (four thousand).
7. Repeated failure to meet the SLA value of the same KPI in 2 (two) consecutive Months shall be assessed starting from the second Month with double points.

8. Repeated failure to meet the SLA value of the same KPI in 3 (three) consecutive Months shall be considered a material breach of the EETS Contract.

3. DEFINITION OF KPI PARAMETERS AND PRESCRIBED SLA LEVEL

3.1. PROPORTION OF DELAYED POSITION DATA

<i>KPI indicator</i>	E.1
<i>Name of KPI</i>	Proportion of delayed position data
<i>Assessment period</i>	Month, retroactive to 60 calendar days after the end of the evaluation period.
<i>Assessed by</i>	Toll Collection Administrator
<i>Definition</i>	<p>The proportion of delayed position data in the total number of position data transmitted in the form of Toll Declarations shall be evaluated. Delay means the time interval Δt elapsed between the passage of a vehicle through a certain point recorded by the OBE at time t_1 and the time of delivery of the Toll Declaration t_2 to the ETC system on-line interface for data processing by the Toll Collection Administrator.</p> <p>It shall be evaluated separately for different Δt-limit values.</p>

$$L_p(m) = \frac{p_L(m)}{p_0(m)} \times 100$$

where:

$p_L(m)$... the number of delayed declared position data elements for which the condition $\Delta t > T_L$ is valid for the Monthly period m

$p_0(m)$... the number of all declared position data elements for Monthly Period m , received within 60 calendar days of the end of the Month to which the evaluation relates

$L_p(m)$...proportion of delayed position data for Month m

Conditions The measurement is based on data processed in the ETC system and stored in the DWH (data warehouse).

The evaluation will be conducted after 60 calendar days from the end of the assessed Monthly Period m . The base $p_0(m)$ shall also include all data elements falling within the assessed Monthly Period m that have been received for processing with a delay of no more than 60 calendar days from the end of the assessed Monthly Period m .

The evaluation shall be carried out jointly for the 3 Billing Periods that fall within a given Month.

Prescribed SLA value

1. Within the time limit $T_{L1} = 30$ (thirty) minutes, 90 (ninety) % of the position data elements shall be delivered to the ETC system for processing.

2. Within the time limit $T_{L2} = 24$ (twenty four) hours after the end of the ten (10) day Billing Period, 98 (ninety-eight) % of the position data elements shall have been received for processing in the ETC system.

Sanctions

1. Time limit T_{L1} : In the event of non-compliance with the prescribed SLA value, 1 penalty point shall be awarded for each incremental percentage point by which the actual value of the parameter was lower than the prescribed value.
2. Time limit T_{L2} : In the event of non-compliance with the prescribed SLA value, 1 penalty point shall be awarded for each incremental percentage point by which the actual value of the parameter was lower than the prescribed value.

3.2. INCORRECTLY CHARGED TOLL

KPI indicator	E.2
Name of KPI	Incorrectly charged Toll
Assessment period	Month,
Assessed by	Toll Collection Administrator
Definition	<p>The amount of incorrectly or wrongly levied Toll (<i>false-positive</i>) is evaluated in relation to the total Toll levied.</p> <p>An incorrectly levied Toll means an amount which the Toll Collection Administrator has duly levied to the EETS Provider on the basis of a Toll Declaration submitted by the EETS Provider and which the Toll Collection Administrator has subsequently had to transfer (credit) to the EETS User and/or the EETS Provider on the basis of a decision on a justified Toll claim.</p> $Q_{FP}(m) = \frac{M_{FP}(m)}{M_C(m)} \times 100$ <p>where:</p> <p>$M_{FP}(m)$... the credited Toll amount on the basis of a decision on a justified claim in the Month m made to the Toll Collection Administrator (in Euros excl. VAT) (in EUR without VAT)</p> <p>$M_C(m)$... total amount of Toll collected for the EETS Provider in the Month m (in EUR without VAT)</p> <p>$Q_{FP}(m)$... the proportion of incorrectly charged Toll per Month m</p>
Conditions	The evaluation shall be carried out on the basis of data held in the ETC system database and/or in the records of the Toll Collection Administrator. The evaluation shall be carried out in the Month m in which the decision on the justified Toll claim was made, regardless of which Monthly period the justified Toll claim refers to.
Prescribed SLA value	The maximum value of the proportion of incorrectly charged Toll is 0.05% (zero point five hundredths of a percent).
Sanctions	If the prescribed SLA value is not met, 2 penalty points shall be awarded for every five hundredths of a percentage point by which the actual value of the parameter is higher than the prescribed value.

3.3. UNREPORTED TOLL

KPI indicator	E.3
Name of KPI	Unreported Toll
Assessment period	Month
Assessed by	Toll Collection Administrator
Definition	<p>The share of the so-called “recalculated” Toll Transactions in the total volume of Toll collected for the calendar Month <i>m</i> (<i>false-negative</i>) is evaluated.</p> <p>The Toll Collection Administrator shall recalculate Toll Transactions and levy the Toll Recalculation in case it detects by its own means (e.g. by means of CCTV footage from roadside control devices) vehicle movements on the Specified Road Sections in excess of the data reported by the EETS Provider in the Toll Declarations.</p> $Q_{FN}(m) = \frac{M_{TC}(m)}{M_{TD}(m) + M_{TC}(m)} \times 100$ <p>where:</p> <p>$M_{TD}(m)$... Toll levied on the basis of data from Toll Declarations (in EUR without VAT) for Month <i>m</i> (in EUR without VAT)</p> <p>$M_{TC}(m)$... Toll recalculated by the Toll Collection Administrator on the basis of added Toll Transactions for Month <i>m</i> (in EUR without VAT)</p> <p>$Q_{FN}(m)$... share of unreported Toll for the Month <i>m</i></p>
Conditions	<p>The evaluation shall be carried out on the basis of data held in the ETC system database and/or processed by the Control System and/or held in the records of the Toll Collection Administrator.</p> <p>The recalculated Toll resulting from incorrect variable vehicle data setting by a driver in the OBE (e.g., the "number of axles of the vehicle or train") is not used for the purpose of evaluating this KPI. In this case, it is the driver's violation and/or the Vehicle Operator's regulatory offense.</p>
Prescribed SLA value	The maximum value of the proportion of unreported Toll is 0.5% (zero point five tenths of one percent).
Sanctions	In the event of non-compliance with the prescribed SLA value, 5 penalty points shall be awarded for each incremental tenth of a percentage point by which the actual value of the parameter was higher than the prescribed value.

3.4. CORRECTNESS OF OBE SETTING

<i>KPI indicator</i>	E.4
<i>Name of KPI</i>	Correctness of OBE setting
<i>Assessment period</i>	Month
<i>Assessed by</i>	Toll Collection Administrator
<i>Definition</i>	<p>The proportion of detected vehicle data discrepancies fixed in the OBE (or registered by the EETS Provider in the ETC system) to the total number of OBEs for which at least one Toll Transaction was processed in the ETC system in the reporting period shall be evaluated. The period under observation is the Month.</p> $Q_{FOBE}(m) = \frac{N_F(m)}{N_T(m)} \times 100$ <p>where:</p> <p>$N_F(m)$... the number of all OBEs for which the Toll Collection Administrator detected discrepancies in the vehicle data settings in the OBE for Month m</p> <p>$N_T(m)$... the number of active OBEs for which at least 1 Toll Transaction in ETC system was levied in Month m</p> <p>$Q_{FOBE}(m)$... the share of OBEs with incorrectly set vehicle data in the total number of active OBEs detected in Month m</p>
<i>Conditions</i>	<p>The evaluation shall be carried out on the basis of data obtained in the framework of the inspection of vehicles and OBEs carried out by the Toll Collection Administrator and the Police Force Authority.</p> <p>Incorrect setting of vehicle variable data in the OBE by the driver (e.g. “number of axles of vehicle or combination of vehicles”) shall not be used for the purpose of evaluating this KPI. In this case, it is an offence by the driver and/or an administrative offence by the Vehicle Operator.</p>
<i>Prescribed SLA value</i>	The maximum value of the proportion of OBEs with incorrectly set vehicle data in the total number of active OBEs shall be 0.1 % (one tenth of one percent).
<i>Sanctions</i>	In the event of non-compliance with the prescribed SLA value, 1 penalty point shall be awarded for each incremental tenth of a percentage point by which the actual value of the parameter was higher than the prescribed value.

3.5. TROUBLESHOOTING EETS ERRORS AND MALFUNCTIONS

<i>KPI indicator</i>	E.5
<i>Name of KPI</i>	Troubleshooting EETS errors and malfunctions
<i>Assessment period</i>	Month
<i>Assessed by</i>	Toll Collection Administrator
<i>Definition</i>	<p>Compliance with the time limits for correcting EETS errors and malfunctions caused by the EETS Provider shall be assessed. It measures the time in minutes from the reporting of the incident to the EETS Provider during which individual incidents and issues were addressed and resolved in the reporting period <i>m</i>, which is the Month. This KPI does not apply to errors and malfunctions of individual OBEs.</p> <p>It shall be assessed separately for each incident severity category:</p> <ol style="list-style-type: none"> 1. Critical Errors / Critical Malfunctions, E.5.1 2. Serious Errors / Serious Malfunctions, E.5.2 3. Other errors / Other malfunctions, E.5.3 <p>The assessment shall be carried out separately for each individual incident severity category. The assessment period of the Month <i>m</i> shall include all incidents that were detected in the assessment period or were still in a pending state in the assessment period, i.e., in a state where the error or malfunction in question has not been corrected, even by a work-around.</p> <p>The assessment is carried out by evaluating information from a number of sources, namely:</p> <ol style="list-style-type: none"> 1. records of operational incidents and their resolution (EETS hot-line support desk log) 2. system logs and operation logs 3. automated systems for monitoring the status and operation of technologies
<i>Conditions</i>	The evaluation shall be carried out by the Toll Collection Administrator on the basis of its own investigations.
<i>Prescribed SLA value</i>	<ol style="list-style-type: none"> 1) Critical Errors / Critical Malfunctions: E.5.1 the time limit for the remedy of a Critical Error/Critical Malfunction shall be a maximum of 4 (four) hours from the time of notification by the Toll Collection Administrator, 2) Serious Errors / Serious Malfunctions: E.5.2 the time limit for the remedy of a Serious Error/Serious Malfunction shall be a maximum of 8 (eight) hours from the time of notification by the Toll Collection Administrator, 3) Other errors / Other malfunctions: E.5.3 the time limit for the removal of the Other Error / Other Malfunction is no more than 30 (thirty) calendar days from the notification by the Toll Collection Administrator. <p>The notification of an error / malfunction by the Toll Collection Administrator is sent to the contact email address of the EETS Provider listed in Annex 3 of the EETS Contract.</p>
<i>Sanctions</i>	<ol style="list-style-type: none"> 1) Critical Errors / Critical Malfunctions: Failure to comply with the prescribed value will result in 5 (five) penalty points being awarded for every 15 (fifteen) minutes over the prescribed limit. 2) Serious Errors / Serious Malfunctions: Failure to comply with the prescribed value will result in 1 (one) penalty point being awarded for every 30 (thirty) minutes over the prescribed limit. 3) Other errors / Other malfunctions: Failure to comply with the prescribed value will result in 0.5 (half) penalty point being awarded for every 7 (seven) calendar days over the prescribed



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limit.

3.6. UPDATE OF THE LIST OF CHARGED VEHICLES

KPI indicator	E.6
Name of KPI	Update of the list of Charged Vehicles (<i>White-list</i>)
Assessment period	Month
Assessed by	Toll Collection Administrator
Definition	<p>The ratio of the number of electronic data messages <i>ExceptionListADU (White-list)</i> sent by the EETS Provider to the EMS for processing within the specified time limit to the total number of electronic data messages <i>ExceptionListADU (White-list)</i> that were supposed to be processed properly during the given period <i>m</i>.</p> <p>The prescribed periodicity of electronic data messages <i>ExceptionListADU (White-list)</i> is at least 12× (twelve times) per calendar day, then the time limit for sending the electronic data message <i>ExceptionListADU (White-list)</i> is no more than 120 (one hundred and twenty) min. after sending the previous electronic data message <i>ExceptionListADU (White-list)</i>, the tolerance is a maximum of +5 (plus five) minutes after the expiration of the given period. If electronic data messages <i>ExceptionListADU (White-list)</i> are sent beyond the prescribed periodicity, the Toll Collection Administrator will include exactly 12 electronic data messages <i>ExceptionListADU (White-list)</i> per calendar day in the calculation.</p> $R_w(m) = \frac{w_c(m)}{w_0(m)} \times 100$ <p>where:</p> <p>$w_0(m)$... the total number of electronic data messages <i>ExceptionListADU (White-list)</i> within the scope of the prescribed periodicity belonging to the period <i>m</i>, which means the Month</p> <p>$w_c(m)$... the number of timely delivered and properly processed electronic data messages <i>ExceptionListADU (White-list)</i> within the scope of the prescribed periodicity belonging to the period of the Month <i>m</i></p> <p>$R_w(m)$... the ratio of timely delivered and properly processed electronic data messages <i>ExceptionListADU (White-list)</i> for the Month <i>m</i></p> <p>The EETS Provider is required to send the electronic data message <i>ExceptionListADU (White-list)</i> to the EMS even if there is no data to send. In such a case, an "empty" message is sent, which contains only the message header and no data blocks.</p>
Conditions	The evaluation is carried out by the Toll Collection Administrator on the basis of a status report (system log) of the processing of the update of the Toll Charged Vehicle list.
Prescribed SLA value	R_w must not be less than 96.5 (ninety six point five) %.
Sanctions	In the event of non-compliance with the prescribed value of the SLA, 0.5 (half) penalty point is assigned for every tenth of a percentage point by which the actual value of the indicator was lower than the prescribed one.

3.7. UPDATE OF THE LIST OF INVALID OBES

KPI indicator	E.7
Name of KPI	Update of the list of invalid OBEs (<i>Black-list</i>)
Assessment period	Month
Assessed by	Toll Collection Administrator
Definition	<p>The ratio of the number of electronic data messages <i>ExceptionListADU (Black-list)</i> sent by the EETS Provider to the EMS for processing within the specified time limit to the total number of electronic data messages <i>ExceptionListADU (Black-list)</i> that were supposed to be processed properly during the given period <i>m</i>.</p> <p>The prescribed periodicity of electronic data messages <i>ExceptionListADU (Black-list)</i> is at least 12× (twelve times) per calendar day, then the time limit for sending the electronic data message <i>ExceptionListADU (Black-list)</i> is no more than 120 (one hundred and twenty) min. after sending the previous electronic data message <i>ExceptionListADU (Black-list)</i>, the tolerance is a maximum of +5 (plus five) minutes after the expiration of the given period. If electronic data messages <i>ExceptionListADU (Black-list)</i> are sent beyond the prescribed periodicity, the Toll Collection Administrator will include exactly 12 electronic data messages <i>ExceptionListADU (Black-list)</i> per calendar day in the calculation.</p> $R_b(m) = \frac{b_c(m)}{b_0(m)} \times 100$ <p>where:</p> <p>$b_0(m)$... the total number of electronic data messages <i>ExceptionListADU (Black-list)</i> within the scope of the prescribed periodicity belonging to the period <i>m</i>, which means the Month</p> <p>$b_c(m)$... the number of timely delivered and properly processed electronic data messages <i>ExceptionListADU (Black-list)</i> within the scope of the prescribed periodicity belonging to the period of the Month <i>m</i></p> <p>$R_b(m)$... the ratio of timely delivered and properly processed electronic data messages <i>ExceptionListADU (Black-list)</i> for the Month <i>m</i></p> <p>The EETS Provider is required to send the electronic data message <i>ExceptionListADU (Black-list)</i> to the EMS even if there is no data to send. In such a case, an "empty" message is sent, which contains only the message header and no data blocks.</p>
Conditions	The evaluation is carried out by the Toll Collection Administrator on the basis of a status report (system log) of the processing of the update of the Toll Charged Vehicle list.
Prescribed SLA value	R_b must not be less than 96.5 (ninety six point five) %.
Sanctions	In the event of non-compliance with the prescribed value of the SLA, 0.5 (half) penalty point is assigned for every tenth of a percentage point by which the actual value of the indicator was lower than the prescribed one.

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