



AP-3.7

Transaction Information File – TIF and TIC

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DOCUMENT STATUS

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REVISION HISTORY

Version	Date	Author	Main Changes
1.0	11 June 2025	NPRA	First version – based on previous AutoPASS doc. 4.3
2.0	8 June 2026	NPRA	Result Code LPRS added to characters 790-799. New Table 6, Pricing Rules.

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1 PREFACE

1.1 Description

1.1.1 TIF (Transaction Information File)

The Transaction Information File contains the information concerning the transactions performed by the Service Users (SU) on the toll facilities managed by a specific TC. The name of the file and list follows the same principle. The name of the receiver is included in the filename to ensure the unique identity of the file.

Each TC shall periodically generate separate TIF files for each TSP for all transactions between the RSE of the TC and the OBE's issued by the TSP. The TC claims periodic payments from the TSP for those transactions. The AutoPASS HUB forwards these files to the relevant receiver TSP.

1.1.2 TIC (Transaction Information file Confirmation)

Each time a TSP or a TC receives a new Transaction Information File from a specific TC, the structure and the content of the file are checked and a confirmation list (Transaction Information file Confirmation or TIC) is produced and sent back in a file. One TIC list is produced for each TIF list from the TC. This file also contains the transactions, which are refused by the TSP or TC. The name of the file and list follows the same principle. But depending on the receiver or content the name of the receiver is included in the file name if necessary, to ensure the unique identity.

Each TIF list shall be confirmed by one and only one TIC list. The header of each TIC list contains the name of TIF list and receiver which identifies the TIF list is related to. Therefore, TSP returns TIC for TIFs received while TC does not return TIC for the copy of TSP TIF they receive. There shall always be only one TIC per TIF.

1.2 Format Versions

The file format version is 130001 for both the TIF and TIC formats.

1.3 File Name Generation

1.3.1 Common definitions

- xxxxxx – 6 character identifier of the sender of the file, that means the Actor ID of the TC.
- YYYY – Year
- MM – Month (01-12)
- DD – Day (01-31)
- SSSS – Sequence within the day (sequential number increased separately for each file per sender/receiver combination per day, starting with 0001 ending at 9999 before resetting)
- zzzzzz – Identifier of the receiver of the file, TSP or TC
- vvvvvv – File format Version – as described in chapter [1.2](#).

1.3.2 TIF

The file name format is: `TIFxxxxxxYYYYMMDDSSSS_zzzzzz_vvvvvv` – 35 characters.

Format of the file sequence of the header: `TIFxxxxxxYYYYMMDDSSSS_vvvvvv` – 28 characters.

- TIF – “Transaction Information File”

1.3.3 TIC

The file name format is: `TICxxxxxxYYYYMMDDSSSS_zzzzzz_vvvvvv`

Format of the file sequence of the header: `TICxxxxxxYYYYMMDDSSSS` – 21 characters.

- TIC – “Transaction Information file Confirmation”

1.4 Data Formats

1.4.1 Character Set

The ISO 8859-1 character set is to be used.

1.4.2 Time Stamp Format

All time stamps in the file body shall be given in local Norwegian time. The “Moment of creation” in the file header shall be in UTC.

The format of the time stamp is YYYYMMDDhhmmss, where:

- YYYY – Year
- MM – Month (01-12)
- DD – Day (01-31)
- hh – Hour (00-23)
- mm – Minute (00-59)
- ss – Second (00-59)

1.5 Principles of Transfer

Transactions will be transferred from AutoPASS Core to the relevant actor in TIF files via the AutoPASS HUB.

The TIF-file contains transactions from only one TC to one specific actor. Debit and credit transactions are not to be included in the same TIF-file.

The receiver of the TIF-file returns a confirmation file (TIC) to the TC via AutoPASS HUB. Each TIF-file shall be confirmed by one, and only one TIC-file.

AutoPASS IP will transfer all transactions not connected to a valid contract to the relevant TC. The receiver and sender of these TIF-files will both be set to the ID of the TC.

AutoPASS TCs will receive a copy of all TIF-files sent to TSPs to allow reconciliation for the TC claims of periodic payment.

2 TRANSACTION INFORMATION FILE FORMAT

2.1 File Header

Name	Number of Char.	Type of value	Begin	End	Definition	Origin	Adjusted	Mandatory or Optional	Value if Nothing	Padding
Register Identifier	1	Numeric	1	1	"0"=Header	Generation	Right	Mandatory	n/a	n/a
Sender Identifier	6	AlphaN	2	7	6 digits Actor ID identifier of the TC (Company having created this file).	Generation	Left	Mandatory	n/a	n/a
Receiver Identifier	6	AlphaN	8	13	6 digits Actor ID identifier of the receiver of this file. The TSP or TC who will invoice the customer.	Generation	Left	Mandatory	n/a	n/a
File Sequence	21	AlphaN	14	34	TIFxxxxxYYYYMMDDSSSS – See chapter 1.3 File Name Generation .	Generation	Left	Mandatory	n/a	n/a
Previous File Sequence	21	AlphaN	35	55	TIFxxxxxYYYYMMDDSSSS (TIF000000000000 in the very first file, not the first file of each day)	Generation	Left	Mandatory	n/a	n/a
Currency	3	AlphaN	56	58	Currency coding. ISO 4217 Alphabetic Currency Codes. "NOK" in AutoPASS.	AutoPASS IP	Left	Mandatory	n/a	n/a
Number of records in body	15	Numeric	59	73	Number of records (lines) in Body	AutoPASS IP	Right	Mandatory	n/a	Zeros
Credit/Debit	3	AlphaN	74	76	State the contents of the lines (All lines in the body are either credit or debit) Value to be used: CRE/DEB	AutoPASS IP	Left	Mandatory	n/a	n/a
Number of transactions	15	Numeric	77	91	Number of transactions to be included in calculation of TSP fee. Not used in Norway. Same as records in body	AutoPASS IP	Right	Optional	Zeros	n/a
Moment of creation	14	Numeric	92	105	Timestamp (UTC) when the original file has been created (YYYYMMDDhhmmss)	Generation	Right	Mandatory	n/a	n/a
List format version	6	AlphaN	106	111	The value to be filled in is defined in chapter 1.2 Format Versions .	Generation	Left	Mandatory	n/a	n/a
Filler	50	AlphaN	112	161	Reserved for future use, filled with Zeros	Generation	Left	Mandatory	n/a	n/a
End of header	1	AlphaN	162	162	Line Feed only	Generation	n/a	Mandatory	n/a	n/a

2.2 Body

Name	Number of Char.	Type of value	Begin	End	Definition	Origin	Adjusted	Mandatory or Optional	Value if Nothing	Padding
Register Identifier	1	Numeric	1	1	"1" = Body	Generation	Right	Mandatory	n/a	n/a
Type of transit	2	AlphaN	2	3	Indicates different characteristics of the transit: Cx/Dx = Debit transactions Rx = Credit transactions Cx are primary transactions (road tolling and ferry charges) Dx is used for road tolls where road toll and ferry charges are collected together (the ferry charge is already a Cx transaction) See Table 1 – Transit Codes for details.	AutoPASS IP	Left	Mandatory	n/a	n/a
PersonalAccountNumber	19	AlphaN	4	22	Attribute ID 32 according to EN 15509 and ISO 7812	OBE	Left	Mandatory for TSP	Blanks	Blanks
Actor ID of TSP	6	AlphaN	23	28	Actor ID of the TSP	OBE	Left	Mandatory for TSP	Blanks	Blanks
ContractAuthenticator	5	AlphaN	29	33	Part of the ContractAuthenticator attribute of the OBE. Not used in AutoPASS.		Left	n/a	Blanks	Blanks

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Name	Number of Char.	Type of value	Begin	End	Definition	Origin	Adjusted	Mandatory or Optional	Value if Nothing	Padding
Date and time of the entry transit	14	Numeric	34	47	Not used in AutoPASS		Right	n/a	Zeros	n/a
Entry Station – Country Code	2	AlphaN	48	49	Not used in AutoPASS		Left	n/a	Zeros	n/a
Entry Station – Actor ID	6	AlphaN	50	55	Not used in AutoPASS		Left	n/a	Zeros	n/a
Entry Station – Network Code	1	Numeric	56	56	Not used in AutoPASS		Right	n/a	Zero	n/a
Entry Station – Station Code	4	Numeric	57	60	Not used in AutoPASS		Right	n/a	Zeros	n/a
Date and time of the exit transit	14	Numeric	61	74	YYYYMMDDhhmmss. Timestamp when the transit took place in local time.	Roadside	Right	Mandatory	n/a	Zeros
Exit Station – Country Code	2	AlphaN	75	76	“NO” or “00”	Roadside	Left	Optional	Zeros	Zeros
Exit Station – Actor ID	6	AlphaN	77	82	Refer to Toll Station Table (Actor ID of the TC)	Roadside	Left	Mandatory	n/a	n/a
Exit Station – Network Code	1	Numeric	83	83	Always 0	Roadside	Right	Optional	n/a	n/a
Exit Station – Station Code	4	Numeric	84	87	Refer to Toll Station Table	Roadside	Right	Mandatory	n/a	Zeros
Lane Identification	4	AlphaN	88	91	Number ID of the lane where the passage took place.	Roadside	Right	Mandatory	n/a	Zeros
Tariff Classification (not used)	2	AlphaN	92	93	Not used in AutoPASS. See pos. 298-299 for Tariff Classification.		Left	n/a	Zeros	n/a
VehicleClass	1	Numeric	94	94	Information from the OBE. Not used in AutoPASS.		Right	n/a	Zeros	n/a
VehicleDimensions	9	Numeric	95	103	As retrieved from the OBE during transaction; filled with Zeros in case of measured classification. Not used in AutoPASS.		Right	n/a	Zeros	n/a
VehicleAxles	6	Numeric	104	109	As retrieved from the OBE during transaction; filled with Zeros in case of measured classification or the TC does not use number of axels for classification. Not used in AutoPASS.		Right	n/a	Zeros	n/a
VehicleAuthenticator	5	Numeric	110	114	As retrieved from the TC in case of claimed classification; filled with Zeros in case of measured classification. Not used in AutoPASS.		Right	n/a	Zeros	n/a
Fee (VAT excluded)	11	Numeric	115	125	Fee associated with the transaction, given in 1/100 (0.01) NOK. (NOK 12.45 = 00000001245)	AutoPASS IP	Right	Mandatory	n/a	Zeros
Amount of VAT	11	Numeric	126	136	Fee associated with the transaction, given in 1/100 (0.01) NOK. (NOK 12.45 = 00000001245)	AutoPASS IP	Right	Mandatory	n/a	Zeros
Fee (VAT included)	11	Numeric	137	147	Fee associated with the transaction, given in 1/100 (0.01) NOK. (NOK 12.45 = 00000001245)	AutoPASS IP	Right	Mandatory	n/a	Zeros
Currency	3	AlphaN	148	150	Currency coding. ISO 4217 Alphabetic Currency Codes. “NOK” in AutoPASS.	AutoPASS IP	Left	Mandatory	n/a	Blanks
Applied VAT rate	4	Numeric	151	154	uu.dd (percentage as for uu.dd %)	AutoPASS IP	Right	Mandatory	n/a	Zeros
Transaction result	2	Numeric	155	156	Field indicating the transaction result. Not used in AutoPASS.		Right	n/a	Zeroes	n/a
OBE status	2	Numeric	157	158	Indicates OBE status as reported during the transaction: "01" Low battery "02" OBE tampered "03" No smart card inserted "04" No communication "05" OK	OBE	Right	Optional	Zeros	Zeros
Level of Security	2	Numeric	159	160	"00" No security key used for access OBE (not accepted used in AutoPASS) "01" Use of security key to access OBE	Roadside	Right	Mandatory for C1 transaction	Zeros	Zeros
Payment aggregation number	29	AlphaN	161	189	Not used in AutoPASS		Left	n/a	Zeros	n/a

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Name	Number of Char.	Type of value	Begin	End	Definition	Origin	Adjusted	Mandatory or Optional	Value if Nothing	Padding
Text Description	25	AlphaN	190	214	Text field with an explanation of the transaction by the TC, to be copied by the TSP into the AutoPASS user's invoice. The field is used for a specification of the purchase and not for location of transaction.	AutoPASS IP	Left	Mandatory	n/a	Blanks
Type of toll lane	2	Numeric	215	216	"03" EFC OBE Dedicated	Roadside	Right	Mandatory	n/a	n/a
Type of operation of the specific lane	2	Numeric	217	218	"03" EFC OBE Dedicated	Roadside	Right	Optional	Zeros	Zeros
Mode of operation (OK, Degraded)	2	Numeric	219	220	"01" Normal "02" Degraded. To be used in case of abnormal use of RSE, i.e. known technical failure or maintenance of RSE causing no automatic registration.	Roadside	Right	Optional	Zeros	Zeros
Manual Entry Classification	2	Numeric	221	222	Not used in AutoPASS		Right	n/a	Zeros	Zeros
Change of class indicator	1	Numeric	223	223	Not used in AutoPASS		Right	n/a	Zeros	Zeros
Pre DAC (Class Automatic Detection) exit	1	Numeric	224	224	Not used in AutoPASS		Right	n/a	Zeros	Zeros
Post DAC exit	1	Numeric	225	225	Not used in AutoPASS		Right	n/a	Zeros	Zeros
DAC entry	1	Numeric	226	226	Not used in AutoPASS		Right	n/a	Zeros	Zeros
Height detector entry	1	Numeric	227	227	Not used in AutoPASS		Right	n/a	Zeros	Zeros
Transaction Counter	12	AlphaN	228	239	Road tolling: AutoPASS IP transaction counter. Resets after 999 999 999 999. AutoPASS Ferry transactions also use this field, but for a separate transaction counter.	AutoPASS IP	Right	Mandatory	n/a	Zeros
License Plate Number declared	10	AlphaN	240	249	License plate number from the HGV	TSP	Left	Mandatory for TSP transactions	Blanks	Blanks
Nationality of License Plate number declared	2	AlphaN	250	251	Nationality from the HGV of license plate number, using ISO 3166-1 alpha-2 codes	TSP	Left	Mandatory	Blanks	Blanks
License Plate number detected	10	AlphaN	252	261	Licence plate from AutoPASS Core LPN detection (ANPR/MIR)	Roadside	Left	Mandatory for type of transit C4 and C8	Blanks	Blanks
Nationality of license Plate number detected	2	AlphaN	262	263	Nationality of Licence plate from ANPR/MIR using ISO 3166-1 alpha-2. Mandatory if licence plate detected is filled.	Roadside	Left	Mandatory for type of transit C4 and C8	Blanks	Blanks
ID of list used for validation	19	AlphaN	264	282	File name of the list that was used by the RSE to verify the passage (OBUStatusfile)	Roadside	Left	Optional	Blanks	Zeros
Video Picture Counter	10	Numeric	283	292	Sequential counter of video pictures taken	Roadside	Right	Mandatory for picture passages	Blanks	Zeros

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Name	Number of Char.	Type of value	Begin	End	Definition	Origin	Adjusted	Mandatory or Optional	Value if Nothing	Padding
Fuel type	3	AlphaN	293	295	<p>The first two characters indicate the Fuel Type:</p> <ul style="list-style-type: none"> Norwegian vehicles: Values from Autosys (Norwegian vehicle register) according to Table 4 – Accepted Fuel Type Codes. Foreign vehicles: Information taken from the “TSP Product Code” of the HGV-file. The mapping of other fuel/engine characteristics used in the HGV-file can be found in Table 5 – Mapping from “Engine Characteristics” to Norwegian “Fuel Types” for the HGV. <p>Character 3 indicates whether the vehicle is a chargeable hybrid (“Y” or “N”).</p>	Vehicle Registry/TSP	Left	Mandatory	n/a	n/a
Emission class	2	AlphaN	296	297	<p>“Euro class”</p> <ul style="list-style-type: none"> Norwegian vehicles: Values from Autosys (Norwegian vehicle register) Foreign vehicles: Information taken from the “Emission class” of the HGV-file. <p>See Table 3 – HGV/TIF Values for “Emission Class”</p>	Vehicle Registry/TSP	Left	Mandatory	n/a	Blanks
Tariff Classification	2	AlphaN	298	299	As defined in Table 2 – Values for “Tariff Classification”	Vehicle Registry/TSP	Left	Mandatory	n/a	n/a
VehicleSpecialClassification 1	1	AlphaN	300	300	“Trailer bit”: 0= No trailer/no info; 1= Trailer detected.	Roadside	n/a	Optional	Zeros	n/a
VehicleSpecialClassification 2	1	AlphaN	301	301	AutoPASS Ferry Class	Roadside	n/a	Optional	Zeros	n/a
Lane Mode	2	Numeric	302	303	Not used in AutoPASS		Right	n/a	Blanks	n/a
Signal code bitmap	8	Numeric	304	311	Not in active use in AutoPASS		Right	n/a	Zeros	n/a
Applied discount rate	3	Numeric	312	314	Applied discount percentage (values 0-100)	AutoPASS IP	Right	Optional	Blanks	Zeros
Pricing correction	2	Numeric	315	316	Not used in AutoPASS		Right	n/a	Zeros	n/a
Signal Code	2	Numeric	317	318	See document AP-1.4, AutoPASS Processing of Signal Codes	Roadside	Left	Mandatory	n/a	n/a
Pricing Rule 3	3	AlphaN	319	321	Pricing rule 3 is the third highest rule in rule hierarchy. See Table 6 – Pricing Rules .	AutoPASS IP	Left	Mandatory for rules-based pricing	Zeros	Blanks
Pricing Rule 2	3	AlphaN	322	324	Pricing rule 2 is the second highest rule in rule hierarchy. See Table 6 – Pricing Rules .	AutoPASS IP	Left	Mandatory for rules-based pricing	Zeros	Blanks
Pricing Rule 1	3	AlphaN	325	327	<p>Pricing rule 1. See Table 6 – Pricing Rules.</p> <p>Applied pricing rules, 3 characters for each applied pricing rule. Pricing rule 1 is the highest rule in the rule hierarchy and is used to apply the price for the passage.</p>	AutoPASS IP	Left	Mandatory for rules-based pricing	Zeros	Blanks
For future use	2	AlphaN	328	329			Left	Mandatory	Zeros	n/a
ID of HGV list used for validation	19	AlphaN	330	348	Not used in AutoPASS		Left	n/a	Zeros	n/a
Additional QA data	4	AlphaN	349	352	<p>0000 – no information</p> <p>DSRC – Based on a physical OBE</p> <p>VIRT – If based on an ANPR contract and a Virtual OBE (not currently used in AutoPASS)</p>	AutoPASS IP	Left	Optional	Blanks	Blanks
For local use	248	AlphaN	353	600	Not in use in AutoPASS	AutoPASS IP	Left	Optional	Zeros	Zeros

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Name	Number of Char.	Type of value	Begin	End	Definition	Origin	Adjusted	Mandatory or Optional	Value if Nothing	Padding
Image result	2	AlphaN	601	602	00 – No ANPR/MIR 10 – ANPR - 2 pictures 11 – ANPR - 1 picture 12 – MIR - 2 pictures 13 – MIR - 1 picture	AutoPASS IP	Left	Mandatory for type of transit C8 and C4	Zeros	n/a
Context mark	12	AlphaN	603	614	ContractProvider + TypeOfContract + ContextVersion 3+2+1 bytes represented as 6+4+2 in Hex e.g. "30C001" + "0004" + "01" = "C04001000401"	TSP	Left	Mandatory for OBE transactions	Blanks	n/a
OBE ID	18	AlphaN	615	632	3+2+4 bytes represented as 6+4+8 characters in Hex e.g. "30C001"+"001D"+"07900108" = "30C001001D07900108". Equipment ID value in Attribute ID 24 from the application element.	TSP	Left	Mandatory for OBE transactions	Blanks	n/a
TSPAuthenticator	8	AlphaN	633	640	Message Authentication Code (MAC). The TSPAuthenticator is calculated during the transaction by the OBE. This is the "OBE Authenticator, TSP" from the TR file.	OBE	Left	Mandatory	Blanks	n/a
RNRSE	8	AlphaN	641	648	Random number provided by the RSE for the calculation of the TSP Authenticator	Roadside	Left	Mandatory	Blanks	n/a
KEYREF for TSP key	3	AlphaN	649	651	Reference to the key used during calculation of the TSP Authenticator	Roadside	Left	Mandatory	Blanks	n/a
Invoice transaction aggregation number	16	Numeric	652	667	Not used in AutoPASS		Right	n/a	Zeros	n/a
UTC time stamp	14	Numeric	668	681	Time of data generation for the TIF-file. (YYYYMMDDhhmmss)	AutoPASS IP	Right	Optional	Zeros	n/a
TC-transaction identification	16	Numeric	682	697	Unique identifier for the transactions. R2 and/or C3 transactions will have the same TC-transaction identification as the original Cx transaction.	AutoPASS IP	Right	Optional	n/a	Zeros
External costs Noise	11	Numeric	698	708	Not used in AutoPASS		Right	n/a	Zeros	n/a
External costs Air	11	Numeric	709	719	Not used in AutoPASS		Right	n/a	Zeros	n/a
Mark-up Special Construction	11	Numeric	720	730	Not used in AutoPASS		Right	n/a	Zeros	n/a
Number of decimal digits	1	Numeric	731	731	Not used in AutoPASS		Left	n/a	Zeros	n/a
Emission class	6	AlphaN	732	737	Not used in AutoPASS		Left	n/a	Zeros	n/a
Engine Characteristics	3	Numeric	738	740	Not used in AutoPASS		Left	n/a	Zeros	n/a
CO2 (CopValue)	2	Numeric	741	742	Not used in AutoPASS		Left	n/a	Zeros	n/a
VehicleMaxLadenWeight	4	Numeric	743	746	Not used in AutoPASS		Right	n/a	Zeros	n/a
Filler	43	AlphaN	747	789	Reserved for future use, filled with zeros	Generation	Left	Mandatory	n/a	Zeros
Result Code LPRS	10	Numeric	790	799	Result from the AutoPASS Identification Module of the Licence Plate Recognition Service. The data values to be used are defined in Confluence.	LPRS	Right	Optional	n/a	Zeros
Transaction Counter	10	Numeric	800	809	SeqLTransaction from Roadside (pos. 172 – 181 in tr. file)	Generation	Right	Mandatory	n/a	Zeros
End of record	1	AlphaN	810	810	Line Feed only	Generation	n/a	Mandatory	n/a	n/a

2.3 File Footer

Name	Number of Char.	Type of value	Begin	End	Definition	Origin	Adjusted	Mandatory or Optional	Value if Nothing	Padding
Register Identifier	1	Numeric	1	1	"2" = Footer	Generation	Right	Mandatory	n/a	n/a
Total amount	15	Numeric	2	16	In the smallest unit, 1/100 NOK. VAT included.	Generation	Right	Mandatory	n/a	Zeros
Filler	90	AlphaN	17	106	Reserved for future use, filled with zeros	Generation	Left	Mandatory	n/a	n/a
End of Footer	1	AlphaN	107	107	Line Feed only	Generation	n/a	Mandatory	n/a	n/a

3 TRANSACTION INFORMATION FILE CONFIRMATION FORMAT

3.1 File Header

Name	Number of Char.	Type of value	Begin	End	Definition	Origin	Adjusted	Mandatory or Optional	Value if Nothing	Padding
Register Identifier	1	Numeric	1	1	"0"=Header	Generation	Right	Mandatory	n/a	n/a
Sender Identifier	6	AlphaN	2	7	6 digits Actor ID identifier of the Company having sent this file. The actor that will invoice the customer.	Generation	Left	Mandatory	n/a	Blanks
Receiver Identifier	6	AlphaN	8	13	6 digits Actor ID identifier of the originator of the TIF-file to which this TIC responds	Generation	Left	Mandatory	n/a	Blanks
File Sequence	21	AlphaN	14	34	TICxxxxxYYYYMMDDSSSS – See chapter 1.3 File Name Generation .	Generation	Left	Mandatory	n/a	Blanks
File Received	21	AlphaN	35	55	The TIF-file to which this TIC responds. TIFxxxxxYYYYMMDDSSSS	Generation	Left	Mandatory	n/a	Blanks
Date of reception	14	Numeric	56	69	Timestamp (UTC) when the TIF-file in "File Received" was received (YYYYMMDDhhmmss)	Generation	Left	Mandatory	n/a	Zeros
Currency	3	AlphaN	70	72	Currency coding. ISO 4217 Alphabetic Currency Codes. "NOK" in AutoPASS.	TC	Left	Mandatory	n/a	n/a
Number of accepted records in body	15	Numeric	73	87	Number of accepted lines in the body of the TIF-file AutoPASS: When "file acceptance=99" the value will be 0	Sender	Right	Mandatory	n/a	Zeros
Number of rejected records in body	15	Numeric	88	102	Number of rejected lines from the body of the TIF-file – and included in this TIC-file	Sender	Right	Mandatory	n/a	Zeros
Credit/Debit	3	AlphaN	103	105	State the contents of the lines (All lines in the body are either credit or debit) Value to be used: CRE/DEB	Sender	Left	Mandatory	n/a	Zeros
Number of accepted transactions	15	Numeric	106	120	In case of more than one line per transaction, the number of transactions shall be stated	Sender	Right	Optional	Blanks	Zeros
Number of rejected transactions	15	Numeric	121	135	In case of more than one line per transaction, the number of rejected transactions shall be stated	Sender	Right	Optional	Blanks	Zeros
List format version	6	AlphaN	136	141	The value to be filled in is defined in chapter 1.2 Format Versions .	Generation	Left	Mandatory	n/a	Blanks
Number of TIC from TC	6	Numeric	142	147	For internal use in the TC solutions in Norway. Starts with 000001 every day.	Generation	Right	Optional	Blank	Zeros
Filler	46	AlphaN	148	193	Reserved for future use, filled with zeros	Generation	Left	Mandatory	n/a	Zeros
File Acceptance	2	Numeric	194	195	00: Full acceptance (all records OK) 01: Partial acceptance 02: Not accepted total – The transaction file is rejected because the same file name was already received 03: Not accepted total – The transaction file is rejected because the field "number of records or transactions" in header is not corresponding to the number of records or transactions in body 04: Not accepted total – The transaction file is rejected because total claimed amount in footer is not corresponding to the summarized amounts for each transaction 05: Not accepted total – The transaction file is rejected because of Miscellaneous 99: AutoPASS: TC repricing. Credit TIF requested.	Sender	Right	Mandatory	n/a	Zeros
End of header	1	AlphaN	196	196	Line Feed only	Generation	n/a	Mandatory	n/a	n/a

3.2 Body

Name	Number of Char.	Type of value	Begin	End	Definition	Origin	Adjusted	Mandatory or Optional	Value if Nothing	Padding
Register Identifier	1	Numeric	1	1	"1" = Body	Generation	Right	Mandatory	n/a	n/a
Copy of TIF body line	808	AlphaN	2	809	In case of a rejected body line in the TIF-file, the line is copied and inserted in this position. The Register Identifier (first character of the TIF-line) shall not be repeated.	Generation	Left	Mandatory	n/a	Blanks
Reason of rejection	2	Numeric	810	811	"00" AutoPASS: When "file acceptance = 99" the value is 00 "01" Transaction has an OBE ID that is registered not valid at the time of passing. "02" Transaction is too old, that means sent to TSP later than the time limit for clearing "03" Transaction is not from a user with a contract from actual Issuer. OBE not inside valid interval on the AIT list. "04" Vehicle registration number from ANPR/MIR is incorrect. "05" Country in Vehicle registration number from ANPR/MIR is incorrect "06" Cancellation sent from TC "07" Transaction contains a passing time outside the contract validity period – "08" Transaction has not a legal Toll Station/lane Identification "09" Transaction record has not a valid format "10" Vehicle Information is incorrect. New pricing required. "11" Authentication failure – transaction not accepted only performed if agreed between TC and TSP (I.e. EN 15509 OBE according to security level 1) "12" Cancellation sent from TC (Norway only) "13" Transaction is sent for cancellation or correction, but is not found in TSP transaction register "14" Data has been sent previously *) "15" Transaction has an OBE ID that is not registered for a user of the TSP "18" Miscellaneous "19" Incorrect LPRS identification corrected by TC "20" Cancellation sent from TC + information to LPRS (Norway only)	Sender	Right	Mandatory	n/a	Zeros
End of record	1	AlphaN	812	812	Line Feed only	Generation	n/a	Mandatory	n/a	n/a

*) Key to identify a transaction uniquely for duplicate check ("14 - Data has been sent previously") is:

- a. "TC-transaction identification" or
- b. The combination of:
 - "Exit Station – Actor ID"
 - "Exit Station – Network Code"
 - "Exit Station – Station Code"
 - Date and time of the exit transit

- "OBE ID"
- "Personal Account Number"
- "Type of Transit"

However, type of transit C1 and C8 will be considered identical when checking for alternative b). When a duplicate C1 and C8 is found any one of the two transits can be rejected (14).

(2) Only in case of a partial acceptance the rejected body line/s shall be included. It shall include all lines in a file stating the individual reason of rejection for each of the lines Note that in case all lines in a valid TIF list are rejected with a reason it will be marked as a partial rejection.

(3) In case of total rejection of a TIF file ("Not accepted total") the corresponding TIC file shall not contain any bodylines.

3.3 File Footer

Name	Number of Char.	Type of value	Begin	End	Definition	Origin	Adjusted	Mandatory or Optional	Value if Nothing	Padding
Register Identifier	1	Numeric	1	1	"2" = Footer	Generation	Right	Mandatory	n/a	n/a
Total amount Accepted	15	Numeric	2	16	In the smallest unit, 1/100 NOK. VAT included.	Sender	Right	Mandatory	n/a	Zeros
Total amount Rejected	15	Numeric	17	31	In the smallest unit, 1/100 NOK. VAT included. In case of a Total Rejection of a TIF file due to reason "04" (Not accepted total – Transaction file is rejected because total claimed amount in footer is not corresponding to the summarized amounts for each transaction), the Total Amount Rejected in the TIC's footer shall have the same value as the Total Amount of the footer of the rejected TIF file.	Generation	Right	Mandatory	n/a	Zeros
Filler	96	AlphaN	32	127	Reserved for future use, filled with zeros	Generation	n/a	Mandatory	n/a	n/a
End of Footer	1	AlphaN	128	128	Line Feed only	Generation	n/a	Mandatory	n/a	n/a

4 TABLES

4.1 Codes for “Types of Transit”

The following codes for the field: “Type of transit” in the Transit detail file is described below:

Table 1 – Transit Codes

Code	Short description	Detailed description
C1 – D1	Normal Transits Charges	OBE transaction registered by the RSE. “C” transactions are primary and “D” transactions are secondary transactions. In road tolling: All transactions are primary. For ferry transactions: Ferry charges are primary. Any additional road toll charges are secondary.
C3 – D3	Corrected Amounts Charges	OBE transaction that has been previously transferred but with an incorrect amount. The amount in this “C3”-record is the correct amount to be charged. The previous transaction is Credited by “R2”
C4	Transits to operator in Norway	Transits for passages without agreement
C8 – D8	Transit without OBE	A transaction that is registered by video pictures by the CP and charged to the user agreement based on the licence plate in the HGV list. “C” transactions are primary and “D” transactions are secondary transactions. In road tolling: All transactions are primary. For ferry transactions: Ferry charges are primary. Any additional road toll charges are secondary.
R2	Credit of previous C-transaction	Used to credit an already charged transit. The corrected price will be given in a new C3 transaction.

All information regarding a transaction shall be given in a single line.

4.2 Tariff Classification Values

Table 2 – Values for "Tariff Classification"

Tariff Classification		EN15509 European Vehicle Group	
01*	Vehicle heavier than 3500kg		n/a
02*	Vehicle below or equal to 3500kg		n/a
12	Passenger Vehicle below or equal to 3500kg	1	Group 1 - Small Passenger Vehicle (UNECE class M1)
22	Light Goods Vehicle below or equal to 3500kg (UNECE class N1)	2	Group 2 - Light Goods Vehicle (UNECE class N1)
31	Vehicle above 3500kg, seat count excluding driver is greater than 8 (UNECE class M2 and M3)	3	Group 3 - Large Passenger Vehicle. (UNECE class M2, M3)
32	Vehicle in UNECE class M1 above 3500kg		Group 3 - Vehicle in UNECE class M1 above 3500kg
41	Heavy Goods Vehicle above 3500kg and below or equal to 12000kg (UNECE class N2)	4	Group 4 - Heavy Goods Vehicle up to 12000kg (UNECE class N2)
51	Heavy Goods Vehicle above 12000kg (UNECE class N3)	5	Group 5 - Heavy Goods Vehicle over 12000kg (UNECE class N3)
63	Motorcycle (UNECE class L)	6	Group 6 - Motorcycle (UNECE class L)
71	Other Vehicle	7	Group 7 - Other vehicles including vehicles above 3500kg not included in previous groups

* Some transactions use "01" and "02" instead of the tariff classifications 12-71.

4.3 Euro Emission Classes

Table 3 – HGVTIF Values for "Emission Class"

Euro emission Classes	Entry in HGVTIF	Entry in TIF
Zero emission	0	00
Unknown	0	00
Vehicle pre Euro classification	0	00
Euro 1 / Euro I	Euro1	01
Euro 2 / Euro II	Euro2	02
Euro 3 / Euro III	Euro3	03
Euro 4 / Euro IV	Euro4	04
Euro 5 / Euro V	Euro5	05
EEV	EEV	15
Euro6 / Euro VI	Euro6	06
Euro7 / Euro VII	Euro7	07

4.4 Fuel Type Codes

The fuel type codes in [Table 4](#) as defined by Autosys, the Norwegian national vehicle register. Other Fuel Type Codes than the ones listed are not to be used.

Table 4 – Accepted Fuel Type Codes

Fuel Type Code	Description
01	Petrol
02	Diesel
03	Paraffin
04	Gas
05	Electric
06	Hydrogen
09	Other fuels
10	Bio petrol
11	Biodiesel
12	LPG-gas
13	CNG-gas
14	Methanol
15	Ethanol
20	Compressed air
21	LNG
22	CNG and LNG

4.5 Mapping of Fuel Type Codes

Table 5 – Mapping from "Engine Characteristics" to Norwegian "Fuel Types" for the HGV

Fuel Type in TSP Product Code, characters 86-87.		Engine Characteristics According to ISO 17573-3	
Fuel Type	Description	Description	Engine Characteristics
00	No information	No Entry.	0
	n/a	No Engine	1
01	Gasoline	Petrol Unleaded	2
01	Gasoline	Petrol Leaded	3
02	Diesel	Diesel	4
04	Gas	LPG	5
05	Electric	Battery -- vehicle powered exclusively by battery	6
05	Electric	Solar	7
02	Diesel	Hybrid -- kept for legacy compatibility, more differentiated values are available	8
06	Hydrogen	Hydrogen	9
02	Diesel	multi-fuel -- Multi-fuel engine	10
01	Gasoline	bivalent-petrol-LPG -- bivalent operating engine with petrol or liquefied petroleum gas	11
01	Gasoline	bivalent-petrol-CNG -- bivalent operating engine with petrol or compressed natural gas	12
01	Gasoline	combined-petrol-electric -- combined operation with petrol and electric engine	13
13	CNG-Gas	CNG -- compressed natural gas	14
12	LPG-Gas	LNG -- liquefied natural gas	15
02	Diesel	combined-diesel-electric -- combined operation of diesel and electric engine	16
05	Electric	combined-hydrogen-electric -- combined operation of hydrogen and electric engine	17
01	Gasoline	bivalent-hydrogen-petrol -- bivalent operating engine with hydrogen or petrol	18
01	Gasoline	bivalent-hydrogen-petrol-electric-engine -- bivalent operating engine with hydrogen or petrol combined with electric engine	19

Fuel Type in TSP Product Code, characters 86-87.		Engine Characteristics According to ISO 17573-3	
Fuel Type	Description	Description	Engine Characteristics
06	Hydrogen	fuel-cell-hydrogen -- fuel cell with hydrogen as primary energy source and electric engine	20
01	Gasoline	fuel-cell-petrol -- fuel cell with petrol as primary energy source and electric engine	21
14	Methanol	fuel-cell-methanol -- fuel cell with methanol as primary energy source and electric engine	22
15	Ethanol	fuel-cell-ethanol -- fuel cell with ethanol as primary energy source and electric engine	23
02	Diesel	fuel-cell-diesel -- fuel cell with diesel as primary energy source and electric engine	24
02	Diesel	combined-multi-fuel-electric-engine -- combined operation of multi fuel and electric engine	25
13	CNG-gas	combined-CNG-electric-engine -- combined operation with compressed natural gas and electric engine	26
12	LPG-gas	combined-LNG-electric-engine -- combined operation with liquefied natural gas and electric engine	27
01	Gasoline	petrol-ethanol -- fuel mix of petrol and mainly ethanol, e.g. E85	28
12	LPG-gas	combined-LPG-electric-engine -- combined operation of LPG and electric engine	29
01	Gasoline	hybrid-petrol-external-battery -- hybrid drive with petrol and external chargeable battery (plug-in hybrid)	30
02	Diesel	hybrid-diesel-external-battery -- hybrid drive with diesel and external chargeable battery (plug-in hybrid)	31
12	LPG-gas	hybrid-LPG-external-battery -- hybrid drive with LPG and external chargeable battery (plug-in hybrid)	32
06	Hydrogen	hybrid-hydrogen-external-battery -- hybrid drive with hydrogen and external chargeable battery (plug-in hybrid)	33
02	Diesel	hybrid-multi-fuel-external-battery -- hybrid drive with multi fuel and external chargeable battery (plug-in hybrid)	34
13	CNG-gas	hybrid-CNG-external-battery -- hybrid drive with compressed natural gas and external chargeable battery (plug-in hybrid)	35
12	LPG-gas	hybrid-LNG-external-battery -- hybrid drive with liquified natural gas and external chargeable battery (plug-in hybrid)	36
01	Gasoline	hybrid-bivalent-hydrogen-petrol-external-battery -- hybrid drive with bivalent operating hydrogen and petrol engine and external chargeable battery (plug-in hybrid)	37
13	CNG-gas	hydrogen-CNG -- fuel mix of hydrogen and compressed natural gas	38

Fuel Type in TSP Product Code, characters 86-87.		Engine Characteristics According to ISO 17573-3	
Fuel Type	Description	Description	Engine Characteristics
12	LPG-gas	hydrogen-LNG -- fuel mix of hydrogen and liquified natural gas	39
13	CNG-gas	hybrid-hydrogen-CNG-external-battery -- hybrid drive with hydrogen and compressed natural gas and external chargeable battery (plug-in hybrid)	40
12	LPG-gas	hybrid-hydrogen-LNG-external-battery -- hybrid drive with hydrogen and liquified natural gas and external chargeable battery (plug-in hybrid)	41
15	Ethanol	ethanol -- ethanol or fuel mix of ethanol and other fuel (except petrol) or additives, e.g. E95	42
05	Electric	hybrid-fuel-cell-hydrogen -- hybrid drive with fuel cell (electric engine) and hydrogen (combustion engine)	43
05	Electric	hybrid-fuel-cell-hydrogen-external-battery -- hybrid drive with fuel cell (electric engine) and hydrogen (combustion engine) and external chargeable battery (plug-in hybrid)	44
02	Diesel	dual-fuel-LNG-diesel -- dual operation with LNG and diesel	45
05	Electric	electric-external -- electric engine with external power supply	46
04	Gas	biogas -- mixture of different gases produced by the breakdown of organic matter	47
10	Bio Diesel	bioDiesel -- vegetable oil- or animal fat-based diesel fuel	48
11	Bio Gasoline	bioPetrol -- petrol fully or partly based on vegetable sources	49
01	Gasoline	bivalent-petrol-biogas -- bivalent operating engine with petrol or biogas	50
05	Gas	combined-biogas-electric-engine -- combined operation of biogas and electric engine	51
02	Diesel	dual-fuel-CNG-diesel -- dual operation with CNG and diesel	52
09	Other fuel (use as default if fuel type is unknown)	Other	255
03	Paraffin		

4.6 Pricing Rules

Table 6 – Pricing Rules

Pricing Rule	Explanation
000	No price rule – Fully priced passage
ASB	Passage with valid agreement
0A1	"Hour Rule", free of charge
0A2	Reverse Hour Rule, free of charge
0A3	"Equalization passage", free of charge
0A4	Sequential "Hour Rule", free of charge
0A7	Passage during rush hour
A10	The price increases or decreases within a given period
A13	Emergency Tariffs
A1U	Extended hour rule, free of charge
0B1	Monthly ceiling for project or subproject, free of charge
0B2	Monthly ceiling for sub-project, toll station or lane, free of charge
0B3	Reverse monthly ceiling, free of charge
0C1	LPN not readable, free of charge
0C3	Exemptions for single vehicles, free of charge
0C4	Exemptions for list of vehicles, free of charge
0C5	Exemptions for emergency vehicles, free of charge
0C6	Motorcycles, moped cars, free of charge
0C7	Duplicate, free of charge
0C8	Invalid agreement passage, free of charge
C10	Trailer, free of charge
C11	Roadside Duplicate (Signal code 19,33,35 and 36), free of charge
0D1	Exemption for persons with reduced mobility, free of charge
0D2	Exemption for address/location, free of charge
0D3	Exemption for buses in schedule routes, free of charge
0D5	Exemption for embassy vehicles, free of charge in Fjellinjen
0D6	Maxi Taxi in Fjellinjen, rated as vehicle in rate group 1
0D8	exemption for vehicles affiliated with NATO HQ, free of charge
OLD	Passing too old, free of charge
ORJ	Cancelled by operator (RBPS), free of charge

4.7 Valid Characters for Licence Plate Numbers

Only the highlighted characters in [Table 7](#) are valid characters for the Licence Plate Number. The lower case characters are only to be used for mapping of non-Latin 1 characters. See [Table 8](#).

Table 7 – Valid Characters for "Licence Plate Number"

ISO/IEC 8859-1																
	x0	x1	x2	x3	x4	x5	x6	x7	x8	x9	xA	xB	xC	xD	xE	xF
0x	Not in use															
1x	Not in use															
2x	SP	!	"	#	\$	%	&	'	()	*	+	,	-	.	/
3x	0	1	2	3	4	5	6	7	8	9	:	;	<	=	>	?
4x	@	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O
5x	P	Q	R	S	T	U	V	W	X	Y	Z	[\]	^	_
6x	`	a	b	c	d	e	f	g	h	i	j	k	l	m	n	o
7x	P	q	r	s	t	u	v	w	x	y	z	{		}	~	
8x	Not in use															
9x	Not in use															
Ax	NBSP	ı	ç	£	¤	¥	¦	§	¨	©	ª	«	¬	SHY	®	¯
Bx	°	±	²	³	´	µ	¶	·	¸	¹	º	»	¼	½	¾	¿
Cx	À	Á	Â	Ã	Ä	Å	Æ	Ç	È	É	Ê	Ë	Ì	Í	Î	Ï
Dx	Ð	Ñ	Ò	Ó	Ô	Õ	Ö	×	Ø	Ù	Ú	Û	Ü	Ý	Þ	ß
Ex	à	á	â	ã	ä	å	æ	ç	è	é	ê	ë	ì	í	î	ï
Fx	ð	ñ	ò	ó	ô	õ	ö	÷	ø	ù	ú	û	ü	ý	þ	ÿ

4.8 Allowed Non-Latin Characters for LPN

Table 8 – Allowed non-Latin1 characters and their mapping for "Licence Plate Number".

Licence Plate Character	Unicode Code Point	Mapped Latin1 Character
A to Z	U+0041 to U+005A	not mapped
0 to 9	U+0030 to U+0039	not mapped
Ä	U+00C4	not mapped
Ö	U+00D6	not mapped
Ü	U+00DC	not mapped
А	U+039B	a
Б	U+042A	b
С	U+010C	c
Д	U+0414	d
Е	U+0401	e
Э	U+042D	f
Г	U+0413	g
Ь	U+042C	h
Ч	U+0427	i
Й	U+0419	j
З	U+0417	k
Л	U+041B	l
Щ	U+0429	m
И	U+0418	n
Ф	U+0424	o
П	U+041F	p
Ы	U+042B	q
Я	U+042F	r
Š	U+0160	s
Ю	U+042E	t
Ц	U+0426	u
Б	U+0411	v
Ш	U+0428	w
Ж	U+0416	x
У	U+0423	y
Ž	U+017D	z
Ð	U+00D0	ä
Ć	U+0106	ù

Non-Latin1 LPN characters in column 1 shall be represented in the HGV list by the matching character in column 3.