



**AP-3.2**

**OBU Status File v.2024**

Version: 1.0

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## DOCUMENT STATUS

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1.0	4 July 2024	NPRA	New document. Content from old doc. 4.3, cleaned up and clarified.

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## 1 PREFACE

### 1.1 Description

This file is produced by AutoPASS Core based on information from the TSPs as supplied in the HGV files. It is distributed to all RSE in AutoPASS, where it is used for validating OBE towards valid contracts.

### 1.2 Format Versions

This file format is specific to AutoPASS. It remains practically unchanged from the original AutoPASS format definition. This version is designated as v.2024.

### 1.3 File Name Generation

The file name format is:

```
obustatusfile_000000_YYYYMMDD_SS.dat
```

- 000000 – Operator code. 999999 is used for broadcast to all.
- YYYY – Year
- MM – Month (01-12)
- DD – Day (01-31)
- SS – Sequence number of the OBUStatusfile

The Sequence Number is incremented for each OBUStatusfile. It is reset to 0 after 99. The Sequence Numbers shall increment also over midnight, i.e. it does not reset to 0 for the start of the next day.

### 1.4 Data Formats

#### 1.4.1 Character Set

The ISO/IEC 8859-1 character set is to be used. See [Table 1 - Valid Characters for LPN](#). Non-Latin characters shall be mapped into this character set according to [Table 2 - Mapping of Non-Latin Characters for LPN](#).

## 2 OBUSTATUSFILE FORMAT

### 2.1 File Header

The first record in the OBU status file must always be a definition record of type 8 or 9.

Name	Number of Char.	Type of value	Begin	End	Definition	Origin	Adjusted	Mandatory or Optional	Value if Nothing	Padding
Record type	1	Numeric	1	1	"8" = Header for file with incremental updates "9" = Header for file with full update	Generation	Right	Mandatory	n/a	Zeros
Blank	1	AlphaN	2	2	Blank	Generation	Left	Mandatory	n/a	Blanks
Reconciliation Record	18	AlphaN	3	20	The number of records in the file, including the header but excluding the footer	Generation	Left	Mandatory	n/a	Blanks
Blank	1	AlphaN	21	21	Blank	Generation	Left	Mandatory	n/a	Blanks
Filler	5	Numeric	22	26	Filled with Zeros	Generation	Left	Mandatory	n/a	Zeros
Blank	1	AlphaN	27	27	Blank	Generation	Left	Mandatory	n/a	Blanks
Filler	8	Numeric	28	35	Filled with Zeros	Generation	Left	Mandatory	n/a	Zeros
Blank	1	AlphaN	36	36	Blank	Generation	Left	Mandatory	n/a	Blanks
Filler	6	Numeric	37	42	Filled with Zeros	Generation	Left	Mandatory	n/a	Zeros
Blank	1	AlphaN	43	43	Blank	Generation	Left	Mandatory	n/a	Blanks
Filler	2	Numeric	44	45	Filled with Zeros	Generation	Left	Mandatory	n/a	Zeros
Blank	1	AlphaN	46	46	Blank	Generation	Left	Mandatory	n/a	Blanks
Filler	33	Numeric	47	79	Filled with Zeros	Generation	Left	Mandatory	n/a	Zeros
LineFeed	1	AlphaN	80	80		Generation	Left	Mandatory	n/a	Blanks

Example:

9 000000000000000000 00000 00000000 000000 00 000

## 2.2 Body

Name	Number of Char.	Type of value	Begin	End	Definition	Origin	Adjusted	Mandatory or Optional	Value if Nothing	Padding
Record type	1	Numeric	1	1	"1" = Body record for new or existing OBE "2" = Body record for OBE to be deleted "3" = Body record for OBE with data that shall replace previous entry	Generation	Right	Mandatory	n/a	Zeros
Blank	1	AlphaN	2	2	Blank	Generation	Left	Mandatory	n/a	Blanks
Personal Account Number	19	AlphaN	3	21	According to ISO 7812. Shall be unique.	TSP	Left	Mandatory	n/a	Blanks
TypeOfContract	1	Numeric	22	22	Always 1 for record types 1, 2, 3, and 7. Always 0 for record types 8 and 9.	TSP	Right	Mandatory	n/a	Zeros
For future use	4	Numeric	23	26	Filled with zeros	Generation	Left	Mandatory	n/a	Zeros
Blank	1	AlphaN	27	27	Blank	Generation	Left	Mandatory	Blank	Blanks
Validity	8	Numeric	28	35	YYYYMMDD. Always use 20301230 for all valid OBE.	TSP	Right	Mandatory	Zeros	Zeros
Blank	1	AlphaN	36	36	Blank	Generation	Left	Mandatory	n/a	Blanks
For future use	5	Numeric	37	41	Filled with zeros	Generation	Left	Mandatory	n/a	Zeros
Override (Obsolete)	1	Numeric	42	42	Always 1	TSP	Right	Mandatory	n/a	Zeros
Blank	1	AlphaN	43	43	Blank	Generation	Left	Mandatory	n/a	Blanks
LightSignalCode/MMI	2	Numeric	44	45	Code for signalling to the driver at RSE. Light signals are no longer used in AutoPASS. MMI is in this context audible signals from the OBE. "00" = The RSE decides what MMI signal the OBE shall give, according to AP-1.4. "30" = The RSE shall always set the OBE to give MMI signal "OK". "32" = The RSE shall always set the OBE to give MMI signal "Contact Service Provider". "33" = The RSE shall not set the OBE to give MMI signal "OK". Other MMI signals shall be given if applicable.	TSP	Right	Mandatory	Zeros	Zeros
Blank	1	AlphaN	46	46	Blank	Generation	Left	Mandatory	n/a	Blank
FareInformation	5	AlphaN	47	51	Not in use	TSP	Left	Optional	Zeros	Zeros
LicencePlateNumber	10	AlphaN	52	61	The Licence Plate number of the vehicle. No spaces or separators are allowed in between the characters.	TSP	Left	Mandatory	n/a	Blanks
LicencePlateNationality	3	AlphaN	62	64	Nationality of the Licence Plate number according to ISO 3166-1-Alpha-2 code elements DK = Denmark, NO = Norway, AT = Austria, SE = Sweden, etc. <a href="https://www.iso.org/iso-3166-country-codes.html">https://www.iso.org/iso-3166-country-codes.html</a>	TSP	Left	Mandatory	n/a	Blanks
Filler (for later use)	15	Numeric	65	79	Filled with Zeros	Generation	Left	Mandatory	n/a	Zeros
LineFeed	1	AlphaN	80	80		Generation	Left	Mandatory	n/a	Blanks

Example:

1 9578001114053868 10000 20301230 000001 02 00000MQ12345 NO 0000000000000000

## 2.3 File Footer

The file footer serves as a reconciliation record of type 7. This record declares the total number of records in the file, including the header but not the footer.

Name	Number of Char.	Type of value	Begin	End	Definition	Origin	Adjusted	Mandatory or Optional	Value if Nothing	Padding
Record type	1	Numeric	1	1	"7" = Footer/Reconciliation Record	Generation	Right	Mandatory	n/a	Zeros
Blank	1	AlphaN	2	2	Blank	Generation	Left	Mandatory	n/a	Blanks
Reconciliation Record	18	AlphaN	3	20	The number of records in the file, including the header but excluding the footer	Generation	Left	Mandatory	n/a	Blanks
Blank	1	AlphaN	21	21	Blank	Generation	Left	Mandatory	n/a	Blanks
Filler	5	Numeric	22	26	Filled with Zeros	Generation	Left	Mandatory	n/a	Zeros
Blank	1	AlphaN	27	27	Blank	Generation	Left	Mandatory	n/a	Blanks
Filler	8	Numeric	28	35	Filled with Zeros	Generation	Left	Mandatory	n/a	Zeros
Blank	1	AlphaN	36	36	Blank	Generation	Left	Mandatory	n/a	Blanks
Filler	6	Numeric	37	42	Filled with Zeros	Generation	Left	Mandatory	n/a	Zeros
Blank	1	AlphaN	43	43	Blank	Generation	Left	Mandatory	n/a	Blanks
Filler	2	Numeric	44	45	Filled with Zeros	Generation	Left	Mandatory	n/a	Zeros
Blank	1	AlphaN	46	46	Blank	Generation	Left	Mandatory	n/a	Blanks
Filler	5	Numeric	47	51	Filled with Zeros	Generation	Left	Mandatory	n/a	Zeros
Blank	14	AlphaN	52	65	Blank	Generation	Left	Mandatory	n/a	Blanks
Filler	14	Numeric	66	79	Filled with Zeros	Generation	Left	Mandatory	n/a	Zeros
LineFeed	1	AlphaN	80	80		Generation	Left	Mandatory	n/a	Blanks

Example:

7 00000000003023780 00000 00000000 000000 00 00000 00000000000000
---

3023780 = The number of records in the OBU Status File, not including the footer.

### 3 ANNEX

#### 3.1 Valid Characters for LPN

Only the highlighted characters in Table 5 are valid characters for the LPN field of the transaction file.

Table 1 - Valid Characters for LPN

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



### 3.2 Allowed Non-Latin Characters for LPN

*Table 2 - Mapping of Non-Latin Characters for LPN*

License Plate Character	Unicode Code Point	Mapped Latin1 Character
A to Z	U+0041to U+005A	not mapped
0 to 9	U+0030to 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