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## Hal E-Bank

Domestic payments (Format of export/import files)

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## 1.Payment orders

There can be any number of payment orders in a single file (\*.txt). File with payment orders consists of:

- header row (optional),
- summary row (mandatory only if header row exist, otherwise does not exist in file) and
- one or more rows each for a single payment order.

#### 1.1 Header row

The first row in file and it is optional. If exists, summary row entry is mandatory. The structure is defined in the following table:

No.	Field	Begining	Length	Туре	Mandatory	Comment
1.	Account number	1	18	N	*	Debtor information
2.	Name	19	35	С	*	
3.	City	54	10	С		
4.	Value date	64	6	D		Only if valuation date is the same for all orders (ddmmyy), otherwise empty
5.	Reserved field	70	98		*	Empty (blank, " ")
6.	Reserved field	168	12	С	*	Fixed text (without quotes): "MULTI E-BANK"
7.	Record type	180	1	N	*	Fixed text (without quotes): "0" – header row
8.	End of line	181	2	С	*	Carriage Return, Line Feed

Table 1: Structure record of header row (first row in file)





## 1.2 Summary Row

The first and optional row in the file - mandatory if header row exists in the file. The structure is defined in the following table:

No.	Field	Begining	Length	Type	Mandatory	Comment
1.	Account number	1	18	N	*	
2.	Name	19	35	С	*	Debtor information
3.	City	54	10	С		
4.	Total amount	64	15	N	*	Total amount of all orders, right aligned (last 2 digits are decimal places without comma). E.g. "1234,56" is entered as "00000000123456"
5.	Total number of payment orders	79	5	N	*	Total number of payment orders in the file. E.g. if there are 2 orders in file, it is entered as "00002"
6.	Reserved field	84	96		*	Empty (blank, " ")
7.	Record type	180	1	N	*	Fixed text (without quotes): "9" – summary record
8.	End of line	181	2	С	*	Carriage Return, Line Feed

Table 2: Structure record of summary row (second row in file)





## 1.3 Payment order record

If header and summary row exist in the file, this record is third and every other row. If header and summary row do not exist in the file, this record is first and every other row in the file. Each row contains record of single payment order. The structure is defined in the following table:

No.	Field	Beginning	Length	Туре	Mandatory	Comment
1.	Creditor account number	1	18	N	*	In form of (without quotes): "fffppppppppppppkk" "fff" – bank code; "ppppppppppppp" – party; "kk" – control number
2.	Creditor name	19	35	С	*	
3.	Creditor address*	54	35			
4.	Creditor city	89	10	С		
5.	Reserved field	99	1	N	*	Fixed text (without quotes): "0"
6.	Debit reference model	100	2	N		2-digit number (usually "97" or "00" or " ")
7.	Debit reference	102	23	С		
8.	Payment details	125	36	С	*	Predefined payment details or custom text. <u>Link to file on NBS</u> (classification by basis of payment)
9.	Reserved field	161	5	N	*	Fixed text (without quotes): "00000"
10.	Reserved field	166	1	С	*	Empty (blank, " ")
11.	Form of payment	167	1	N	*	"2" – transfer or "3" – compensation (debit and credit of same account for same value) and assigment/cession
12.	Payment code	168	2	С	*	Code of payment. Link to file on NBS (classification by basis of payment)
13.	Form of payment	170	1	С		Empty (blank), " " – transfer or compensation or "9" – return of founds
14.	Reserved field	171	1	С	*	Empty (blank, " ")





15.	Amount	172	13	N	*	Amount – value, right aligned (last 2 digits are decimal places without comma). E.g. "1234,56" is entered as "0000000123456"
16.	Credit reference model	185	2	С		2-digit number (usually "97" or "00" or "0 " or " ")
17.	Credit reference	187	23	С		
18.	Value date	210	6	D		Payment order execution date (ddmmyy) – mandatory when importing in B2B version
19.	Document type	216	1	N		"0" – payment order, "4" – compensation
20.	Record type	217	1	N	*	Fixed text (without quotes): "1" – payment order record
21.	Instant Payment	218	1	N		1 – Instant Payment; 0 – Regular Payment
22.	End of line	219	2	С	*	Carriage Return, Line Feed

Table 3: Structure record of payment order row (first or third and every other row in file)



<sup>\*</sup> Note: For certain banks, the address of creditor may be a mandatory field when sending an order.



## 2. Transactions and statements

#### 2.1 Transactions

No.	Field	Begining	Length	Type	Comment
1.	Partner account number	1	18	N	In form of (without quotes): "fffppppppppppppkk" "fff" – bank code; "ppppppppppppp" – party; "kk" – control number
2.	Processing code	19	2	С	"10" – credit; "20" – debit; "00" – rejected
3.	Processing date	21	8	D	In form of (without quotes): "dd.mm.yy"
4.	Cancellation	29	2	С	Canceled transaction - "S ", otherwise empty (2x blank - " ")
5.	Partner name	31	35	С	
6.	Reserved field	66	1	С	Empty (blank, " ")
7.	Value date	67	6	D	In form of: ddmmyy
8.	User account number	73	18	N	Same as field 1. Account number from which transaction is exported
9.	Transaction amount	91	15	N	Amount – value, right aligned (last 2 digits are decimal places without comma). E.g. "1234,56" is entered as "0000000123456"
10.	Reserved field	106	1	С	Empty (blank, " ")
11.	Form of payment	107	1	С	"1" – cash transfer, "2" – non-cash transfer, "3" – compensation (debit and credit of same account for same value) or "9" – return of founds
12.	Payment code	108	2	С	Code of payment. Link to file on NBS (classification by basis of payment)
13.	Reserved field	110	2	С	2x empty (2x blank, " ")
14.	Credit reference model	112	2	С	2-digit number (usually "97" or "00" or "0 " or " ")
15.	Credit reference	114	22	С	





16.	Debit reference model	136	2	С	2-digit number (usually "97" or "00" or "0 " or " ")
17.	Debit reference	138	22	С	
18.	Payment details	160	36	С	
19.	Partner city	196	10	С	
20.	Partner name	206	35	С	
21.	Complaint number	241	22	С	Bank's reference (transaction mark)
22.	Beneficiary account number or empty (blank)	263	18	С	In form of (without quotes): "fffppppppppppppkk" "fff" – bank code; "pppppppppppp" – party; "kk" – control number
23.	End of line	281	2	С	Carriage Return, Line Feed

Table 4: Structure record of transaction





#### 2.2 Statement header

When exporting statement, statement header is exported in "[FILE\_NAME]\_cov.txt" (with extension "\_cov.txt").

No.	Field	Begining	Length	Туре	Comment
1.	Record type	1	2	N	"01" – account balance
2.	Account number	3	18	N	In form of (without quotes): "fffppppppppppppkk" "fff" – bank code; "ppppppppppppp" – party; "kk" – control number
3.	Booking date	21	8	D	In form of (without quotes): "ddmmgggg"
4.	Previous statement date	29	8	D	Like in field 3 (If data not sent by bank "01011970" is entered)
5.	Previous statement balance	37	18	N	Amount – value, right aligned (last 2 digits are decimal places without comma). E.g. "1234,56" is entered as "00000000000123456"
6.	Number of credit transactions	55	6	N	Like field 11
7.	Sum of credt transations for day	61	18	N	Like field 5
8.	Number of debit transactions	79	6	N	Like field 11
9.	Sum of debit transations for day	85	18	N	Like field 5
10.	New balance (Closing balance)	103	18	N	Like field 5
11.	Transactions number in waiting row for today	121	6	N	Right aligned. E.g. "123" is entered as "000123"
12.	Summary amount in waiting row for today	127	18	N	Like field 5
13.	Statement number	145	3	N	Right aligned. E.g. "12" is entered as "012"
14.	End of line	148	2	С	0x0D – carriage return, 0x0A – Line feed

Table 5: Structure record of statement header





### 3. The Address book

Each record contains information about business partner and one of his accounts. An example a record for import into personal Address Book is shown in the frame (one complete record is shown in the frame, which, due to its length is divided into multiple rows):

"BUSINESS PARTNER NAME","PARTNER ADDRESS","PARTNER CITY","COUNTRY","COMMENT","ACCOUNT NUMBER",
"NAME OF THE BANK WHERE THE ACCOUNT IS HELD","BANK ADDRESS","BANK CITY","BANK COUNTRY","COUNTRY CODE","","BANK BIC CODE",
"MODEL AND REFERENCE NUMBER","BANK ACCOUNT NUMBER AT THE CENTRAL BANK",0, "","PARTNER TAX NUMBER"

#### Record format description:

- Each row contains 18 fields / columns,
- Content of each field is enclosed by quotation marks, except field 16,
- Delimiter between fields is comma,
- · Empty fields are represented by double quotation marks (""),
- Fields with key information cannot be empty,
- Each row ends with 0x0D, 0x0A (line feed, carriage return).

#### Note:

- Double quotation mark within the field is displayed as a single quotation mark. E.g. "THIS IS """ is imported as THIS IS ".
- Information is divided into three groups by their contents:
  - o Fields 1 to 5 and 16 to 18 contain information about the beneficiary.
  - o Fields 6 and 14 contain information about the account model and the reference number.
  - o Fields between 7 and 13, and field 15 contain information about the bank with which the account is held.
- The information about the bank is compared with the Address Book of banks data during importing. In fields 6 and 13, allowed characters are only digits from 0 to 9 and hyphen" –"
- The address book is organized also to include information about beneficiary's account in foreign banks. This additional data Hal E-Bank program does not use for domestic payment operations.

If Field 6 (account number) is empty, only the information about beneficiary is imported into the Address Book. If Field 6 is filled, then fields 7, 9, 10 must be filled as well.





No.	Mandatory	Maximum width (characters)	Field contents
1.	*	35	Business partner name
2.		35	Partner address
3.	*	35	Partner postal code and city
4.	*	35	Partner country
5.		150	Partner comment
6.		35	Partner account number in the form 999-00000000052434
7.		35	Bank name, which holds the account (in field 6)
8.		35	Bank street and street number
9.		35	Bank postal code and city
10.		35	Bank country
11.		2	Country 2-character alpha code in Country codes list (ISO 3166) <u>Link to file on NBS</u> (e.g. RS – Serbia, DE – Germany)
12.		150	Account comment
13.		11	Bank BIC address
14.		25	Model (first two characters) and reference number
15.		35	Bank account number in NBS (central bank)
16.	*	1	User type (always is 0). This field is entered without quotes
17.		4098	Serialized record. Not used during import (always empty – "")
18.		35	Partner tax number
19.	*	2	Carriage Return, Line Feed

Table 6: Structure record of address book

