

Technical Description of the ABO Format Structure for Programmers

Format ABO

The ABO format is commonly used for exchanging financial messages in the Czech Republic and Slovakia. The format structure is determinedly defined, according to the below-stated overview. Record description is not used during the import or export of message to the ABO format.

Payment Order

Layout of records within data file:

UHL1

```
Accounting file header
  Group header
    Item
    Item
    ...
    ...
    Item
  End of group
  ...
  ...
End of accounting file
...
```

UHL1 Record:

| Sequence No. | Name | F/V | Minimum Length | Maximum Length | Content | Comment |
|--------------|--------------------------------------|-----|----------------|----------------|------------------------------|---------|
| 1 | Message type | F | 4 | 4 | UHL1 | |
| 2 | Code date | F | 6 | 6 | ddmmyy | 1 |
| 3 | Client name | F | 20 | 20 | AAAAAAAAAAAAAAAAAAAAAAAAAAAA | 2 |
| 4 | Client number | F | 10 | 10 | NNNNNNNNNN | 3 |
| 5 | Interval of accounting files - start | F | 3 | 3 | NNN | |
| 6 | Interval of accounting files - end | F | 3 | 3 | NNN | |
| 7 | Code – fixed part | F | 6 | 6 | NNNNNN | 4 |
| 8 | Code – secret part | F | 6 | 6 | NNNNNN | 4 |
| 9 | End-of-message character | F | 2 | 2 | CR LF | |

Comments:

F/V Fixed or variable length

- 1 Information does not have any relation to the maturity.
- 2 Alphanumeric characters; can be supplemented by trailing.
- 3 Editing format, i.e. format identical with the format of account numbers which are stated on the payment orders, including leading zeros. Only the mandatory part of the account number without the prefix is filled in.
- 4 Octal representation – not required by the application.

Accounting File Header:

| Sequence No. | Name | F/V | Minimum Length | Maximum Length | Content | Comment |
|--------------|--------------------------|-----|----------------|----------------|---------|---------|
| 1 | Message type | F | 1 | 1 | 1 | |
| 2 | Field separator | F | 1 | 1 | (space) | |
| 3 | Type of data | F | 4 | 4 | rmoo | 1 |
| 4 | Field separator | F | 1 | 1 | (space) | |
| 5 | Accounting file number | F | 6 | 6 | sssppp | |
| 6 | Field separator | F | 1 | 1 | (space) | |
| 7 | Bank code | F | 4 | 4 | 0800 | |
| 8 | End-of-message character | F | 2 | 2 | CR LF | |

Comments:

- 1 Permitted is only the "1501" value for payment orders and "1502" for direct debits.

End of Accounting File:

| Sequence No. | Name | F/V | Minimum Length | Maximum Length | Content | Comment |
|--------------|--------------------------|-----|----------------|----------------|----------|---------|
| 1 | Message type | F | 1 | 1 | 5 | |
| 2 | Field separator | F | 1 | 1 | (space) | |
| 3 | “Plus” sign | F | 1 | 1 | + (plus) | |
| 4 | End-of-message character | F | 1 | 1 | CR LF | |

Group Header:

| Sequence No. | Name | F/V | Minimum Length | Maximum Length | Content | Comment |
|--------------|---------------------------|-----|----------------|----------------|-----------------------|---------|
| 1 | Message type | F | 1 | 1 | 2 | |
| 2 | Field separator | F | 1 | 1 | (space) | |
| 3 | Payer account number | V | 2 | 17 | (NNNNNNN-NNNNNNNNNNN) | 1 |
| 4 | Field separator | F | 1 | 1 | (space) | |
| 5 | Total amount of the group | V | 1 | 14 | (NNNNNNNNNNNNNNNN) | 2 |
| 6 | Field separator | F | 1 | 1 | (space) | |
| 7 | Due date | F | 6 | 6 | ddmmyy | 3 |
| 8 | End-of-message character | F | 2 | 2 | CR LF | |

Comments:

- 1 Account number is stated only in case of batch payment orders. Then this detail is not populated in the record of individual payment order. If the account number is shorter, the first and the second part can be supplemented with leading zeros. In case of a group containing individual orders, Field No.4 follows immediately after the Field No.2. If the account number does not contain a prefix the “ – “ sign will be also omitted.
- 2 Leading zeros can, but do not need to be stated. Amount is stated in hellers (the last two characters).
- 3 Due date must not be less than the computer system date at the point of processing.

End of Group:

| Sequence No. | Name | F/V | Minimum Length | Maximum Length | Content | Comment |
|--------------|--------------------------|-----|----------------|----------------|----------|---------|
| 1 | Message type | F | 1 | 1 | 3 | |
| 2 | Field separator | F | 1 | 1 | (space) | |
| 3 | “Plus” sign | F | 1 | 1 | + (plus) | |
| 4 | End-of-message character | F | 1 | 1 | CR LF | |

Item of Individual Payment Order:

| Sequence No. | Name | F/V | Minimum Length | Maximum Length | Content | Comment |
|--------------|---------------------------|-----|----------------|----------------|--|---------|
| 1 | Account number - debit | V | 2 | 17 | (NNNNNNN-NNNNNNNNNNN) | 1 |
| 2 | Field separator | F | 1 | 1 | (space) | |
| 3 | Account number - credit | V | 2 | 17 | (NNNNNNN-NNNNNNNNNNN) | 1 |
| 4 | Field separator | F | 1 | 1 | (space) | |
| 5 | Amount | V | 1 | 12 | (NNNNNNNNNNNNNN) | 2, 5 |
| 6 | Field separator | F | 1 | 1 | (space) | |
| 7 | Variable symbol | V | 1 | 10 | (NNNNNNNNNNNN) | 2 |
| 8 | Field separator | F | 1 | 1 | (space) | |
| 9 | Constant symbol | V | 8 | 10 | (NNNNNNNNNNNN) | 2,3 |
| 10 | Field separator | F | 1 | 1 | (space) | |
| 11 | Specific symbol | V | 0 | 10 | (NNNNNNNNNNNN) | 2,4 |
| 12 | Field separator F | F | 1 | 1 | (space) | |
| 13 | Message for the recipient | V | 0 | 35 | AAAAAAAAAAAAAAAAAAAAAAAA AAAAAAAAAAAAAAAA | |
| | End-of-message character | F | 2 | 2 | CR LF | |

Comments:

- Account number – debit is populated if the file contains individual payment orders; in case of batch payment orders this field will be omitted, then these items start with the Field No. 3. If the account number is shorter the first and the second part can be supplemented with leading zeros.
- Detail can be supplemented with leading zeros – up to the maximum of characters.
- Constant symbol as such is usually stated on the 1st to the 4th position from the right, bank code of the bank that maintains partner organisation account is stated on the 5th to the 8th position from the right.
- If the S-symbol is not present, Field No.12 follows immediately after the Field No.10, or 1 to 10 “zero” characters can be stated in the Field No.11 (if the S-symbol is not specified, it is still necessary to keep both separators in fields 10 and 12, or the S-symbol can be replaced with “0”).
- Amount is stated in hellers (the last two characters).
- In the "Message for recipient" field, you can use the "|" character to add a "Message for sender" (called "Message for yourself" in George). If this character is in the field, everything after it is considered a "Message for sender". George and George Business allow up to 140 characters in the "Message for recipient" field and, using the "|" character, an additional 140 characters in the "Message for sender".
- Unless otherwise stated, the allowed characters for each field are consistent with the allowed characters for a single payment. Some accounting systems allow non-standard characters from a payment perspective to be added to the "Message for recipient" in the import file. We recommend deleting or replacing these characters, as depending on the character, field, and system via which the order was created, the file may be rejected or the character may be omitted/replaced by bank systems both inside and outside the bank. These characters are: ~°´µ¨{}" <"@>#,.;!%\$:&_*="+""?()/-[] and non-breaking spaces.

Processing on the Client Side

Banking system will accept files in the ABO format with the maximum number of 200 (George), 500 (George Business) or 1000 (BUSINESS 24) messages, depending on the service from which the transaction was entered. Size of the imported file is also limited; it cannot exceed 50 MB (George Business), 10 MB (George) and 2 MB (BUSINESS 24).

UTF-8 encoding is supported for files without diacritics. For files with diacritical characters, ANSI encoding is supported and diacritical characters must be in WIN1250 encoding.

Account Statement and Transaction Item

Layout of records within data file:

Account statement
Transaction item
Transaction item
...
...
...
Account statement
Transaction item
...
...
...
...

Account Statement in CZK:

| Sequence No. | Name | F/V | Minimum Length | Maximum Length | Content | Comment |
|--------------|-----------------------------|-----|----------------|----------------|----------------------------|---------|
| 1 | Type of record | F | 3 | 3 | 074 | |
| 2 | Client account number | F | 16 | 16 | NNNNNNNNNNNNNNNN | 1 |
| 3 | Abbreviated client name | F | 20 | 20 | AAAAAAAAAAAAAAAAAAAA AA | |
| 4 | Old balance name | F | 6 | 6 | ddmmyy | |
| 5 | Old balance | F | 14 | 14 | NNNNNNNNNNNNNNNN | 5 |
| 6 | Old balance sign | F | 1 | 1 | (plus) or (minus) | 2 |
| 7 | New balance | F | 14 | 14 | NNNNNNNNNNNNNNNN | 5 |
| 8 | New balance sign | F | 1 | 1 | (plus) or (minus) | 2 |
| 9 | Transactions – debit | F | 14 | 14 | NNNNNNNNNNNNNNNN | 5 |
| 10 | Sign of debit transactions | F | 1 | 1 | (plus) or (minus) | 3 |
| 11 | Transactions – credit | F | 14 | 14 | NNNNNNNNNNNNNNNN | 5 |
| 12 | Sign of credit transactions | F | 1 | 1 | (plus) or (minus) | 3 |
| 13 | Statement sequence number | F | 3 | 3 | NNN | |
| 14 | Posting date | F | 6 | 6 | ddmmyy | |
| 15 | Filler | F | 14 | 14 | (space) | 4 |
| 16 | End-of-record character | F | 2 | 2 | CR LF | |

Comments:

- 1 Depending on the application settings the data can be stated in the so-called internal format – see the internal format description below.
- 2 “Plus” sign in case of positive balance and the “minus” sign in case of negative balance.
- 3 Character “zero” or the “minus” sign if the reversal prevails.
- 4 14 “space” characters due to the unification of length for record types 074 and 075.
- 5 Amount is stated in hellers (the last two characters).

Transaction Item in CZK:

| Sequence No. | Name | F/V | Minimum Length | Maximum Length | Content | Comment |
|--------------|-------------------------|-----|----------------|----------------|--------------------------|---------|
| 1 | Type of record | F | 3 | 3 | 075 | |
| 2 | Client account number | F | 16 | 16 | NNNNNNNNNNNNNNNN | 1 |
| 3 | Counter-account number | F | 16 | 16 | NNNNNNNNNNNNNNNN | 1,2 |
| 4 | Document number | F | 13 | 13 | AAAAAAAAAAAAA | 3 |
| 5 | Amount | F | 12 | 12 | NNNNNNNNNNNN | 10 |
| 6 | Posting code | F | 1 | 1 | N | 4 |
| 7 | V-symbol | F | 10 | 10 | NNNNNNNNNN | |
| 8 | K-symbol. | F | 10 | 10 | NNNNNNNNNN | 5 |
| 9 | S-symbol | F | 10 | 10 | NNNNNNNNNN | |
| 10 | Value | F | 6 | 6 | ddmmyy | 6 |
| 11 | Additional detail | F | 20 | 20 | AAAAAAAAAAAAAAAAAA AA | 7 |
| 12 | Change of item code | F | 1 | 1 | A | 8 |
| 13 | Type of data | F | 4 | 4 | rmoo | 9 |
| 14 | Due date | F | 6 | 6 | ddmmyy | |
| 15 | End-of-record character | F | 2 | 2 | CR LF | |

Comments:

- Depending on the application settings the data can be stated in the so-called internal format – see the internal format description below.
- Account number of the partner organisation.
- Item identification number – document number supplemented with leading zeros.
- The detail is related to the detail with Sequence No. 2 and its content is specified as follows: “1” – debit item, “2” – credit item, “3” – debit entry reversal, “4” – credit item reversal.
- Constant symbol as such is usually stated on the 1st to the 4th position from the right, bank code of the bank that maintains account presented in the Field No. 3 is stated on the 5th to the 8th position from the right.
- Date, from which the item is included into the balance for interest calculation.
- Abbreviated name of partner organisation, or type of transaction. Text field is aligned to the left and supplemented with blank spaces up to the field length.
- Information on additional item change in the payment index-file and/or its partial payment: “0” – item was not additionally changed or partially paid, “Z” – item was changed, “C” – partial payment, “P” – item was additionally changed and partially paid.
- The detail acquires different values depending on the input data character from the payer point of view. Values important for customers: r – always “1”, m – for operations in CZK “1”, oo – odd number (“01”) – payment, even number (“02”) – collection/deposit.
- Amount is stated in hellers (the last two characters).

Internal format of account number is created through permutation according to the following principle:

Px-prefix, position x.

Cx- account number, position x.

Account number: P0P1P2P3P4P5C0C1C2C3C4C5C6C7C8C9
 Internal format: C9C7C8C5C0C1C2C3C4C6P1P2P3P4P5P6