CBS Document Interchange

Contents

Introduction

WAY4™ allows documents to be imported and exported. The current system version allows for the import and export of financial and authorization documents.

Documents are imported through pipe "RBS. Documents Import.dll". Pipe "RBS. Documents Import.dll" creates outgoing response files as a result of document import and processing. To create incoming response files when the pipe is running in deferred response mode (parameter DEFERRED_RESPONSE="Y") pipe "RBS. Documents Import Response.dll" is used. Documents are exported through pipe "RBS. Documents Export.dll".

Transaction type auto-detection mode may be used to import documents. This mode is used when the sender does not detect the transaction type and tries to determine it from the source message code and the type of device used in the operation. To activate this mode, set the Message Type Auto-detection parameter in the header of the imported file to "A".

When importing documents in auto detection mode, define the transaction type codes with the following parameters for import pipe "RBS. Documents Import.dll":

- CREDIT_CODE;
- ATM_CODE;
- CASH_CODE;
- RETAIL_CODE;
- UNIQUE_CODE;
- CREDIT_R_CODE;
- ATM_R_CODE;
- CASH_R_CODE;
- RETAIL_R_CODE;
- UNIQUE_R_CODE.

In this list, the characters "_R_" indicate a reversal operation. The values of indicated parameters are used by pipe "RBS. Documents Import.dll" to determine the transaction type. If parameter values are not defined in the pipe parameter list, the system during import will use values taken from the parameter names.

When importing documents, it is possible to completely withdraw the account's amount available, for example, in order to empty the contract account before closing it. To do this, add characters "0:" to the "Source Message Code" field of the imported transaction message before the source message code, and set the transaction amount to 0. If it is not necessary to process withdrawal errors that occur when there is a 0 or negative balance, set pipe parameter GEN_ZERO_AM_AV_MSG to "N". In this case, if it is not possible to

withdrawal the amount available from the account, the system creates neither an error message nor financial documents, and the withdrawal transaction will be considered successfully executed.

When importing a payment document for a withdrawal, it is possible to withdraw a contract's actual amount available that is less than the original withdrawal amount if the withdrawal amount exceeds the contract's amount available. To do this, the *Authorization mode* field of the file header should be set to "Y". The required amount must be shown in the created document in the *Transaction Amount* field, and the actual amount withdrawn is shown in the *Settlement Amount* field. The scenario is logged in the process log and in the response file. Moreover, the amount in the *File Total* field of the response file will not be the same as the amount in the *Accept File Total* field, even if there are no bad transactions in the imported file. If the contract's amount available is 0, the system will create a financial document with a 0 amount in the *Settlement Amount* field when working with this mode.

When working in this mode, it is recommended that users set pipe parameter DOC_PROCESSING to value "ACCEPT" for immediate processing of documents formed after import. If there is another value for this parameter, the process log will generate a warning.

In the pipe for exporting documents, pipe "RBS. Documents Export.dll", the SELECT operator consists of three independent components united by the UNION operator:

1. Selection from M_TRANSACTION – used to export financial transactions;
2. Selection from DOC – used to export documents that may not contain macro-transactions;
3. Selection from CREDIT_HISTORY – used to export authorizations.

It should be kept in mind that for each specific document export, only one component of the SELECT operator from the list above might be used. This condition is maintained through **one** of the three parameters of the import pipe: MTR_FILTER, DOC_FILTER, CHI_FILTER (see "Parameters of Pipe "RBS. Documents Import.dll").

Exporting may be done in "EXPORT TO AGENT" mode, which is activated when the parameter EXPORT_TO_AGENT = "Y" for pipe "RBS. Documents Export.dll". This mode is used to export financial documents by cards (Target = "Card") from the processing center to the agent bank. This mode redefines the following fields:

- SRC_CHANNEL;
- SRC_MEMBER_ID;
- REC_MEMBER_ID.

These fields are not filled for transactions executed on the agent bank's device. For all other transactions, the agent bank's Bank_Code is used as the REC_MEMBER_ID.

To speed up document import, deferred response mode may be used. To activate this mode, it is necessary to set the following parameter values for the

import pipe ("RBS. Documents Import.dll"): DEFERRED_RESPONSE = "Y", DOC_PROCESSING = "NOTHING", while the Authorization mode field of the imported file must be set to "N", and the File Check Level field, "R". When using deferred response mode, documents created after document import are not accepted automatically and must be accepted manually by the user. After accepting documents, run the pipe "RBS. Documents Import Response.dll" to create the outgoing response file.

Chapter 1. Pipe Parameters

Parameters of Pipe "RBS. Documents Import.dll"

Parameter	Value	Parameter Description
NAME_PREFIX		First letter of the file name. Used to filter files when importing.
POSTING_DATE	NULL/FILE/ <YYYY-MM-DD>	Rules for filling the POSTING_DATE field of the document created after import: "FILE" or empty – value is taken from the file; this value is used as default; "NULL" – field is set to value "NULL"; YYYY-MM-DD – document field is filled by the date indicated in this field in the incoming file.
EXT_SLIP_NUMBER	Y/N	When this parameter is set to "Y", a special prefix is added to the value of field SOURCE_REG_NUM contained in the file: • TRN – for financial documents, • AUT – for authorization documents. Default parameter value is "N".
AMOUNT_EXPONENT_IS_2	Y/N	When this parameter is set to "Y", if the Exponent field is not filled in the imported file, these fields will be set to "2" during import. Default parameter value is "N".
DOC_PROCESSING	APPROVE/ ACCEPT/ NOTHING	Parameter defining how documents formed after import are processed: "APPROVE" – documents are approved; this is the default value; "ACCEPT" – documents are accepted; this value is only allowed when the Check Level parameter of the file header is set to "R"; "NOTHING" – created documents are not processed.
KILL_BAD_DOCS	Y/N	When this parameter is set to "Y", rejected documents are deleted from the DOC table through the ROLLBACK mechanism. If "N" is set (default value), these documents are stored with status AMND_STATE= "C".

Parameter	Value	Parameter Description
GEN_POSIT_RESP	Y/N/A	When this parameter is set to value "Y", the response file will include information on documents that were successfully imported. If the parameter value was set to "N" (default value), information on successfully imported documents will not be sent in the response file. If the "A" value is set as the parameter value, the Message field of the outgoing response file's information message will contain the transaction amount, right-justified and padded to zeros to the 18th position, where the last two digits indicate the decimal part of the transaction amount.
REC_MBR_ID		This parameter allows users to redefine the value of the RECEIVING_MEMBER_ID field in imported documents. The parameter value is set as the value of this field.
RESP_FILE_PREFIX		The first letter of the outgoing response file name.
APPROVE_PROC		Name of stored procedure used for approval of imported documents. Default value: "incd.approve_doc".
DEFERRED_RESPONSE	Y/N	Deferred outgoing response file; default value – "N".
GEN_ZERO_AM_AV_MSG	Y/N	When this parameter is set to "Y" (default value), the response file will contain an error message if it is not possible to execute a withdrawal because of the balance having a zero or negative balance. If this value is set to "N", the message is not created in the response file.
RESP_FOR_DUPL_FILES	Y/N	When set to "Y", when the system attempts to import an already imported file, a response file will be created stating that the file was already imported. The imported file will be sent to the bad file directory. The default value is "N". In this case, the response file is not created and the imported file remains in the outgoing directory, and an error message will be created during the second import process.
SRC_MEMBER_ID_FROM_FH	Y/N	When this parameter is set to "Y", if the Source Member ID field has not been filled in the imported document, it will be assigned a value based on the file prefix type and the File Sender field of the file header. The default value is "N".

Parameter	Value	Parameter Description
CHECK_AM_AV_WITH_FEE	Y/N/T	If the value of this parameter is "Y" and the value of the Authorization Mode parameter of the file header is either "P" or "S", the determination of whether or not the indicated amount or available amount may be debited is done allowing for the fee, as set in the Service Package. In this case, the fee is added to the transaction amount. If the Authorization Mode parameter is "S", meaning that the debiting is partial and a fee amount is set in the Service Package, the actual settlement amount will be the available amount minus an amount no less than the fee. If the available amount is less than the fee, the settlement amount will be zero. If the value of this parameter is "T", the settlement amount is determined allowing for the fee (Target Fee) as indicated in the file. This value of the parameter may only be used when the value of the Authorization Mode parameter of the file header is "P". The default value of the parameter is "N".

Parameters of Pipe "RBS. Documents Import Response.dll"

Parameter	Value	Parameter Description
GEN_POSIT_RESP	Y/N	When this parameter is set to "Y", the response file will include information on successfully loaded documents. When the parameter is set to "N" (default value), information on successfully imported documents will not be sent in the response file. When the parameter is set to "A", the Message field of the outgoing file's information message will contain the transaction amount, right-justified and padded to zeros to the 18th position, where the last two digits indicate the decimal part of the transaction amount.
FILTER	Condition fragment	Fragment of condition WHERE added to operator SELECT. For example: "(rec_date > to_date('02/01/2001','DD/MM/YYYY'))".
BAD_DOC_STATUSES	List divided by semicolons	Parameter indicating what posting statuses are considered a result of bad documents. By default, these are statuses D (Decline), E (Decline Service), and J (Rejected).
FILE_TYPE	TRN/AUI	The parameter indicating the types of files the pipes generated responses to. Its default value is "TRN", that is, financial documents. In order to generate response files to authorization documents, the value of this parameter must be "AUI".

Parameters of Pipe "RBS. Documents Export.dll"

Parameter	Value	Parameter
MTR_FILTER		Filter for the SELECT operator for the M_TRANSACTION table. The following table assignments may be used: MTR for TRANSACTION, DOC for DOC, SCN for the transaction source's ACNT_CONTRACT, TCN for the transaction receiver's ACNT_CONTRACT, SFI for the transaction source's F_I, TFI for the transaction receiver's F_I. For example: doc.POSTING_STATUS in ('P') and tcn.PCAT='C' and tfi.BRANCH_CODE='0001' and mtr.local_date = (select date_from from v_local_constants).
DOC_FILTER		Filter for the SELECT operator for the DOC table. The following table assignments may be used: MTR for TRANSACTION, DOC for DOC, SCN for the transaction source's ACNT_CONTRACT, TCN for the transaction receiver's ACNT_CONTRACT, SFI for the transaction source's F_I, TFI for the transaction receiver's F_I, CHI for CREDIT_HISTORY.
CHI_FILTER		Filter for the SELECT operator for the CREDIT_HISTORY table. DOC for DOC, SCN for the transaction source's ACNT_CONTRACT, TCN for the transaction receiver's ACNT_CONTRACT, SFI for the transaction source's F_I, TFI for the transaction receiver's F_I, CHI for CREDIT_HISTORY. Example: doc.service_class not in ('C','M')
CRE_FILE_FOR_SRC	1/0	Parameter determining whether it is necessary to export documents for the transaction source's financial institution. Default value: "1" (export) for documents selected through pipe parameters MTR_FILTER and DOC_FILTER, "0" (no export) for documents selected through pipe parameter CHI_FILTER.
CRE_FILE_FOR_TGT	1/0	Parameter determining whether it is necessary to export documents for the transaction target's financial institution. Default value is "1" (export).
MTR_FILE_DATE	File name	Data shown as the file creation date (see field File Date in the file name structure) when exporting documents for the macrotransaction table (when the MTR_FILTER pipe parameter is set). The default parameter value is "mtr.local_date".

Parameter	Value	Parameter
DOC_FILE_DATE	File name	Data shown as the file creation date (see field File Date in the file name structure) when exporting documents for the macrotransaction table (when the MTR_FILTER pipe parameter is set). The default parameter value is "mtr.local_date".
CHI_FILE_DATE	File name	Data shown as the file creation date (see field File Date in the file name structure) when exporting documents from CREDIT_HISTORY table (when the CHI_FILTER pipe parameter is set). The default parameter value is "doc.posting _date".
CUT_FILES_BY_FI	Y/N	Parameter showing how documents are grouped. When the default value "Y" is set for this parameter, exported documents are grouped into files according to the financial institutions whose contracts act as transaction channel targets or sources. Otherwise, all documents are exported in one file.
NORMALIZE_MODE	Y/N	This parameter when set to "Y" activates a special mode for creating outgoing files. This mode is used to export financial documents for the macrotransaction table (when the MTR_FILTER pipe parameter is set). The outgoing file for reversal (for example, dispute) transactions contains card contract data in the channel target fields and not in the channel source files where contract data appear by default. The default parameter value is "N".
EMPTY_FILES	Y/N	When this parameter is set to "Y", empty files will be created during the export procedure for financial institutions where no transactions were executed using their contracts. The default parameter value is "N" (such files are not created).
OEM	Y/N	Parameter showing in which encoding data will be exported to file: "Y" – data is exported in OEM encoding (DOS); "N" – data is exported in Windows encoding, this is the default value.
FEE_TYPE	DOC/MTR/ FULL	This parameter defines the data source for fields Source Fee and Target Fee of the outgoing file: "DOC" – DOC table; "MTR" – M_TRANSACTION table (Default value); "FULL" – ENTRY table. When the parameter value is set to "MTR" or "FULL", the fee amount will be determined depending on the value of the M_TRANSACTION table's Direction field: "Debit" – the fee amount will be multiplied by "-1" (i.e. charged with the opposite sign); "Credit" – the fee amount does not change; "None" – no fee is charged.

Parameter	Value	Parameter
FILE_TYPE	<Type>, <FilePref>, <DocMask>, <BatMask>, <LineLen>, <FICode>, <Ver>	This parameter defines the format of exported files. The parameter value is a list of values separated by semicolons. Any of the values from the following list may be omitted. <Type> – document type: TRANSACT – financial documents (Default value), AUTH – authorization documents; <FilePref> – first character of the file name; <DocMask> – mask for the document field; <BatMask> – not used; <LineLen> – line length; <FICode> – entry code in the FILE_INFO table: the admissible values are "TRN" (financial documents) and "AUI" (authorization documents); <Ver> – file format version number. List of file format versions is found in "Formats of Exported Documents".
EXPORT_TO_AGENT	Y/N	When this parameter is set to "Y", "EXPORT TO AGENT" mode is activated (see " Introduction"). Default parameter value is "N".
ONUS_SRC_CHANNEL		This parameter is used when exporting documents with parameters TGT_CHANNEL = "ON_US", SRC_CHANNEL = "ON_US" and activated mode EXPORT_TO_AGENT. This parameter is used to fill in the SRC_CHANNEL field of exported documents. Default value (when parameter is undefined) is "m".
ONUS_SRC_MBR_ID		This parameter is used when exporting documents with parameters TGT_CHANNEL = "ON_US", SRC_CHANNEL = "ON_US" and when EXPORT_TO_AGENT is activated. The parameter is used to fill in the SRC_MEMBER_ID field. If the parameter is not set or is set to "BANK_CODE", the Bank_Code of the device's financial institution is used.
FRGN_SRC_CHANNEL		This parameter is used when exporting documents with parameters TGT_CHANNEL = "ON_US", SRC_CHANNEL ≠ "ON_US" and when EXPORT_TO_AGENT mode is activated. Parameter is used to fill the SRC_CHANNEL field of exported documents. If the parameter is not indicated, then the system uses the SRC_CHANNEL value from the DOC table.

Parameter	Value	Parameter
FRGN_SRC_MBR_ID		This parameter is used when exporting documents with parameters TGT_CHANNEL = "ON_US", SRC_CHANNEL ≠ "ON_Us" and when EXPORT_TO_AGENT mode is activated. The parameter is used to fill in the SRC_MEMBER_ID field. If the parameter is set to "BANK_CODE", then the Bank_Code value of the contract source's financial institution will be used. If the parameter is not indicated, the value of the SRC_MEMBER_ID field from the DOC table is used.
FILTER_REVERSES	Y/N	Parameter determining whether reversal documents will be filtered during export. The default parameter value is "Y" (reversed documents will not be exported).
MARK_TRANS	Y/N	Parameter determining whether exported documents in the documents table will be set with (OUTWARD_STATUS) = “Y”. Default parameter value is "N" (outgoing status is not set).
CREDIT_HISTORY		This parameter is used to aggregate exported data from the CREDIT_HISTORY table. For example, the value "(select c.doc__id doc__id,c.curr curr,c.posting_date posting_date,sum(c.amount) amount from credit_history c where credit_type <> 'A' group by c.doc__id, c.curr, c.posting_date)" allows all table records related to one financial document to be exported as a separate string; moreover, the amount of the exported document will be equal to the amount of funds of the table records. The default value is "CREDIT_HISTORY" (every record in the table is exported as a separate string).

Formats of Exported Documents

The format of exported documents are defined by the value of parameter FILE_TYPE in pipe "RBS. Documents Export.dll". The current pipe version supports several file format versions for financial documents.

Format Version	Value of Parameter FILE_TYPE	Comments
20	TRANSACT,T, F3FDC000000014954ABFFFF10006,,607,TRN,20	Default format.
21	TRANSACT,T, F3FFFFE001FE14954ABFFFF10006,,689,TRN,21	Advanced format.
21a	TRANSACT,T,F3FFFFE001FE14974BBFFFF10F06,, 865,TRN,21a	Added export of contract RBS numbers, and WAY4 and RBS numbers of parent contracts for a SeeMain scenario.

Format Version	**Value of Parameter FILE_TYPE**	**Comments**
21b	TRANSACT,T,F3FFFFE001FE14974BBFFFF18FC6,,875,TRN,21b	Added export of document fields S_CAT and T_CAT and posting dates.
21c	TRANSACT,T,F3FFFFE001FE14974BBFFFF18F36,,875,TRN,21c	Same as 21b but the contract category is taken not from document fields but from contract entries.
21d	TRANSACT,T,F3FFFFE001FE14954ABFFFF1000E,,4689,TRN,21d	Same as 21 but the document field ADD_INFO is added
21e	TRANSACT,T,F3FFFFE001FE14974BBFFFF18FCE,,4875,TRN,21e	Same as 21b but the document field ADD_INFO is added.

Chapter 2. File Formats

Data File Formats for Financial Documents

These files contain data on financial documents. Files are both incoming and outgoing for the WAY4 system.

File data is stored in ASCII text format. The file consists of rows. The character combinations <CR><LF> are used as delimiters. Each file row contains one message. Types of messages in the file are the file header, the file trailer, the transaction message and the message with the transaction's EMV attributes. The first file message is the file header. The last file message is the file trailer. The message with the transaction's EMV attributes may only come after its corresponding transaction message.

Note that in the current implementation of import and export pipes, it is only possible to import a transaction's EMV attributes to WAY4. These attributes are not exported.

Field formats:

- **n** – numerical field containing only integers, right-justified and padded to the indicated length to the left with zeros.
- **ns** – numerical field containing only integers and decimal character. The character "." is used as the decimal point. The number of places in the decimal part is fixed and is shown in the field description. This value is right-justified and padded to the indicated length with spaces.
- **an** – character field that may contain any letters, integers, and special characters, left-justified and padded to the indicated length to the right with spaces.
- **JJJ** – date, where JJJ is the sequential number of the day in the year (001 … 366).
- **YYMM** – date, where YY are the last two numerals in the year (00 … 99), MM is the numerical value of the month in the year (01 … 12).
- **YYYYMMDD** – date, where YYYY is the year (0000 … 9999), MM is the sequential number of the month in the year (01 … 12), DD is the sequential number of the day in the month (01 … 31).
- **HHMISS** – time, where HH is hours (00 … 23), MI is minutes (00 … 59), SS is seconds (00 … 59).
- **b** – a binary field used only for delimiter symbols.

Usage indicators for data elements are as follows:

- **M** – the field is mandatory;
- **O** – the field is optional;
- C – data entry depends on values in other fields;

- **n/a** – the field is not used;
- **n/e** – field is absent.

If the field is not filled, it should contain spaces.

Money amounts are presented in minimal currency units (cents, pence…)

If table cells are divided into two parts, it indicates that the upper part relates to file import and the lower part to file export.

File name structure:

No.	Field	Pos	Len	Usage	Format	Description
1.	File Name Prefix	1	1	M	an	"T" The field value depends on the parameter of import pipe NAME_PREFIX; Default value – "T".
2.	File Sender File Receiver	2	4	M	ans	Sender ID. Codes are defined in the *Member ID* field of the BIN table ("Full → Configuration Setup → Routing → BIN Groups → [BIN Table]"). If the code length is less than four characters, it is padded to the right with zeros. If the length of a code in the table is 5 characters, the first 4 characters are used; if the code length is 6 characters, characters 2-5 are used. Receiver ID. Receiver codes are defined in the *Branch Code* field of the table found at "Full → Configuration Setup → Main Tables → Financial Institutions". If the code length is less than four characters, it is padded to the right with zeros. If the length of a code in the table is 5 characters, the first 4 characters are used; if the code length is 6 characters, characters 2-5 are used.
3.	Delimiter	6	1	M	ans	"_" (underline character).
4.	File Number	8	2	M	n	Sequential file number for the current day.
5.	Delimiter	9	1	M	ans	Character "."
6.	File Date	10	3	M	JJJ	File creation date.

File header structure:

No.	Field	Pos	Len	Usage	Format	Description
1.	Row Code	1	2	M	ans	“FH”
2.	Row Number	3	6	M	n	Row number in the file ("000001" – for the header).
3.	File Label	9	10	M	ans	“TRANSACT”
4.	Version	19	3	M	ans	“20 ” or “21 “ Field value depends on parameter FILE_TYPE; Default value – “20”.
5.	File Sender File Receiver	22	16	M	ans	Sender ID. Codes are defined in the *Member ID* field of the BIN table ("Full → Configuration Setup → Routing → BIN Groups → [BIN Table]"). Receiver ID. Receiver codes are defined in the *Branch Code* field of the table found at "Full → Configuration Setup → Main Tables → Financials Institutions".
6.	File Creation Date	38	8	M	YYYYMMDD	File creation date.
7.	File Creation Time	46	6	M	HHMISS	File creation time.
8.	File Number	52	4	M	n	Sequential file number for the current day.
9.	Source Contract Identification Type	56	1	M	ans	"N"
10.	Target Contract Identification Type	57	1	M	ans	Receiver contract identification method: "C" – by contract number (checks that the contract is present). “R” – by contract RBS number (checks that the contract is present), "N" – by contract number (without checking that contract is present). If the file header parameter Authorization Mode is set to "P" or "S", this parameter should be set to "C" or "R".
11.	Source Client Check Type	58	1	M	ans	"N"
12.	Target Client Check Type	59	1	M	ans	"N"

No.	Field	Pos	Len	Usage	Format	Description
13.	File Check Level	60	1	M	ans	Check and rejection level when error is found: "F" (file) – all file transactions are rejected if an error is found, "R" (transaction) – bad transactions are rejected, good ones are accepted (if a file format error is present, the entire file is rejected).
14.	Data Charset	61	1	M	ans	Character set: "D" – MS DOS, "W" – MS Windows.
15.	Message Type Auto-detection	62	1	M	ans	Transaction type detection: "F" – transaction type is shown in the file (in the Source Message Code field), "A" – the Source Message Code field shows the transaction class; the exact transaction type is detected during import (this mode can only be used with permission from OpenWay).
16.	File Structure	63	1	M	ans	"F"
17.	Authorization mode	64	1	M	ans	Authorization mode checking the transaction receiver's amount available: "P" – only documents whose accounts have the settlement amount available are processed; “S” – documents are processed for the available amount, "N" – all documents are processed.
18.	Reserved	65	10	M	ans	Filled with spaces.
19.	File Line Length	75	6	M	n	"000543" – for the 20th format version; "000625" – for the 21st format version. The field value depends on the import pipe parameter FILE_TYPE; the default value is "000543".

No.	Field	Pos	Len	Usage	Format	Description
20.	Detail Record Mask	81	35	M	ans	"F3FDC000000014954ABFFFF10" – for the 20th format version; "F3FFFFE001FE14954ABFFFF10" – for the 21st format version. The field value depends on the import pipe parameter FILE_TYPE; Default value is "F3FDC000000014954ABFFFF10" (20th format version).
21.	Batch Record Mask	116	35	C	ans	Reserved for use in future versions. Filled with spaces.
22.	Source Channel	151	1	O	ans	When this parameter is defined, the system will check that the indicated source channel is present in the WAY4 DB when importing. If the set value is not found, an error message will be generated. If the parameter value is not defined, the field is filled with spaces. Filled with spaces.
23.	Receiving Member Id	152	16	O	ans	When this parameter is defined, the system will check that the indicated Receiving Member ID is present in the WAY4 DB when importing. If the set value is not found, an error message will be generated. If the parameter value is not defined, the field is filled with spaces. Filled with spaces.
24.	Receiving Financial Institution	168	6	O	ans	When this parameter is defined, the system will check that the indicated receiving financial institution is present in the WAY4 DB when importing. If the set value is not found, an error message will be generated. If the parameter value is not defined, the field is filled with spaces.
25.	File Data Date	174	8	O	YYYYMMDD	Filled with spaces. Export file creation date.
26.	Reserved	182	359	M	ans	Filled with spaces. The length of this field depends on the import pipe parameter FILE_TYPE (field <LineLen>).
27.	Terminal Symbol	541	1	M	ans	Character "*"

No.	Field	Pos	Len	Usage	Format	Description
28.	Delimiter	542	2	M	b	0x0D, 0x0A (CRLF)

Transaction message structure:

No.	Int.ID	Field	Pos. 20	Pos. 21	Pos. 21a	Pos. 21b	Pos. 21d	Pos. 21e	Len	Usage	For mat	Description
1.		Row Code	1	1	1	1	1	1	2	M	ans	“RD”
2.		Row Number	3	3	3	3	3	3	6	M	n	Row number in the file.
3.	1	Transaction Number	9	9	9	9	9	9	10	n/a M	n	Transaction number in the file.
4.	2	Slip Number	19	19	19	19	19	19	30	M	ans	Document number.
5.	3	Transaction Type	49	49	49	49	49	49	4	n/a M	ans	Transaction type code. Encoding is defined in the TRANS_TYPE table. A value of the trans_code field in the above-mentioned table is exported as a transaction code, i.e. one and the same value is exported for both original and reversal transactions. To get more specific information about a transaction type, use field 10 (Request Category) in a transaction message.

No.	Int.ID	Field	Pos. 20	Pos. 21	Pos. 21a	Pos. 21b	Pos. 21d	Pos. 21e	Len	Usage	For mat	Description
6.	4	Source Message Code	53	53	53	53	53	53	15	M	ans	Source message code. Encoding is defined in the MESSAGE_TYPE table. For Credit Limit type documents, use constant "CREDIT_LIMIT". To withdraw funds available from the account, place characters "0:" before the code. Transaction class code. Used if auto-detection mode is activated (field Message Type Auto-detection of the file header): "DN" – debit transaction, "CN" – credit transaction; "DR" – reversal of debit transaction, "CR" – reversal of credit transaction.
7.	7	Is Authorization	68	68	68	68	68	68	1	n/a M	ans	Document type: “Y” – Authorization document (Auth), “N” – Financial document, “P” – Preauthorization document (PreAuth).
8.	8	Service Class	69	69	69	69	69	69	1	n/a _____ M	ans	Document class: "T" – Transaction; "M" – Miscellaneous; "A" – Account Transfer; "C" – Credit Limit.

No.	Int.ID	Field	Pos. 20	Pos. 21	Pos. 21a	Pos. 21b	Pos. 21d	Pos. 21e	Len	Usage	For mat	Description
9.	9	Message Category	70	70	70	70	70	70	1	n/a M	ans	Message category: "F" – File Summary, "B" – Batch Summary, "H" – Batch Header, "U" – Unique Message, "M" – Batch Message.
10.	10	Request Category	71	71	71	71	71	71	1	n/a M	ans	Request category: "Q" – Request, "P" – Advice, "R" – Reversal, "J" – Adjustment, "A" – Partial Advice.
11.	11	Transaction Date – Time	72	72	72	72	72	72	14	M	YYYYMMDDHHMISS	Calendar date and time of transaction.
12.	12	Transaction Currency	86	86	86	86	86	86	3	C	ans	Numerical currency code for the transaction in ISO-4217.
13.	13	Transaction Currency Exponent	89	89	89	89	89	89	1	C	ans	Decimal part of the amount in the transaction currency.
14.	14	Transaction Amount	90	90	90	90	90	90	15	C	n	Amount in the transaction currency.
15.	15	Transaction Amount Sign	n/e	105	105	105	105	105	1	M	ans	Sign of the amount in the transaction currency.
16.	16	Settlement Currency	105	106	106	106	106	106	3	O	ans	Numerical settlement currency code in ISO-4217.

No.	Int.ID	Field	Pos. 20	Pos. 21	Pos. 21a	Pos. 21b	Pos. 21d	Pos. 21e	Len	Usage	For mat	Description
17.	17	Settlement Currency Exponent	108	109	109	109	109	109	1	O	ans	Decimal part of the amount in the settlement currency.
18.	18	Settlement Amount	109	110	110	110	110	110	15	O	n	The amount in the settlement currency.
19.	19	Settlement Amount Sign	n/e	125	125	125	125	125	1	O	ans	Sign of the amount in the settlement currency.
20.	20	Source Account Currency	n/e	126	126	126	126	126	3	n/a O	ans	Numerical source contract currency code in ISO-4217.
21.	21	Source Account Currency Exponent	n/e	129	129	129	129	129	1	n/a O	ans	Decimal part of the amount in the source contract's currency.
22.	22	Source Account Amount	n/e	130	130	130	130	130	15	n/a O	n	Amount in source contract's currency.
23.	23	Source Account Amount Sign	n/e	145	145	145	145	145	1	n/a O	ans	Sign of the amount in the source contract's currency.
24.	24	Target Account Currency	n/e	146	146	146	146	146	3	n/a O	ans	Numerical target contract currency code in ISO-4217.
25.	25	Target Account Currency Exponent	n/e	149	149	149	149	149	1	n/a O	ans	Decimal part of the amount in the target contract currency.
26.	26	Target Account Amount	n/e	150	150	150	150	150	15	n/a O	n	Amount in the receiver contract's currency.

No.	Int.ID	Field	Pos. 20	Pos. 21	Pos. 21a	Pos. 21b	Pos. 21d	Pos. 21e	Len	Usage	For mat	Description
27.	27	Target Account Amount Sign	n/e	165	165	165	165	165	1	n/a O	ans	Sign of the amount in the target contract's currency.
28.	40	Source Fee Currency	n/e	166	166	166	166	166	3	n/a O	ans	Numerical source fee currency in ISO-4217.
29.	41	Source Fee Currency Exponent	n/e	169	169	169	169	169	1	n/a O	ans	Decimal part of the amount in the source fee currency.
30.	42	Source Fee Amount	n/e	170	170	170	170	170	15	n/a O	n	Source fee amount.
31.	43	Source Fee Amount Sign	n/e	185	185	185	185	185	1	n/a O	ans	Sign of the source fee amount.
32.	44	Target Fee Currency	n/e	186	186	186	186	186	3	n/a O	ans	Numerical target fee currency in ISO-4217.
33.	45	Target Fee Currency Exponent	n/e	189	189	189	189	189	1	n/a O	ans	Decimal part of the amount in the target fee currency.
34.	46	Target Fee Amount	n/e	190	190	190	190	190	15	n/a O	n	Target fee amount.
35.	47	Target Fee Amount Sign	n/e	205	205	205	205	205	1	n/a O	ans	Sign of the target fee amount.
36.	52	Source Member Id	124	206	206	206	206	206	16	O	ans	Sender ID in source channel's encoding.
37.	54	Receiving Member Id	140	222	222	222	222	222	16	O	ans	Receiver ID in source channel's encoding.

No.	Int.ID	Field	Pos. 20	Pos. 21	Pos. 21a	Pos. 21b	Pos. 21d	Pos. 21e	Len	Usage	For mat	Description
38.	57	Source Message Channel	156	238	238	238	238	238	1	C	ans	Source message channel code. Codes are defined in the *Code* field of the table at "Full → Configuration Setup → Main Tables → Message Channels". It is recommended that users not fill this field for financial transactions if transactions have been executed on a device registered in WAY4.
39.	60	Source Identification Specification	157	239	239	239	239	239	2	C	ans	Additional transaction sender number.
40.	62	Original Source Number	159	241	241	241	241	241	24	M	ans	Transaction source number ID.
41.	63	Source RBS Number	n/e	n/e	265	265	n/e	265	32	n/a O	ans	Source contract RBS number.
42.	64	Source Account Type	183	265	297	297	265	297	1	O	ans	Transaction source account type code; this account is used for posting. Codes are defined in "Full → Configuration Setup → Accounting Setup → Account Types".

No.	Int.ID	Field	Pos. 20	Pos. 21	Pos. 21a	Pos. 21b	Pos. 21d	Pos. 21e	Len	Usage	For mat	Description
43.	66	Target Message Channel	184	266	298	298	266	298	1	O	ans	Target message channel code. Codes are defined in the *Code* field of the table at "Full → Configuration Setup → Main Tables → Message Channels".
44.	69	Target Identification Specification	185	267	299	299	267	299	2	C	ans	Relation code between the target contract and related contract. For example: "00" – Default value, "10" – Savings, "20" – Checking, "30" – Universal. Codes are defined in the table at "Full → Configuration Setup → Accounting Setup → Contract Relations".
45.	71	Original Target Number	187	269	301	301	269	301	24	M	ans	Transaction target ID.
46.	72	Target RBS Number	n/e	n/e	325	325	n/e	325	32	n/a O	ans	Target RBS number.
47.	73	Target Account Type	211	293	357	357	293	357	1	O	ans	Target account type code; this account is used for posting. Codes are defined in the table at "Full → Configuration Setup → Accounting Setup → Account Types".

No.	Int.ID	Field	Pos. 20	Pos. 21	Pos. 21a	Pos. 21b	Pos. 21d	Pos. 21e	Len	Usage	For mat	Description
48.	75	Merchant ID	212	294	358	358	294	358	32	C	ans	Merchant ID, corresponds to the *Card Acceptor ID* field in the contract device's configuration.
49.	76	SIC Code	244	326	390	390	326	390	4	C	ans	Merchant SIC (MCC).
50.	77	City	248	330	394	394	330	394	16	C	ans	City where transaction was executed.
51.	78	Country	264	346	410	410	346	410	3	C	ans	Three-character country code where transaction was executed. Codes are defined in ISO-3166 in the *Code (3 Bytes)* field of the table at "Full→ Configuration Setup→ Main Tables→ Country Table".
52.	79	Card Expiry Date	267	349	413	413	349	413	4	C	YY MM	Card expiry date.
53.	80	Card Sequence Number	271	353	417	417	353	417	1	C	n	Card sequence number in WAY4.
54.	81	Transaction Condition	272	354	418	418	354	418	4	C	ans	Transaction condition. Codes are defined in the *Code* field of the Transaction Conditions dictionary.
55.	82	Approval Code	276	358	422	422	358	422	6	C	ans	Authorization code.
56.	83	Retrieval Reference Number	282	364	428	428	364	428	12	C	ans	Unique retrieval reference number.

No.	Int.ID	Field	Pos. 20	Pos. 21	Pos. 21a	Pos. 21b	Pos. 21d	Pos. 21e	Len	Usage	For mat	Description
57.	84	Acquirer Reference Number	294	376	440	440	376	440	30	O	ans	Transaction ID given to the payment system by the acquirer (Acquirer Reference Number).
58.	85	Issuer Reference Number	324	406	470	470	406	470	30	O	ans	Transaction ID given to the payment system by the issuer (Issuer Reference Number).
59.	86	Transaction Details	354	436	500	500	436	500	32	C	ans	Transaction details.
60.	87	Reason Details	386	468	532	532	468	532	100	O	ans	Additional transaction details.
61.	88	CPS Data	486	568	632	632	568	632	21	O	ans	Information for CPS (Customer Payment Data) support. Filled for CPS transactions.
62.	89	Reason Code	507	589	653	653	589	653	4	C	ans	Reason code for the dispute document. Used for dispute documents.
63.	90	Requirement Code	511	593	657	657	593	657	4	C	ans	Code for additional required information. Used for dispute documents.
64.	91	Processing Class	515	597	661	661	597	661	10	O	ans	"ECHA", "ECRD", etc.
65.	92	Required Processing Date	525	607	671	671	607	671	8	O	YYYYMMDD	Banking date when the document should be processed.

No.	Int.ID	Field	Pos. 20	Pos. 21	Pos. 21a	Pos. 21b	Pos. 21d	Pos. 21e	Len	Usage	For mat	Description
66.	96	Settlement Date	533	615	679	679	615	679	8	n/a	YYY YMM DD	Processing date for the payment system document (corresponds to the FX Settl Date field of the DOC table).
67.	97	Posting Date	n/e	n/e	n/e	687	n/e	687	8	n/a M	YYY YMM DD	Posting date.
68.	101	Parent Source Number	n/e	n/e	687	695	n/e	695	24	n/a O	ans	Parent source contract ID. This field is filled if the authorization scenario for the transaction source contract is "See Main".
69.	102	Parent Source RBS Number	n/e	n/e	711	719	n/e	719	32	n/a O	ans	Parent source RBS number. This field is filled if the contract's source authorization scenario is the "See Main" transaction.
70.	103	Parent Target Number	n/e	n/e	743	751	n/e	751	24	n/a O	ans	Parent target number. This field is filled if the contract's source authorization scenario is the "See Main" transaction.
71.	104	Parent Target RBS Number	n/e	n/e	767	775	n/e	775	32	n/a O	ans	Parent target RBS number. This field is filled if the contract's source authorization scenario is the "See Main" transaction.

No.	Int.ID	Field	Pos. 20	Pos. 21	Pos. 21a	Pos. 21b	Pos. 21d	Pos. 21e	Len	Usage	For mat	Description
72.	105	Source Category	n/e	n/e	n/e	807	n/e	807	1	n/a O	ans	Source contract category (value of field S_CAT of the DOC table).
73.	106	Target Category	n/e	n/e	n/e	808	n/e	808	1	n/a O	ans	Target contract category (value of field T_CAT of the DOC table).
74.	109	Add Info	n/e	n/e	n/e	n/e	623	809	4000	O	ans	Additional document data in the form of tags: <Tag Name 1>=<Tag Value 1>; <Tag Name 2>=<Tag Value 2>;…
75.	110	Full Source Account Type	541	623	799	809	4623	4809	32	O	ans	Transaction source account type code; this account is used for posting. Codes are defined in "Full → Configuration Setup → Accounting Setup → Account Types".
76.	110	Full Target Account Type	573	655	831	841	4655	4841	32	O	ans	Target account type code; this account is used for posting. Codes are defined in the table at "Full → Configuration Setup → Accounting Setup → Account Types".
77.		Terminal Symbol	605	687	863	873	4687	4873	1	M	ans	Character "*"
78.		Delimiter	506	688	864	874	4688	4874	2	M	b	0x0D, 0x0A (CRLF)

Format of EMV transaction attribute message:

No.	Field	Pos	Len	Usage	Format	Value
1.	Row Code	1	2	M	ans	“R1”
2.	Row Number	3	6	M	n	Row number in the file.
3.	Application Cryptogram	9	16	M	ans	EMV data element tag 9F26.
4.	Cryptogram Info Data	25	2	M	ans	EMV data element tag 9F27
5.	Issuer Application Data	27	64	M	ans	EMV data element tag 9F10.
6.	Unpredictable Number	91	8	M	ans	EMV data element tag 9F37.
7.	ATC	99	4	M	ans	EMV data element tag 9F36
8.	TVR	103	10	M	ans	EMV data element tag 95
9.	Transaction Type	113	2	M	ans	EMV data element tag 9C.
10.	Application Interchange Profile	115	4	M	ans	EMV data element tag 82.
11.	Amount Other	119	12	O	n	EMV data element tag 9F03.
12.	Terminal Capabilities	131	6	M	ans	EMV data element tag 9F33.
13.	CVM Results	137	6	O	ans	EMV data element tag 9F34.
14.	Terminal Type	143	2	O	ans	EMV data element tag 9F35.
15.	IFD Serial Number	145	8	O	ans	EMV data element tag 9F1E.
16.	Transaction Category Code	153	1	O	ans	EMV data element tag 9F53.
17.	Dedicated File Name	154	32	O	ans	EMV data element tag 84.
18.	Terminal Application Version Number	186	4	O	ans	EMV data element tag 9F09.
19.	Transaction Sequence Counter	190	8	O	n	EMV data element tag 9F41.
20.	Issuer Script 1 Result	198	40	O	ans	Field 143. V.I.P. system BASE I Technical specifications, 30 June 2000.
21.	ARPC Response code	238	2	M	ans	EMV data element tag 8A.
22.	Terminal Country Code	240	3	O	ans	EMV data element tag 9F1A.
23.	EMV Transaction Date	243	8	O	YYYYMMDD	EMV data element tag 9A.
24.	EMV Transaction Amount	251	12	O	n	EMV data element tag 81.

No.	Field	Pos	Len	Usage	Format	Value
25.	EMV Transaction Currency	263	3	O	ans	EMV data element tag 5F2A.
26.	EMV Card Sequence Number	266	3	O	ans	EMV data element tag 5F34.
27.	Reserved	269	272	M	ans	Filled with spaces. Length of this field depends on the import pipe parameter FILE_TYPE (field <LineLen>).
28.	Terminal Symbol	541	1	M	ans	Character "*"
29.	Delimiter	542	2	M	b	0x0D, 0x0A (CRLF)

File trailer structure:

No.	Field	Pos	Len	Usage	Format	Description
1.	Row Code	1	2	M	ans	“FT”
2.	Row Number	3	6	M	n	Row number in the file.
3.	Number of Batches	9	6	M	n	Quantity of transaction messages in the file.
4.	Hash File Total	15	18	M	n	Check sum. Values in the Transaction Amount field are totaled without taking into consideration the currency, sign and decimal place of the amount.
5.	Reserved	33	508	M	ans	Filled with spaces. Length of this field depends on the import pipe parameter FILE_TYPE (field <LineLen>).
6.	Terminal Symbol	541	1	M	ans	Character "*"
7.	Delimiter	542	2	M	b	0x0D, 0x0A (CRLF)

File Format for Authorization Documents

These files contain data on authorization documents. Files may be both incoming and outgoing for WAY4.

File data is stored in ASCII text format. The file consists of rows. The character combinations <CR><LF> are used as delimiters. Each file row contains one message. Types of messages in the file are the file header, the file trailer, and the authorization message. The first file message is the file header. The last file message is the file trailer.

Field formats:

- **n** – numerical field containing only integers, right-justified and padded to the indicated length to the left with zeros.
- **ns** – numerical field containing only integers and decimal character. The character "." is used as the decimal point. The number of places in the decimal part is fixed and is shown in the field description. This value is right-justified and padded to the indicated length with spaces.
- **ans** – character field that may contain any letters, integers, and special characters, left-justified and padded to the indicated length to the right with spaces.
- **JJJ** – date, where JJJ is the sequential number of the day in the year (001 … 366).
- **YYMM** – date, where YY are the last two numerals in the year (00 … 99), MM is the numerical value of the month in the year (01 … 12).
- **YYYYMMDD** – date, where YYYY is the year (0000 … 9999), MM is the sequential number of the month in the year (01 … 12), DD is the sequential number of the day in the month (01 … 31).
- **b** – binary field used only for delimiter symbols.

Usage indicators for data elements are as follows:

- **M** – field is mandatory;
- **O** – field is optional;
- C – data entry depends on values in other fields;
- **n/a** – field is not used.

If the field is not filled, it should contain spaces.

Money amounts are presented in minimal currency units (cents, pence…)

If table cells are divided into two parts, it indicates that the upper part relates to file import and the lower part to file export.

File name structure:

No.	Field	Pos	Len	Usage	Format	Description
1.	File Name Prefix	1	1	M	an	Field value depends on import pipe parameter NAME_PREFIX; default value is "K". Field value depends on import pipe parameter FILE_TYPE; Default value – "K".
2.	File Sender File Receiver	2	4	M	ans	Sender ID. Codes are defined in the *Member ID* field of the BIN table ("Full → Configuration Setup → Routing → BIN Groups → [BIN Table]"). If the code length is less than four characters, it is padded to the right with zeros. If the length of a code in the table is 5 characters, the first 4 characters are used; if the code length is 6 characters, characters 2-5 are used. Receiver ID. Receiver codes are defined in the *Branch Code* field of the table found at "Full → Configuration Setup → Main Tables → Financial Institutions". If the code length is less than four characters, it is padded to the right with zeros. If the length of a code in the table is 5 characters, the first 4 characters are used; if the code length is 6 characters, characters 2-5 are used.
3.	Delimiter	6	1	M	ans	"_" (underline character).
4.	File Number	8	2	M	n	Sequential file number for the current day.
5.	Delimiter	9	1	M	ans	Character "."
6.	File Date	10	3	M	JJJ	Authorization date contained in the file. For import, the calendar file creation date is recommended.

File header structure:

No.	Field	Pos	Len	Usage	Format	Description
1.	Row Code	1	2	M	ans	“FH”
2.	Row Number	3	6	M	n	Row number in the file ("000001" for the header).
3.	File Label	9	10	M	ans	“AUTH”
4.	Version	19	3	M	ans	“20” Field value depends on the import pipe parameter FILE_TYPE; default value is “20”.

No.	Field	Pos	Len	Usage	Format	Description
5.	File Sender File Receiver	22	16	M	ans	Sender ID. Codes are defined in the *Member ID* field of the BIN table ("Full → Configuration Setup → Routing → BIN Groups → [BIN Table]"). Receiver ID. Receiver codes are defined in the *Branch Code* field of the table found at "Full → Configuration Setup → Main Tables → Financials Institutions".
6.	File Creation Date	38	8	M	YYYYMMDD	File creation date.
7.	File Creation Time	46	6	M	HHMISS	File creation time.
8.	File Number	52	4	M	n	Sequential file number for the current day.
9.	Source Contract Identification Type	56	1	M	ans	"N"
10.	Target Contract Identification Type	57	1	M	ans	"N"
11.	Source Client Check Type	58	1	M	ans	"N"
12.	Target Client Check Type	59	1	M	ans	"N"
13.	File Check Level	60	1	M	ans	File check and rejection level when errors are detected: "F" (file) – all file transactions are rejected if errors are found, "R" (transaction) – transactions containing errors are rejected, transactions not containing errors are accepted (if a file format error is found, the entire file is rejected).
14.	Data Charset	61	1	M	ans	Data character table: "D" – MS DOS, "W" – MS Windows.
15.	Message Type Auto-detection	62	1	M	ans	"F"
16.	File Structure	63	1	M	ans	"F"
17.	Authorization mode	64	1	M	ans	"N"
18.	Reserved	65	10	M	ans	Filled with spaces.
19.	File Line Length	75	6	M	n	"000500" Field value depends on the import pipe parameter FILE_TYPE; default value "000500".

No.	Field	Pos	Len	Usage	Format	Description
20.	Detail Record Mask	81	35	M	ans	"b03dc0000001d0ce2f3fe400d" Field value depends on the import pipe parameter FILE_TYPE; default value is "b03dc0000001d0ce2f3fe400d" (corresponds to the 20th format version).
21.	Batch Record Mask	116	35	C	ans	Reserved for use in future versions. Filled with spaces.
22.	Source Channel	151	1	O	ans	When this parameter is defined, the system will check that the indicated source channel is present in the WAY4 DB when importing. If the set value is not found, an error message will be generated. If the parameter value is not defined, the field is filled with spaces. Filled with spaces.
23.	Receiving Member Id	152	16	O	ans	When this parameter is defined, the system will check that the indicated Receiving Member ID is present in the WAY4 DB when importing. If the set value is not found, an error message will be generated. If the parameter value is not defined, the field is filled with spaces. Filled with spaces.
24.	Receiving Financial Institution	168	6	O	ans	When this parameter is defined, the system will check that the indicated receiving financial institution is present in the WAY4 DB when importing. If the set value is not found, an error message will be generated. If the parameter value is not defined, the field is filled with spaces. Filled with spaces.
25.	File Data Date	174	8	n/a M	YYYYMMDD	Filled with spaces. Authorization date contained in the file.

No.	Field	Pos	Len	Usage	Format	Description
26.	Reserved	182	316	M	ans	Filled with spaces. Length of this field depends on the import pipe parameter FILE_TYPE (field <LineLen>).
27.	Terminal Symbol	498	1	M	ans	Character "*"
28.	Delimiter	499	2	M	b	0x0D, 0x0A (CRLF)

Authorization message structure:

No.	Int. ID	Field	Pos. 20	Len	Usage	Format	Description
1.		Row Code	1	2	M	ans	“RD”
2.		Row Number	3	6	M	n	Row number in the file.
3.	1	Transaction Number	9	10	n/a M	ans	Transaction ID (value of the ID field in the DOC table).
4.	3	Transaction Type	19	4	O	ans	Transaction type code. Codes are defined in the TRANS_TYPE table.
5.	4	Source Message Code	23	15	O	ans	Source message code. Codes are defined in the MESSAGE_TYPE table.
6.	11	Transaction Date – Time	38	14	M	YYYYMMDD HHMISS	Calendar date and time the transaction was executed.
7.	12	Transaction Currency	52	3	M	ans	Numerical transaction currency code in ISO-4217.
8.	13	Transaction Currency Exponent	55	1	M	ans	Transaction currency exponent.
9.	14	Transaction Amount	56	15	M	n	Amount in the transaction currency.
10.	16	Settlement Currency	71	3	O	ans	Numerical settlement currency code in ISO-4217.
11.	17	Settlement Currency Exponent	74	1	O	ans	Settlement currency exponent.
12.	18	Settlement Amount	75	15	O	N	Amount in the settlement currency.
13.	48	Authorization Currency	90	3	n/a C	ans	Numerical authorization currency code in ISO-4217.

No.	Int. ID	Field	Pos. 20	Len	Usage	Format	Description
14.	49	Authorization Currency Exponent	93	1	n/a C	ans	Authorization currency exponent.
15.	50	Authorization Amount	94	15	n/a C	n	Authorization amount.
16.	52	Source Member Id	109	16	O	ans	Source channel sender code.
17.	57	Source Message Channel	125	1	O	ans	Source message channel. Codes are defined in the *Code* field in the table at "Full → Configuration Setup → Main Tables → Message Channels".
18.	58	Source Contract Type	126	4	n/a O	ans	Source contract type. Codes are defined in the CONTR_TYPE table.
19.	61	Source Contract Number	130	24	n/a O	ans	Source contract number.
20.	62	Original Source Number	154	24	M	ans	Original source number (value of field SOURCE_NUMBER in the DOC table).
21.	63	Source RBS Number	178	32	n/a O	ans	Source RBS number.
22.	67	Target Contract Type	210	4	n/a O	ans	Target contract type. Codes are defined in the CONTR_TYPE table.

No.	Int. ID	Field	Pos. 20	Len	Usage	Format	Description
23.	69	Target Identification Specification	214	2	C	ans	Relation type code between the source and the related contract. For example: "00" – Default value, "10" – Savings, "20" – Checking, "30" – Universal. Codes are defined in the table at "Full → Configuration Setup → Accounting Setup → Contract Relations".
24.	70	Target Contract Number	216	24	n/a O	ans	Target contract number.
25.	71	Original Target Number	240	24	M	ans	Target ID number (value of field TARGET_NUMBER in the DOC table).
26.	72	Target RBS Number	264	32	n/a O	ans	Target RBS number.
27.	75	Merchant ID	296	32	O	ans	Merchant ID, corresponds to the *Card Acceptor ID* field in the contract device configuration.
28.	76	SIC Code	328	4	O	ans	Merchant SIC (MCC).
29.	77	City	332	16	O	ans	City where transaction was executed.
30.	78	Country	348	3	O	ans	Three-character code of the country where the transaction was executed. Codes are defined in ISO-3166 in the *Code (3 Bytes)* field in the table at "Full→ Configuration Setup→ Main Tables→ Country Table".
31.	79	Card Expiry Date	351	4	M	YYMM	Card expiry date.
32.	80	Card Sequence Number	355	1	O	n	Card sequence number in WAY4.

No.	Int. ID	Field	Pos. 20	Len	Usage	Format	Description
33.	81	Transaction Condition	356	4	M	ans	Transaction condition. Codes are defined in the *Code* field of the Transaction Conditions dictionary.
34.	82	Approval Code	360	6	C	ans	Authorization code.
35.	83	Retrieval Reference Number	366	12	O	ans	Unique retrieval reference number.
36.	86	Transaction Details	378	32	O	ans	Transaction details.
37.	97	Document Date	410	8	n/a M	YYYYMMDD	Banking date of the authorization.
38.	98	Authorization Date-Time	418	14	n/a C	YYYYMMDD HHMISS	Calendar date and time of the authorization.
39.	100	Response Code	432	3	n/a M	ans	Response code.
40.		Reserved	435	63	M	ans	Filled with spaces. Length depends on import pipe parameter FILE_TYPE (field <LineLen>).
41.		Terminal Symbol	498	1	M	ans	Character "*"
42.		Delimiter	499	2	M	b	0x0D, 0x0A (CRLF)

File trailer structure:

No.	Field	Pos	Len	Usage	Format	Description
1.	Row Code	1	2	M	ans	“FT”
2.	Row Number	3	6	M	n	Row number in the file.
3.	Number of Batches	9	6	M	n	Number of transaction messages in the file.
4.	Hash File Total	15	18	M	n	Check sum. Values are totaled from the Transaction Amount field without taking into account the currency, sign, and decimal place.
5.	Reserved	33	465	M	ans	Filled with spaces. The length of this field depends on the import pipe parameter FILE_TYPE (field <LineLen>).
6.	Terminal Symbol	498	1	M	ans	Character "*"
7.	Delimiter	499	2	M	b	0x0D, 0x0A (CRLF)

Response File Format (Importing Documents)

This file is sent by WAY4 as a response to an incoming financial or authorization document and serves to confirm file acceptance. It contains information on errors in the incoming file.

The response file is created in the outgoing mail directory of the corresponding financial institution (file sender).

File data is stored in ASCII text format. The entry length is 242 bytes, including two bytes of delimiters (CRLF). Each row in the file contains a message. Types of messages in the file are the file header, the file trailer, and the error message. The first file message is the file header. The last file message is the file trailer. If the incoming file does not contain errors, the file will only contain the file header and trailer.

Field formats:

- **n** – numerical field containing only integers, right-justified and padded to the indicated length to the left with zeros.
- **ns** – numerical field containing only integers and decimal character. The character "." is used as the decimal point. The number of places in the decimal part is fixed and is shown in the field description. This value is right-justified and padded to the indicated length with spaces.
- **ans** – character field that may contain any letters, integers, and special characters, left-justified and padded to the indicated length to the right with spaces.
- **JJJ** – date, where JJJ is the sequential number of the day in the year (001 … 366).
- **YYMM** – date, where YY are the last two numerals in the year (00 … 99), MM is the numerical value of the month in the year (01 … 12).
- **YYYYMMDD** – date, where YYYY is the year (0000 … 9999), MM is the sequential number of the month in the year (01 … 12), DD is the sequential number of the day in the month (01 … 31).
- **b** – binary field used only for delimiter symbols.

Usage indicators for data elements are as follows:

- **M** – field is mandatory;
- **O** – field is optional;
- C – data entry depends on other conditions.

If the field is not filled, it should contain spaces.

File name format:

No.	Field	Pos	Len	Usage	Format	Value
1.	File Name Prefix	1	1	M	ans	“W”
2.	Inward File Sender	2	4	M	ans	Incoming file sender ID. If the code length is greater than four characters, only the last four characters are used. If the code length is less than four characters, it is padded to the right with zeros. Corresponds to the value of the File Sender field of the incoming file.
3.	Delimiter	6	1	M	ans	"_" (underline character).
4.	Inward File Number	7	2	M	n	Sequential number of the incoming file for the current day. Corresponds to the value of the File Number field of the incoming file.
5.	Delimiter	9	1	M	ans	Character "."
6.	Inward File Date	10	3	M	JJJ	Incoming file creation date. Corresponds to the value of the File Date field of the incoming file.

File header format:

No.	Field	Pos	Len	Usage	Format	Value
1.	Row Code	1	2	M	ans	“FH”
2.	Row Number	3	6	M	n	Row number in the file ("000001" for the header).
3.	Filler	9	1	M	ans	Space character.
4.	File Label	10	10	M	ans	“TRANS-RESP”
5.	Filler	20	1	M	ans	Space character.
6.	Version	21	3	M	ans	Version number.
7.	Filler	24	1	M	ans	Space character.
8.	Inward File Sender	25	6	M	ans	Incoming file sender ID. Corresponds to the value of the File Sender field of the incoming file.
9.	Filler	31	1	M	ans	Space character.
10.	Inward File Date	32	10	M	YYYY/MM/DD	Creation date of the incoming fle. Corresponds to the value of the File Date field of the incoming file.
11.	Filler	42	1	M	ans	Space character.

No.	Field	Pos	Len	Usage	Format	Value
12.	Inward File Time	43	8	M	HH:MI:SS	Creation time of the incoming file. Corresponds to the value of the File Time field of the incoming file.
13.	Filler	51	1	M	ans	Space character.
14.	Reserved	52	2	M	n	Filled with zeros.
15.	Inward File Number	54	2	M	n	Sequential number of the incoming file for the current day. Corresponds to the File Number field of the incoming file.
16.	Filler	56	1	M	ans	Space character.
17.	File Date	57	10	M	YYYY/MM/DD	Response file creation date.
18.	Filler	67	1	M	ans	Space character.
19.	File Time	68	8	M	HH:MI:SS	Response file creation time.
20.	Reserved	76	164	M	ans	Filled with spaces.
21.	Terminal Symbol	240	1	M	ans	Character "*"
22.	Delimiter	241	2	M	b	0x0D, 0x0A (CRLF)

File trailer format:

No.	Field	Pos	Len	Usage	Format	Value
1.	Row Code	1	2	M	ans	“FT”
2.	Row Number	3	6	M	n	Row number in the file.
3.	Filler	9	1	M	ans	Space character.
4.	Number of Messages	10	6	M	n	Number of information messages in the file.
5.	Filler	16	1	M	ans	Space character.
6.	File Response Flag	17	23	M	ans	File response flag: "FILE REJECTED" – file rejected, "FILE ACCEPTED" – file accepted. "FILE ACCEPTED PARTIALLY" – file is partially accepted, some documents were rejected.
7.	Filler	40	1	M	Ans	Space character.
8.	Number of Accepted Documents	41	6	M	N	Number of accepted documents.

No.	Field	Pos	Len	Usage	Format	Value
9.	Filler	47	1	M	Ans	Space character.
10.	Number of Rejected Documents	48	6	M	N	Number of rejected documents.
11.	Filler	54	1	M	Ans	Space character.
12.	Inward File Hash Total	55	18	N	N	Check sum for incoming files. Values in the Transaction Amount field are totaled without taking into account the currency, sign, and decimal place.
13.	Filler	73	1	M	Ans	Space character.
14.	File Hash Acceptance Total	74	18	N	N	Check sum for accepted transactions. Values in the Transaction Amount field or the Settlement field (if Authorization mode="S") are totaled without taking into account the currency, sign or decimal place.
15.	Filler	92	1	M	Ans	Space character.
16.	Reserved	93	147	M	Ans	Filled with spaces.
17.	Terminal Symbol	240	1	M	Ans	Character "*".
18.	Delimiter	241	2	M	B	0x0D, 0x0A (CRLF)

Information message format:

No.	Field	Pos	Len	Usage	Format	Value
1.	Row Code	1	2	M	ans	“RD”
2.	Row Number	3	6	M	n	Row number in the file.
3.	Filler	9	1	M	ans	Space character.
4.	Inward Row Number	10	6	C	n	Incoming file row number. Field is filled in error messages.
5.	Filler	16	1	M	ans	Space character.
6.	Message Type	17	5	C	ans	Filled with spaces.
7.	Filler	22	1	M	ans	Space character.
8.	Reserved	23	30	C	ans	Filled with spaces.
9.	Filler	53	1	M	ans	Space character.
10.	Inward Document Number	54	30	C	ans	Document number in the incoming file. Filled if the document number was read during import.

No.	Field	Pos	Len	Usage	Format	Value
11.	Filler	84	1	M	ans	Space character.
12.	Message	85	100	M	ans	Error description.
13.	Filler	185	1	M	ans	Space character.
14.	Error Code	186	4	M	ans	Error code.
15.	Reserved	190	50	M	ans	Filled with spaces.
16.	Terminal Symbol	240	1	M	ans	Character "*".
17.	Delimiter	241	2	M	b	0x0D, 0x0A (CRLF)