Structure of RFT (MT101) file

Each RFT file (SWIFT MT101 format file) consists of a SWIFT header (optional), the MUG (message user group), a common sequence A, and sequence B, which contains the details of the transaction.

Sequence A, General Information, is a single occurrence mandatory sequence and contains information to be applied to all individual transactions detailed in sequence B.

Sequence B, Transaction Details, is a repetitive sequence. Each occurrence provides details of one individual transaction. Fields which appear in both sequences are mutually exclusive (apply to fields 50a C or L, 50a G or H, 52a).

The parties (see Chapter 1.1) are not necessarily different entities. The first column shows the parties that can be omitted in an MT101, either because their function is not present or the function is assumed by a party in the second column:

If the following party is missing...		Their function is assumed by...	
50a C/L	Instructing Party	50a G/H	Ordering Customer
52a	Account Servicing Institution	R	Receiver (or the institution determined from the account number in field 50H)
56a	Intermediary	57a	Account With Institution
57a	Account With Institution	R	Receiver (or the institution determined from the account number in field 59)

The maximum length of the messages when sent within the SWIFT network is 10,000 characters. The module also forms a new logical file after each 10,000 characters. The length can be modified by a setting in the MCCRFTSWIFT.INI from ..\MCCWIN\DAT.

Rules (Conditions):

C1)
If an exchange rate is given in field 36, the corresponding forex deal must be referenced in field 21F.

Sequence B if field 36 is…	Sequence B then field 21F is…
Present	Mandatory
Not present	Optional

C2)
In each occurence of sequence B, if field 33B is present and amount in field 32B is not equal to zero, then field 36 must be present, otherwise field 36 is not allowed

Within the same occurrence of sequence B		
If field 33B is ...	**And amount in field 32B**	**Then field 36 is …**

Present	Equals zero	Not allowed
Present	Not equals zero	Mandatory
Not present	Not applicable	Not allowed

C3)
If there is only one debit account, the ordering customer must be identified in field 50a (option G or H) in sequence A. Conversely, if multiple debit accounts are used, they must be identified for every transaction in field 50a (option G or H) of sequence B.

Consequently, field 50a (option G or H), must be present in either sequence A or in each occurrence of sequence B, but must never be present in both sequences, nor be absent from both sequences.

Sequence A if field 50a (option G or H) is…	In every occurrence of sequence B then field 50a (option G or H) is…
Present	Not allowed
Not present	Mandatory

C4)
Field 50a (option C or L), may be present in either sequence A, or in each occurrence of sequence B, but must not be present in both sequences A and B.

Sequence A if field 50a (option C or L) is…	Sequence B then field 50a (option C or L) is…
Present	Not allowed
Not present	Optional in any occurrence

C5)
If field 33B is present in sequence B, its currency code must be different from the currency code in field 32B in the same occurrence of sequence B.

Examples:

Valid:
:32B:USD1000,
:33B:CHF1200,

:32B:CHF1200,
:33B:USD1000,

Invalid:

:32B:USD1000,00
:33B:USD1000,
:32B:CHF1200,
:33B:CHF1000,00

C6)

Field 52a may be present in either sequence A or in each occurrence of sequence B, but must not be present in both sequences.

Sequence A if field 52a is…	Sequence B then field 52a is…
Present	Not allowed
Not present	Optional

C7)
If field 56a is present, field 57a must also be present.

If field 56a is…	then field 57a is…
Present	Mandatory
Not present	Optional

C8)
If field 21R is present in sequence A, then in each occurrence of sequence B, the currency code in fields 32B must be the same.

C9)
In each occurrence of sequence B, the presence of fields 33B and 21F is dependent on the presence and value of fields 32B and 23E as follows:

Within the same occurrence of sequence B			
If amount in field 32B ...	And field 23E is ...	Then field 33B is …	and field 21F is …
Equals zero	Present and code equals EQUI	Mandatory	Optional
Equals zero	Present and code not equals EQUI	Not allowed	Not allowed
Equals zero	Not present	Not allowed	Not allowed
Not equals zero	Not applicable	Optional	Optional

Rules for chained messages:

• If field 21R is present in sequence A, and field 28D indicates that more than one message is chained for this request for transfer instruction, the currency code must be the same for all occurrences of field 32B in sequence B of all chained messages.

• In case of an equivalent amount transfer, identified with the code EQUI in field 23E, the transaction amount in field 32B must equal zero.

• In case of sweeping, topping or zero balancing operations, identified with a code in field 23E, the transaction amount in field 32B can equal zero.

• In case field 28D indicates that messages are chained, all messages belonging to the same chain must have exactly the same sender's reference in field 20.

• In case field 28D indicates that messages are chained, sequence A must be repeated and be identical for all messages belonging to the same chain.

• When the currency of the settlement amount is in euro and it is necessary to indicate the equivalent in National Currency Denomination, the following guideline applies:
- field 32B contains the euro amount, to be executed by the receiver;
- field 33B contains the currency and value of the instructed amount i.e. the NCD amount, equivalent to field 32B;
- field 36 (due to rule 2) contains the fixed conversion rate between the euro and the National Denomination Currency amounts;
- field 21F (due to rule 1) contains the value "NONREF".

Key to columns in the description of the records:

No. / Name	=	No. and name of the field
m / o	=	Value of the field
	m =	mandatory
	o =	optional
Format	=	Length and format of the field
	x =	alphanumeric field
	n =	numeric field
Description	=	Additional description of the field

SWIFT header format:

1) Basic Header Block

Example: {1:F 01 RZBAATWWXXXX 0000 000000}

Field	Description	Entry
		CR LF
{	Start of block indicator	Constant {
1	Block identifier	Constant 1
:	Separator	Constant :
F	Application Identifier	Constant F (Financial)
01	Data Unit	Constant 01 (User to user or system message)
RZBAATWWXXXX	BIC of sender or code for routing header	Forwarding bank from MUG
0000	Input Session Number	Constant 0000
000000	Input Sequence Number	Constant 000000
}	End of block indicator	Constant }

2) Application Header Block

Example: {2:I 101 COBADEFFXXXX N}

Field	Description	Entry

{	Start of block indicator	Constant {
2	Block identifier	Constant 2
:	Separator	Constant:
I	Input Identifier	Constant I
101	Message Type	Constant 101
COBADEFFXXXX	BIC of receiver or code for routing header	Executing bank from MUG
N	Priority	Constant N
}	End of block indicator	Constant }

3) User Header Block

Example: {3:{113:XXXX}}

Field	Description	Entry
{	Start of block indicator	Constant {
3	Block identifier	Constant 3
:	Separator	Constant :
{		Constant {
113		Constant 113
:	Separator	Constant :
XXXX	Banking Priority	Constant XXXX
}}	End of block indicator	Constant }}

4) Text Block

Field	Description	Entry
{	Start of block indicator	Constant {
4	Block identifier	Constant 4
:	Separator	Constant :
		CR LF
Text block with message MT101 (see below)		Text block from input file, one sequence A with corresponding B-sequences
		CR LF
-}	End of block indicator	Constant -}

MT101 record format:

MUG (message user group)

No. / Name	M / O	Format	Description
Sender	m	11x	SWIFT code of Forwarding bank
Receiver	m	11x	SWIFT Code of Executing bank
Message Type	m	3n	In this case: always 101

☞ **Please note:**
 As default, routing header and MUG are created.
 This setting can be modified via MCCRFTSWIFT.INI in the directory ..\MCCWIN\DAT.

Mandatory Sequence A: General Information

No. / Name	m / o	Format	Description
:20: Sender's Reference This field specifies the unique reference to the entire message. The reference must be unique for each message (or chain of messages) and is part of the message identification and transaction identification which is to be used in related queries, cancellations, etc.	M	16x	This reference is composed as follows: The first 8 digits represent the file name without extension: the first 6 digits from this sub-group are the date (in format YYMMDD); the next 2 digits from this sub-group represent a counter, which is stored as internal field in the central parameter file of the module to be increased per payment file. They are stored in the rft.par, in order to avoid duplicates, even if the payment files are not present any more. The next 8 digits represent a counter, which is increased per A-level present in a file.
:21R: Customer specified Reference	o	16x	This field specifies the reference to the entire message assigned by either the: instructing party, when present or ordering customer, when the instructing party is not present. When this field is present, the ordering customer requests a single debit entry for the sum of the amounts of all transactions in the instruction, even if this instruction is chained in several messages. If the field is not used, all debit items are posted individually.
:28D: Message Index/Total	m	5n/5n	In this case: always 1/1 This field chains different messages by specifying the sequence number in the total number of messages. Both the message index and the total number of messages allow the receiver to check that all transactions to be executed have been received.

:50a: Instructing Party **a** stands for option C or L	o	Option**C**: only SWIFT adress 8x[3x] Option **L**: 35x Ordering Customer name and date (Party identifier)	This field specifies the customer which is authorized by the Account Owner/Account Servicing Institution to order: -all transactions of the message, when used in sequence A, -all transactions in the particular occurrence of Sequence B, when used in sequence B. This field must only be used when the Instructing Customer is not also the Account Owner.
:50a: Ordering Customer **a** stands for option G or H	o	Option **F**: /34x (Account) + c/33x (Name + Address) Option **G**: /34x Account + 8x[3x] (BEI) Option **H**: /34x (Account) 4 * 35x (Name + Address	This field identifies the Account Owner whose account is to be debited with: -all transactions in sequence B. Both the account number of the ordering customer at the Receiver or at the account servicing institution and the name and address or the BEI of the ordering customer must be present. With option F: c = Codes cf. Chapter 3.3: *Account owners/Ordering parties reference tables.* Rules and language dependent labelling of the field:50F: is controlled via the MCCRFTSWIFT.INI in the ..\MCCWIN\DAT directory.

No. / Name	M / O	Format	Explanation
:52a: Account Servicing Institution **a** stands for Option A or C	o	Option **A**: BIC Code (= SWIFT Code) with 8 or 11 digits alpha-numeric Option **C**: /34x (party identifier) Party Identifier may be used to indicate a national clearing system code. Examples in next column	This field specifies the Account Servicing Institution -when other than the Receiver- which services the account of the Account Owner to be debited. This is applicable even if field 50a Ordering Customer contains an IBAN. Examples: CH: :52C://SW (5) DE: :52C://BL (8) GB: :52C://SC (6) US: :52C://FW (9) The country-specific names of codes (abbreviated here) such as Clearing Code, Bankleitzahl, Sort Code and Fedwire Code are followed by the actual codes (the number of digits of the applicable code is shown above in brackets)
:30: Requested Execution Date	m	6n (valid date in format YYMMDD)	This field specifies the date an which all transactions appearing in sequence B should be initiated by the executing bank. The requested execution date represents the date on which the Ordering Customer's account(s) is (are) to be debited. Depending on country-specific banking practice, the Requested Execution Date may not be equal to the *Interbank Value Date*.
:25: Authorization	o	35x	This field specifies additional security provisions (e.g. a digital signature) between the Ordering Customer/Instructing Party and the Account Servicing Financial Institution.

Mandatory Repetitive Sequence B: Transaction Details

No. / Name	M / O	Format	Explanation
:21: Transaction Reference	m	16 x	This field specifies the unambiguous reference for the individual transaction contained in a particular occurrence of sequence B. In transaction specific queries, cancellations, etc., the Sender's Reference together with this Transaction Reference provides the transaction identification.
:21F: F/X Deal Reference	o	16x	This field specifies the foreign exchange contract reference between the Ordering Customer and the Account Servicing Financial Institution. The following code may be used: NONREF (There is no underlying foreign exchange deal to this transaction).

:23E: Instruction Code (Additional Information)* **INTC** This transaction contains an intra-company payment, ie, a payment between two companies belonging to the same group. **NETS** This transaction contains a payment that should be settled via a net settlement system, if available. **PHON** This transaction requires the beneficiary to be contacted by telephone and should be followed by the appropriate telephone number. This code is meant for the last financial institution in the chain. **RTGS** This transaction contains a payment that should be settled via a real time gross settlement system, if available. **URGP** This transaction contains a time sensitive payment which should be executed in an expeditious manner. **OTHR** Used for bilaterally agreed codes/information. The actual bilateral code/information needs to be specified in Additional Information.	o	4a [/30x]	This field specifies instructions for the Account Servicer of the Ordering Customer. One of the following codes must be used: **CHQB** This transaction contains a request that the beneficiary be paid via issuance of a cheque. **CMSW** This transaction contains a cash management instruction, requesting to sweep the account of the ordering customer. **CMTO** This transaction contains a cash management instruction, requesting to top the account of the ordering customer above a certain floor amount. The floor amount, if not pre-agreed by the parties involved, may be specified after the code. **CMZB** This transaction contains a cash management instruction, requesting to zero balance the account of the ordering customer. **CORT** This transaction contains a payment that is made in settlement of a trade, eg, foreign exchange deal, securities transaction. **EQUI** This transaction contains an instruction requesting to pay the beneficiary customer an amount in one currency, equivalent to an instructed amount in a different currency. **INTC** This transaction contains an intra-company payment, ie, a payment between two companies belonging to the same group. **NETS** This transaction contains a payment that should be settled via a net settlement system, if available. **OTHR** Used for bilaterally agreed codes/information. The actual bilateral code/information needs to be specified in Additional Information. (to be continued in the first row)

*Additional Information is only allowed when Instruction Code consists of one of the following codes: CMTO, PHON and OTHR.

In each occurrence of sequence B: when this field is used more than once, the following combinations are not allowed:

CHQB with CMSW
CHQB with CMTO
CHQB with CMZB
CHQB with CORT
CHQB with NETS
CHQB with PHON
CHQB with RTGS
CHQB with URGP
CMSW with CMTO
CMSW with CMZB
CMTO with CMZB
CORT with CMSW
CORT with CMTO
CORT with CMZB
CORT with REPA
EQUI with CMSW
EQUI with CMTO
EQUI with CMZB
NETS with RTGS.

For example:

Valid:
:23E:CHQB
:23E:CORT

Invalid:
:23E:CHQB
:23E:URGP
:23E:NETS
:23E:RTGS

In each occurrence of Sequence B: when this field is repeated, the same code word must not be present more than once.

Code REPA indicates that the payment is the result of an initiation performed via an e-payments product between the customers. This code is intended for the beneficiary's bank who should act according to the specifications of the e-payments product.
The use of EQUI is subject to agreements between the ordering customer and beneficiary customer and between the ordering customer and his account servicing institution.

To facilitate the receiving bank's processing when multiple codes are used, the codes must appear in the following order:
- Instructions for the receiver of the message (CMSW, CMTO, CMZB, INTC, URGP)
- Codes impacting the routing or composition of the resulting payment message (NETS, RTGS)
- Codes containing instructions for one of the following parties in the transaction chain (CHQB, PHON)
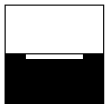- Information codes (CORT, OTHR)

:32B: Currency/Transaction Amount	m	3a15n	This field specifies the currency and the amount of the subsequent transfer to be executed by the Receiver. Currency must be a valid ISO 4217 currency code. The integer part of the Amount must contain at least one digit, without any leading zeros. The decimal comma is mandatory and is included in the maximum length. The number of digits following the comma must not exceed the maximum number allowed for the specific currency. The amount is subject to deduction of the Receiver's/Beneficiary's Bank's charges if field :71A: is BEN or SHA
:56a: Intermediary **a** stands for Option A, C or D Party Identifier may be used to indicate a national clearing system code. Option A is the preferred option. If the intermediary cannot be identified by a BIC, option C should be used containing a 2!a clearing system code preceded by a double slash '//'. Option D must only be used when there is a need to be able to specify a name and address, eg, due to regulatory considerations.	o	Options **A** and **C** see field **:52a:**; Option **D**: e.g. for countries other than specified under C: specification of country (mandatory) and complete address: 4 * 35x	This field specifies the Financial Institution between the Receiver and the Account with Institution through which the transaction must pass. The Intermediary may be a branch or affiliate of the Receiver or the Account With Institution, or an entirely difference financial institution. When one of the codes //FW (with or without the 9-digit number), //AU, //SC or //CP is used, it should appear only once and in the first of the fields 56a and 57a of the payment instruction. When it is necessary that an incoming S.W.I.F.T. payment be made to the party in this field via Fedwire, US banks require that the code //FW appears in the optional Party Identifier of field 56a or 57a.

| :57a:
Account With Institution
a stands for Option A, C or D

Party Identifier may be used to indicate a national clearing system code.

Option A is the preferred option.
If the account with institution cannot be identified by a BIC, option C should be used containing a 2!a clearing system code preceded by a double slash '//'.
Option D must only be used when there is a need to be able to specify a name and address, eg, due to regulatory considerations. | o | Option **A**, **C** or **D** as for field **:56a:** | This field specifies the Financial Institution -when other than the Receiver- which services the account for the Beneficiary Customer.
This is applicable even if field 59 contains an IBAN.

When one of the codes //FW (with or without the 9-digit number), //AU, //SC or //CP is used, it should appear only once and in the first of the fields 56a and 57a of the payment instruction.
When it is necessary that an incoming S.W.I.F.T. payment be made to the party in this field via Fedwire, US banks require that the code //FW appears in the optional Party Identifier of field 56a or 57a. |
| :59a:
Beneficiary | m | Option A:
[/34x]
(Account)
+ 8a[3a]
BIC Code
No option letter:[/34x] (Account)
4 * 35x
(Name + Address) | This field identifies the beneficiary of the subsequent operation from the particular occurrence of sequence B. |

:70: Payment details (Remittance Information) For national clearing purposes, the Sender must check with the Receiver regarding length restrictions of field 70. The information specified in this field is intended only for the beneficiary customer, ie, this information only needs to be conveyed by the Receiver. Multiple references can be used, if separated with a double slash, '//'. Code must not be repeated between two references of the same kind.	o	4*35x	This field specifies details of the individual transactions which are to be transmitted to the Beneficiary Customer. One of the following codes may be used, placed between slashes: **INV** Invoice (followed by the date, reference and details of the invoice). **RFB** Reference for the beneficiary customer (followed by up to 16 characters). **ROC** Ordering customer's reference. EXAMPLE :70:/RFB/BET072 :70:/INV/abc/SDF-96//1234-234///ROC/98I U87
:77B: Regulatory Reporting	o	3*35x In addition to narrative text, the following line formats may be used: Line 1 /8a/2!a [//additio-nal infor-mation] (Code) (Country) (Narrative) Lines 2-3 [//continu-ation of additional informatio n] (Narrative)	This field specifies code(s) for the statutory and/or regulatory information required by the authorities in the country of the Receiver or the Sender/originating customer. When the residence of either the ordering customer or beneficiary customer is to be identified, the following codes may be used, placed between slashes ('/') **ORDERRES** Residence of ordering customer **BENEFRES** Residence of beneficiary customer Country consists of the ISO country code of the country of residence of the ordering customer or beneficiary customer. The information specified must not have been explicitly conveyed in another field.

:33B: Currency/Original Ordered Amount	o	3a15n	This field specifies the original currency and amount as specified by the Ordering Customer, when different from the transaction currency and amount specified in field **:32B:**. Currency must be a valid ISO 4217 currency code . The integer part of Amount must contain at least one digit. A decimal comma is mandatory and is included in the maximum length. The number of digits following the comma must not exceed the maximum number allowed for the specified currency.
:71A: Details of Charges (Code)	m	3a	This field specifies which party will bear the applicable charges for the subsequent transfer of funds. One of the following code words must be used: **OUR** (All transaction charges for the subsequent credit transfer are to be borne by the ordering customer.) **SHA** (All transaction charges other than the charges of the financial institution servicing the ordering customer account are borne by the beneficiary customer.) **BEN** (All transaction charges, including the charges of the financial institution servicing the ordering customer's account, for the subsequent credit transfer(s) are to be borne by the beneficiary customer.)
:25A: Charges Account	o	/34x	This field specifies the Ordering Customer's account number to which applicable transaction charges should be separately applied. When used, the account number must be different from the account number specified in field :50a: Ordering Customer
:36: Exchange Rate	o	12n	This field specifies the exchange rate applied by the ordering customer/instructing party when converting the original ordered amount to the transaction amount. The integer part of Rate must contain at least one digit. A decimal comma is mandatory and is included in the maximum length.

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(----->   -----| = Repetition)

☞ **Please note:**
    If address lines were filled with ISO country codes (e.g. in the fields 50F, 50H, 56D, 57D, 59), then in the file these codes are separated from the place by "/" respectively (thus e.g. GB/PLACE or 3/GB/PLACE).
    On the import of files also "-" is accepted as separator between country code and place.

Example of MT101 RFT file (with complete SWIFT header):

{1:F01SOLTDE34BICX0000000000}{2:I101COLSDE33BICXN}{3:{113:XXXX}}{4:
SOLTDE34BIC
COLSDE33BIC

```
101
:20:0201150100000001
:28D:1/1
:50L:SONNENSCHEIN (only if account owner other than ordering customer)
:50H:/11111111111111111111111111111111111
SMARTMANN
JONNY
TRENSESTR. 37
67567 REBESLOH
:52A:DXLCDE%KBIC
:30:020108
:25:AS PER CONTRACT DATED 23.12.01
:21:200201020001
:21F:FGF
:23E:OTHR
INSTRUCTION TEXT
:23E:PHON
TELEPHONE NUMBER
:23E:NETS
:32B:EUR5555555,00
:56A:FVLBNL22
:57A:DGSGCHGG
:59:/44444444444444444444444444444444444
RUEDI ALPPACHER
ARVENWEG 4
3700 SPIEZ
:70:SALARY PAYMENT
FOR
MR.
ALPPACHER
:77B:RETURN TEXT 1 TO AUTHORITIES
// RETURN TEXT 2 TO AUTHORITIES
// RETURN TEXT 3 TO AUTHORITIES
:33B:AOK1222,34
:71A:SHA
:25A:99999999999999999999999999999999999
:36:4545,00
-}
```

Example of MT101 RFT file (without complete SWIFT header):

```
{-
SOLTDE34XXX
COLSDE33XXX
101
:20:0201150100000001
:28D:1/1
:50H:/11111111111111111111111111111111111
SONNENSCHEIN
SUSI
ZUR SONNE 5
34436 LICHTERLOH
:30:020108
:21:200201020003
```

```
:32B:EUR432,00
:59:/4578463576437567346576347567346573
SMARTMANN
JONNY
TRENSESTR. 37
67567 REBESLOH
:70:SALARY
:71A:SHA
-}
```