

# **OP Financial Group's Customer Instructions for International SWIFT Account Reporting Data Retrieved from the Web Services Channel**



**Payment Services**

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## 1 General

This service description describes OP Financial Group's incoming SWIFT account reporting in the Web Services channel, hereinafter the WS channel. The operation of the WS channel is described in a separate service description of the WS channel.

SWIFT is an international data transmission network between banks. SWIFT uses international message standards. You can find more information at the [www.swift.com](http://www.swift.com) website (in English).

Customers may use the OP Financial Group's SWIFT account reporting service to retrieve account reporting information for their accounts in domestic or foreign banks from the WS channel.

Customers may retrieve the following data from the WS channel:

- tilioite (Customer Statement Message MT940) XML-, OD- ja/tai SW –muodoissa
- saldoilmoitus (Balance Report MT941) XML- ja/tai SW-muodoissa
- tapahtumaote (Interim Transaction Report MT942) XML- ja/tai SW-muodoissa

This service description contains the OP Financial Group's SWIFT account reporting descriptions of the messages used in the B2C (Bank-to-Customer) service delivered via the international SWIFT system, defined in accordance with the ISO organisation's ([www.iso.org](http://www.iso.org)) ISO20022 standard (<http://www.iso20022.org/>), and converted into XML format. B2C messages are a part of the international ISO 20022 standard and belong to the Cash Management (camt) XML message group. It is also possible to retrieve account statements in OD format as in the electronic account statement, and account statements in SW format as in the SWIFT message, and balance and transaction reports in SW format.

Retrieval of SWIFT account reporting data from the WS channel is not dependent of through which channel or using which data format their accounts have been accessed. The service is available 24/7, excluding Finnish national holidays. Foreign banks may also have their own limitations on sending the messages.

OP Financial Group's latest description on SWIFT account reporting data is included in this document. OP Financial Group reserves the right to change this description on the basis of national and international recommendations.

## 2 Requirements for Implementation

### 2.1 Agreements

The customer must make a written agreement with Osuuspankki on the use of the WS channel and the retrieval of SWIFT account reporting data. If the customer retrieves data in XML format, the camt version used by the customer is agreed at the same time. The service is activated immediately when the agreement becomes valid in both the OP Financial Group and the bank from which SWIFT reports are sent to the OP Financial Group.

SWIFT account reporting is based on the account number. Account numbers abroad may be rather different than those used in Finland. For example, the account number may include a currency or the customer's name. For this reason, it is important that the account number is exactly correct on the agreement, too. The customer must notify the customer's own OP Financial Group member bank of any changes to account numbers without delay.

## 2.2 Types of Incoming Data

In SWIFT account reporting, the data arrives in the WS channel for retrieval based on the agreement between the customer and the bank, either in XML format conforming to the ISO 20022 standard, in SWIFT message account statement format and/or as account reports in electronic account statement format. The data format is determined based on the FileType element value returned by the channel as follows:

```
<?xml version="1.0" encoding="UTF-8"?>
<ApplicationRequest xmlns="http://bxd.fi/xmldata/">
<CustomerId>1000000000</CustomerId>
<Timestamp>2011-08-15T09:48:31.177+03:00</Timestamp>
<Status>NEW</Status>
<Environment>PRODUCTION</Environment>
<SoftwareId>Ohjelmisto 1.0</SoftwareId>
<FileType>SW</FileType>
<Signature xmlns="http://www.w3.org/2000/09/xmldsig#">
<SignedInfo>
<CanonicalizationMethod Algorithm="http://www.w3.org/TR/2001/REC-xml-c14n-
20010315#WithComments"/>
<SignatureMethod Algorithm="http://www.w3.org/2000/09/xmldsig#rsa-sha1"/>
<Reference URI="">
<Transforms>
<Transform Algorithm="http://www.w3.org/2000/09/xmldsig#enveloped-signature"/>
</Transforms>
<DigestMethod Algorithm="http://www.w3.org/2000/09/xmldsig#sha1"/>
<DigestValue>sPNzEb+Mf5dchY5MTGq7GL1grEg=</DigestValue>
</Reference>
</SignedInfo>
<SignatureValue>alqreFNkxuy...nM4SXE8g==</SignatureValue>
<KeyInfo>
<X509Data>
<X509Certificate>MIIC9TCCA...lv3xpHPU=</X509Certificate>
</X509Data>
</KeyInfo>
</Signature>
</ApplicationRequest>
```

Return messages		
Message type	Message types conforming to the ISO 20022 standard Schema or format	File type (highlighted in the example above)
MT940 tilioite (Customer Statement Message)	BankToCustomerStatementV02 camt.053.001.02.xsd	camt.053.001.02 MT940
	SWIFT message format	SW
	Electronic account statement format.	OD
MT941 saldoilmoitus (Balance report)	BankToCustomerAccountReportV02 camt.052.001.02.xsd	camt.052.001.02 MT941
	SWIFT message format	MT941
MT942 tapahtumaote (Interim Transaction Report)	BankToCustomerAccountReportV02 camt.052.001.02.xsd	camt.052.001.02 MT942
	SWIFT message format	MT942

### **2.3 Retrieval of Incoming Data**

The customer uses their own cash management or ledger software that supports the processing of data delivered via the WS channel for the retrieval of data, for example, the Kultalinkki software.

Data that can be retrieved can be listed with the getFileList service as indicated in the WS channel description. Customers can check the integrity of retrieved data in the WS channel by checking whether the signature is genuine. OP Financial Group uses UTF-8 character encoding for camt XML data.

The data is delivered for retrieval by the customer several times a day on banking days, once they have been received from the sending bank via the SWIFT system to OP Financial Group and converted into the format agreed with the customer.

The data is available for retrieval in the WS channel for three months from the time of creation of the data. During this time, there are no limits on data retrieval.

### **2.4 Paging**

The maximum length of a SWIFT message is 2,000 characters. In SWIFT account statement reporting, account report data may arrive in separate messages when the account report contains multiple pages. In the OP Financial Group, messages related to the same customer's account and service type are appended into one set of account reporting data, if they were received from the sending bank within the same data set.

## **3 Contents of the Data**

The data contents, sending periods and times of the account report messages may vary depending on the sending bank, and all banks are not necessarily able to send these message types. This is agreed between the customer and the banks using power of attorney. The sending bank is responsible for the message contents. OP Financial Group only acts as the bundler and relay of the pages and does not make any changes to the contents.

## **4 Testing the Data**

Customers may test data retrieval in OP Financial Group's WS channel customer test system. Customers are able to test all the same data as in the normal production environment. You can get access codes to the customer test system from your own Group member bank branch.

## **5 Pricing**

The customer is charged a monthly fee for the service in accordance with the service price list.

## **6 Termination of agreement**

If they so desire, customers may terminate their agreement in writing at their own Group member bank branch and the bank sending SWIFT account reporting.

## 7 SWIFT Account Reporting from OP Financial Group to Other Banks

OP Financial Group also offers an outgoing SWIFT account reporting service. You can find out more information from your nearest Group member bank branch.

## 8 Data descriptions

The mandatory fields of the SWIFT messages are displayed in bold in the last column of the tables below.

### 8.1 Saapuva MT940 tiliote XML (camt.053.001.02)

Index	Element name	Element	Qty	Description	SWIFT MT940 field
<b>1.0</b>	<b>GroupHeader</b>	<b>&lt;GrpHdr&gt;</b>	<b>[1..1]</b>	<b>Each message contains one GrpHdr element that contains the common information for the message</b>	
1.1	+MessageIdentification	<MsgId>	[1..1]	Reference from field 20	<b>:20:</b>
1.2	+CreationDateTime	<CreDtTm>	[1..1]	Time of data creation at the OP Financial Group in UTC format YYYY-MM-DDTHH:MM:SS	
<b>2.0</b>	<b>Statement</b>	<b>&lt;Stmnt&gt;</b>	<b>[1..n]</b>		
2.1	+Identification	<Id>	[1..1]	SWIFT message reference number	<b>:20:</b>
2.2	+ElectronicSequenceNumber	<ElectrncSeqNb>	[0..1]	The sequential number of the SWIFT message from the beginning of the year.	<b>:28C:</b>
2.4	+CreationDateTime	<CreDtTm>	[1..1]	Time of data creation at the OP Financial Group in UTC format YYYY-MM-DDTHH:MM:SS	
2.10	+Account	<Acct>	[1..1]		
1.2.0	++Identification	<Id>	[1..1]		
1.2.2	+++Other	<Othr>	[1..1]		
1.2.3	++++Id	<Id>	[1..1]	The account number of the reported account	<b>:25:</b>
2.23	+Balance	<Bal>	[1..n]		
2.24	++Type	<Tp>	[1..1]		
2.25	+++CodeOrProprietary	<CdOrPrtry>	[1..1]		
2.26	++++Code	<Cd>	[1..1]	PRCD = Opening balance	<b>:60F:</b>
				CLAV = Closing balance, includes the limit	:64:
				CLBD = Closing balance	<b>:62F:</b>
				FWAV = Balance of advance bookings	:65:
2.35	++CreditDebitIndicator	<CdtDbtInd>	[1..1]	CRDT = Positive balance DBIT = Negative	<b>:60F:</b> <b>:62F:</b> :64:

				balance	:65:
2.36	++Date	<Dt>	[1..1]		
4.1.0	+++Date	<Dt>	[1..1]	Balance date	:60F: :62F: :64: :65:
<b>2.76</b>	<b>+Entry</b>	<b>&lt;Ntry&gt;</b>	<b>[0..n]</b>		
2.78	++Amount	<Amt>	[1..1]	Amount booked for the account	:61:
	Valuuttakoodi atribuutti	Ccy	[1..1]	Account's currency code	:60F:
2.79	++CreditDebitIndicator	<CdtDbtInd>	[1..1]	CRDT = Credit transaction  DBIT = Debit transaction	:61:
2.80	++ReversalIndicator	<RvslInd>	[0..1]	Display (true), when the debit/credit indicator is RC or RD	:61:
2.81	++Status	<Sts>	[1..1]	BOOK = Booked for the account	:61:
2.82	++BookingDate	<BookgDt>	[0..1]		
4.10	+++Date	<Dt>	[0..1]	Booking date in format 9999-MM-DD	:61:
2.83	++ValueDate	<ValDt>	[0..1]		
4.10	+++Date	<Dt>	[0..1]	Value date in format YYYY-MM-DD	:61:
2.84	++AccountServicerReference	<AcctSvcrRef>	[0..1]	Transaction reference given by bank	:61:
2.91	++BankTransactionCode	<BkTxCd>	[1..1]		
2.97	+++Proprietary	<Prtry>	[0..1]		
2.98	++++Code	<Cd>	[1..1]	(1+3 characters) One-character transaction type from the following alternatives:  S (SWIFT transfer)  N (Non-SWIFT transfer)  F (First advice)  and additionally a three-character identification code appended without a space from the following alternatives:  BNK (Securities Related Item – Bank Fees)  BOE (Bill of Exchange)  BRF (Brokerage Fee)  CAR (Securities Related Item – Corporate Actions)	:61:

				<p>Related (should only be used when no specific corporate action event code is available)</p> <p>CAS (Securities Related Item – Cash in Lieu)</p> <p>CHG (Charges and Other Expenses)</p> <p>CHK (cheques)</p> <p>CLR (Cash Letters/Cheques Remittance)</p> <p>CMI (Cash Management Item – No Detail)</p> <p>CMN (Cash Management Item – Notional Pooling )</p> <p>CMP (Compensation Claims)</p> <p>CMS (Cash Management Item – Sweeping)</p> <p>CMT (Cash Management Item – Topping)</p> <p>CMZ (Cash Management Item – Zero Balancing)</p> <p>COL (Collections (used when entering a principal amount))</p> <p>COM (Commission)</p> <p>CPN (Coupons Securities Related Item – Coupon Payments.)</p> <p>DCR (Documentary Credit (used when entering a principal amount))</p>	
--	--	--	--	--	--



				DDT (Direct Debit Item)	
				DIS (Securities Related Item – Gains Disbursement)	
				DIV (Dividends (Securities Related Item – Dividends.))	
				EQA (Equivalent Amount)	
				EXT (Securities Related Item – External Transfer for Own Account)	
				FEX (Foreign Exchange)	
				INT (Interest (Interest related amount.))	
				LBX (Lock Box)	
				LDP (Loan Deposit)	
				MAR (Securities Related Item – Margin (Payments/Receipts)	
				MAT (Securities Related Item – Maturity)	
				MGT (Management fees (Securities Related Item – Management Fees.)	
				MSC (Miscellaneous)	
				NWI (Securities Related Item – New Issues Distribution)	
				ODC (Overdraft Charge)	
				OPT	

				<p>(Securities Related Item – Options)</p> <p>PCH (Purchase (Securities Related Item – Purchase (including STIF and Time deposits)))</p> <p>POP (Securities Related Item – Pair-off Proceeds)</p> <p>PRN (Securities Related Item – Principal Pay-down/Pay-up)</p> <p>REC (Reclaim (Securities Related Item – Tax Reclaim))</p> <p>RED (Securities Related Item – Redemption/Withdrawal)</p> <p>RIG (Securities Related Item – Rights)</p> <p>RTI (Returned Item)</p> <p>SAL (Sale (Securities Related Item – Sale (including STIF and Time deposits)))</p> <p>SEC (Securities (Securities (used when entering a principal amount)))</p> <p>SLE (Securities Related Item – Securities Lending Related)</p> <p>STO (Standing Order)</p> <p>STP (Securities Related Item – Stamp Duty)</p> <p>SUB</p>	
--	--	--	--	---	--

				(Securities Related Item – Subscription)	
				SWP (Securities Related Item – SWAP Payment)	
				TAX (Securities Related Item – Withholding Tax Payment)	
				TCK (Travellers Cheques)	
				TCM (Securities Related Item – Tripartite Collateral Management)	
				TRA (Securities Related Item – Internal Transfer for Own Account)	
				TRF (Transfer)	
				TRN (Securities Related Item – Transaction Fee)	
				UWC (Securities Related Item – Underwriting Commission)	
				VDA (Value Date Adjustment (used with an entry made to withdraw an incorrectly dated entry – it will be followed by the correct entry with the relevant code))	
				WAR (Securities Related Item – Warrant)	
2.99	++++Issuer	<Issr>	[0..1]	SWIFT	
<b>2.135</b>	<b>++Entry Details</b>	<b>&lt;NtryDtls&gt;</b>	<b>[0..n]</b>		
2.142	+++TransactionDetails	<TxDtls>	[0..n]		
2.143	++++References	<Refs>	[0..1]		
2.148	+++++EndToEndIdentification	<EndToEndId>	[0..1]	Transaction reference	:61:
2.314	+++AdditionalEntryInformation	<AddtNtryInf>	[0..1]	Message to account owner	:86:

```
<?xml version="1.0" ?>
- <Document xmlns="urn:iso:std:iso:2002:tech:xsd:camt.053.001.02">
- <!-- Versio 1.3
-->
- <BkToCstmrStmnt>
- <GrpHdr>
  <MsgId>STATEMENT 005</MsgId>
  <CreDtTm>2016-03-03T08:09:00</CreDtTm>
  <AddtlInf>SUORAVELOITTAJA</AddtlInf>
</GrpHdr>
- <Stmnt>
  <Id>STATEMENT 005</Id>
  <ElctrncSeqNb>00005</ElctrncSeqNb>
  <LglSeqNb>00005</LglSeqNb>
  <CreDtTm>2016-03-03T07:31:00</CreDtTm>
- <Acct>
- <Id>
- <Othr>
  <Id>500094-20129413</Id>
</Othr>
</Id>
  <Ccy>EUR</Ccy>
- <Svcr>
- <FinInstnId>
  <BIC>OKOYFIH0XXX</BIC>
</FinInstnId>
</Svcr>
</Acct>
- <Bal>
- <Tp>
- <CdOrPrtry>
  <Cd>PRCD</Cd>
</CdOrPrtry>
</Tp>
  <Amt Ccy="EUR">13271200.86</Amt>
  <CdtDbtInd>CRDT</CdtDbtInd>
- <Dt>
  <Dt>2016-02-29</Dt>
</Dt>
</Bal>
- <Bal>
- <Tp>
- <CdOrPrtry>
  <Cd>CLBD</Cd>
</CdOrPrtry>
</Tp>
  <Amt Ccy="EUR">13270961.81</Amt>
  <CdtDbtInd>CRDT</CdtDbtInd>
- <Dt>
  <Dt>2016-03-02</Dt>
</Dt>
</Bal>
- <Ntry>
  <Amt Ccy="EUR">200.00</Amt>
  <CdtDbtInd>DBIT</CdtDbtInd>
  <RvslInd>false</RvslInd>
```

```
<Sts>BOOK</Sts>
- <BookgDt>
  <Dt>9999-03-02</Dt>
</BookgDt>
- <ValDt>
  <Dt>2016-03-02</Dt>
</ValDt>
<AcctSvcrRef>00094270001</AcctSvcrRef>
- <BkTxCd>
- <Prtry>
  <Cd>NTRF</Cd>
  <Issr>SWIFT</Issr>
</Prtry>
</BkTxCd>
- <NtryDtls>
- <TxDtls>
- <Refs>
  <EndToEndId>NONREF</EndToEndId>
</Refs>
<AddtlTxInf>YRITYS LASKUTTAJA</AddtlTxInf>
</TxDtls>
</NtryDtls>
</Ntry>
- <Ntry>
  <Amt Ccy="EUR">100.16</Amt>
  <CdtDbtInd>DBIT</CdtDbtInd>
  <RvslInd>false</RvslInd>
  <Sts>BOOK</Sts>
- <BookgDt>
  <Dt>9999-03-02</Dt>
</BookgDt>
- <ValDt>
  <Dt>2016-03-02</Dt>
</ValDt>
<AcctSvcrRef>00094270002</AcctSvcrRef>
- <BkTxCd>
- <Prtry>
  <Cd>NTRF</Cd>
  <Issr>SWIFT</Issr>
</Prtry>
</BkTxCd>
- <NtryDtls>
- <TxDtls>
- <Refs>
  <EndToEndId>NONREF</EndToEndId>
</Refs>
<AddtlTxInf>YRITYS SANOMA</AddtlTxInf>
</TxDtls>
</NtryDtls>
</Ntry>
- <Ntry>
  <Amt Ccy="EUR">61.11</Amt>
  <CdtDbtInd>CRDT</CdtDbtInd>
  <RvslInd>false</RvslInd>
  <Sts>BOOK</Sts>
- <BookgDt>
```

```

<Dt>9999-03-02</Dt>
</BookgDt>
- <ValDt>
<Dt>2016-03-02</Dt>
</ValDt>
<AcctSvcrRef>00001999999</AcctSvcrRef>
- <BkTxCd>
- <Prtry>
<Cd>NTRF</Cd>
<Issr>SWIFT</Issr>
</Prtry>
</BkTxCd>
- <NtryDtIs>
- <TxDtIs>
- <Refs>
<EndToEndId>NONREF</EndToEndId>
</Refs>
</TxDtIs>
</NtryDtIs>
</Ntry>
</Stmnt>
</BkToCstmrStmnt>
</Document>

```

## 8.2 Incoming MT940 account statement SW

SWIFT MT940 aineistokuvaus:

Status	Tag	Field Name	Content/Options	No.
M	20	Transaction Reference Number	16x	1
O	21	Related Reference	16x	2
M	25	Account Identification	35x	3
M	28C	Statement Number/Sequence Number	5n[/5n]	4
M	60a	Opening Balance	F or M	5
----->				
O	61	Statement Line	6!n[4!n]2a[1!a]15d1!a3!c16x[/16x] [34x]	6
O	86	Information to Account Owner	6*65x	7
-----				
M	62a	Closing Balance (Booked Funds)	F or M	8
O	64	Closing Available Balance (Available Funds)	1!a6!n3!a15d	9
----->				
O	65	Forward Available Balance	1!a6!n3!a15d	10
-----				
O	86	Information to Account Owner	6*65x	11



4	Sender bank	AN25		
5	(branch)	AN10		
6	Customer's account number	AN35		
7	Account statement number	N5		
8	Message reference, TRN given by the account-holding bank	AN16		
9	Reference/query message query message TRN	AN16		
10	YYMMDD	N6		
11	Account currency type	AN3		
12	Opening balance sign, + or - data, two decimals	AN1 N15		
13	Balance type M = intermediate balance F = opening balance	AN1		
14	Reserved for future use	AN		
		168		

**SWIFT-kentät:**

Kenttä 3/field 28  
 Kenttä 6/field 25  
 Kenttä 7/field 28  
 Kenttä 8/field 20  
 Kenttä 9/field 21  
 Kenttä 10/field 60 date  
 Kenttä 11/field 60 ccy  
 Kenttä 12/alkusaldon tieto/field 60a

**Transaction record**

Field	Name	Format	P/V	Description
1	Content identifier	AN4		"OD"
2	Record type	N1		"2"
3	Value date, transaction's value date	N6		VVKKPP
4	Arrival date, booking date	N4		KKPP
5	Transaction reference, account owner's reference	AN16		
6	Information	AN34		
7	Account-holding bank's reference	AN16		
8	Correction ID 0 = not a correction 1 = correction (R)	AN1		
9	Transaction amount sign, + = C, RD - = D, RC data, two decimals	AN15		
10*	Transaction type	AN4		*
11*	Money type code	AN1		*
12	Reserved for future use	AN65		



		168		
--	--	-----	--	--

Fields 10 and 11: The use of these codes is agreed between the customer and the account-holding bank.

SWIFT fields:

Kenttä 3/field 61/1  
 Kenttä 4/field 61/2  
 Kenttä 5/field 61/7  
 Kenttä 6/field 61/9  
 Kenttä 7/field 61/8  
 Kenttä 8/field 61/3  
 Kenttä 9/field 61/5 ja 61/3  
 Kenttä 10/field 61/6  
 Kenttä 11/field 61/4

Transaction record

Field	Name	Format	P/V	Description
1	Content identifier	AN4		"OD"
2	Record type	N1		"3"
3	Reference, account statement transaction reference	AN16		
4	Information	AN65		
5	Information	AN65		
6	Reserved for future use	AN17		
		168		

This record is optional.

The transaction-specific information record always comes after the corresponding transaction record. Maximum of three information records per one transaction record.

SWIFT fields:

Kenttä 4/field 86  
 Kenttä 5/field 86

Intermediate/closing balance record

Field	Name	Format	P/V	Description
1	Content identifier	AN		"OD"
2	Record type	N1		"4"
3	Closing Balance			
3.1	Date	N6		VVKKPP
3.2	Closing balance sign	AN1		+ tai -
3.3	Closing balance	N15		2 desimaalia
4	Closing Available Balance			
4.1	Date	N6		VVKKPP
4.2	Available funds, Sign	AN1		+ tai -
4.3	Available funds	N15		2 desimaalia
5	Balance type M = intermediate balance F = closing balance	AN1		Liitty closing balanceen
6	Reserved for future use	AN118		

		168		
--	--	-----	--	--

SWIFT fields:

Kenttä 3/field 62

Kenttä 4/field 64

Forward available balance

Field	Name	Format	P/V	Description
1	Content identifier	AN4	P	"OD"
2	Record type	N1	P	"5"
3	Forward Available Balance (7 pcs)			
3.1	Date	N6	V	VVKKPP
3.2	Closing balance sign	AN1	V	+ tai -
3.3	Closing balance	N15	V	2 desimaalia
4	Reserved for future use	AN9	V	
		168		

SWIFT fields: Field 3/field 65

Account-specific information record

Field	Name	Format	P/V	Description
1	Content identifier	AN4		"OD"
2	Record type	N1		"6"
3	Reference Reference of the account statement message	AN16		
4	Information	AN65		
5	Information	AN65		
6	Reserved for future use	AN17		
		168		

SWIFT fields: Field 4/field 86

Batch trailer

Field	Name	Format	P/V	Description
1	Content identifier	AN4		"OD"
2	Record type	N1		"9"
3	Business ID customer's business ID	AN10		
4	Deliver batch transfer date	N6		VVKKPP
5	Number of records	N6		
6	Reserved for future use	AN141		
		168		

SWIFT FIELD DESCRIPTIONS

Field 20 Transaction Reference Number (TRN) message reference (P)

The "message parts" of an account statement comprising several messages can either have the same or a different reference, depending on the practices of the sending bank.

Field 21 Related Reference REFERENCE OF THE MESSAGE RELATED TO THE MESSAGE (V)

If MT940 was sent as a response to an MT920 query message, this field contains the TRN of the original query message.

Field 25 Account Identification ACCOUNT NUMBER (P)

The number of the account for which the account statement was sent

Field 28 Statement number/sequence number ACCOUNT STATEMENT NUMBER/SEQUENCE NUMBER (P)

The sequence number of the account statement, followed by a number indicating which message part of the account statement this is. For example 235/01 is the first message of the account statement, 235/02 the second message, etc.

Field 60a Opening Balance THE OPENING BALANCE (P)

The contents of this field must always equal the closing balance F62a of the previous account statement.

Code 62F (first opening balance) of the first account statement message (e.g. 235/01). Correspondingly, the code of the intermediate opening balance field of the second message, 235/02, is 62M.

Field 61 Statement line STATEMENT LINE (V)

This field contains transaction-specific data. This field can be repeated within the limits allowed by the maximum message length.

The account statement lines comprise nine subfields, distributed into different fields in the transaction record. The use of the fields can be determined from the data contents and the code list in Standards I Part VI.

Field 62 Closing Balance (booked funds) CLOSING BALANCE (P)

The contents of this field are repeated in field 60a of the next account statement message generated for the account.

If the entire account statement fits in one message, code 62F is used. However, if the account statement is transferred as several messages, the intermediate closing balance code for all but the last message is 62M, while the final closing balance code for the account statement's last message is 62F.

Field 64 Closing Available Balance AVAILABLE BALANCE ((O))



				<b>message</b>	
1.1	+MessageIdentification	<MsgId>	[1..1]	Unique identifier provided by the bank	<b>:20:</b>
1.2	+CreationDateTime	<CreDtTm>	[1..1]	Time of data creation at the OP Financial Group in UTC format YYYY-MM-DDTHH:MM:SS	:13D:
1.5	+AdditionalInformation	<AddtlInf>	[0..1]	Identifying reference of the response message (seldom used)	<b>:21:</b>
<b>2.0</b>	<b>Report</b>	<b>&lt;Rpt&gt;</b>	<b>[1..n]</b>		
2.1	+Identification	<Id>	[1..1]	SWIFT message reference number	<b>:20:</b>
2.2	+ElectronicSequenceNumber	<ElctrcSeqNb>	[0..1]	The sequential number of the SWIFT message from the beginning of the year.	<b>:28C:</b>
2.3	+LegalSequenceNumber	<LglSeqNb>	[0..1]	The sequential number of the SWIFT message from the beginning of the year. The page numbering of the message is not displayed.	<b>:28C:</b>
2.4	+CreationDateTime	<CreDtTm>	[1..1]	The data generation time at the bank sending the balance statement to the SWIFT system in UTC format YYYY-MM-DDTHH:MM:SS	<b>:13D:</b>
2.10	+Account	<Acct>	[1..1]		
2.10.. (1.2.0)	++Identification	<Id>	[1..1]		
2.10.. (1.2.2)	+++Other	<Othr>	[1..1]		
2.10.. (1.2.3)	++++Identification	<Id>	[1..1]	The account number of the reported account	<b>:25:</b>
2.10.. (1.2.11)	++Currency	<Ccy>	[0..1]	Account's currency code	<b>:62F:</b>
2.10.. (1.2.56)	++Servicer	<Svcr>	[0..1]		
2.10.. (1.2.57)	+++FinancialInstitutionIdentification	<FinInstnId>	[1..1]		
2.10 (1.2.58)	++++BIC	<BIC>	[0..1]	BIC of the sending bank, 11 characters, e.g. OKOYEE2XXXX.	<b>Header 2:</b>
2.23	+Balance	<Bal>	[1..n]	Balance data in their own Balance elements	
2.24	++Type	<Tp>	[1..1]		
2.25	+++CodeOrProprietary	<CdOrPrtry>	[1..1]		
2.26	++++Code	<Cd>	[1..1]	PRCD = Opening balance (avaussaldo)	<b>:60F:</b>

				ITBD = Closing balance (loppusaldo)	<b>:62F:</b>
				CLAV = Closing available balance (käytettävissä oleva loppusaldo)	:64:
				FWAV = Forward Available Balance (ennakkokirjausten saldo)	:65:
2.34	++Amount	<Amt>	[1..1]	Balance amount. Three-character currency code in an attribute.	:64: :65: <b>:62F:</b> :60F:
2.35	++CreditDebitIndicator	<CdtDbtInd>	[1..1]	CRDT = Positive balance  DBIT = Negative balance	:64: C/D  :65: C/D  <b>:62F:</b> <b>C/D</b>  :60F: C/D
2.36..	++Date	<Dt>	[1..1]		
2.36.. (4.1.0)	+++Date	<Dt>	[1..1]	Balance date	:64: :65: <b>:62F:</b> :60F:
2.43	+TransactionsSummary	<TxsSummry>	[0..1]		
2.49	++TotalCreditEntries	<TtlCdtNtries>	[0..1]		
2.50	+++NumberOfEntries	<NbOfNtries>	[0..1]	Number of credit transactions	:90C:
2.51	+++Sum	<Sum>	[0..1]	Total amount of credit transactions	:90C:
2.52	++TotalDebitEntries	<TtlDbtNtries>	[0..1]		
2.53	+++NumberOfEntries	<NbOfNtries>	[0..1]	Number of debit transactions	:90D:
2.54	+++Sum	<Sum>	[0..1]	Total amount of debit transactions	:90D:
2.315	+AdditionalReportInformation	<AddtlRptInf>	[0..1]	Additional information on the report	:86:
	BankToCustomerAccountReport	<BkCstmrAcctRpt>			

MT941 camt.052.001.01 sample data:

```

<?xml version="1.0" ?>
- <Document xmlns="urn:iso:std:iso:2002:tech:xsd:camt.052.001.02">
- <!--
Versio 1.3
-->
- <BkToCstmrAcctRpt>
- <GrpHdr>
<MsgId>ASTESTI941</MsgId>
<CreDtTm>2013-09-26T13:02:00</CreDtTm>

```

```

<AddtInf>1234567890123456</AddtInf>
  </GrpHdr>
- <Rpt>
  <Id>ASTESTI941</Id>
  <ElctrncSeqNb>99</ElctrncSeqNb>
  <LglSeqNb>99</LglSeqNb>
  <CreDtTm>2013-09-26T13:36:00</CreDtTm>
- <Acct>
- <Id>
- <Othr>
  <Id>123456</Id>
  </Othr>
  </Id>
  <Ccy>EUR</Ccy>
- <Svcr>
- <FinInstnId>
  <BIC>OKOYFIHOXXX</BIC>
  </FinInstnId>
  </Svcr>
  </Acct>
- <Bal>
- <Tp>
- <CdOrPrtry>
  <Cd>PRCD</Cd>
  </CdOrPrtry>
  </Tp>
  <Amt Ccy="EUR">1102.00</Amt>
  <CdtDbtInd>CRDT</CdtDbtInd>
- <Dt>
  <Dt>2013-09-25</Dt>
  </Dt>
  </Bal>
- <Bal>
- <Tp>

```

### 8.5 Saapuva MT941 saldoilmoitus SW

SWIFT MT941 data description:

Status	Tag	Field Name	Content/Options	No.
M	20	Transaction Reference Number	16x	1
O	21	Related Reference	16x	2
M	25	Account Identification	35x	3
M	28	Statement Number/Sequence Number	5n[/2n]	4
O	13D	Date/Time Indication	6!n4!n1!x4!n	5
O	60F	Opening Balance	1!a6!n3!a15d	6
O	90D	Number and Sum of Entries	5n3!a15d	7

O	90C	Number and Sum of Entries	5n3!a15d	8
M	62F	Book Balance	1!a6!n3!a15d	9
O	64	Closing Available Balance (Available Funds)	1!a6!n3!a15d	10
----->				
O	65	Forward Available Balance	1!a6!n3!a15d	11
-----				
O	86	Information to Account Owner	6*65x	12

**MT941 SW sample data:**

```
{1:F21OKOYFIH0AXXX3543141219}{4:{177:1309261228}{451:0}}{1:F01OKOYFIH0AX
XX3543141219}{2:094112281309260KOYFIH0AXXX35430800991309261228N}{4:
:20:ASTESTI941
:21:1234567890123456
:25:123456
:28:99/1
:13D:1309261336+0100
:60F:C130925EUR1102,
:90D:3EUR1333,
:90C:1EUR2100,
:62F:C130926EUR1869,
:64:C130926EUR1869,
:65:C130927EUR120,
:65:D130927EUR100,
:86:LISATIETOA
LISATIETOA
LISATIETOA
LISATIETOA
-}
```

**8.6 Saapuva MT942 tapahtumaote XML (camt.052.001.02)**

Index	Element name	Element	Qty	Description	SWIFT MT942 field
	<b>BankToCustomerAccountReport</b>	<b>&lt;BkCstmrAcct Rpt&gt;</b>			
<b>1.0</b>	<b>GroupHeader</b>	<b>&lt;GrpHdr&gt;</b>	<b>[1..1]</b>	<b>Each message contains one GrpHdr element that contains the common information for the message</b>	
1.1	+MessageIdentification	<MsgId>	[1..1]	Unique ID given by the bank, SWIFT message reference	<b>:20:</b>
1.2	+CreationDateTime	<CreDtTm>	[1..1]	Time of data creation at the OP Financial Group in UTC format YYYY-MM-DDTHH:MM:SS	
1.5	+AdditionalInformation	<AddtlInf>	[0..1]	Identifying reference of	<b>:21:</b>



				the response message (seldom used) The transaction's smallest monetary amount to be reported and the currency code	<b>:34F:</b>
<b>2.0</b>	<b>Report</b>	<b>&lt;Rpt&gt;</b>	<b>[1..n]</b>		
2.1	+Identification	<Id>	[1..1]	Unique ID given by the bank, SWIFT message reference	<b>:20:</b>
2.2	+ElectronicSequenceNumber	<ElctrcSeqNb>	[0..1]	The sequential number of the SWIFT message from the beginning of the year	<b>:28C:</b>
2.3	+LegalSequenceNumber	<LglSeqNb>	[0..1]	The sequential number of the SWIFT message from the beginning of the year. The page numbering of the message is not displayed.	<b>:28C:</b>
2.4	+CreationDateTime	<CreDtTm>	[1..1]	The data generation time at the bank sending the transaction statement to the SWIFT system in the UTC format YYYY-MM-DDTHH:MM:SS	<b>:13D:</b>
2.10	+Account	<Acct>	[1..1]		
2.10.. (1.2.0)	++Identification	<Id>	[1..1]		
2.10.. (1.2.2)	+++Other	<Othr>	[1..1]		
2.10.. (1.2.3)	++++Identification	<Id>	[1..1]	The account number of the reported account	<b>:25:</b>
2.10.. (1.2.11)	++Currency	<Ccy>	[0..1]	Account's currency code	<b>:34F:</b>
2.10.. (1.2.56)	++Servicer	<Svcr>	[0..1]		
2.10.. (1.2.57)	+++FinancialInstitutionIdentification	<FinInstnId>	[1..1]		
2.10 (1.2.58)	++++BIC	<BIC>	[0..1]	BIC of the sending bank, 11 characters, e.g. OKOYEE2XXXX.	<b>Header 2:</b>
2.43	+TransactionsSummary	<TxSsumry>	[0..1]		
2.49	++TotalCreditEntries	<TtlCdtNtries>	[0..1]		
2.50	+++NumberOfEntries	<NbOfNtries>	[0..1]	Number of credit transactions	<b>:90C:</b>
2.51	+++Sum	<Sum>	[0..1]	Total amount of credit transactions	<b>:90C:</b>
2.52	++TotalDebitEntries	<TtlDbtNtries>	[0..1]		
2.53	+++NumberOfEntries	<NbOfNtries>	[0..1]	Number of debit transactions	<b>:90D:</b>
2.54	+++Sum	<Sum>	[0..1]	Total amount of debit transactions	<b>:90D:</b>
<b>2.76</b>	<b>+Entry</b>	<b>&lt;Ntry&gt;</b>	<b>[0..n]</b>	<b>Separate transactions are reported using this element</b>	
2.78	++Amount	<Amt>	[1..1]	Transaction amount. Three-character currency code in an attribute.	<b>:61:</b> (Ccy)

					<b>:34F:</b>
2.79	++CreditDebitIndicator	<CdtDbtInd>	[1..1]	CRDT = Positive balance DBIT = Negative balance	:61:
2.80	++ReversalIndicator	<RvslInd>	[0..1]	If 2.79 value is RD or RC, the value of this element is 'true'; otherwise, 'false'.	:61:
2.81	++Status	<Sts>	[1..1]	BOOK = booked or PDNG = pending	:61:
2.82	++BookingDate	<BookgDt>	[0..1]	Booking date in format 9999-MM-DD	:61:
2.83	++ValueDate	<ValDt>	[0..1]	Value date in format YYYY-MM-DD	:61:
2.84	++AccountServicerReference	<AcctSvcrRef>	[0..1]	Transaction reference given by bank	:61:
2.91	++BankTransactionCode	<BkTxCd>	[1..1]		
2.97	+++Proprietary	<Prtry>	[0..1]		
2.98	++++Code	<Cd>	[1..1]	(1+3 characters) One-character transaction type from the following alternatives:  S (SWIFT transfer)  N (Non-SWIFT transfer)  F (First advice)  and additionally a three- character identification code appended without a space from the following alternatives:  BNK (Securities Related Item – Bank Fees)  BOE (Bill of Exchange)  BRF (Brokerage Fee)  CAR (Securities Related Item – Corporate Actions Related (should only be used when no specific corporate action event code is available)  CAS (Securities Related Item – Cash in Lieu)  CHG (Charges and Other Expenses)	:61:

				CHK (cheques)  CLR (Cash Letters/Cheques Remittance)  CMI (Cash Management Item – No Detail)  CMN (Cash Management Item – Notional Pooling )  CMP (Compensation Claims)  CMS (Cash Management Item – Sweeping)  CMT (Cash Management Item – Topping)  CMZ (Cash Management Item – Zero Balancing)  COL (Collections (used when entering a principal amount))  COM (Commission)  CPN (Coupons Securities Related Item – Coupon Payments.)  DCR (Documentary Credit (used when entering a principal amount))  DDT (Direct Debit Item)  DIS (Securities Related Item – Gains Disbursement)  DIV (Dividends (Securities Related Item – Dividends.))  EQA (Equivalent Amount)	
--	--	--	--	--	--

				<p>EXT (Securities Related Item – External Transfer for Own Account)</p> <p>FEX (Foreign Exchange)</p> <p>INT (Interest (Interest related amount.))</p> <p>LBX (Lock Box)</p> <p>LDP (Loan Deposit)</p> <p>MAR (Securities Related Item – Margin (Payments/Receipts)</p> <p>MAT (Securities Related Item – Maturity)</p> <p>MGT (Management fees (Securities Related Item – Management Fees.)</p> <p>MSC (Miscellaneous)</p> <p>NWI (Securities Related Item – New Issues Distribution)</p> <p>ODC (Overdraft Charge)</p> <p>OPT (Securities Related Item – Options)</p> <p>PCH (Purchase (Securities Related Item – Purchase (including STIF and Time deposits)))</p> <p>POP (Securities Related Item – Pair-off Proceeds)</p> <p>PRN (Securities Related Item –</p>	
--	--	--	--	---	--

				Principal Pay-down/Pay-up)  REC (Reclaim (Securities Related Item – Tax Reclaim)  RED (Securities Related Item – Redemption/Withdrawal)  RIG (Securities Related Item – Rights)  RTI (Returned Item)  SAL (Sale (Securities Related Item – Sale (including STIF and Time deposits)))  SEC (Securities (Securities (used when entering a principal amount)))  SLE (Securities Related Item – Securities Lending Related)  STO (Standing Order)  STP (Securities Related Item – Stamp Duty)  SUB (Securities Related Item – Subscription)  SWP (Securities Related Item – SWAP Payment)  TAX (Securities Related Item – Withholding Tax Payment)  TCK (Travellers Cheques)  TCM (Securities Related Item –	
--	--	--	--	--	--

				Tripartite Collateral Management)	
				TRA (Securities Related Item – Internal Transfer for Own Account)	
				TRF (Transfer)	
				TRN (Securities Related Item – Transaction Fee)	
				UWC (Securities Related Item – Underwriting Commission)	
				VDA (Value Date Adjustment (used with an entry made to withdraw an incorrectly dated entry – it will be followed by the correct entry with the relevant code))	
				WAR (Securities Related Item – Warrant)	
<b>2.135</b>	<b>++EntryDetails</b>	<b>&lt;NtryDtls&gt;</b>	<b>[0..n]</b>		
2.142	+++TransactionDetails	<TxDtls>	[0..n]		
2.143	++++References	<Refs>	[0..1]		
2.148	+++++EndToEndIdentification	<EndToEndId>	[0..1]	Transaction reference	:61:
2.313	++++AdditionalTransactionInformation	<AddtITxInf>	[0..1]	Additional information	:61:
2.314	++AdditionalEntryInformation	<AddtNtryInf>	[0..1]	Additional information for the transaction	:61: ja :86:
2.315	+AdditionalReportInformation	<AddtIRptInf>	[0..1]	Additional information on the report	:86:
	BankToCustomerAccountReport	<BkToCstmrAcc Rpt>			

MT942 camt.052.001.01 sample data:

```

<?xml version="1.0" ?>
- <Document xmlns="urn:iso:std:iso:2002:tech:xsd:camt.052.001.02">
- <!--
Versio 1.3
-->
- <BkToCstmrAcctRpt>
- <GrpHdr>
<MsgId>ASTESTI942</MsgId>
<CreDtTm>2013-09-26T11:02:00</CreDtTm>
<AddtInf>1234567890123456 / USDD0,00 / USDC1,00</AddtInf>
</GrpHdr>

```







```
<AddtITxInf>34</AddtITxInf>
  </TxDtIs>
  </NtryDtIs>
<AddtINtryInf>MALLI</AddtINtryInf>
  </Ntry>
- <Ntry>
  <Amt Ccy="USD">350.00</Amt>
  <CdtDbtInd>DBIT</CdtDbtInd>
  <RvslInd>>false</RvslInd>
  <Sts>PDNG</Sts>
- <BookgDt>
  <Dt>9999-09-12</Dt>
  </BookgDt>
- <ValDt>
  <Dt>2013-09-27</Dt>
  </ValDt>
  <AcctSvcrRef>111111111111</AcctSvcrRef>
- <BkTxCd>
- <Prtry>
  <Cd>NDDT</Cd>
  </Prtry>
  </BkTxCd>
- <NtryDtIs>
- <TxDtIs>
- <Refs>
  <EndToEndId>100</EndToEndId>
  </Refs>
  <AddtITxInf>2222222222222222</AddtITxInf>
  </TxDtIs>
  </NtryDtIs>
  <AddtINtryInf>MALLI 2</AddtINtryInf>
  </Ntry>
- <Ntry>
  <Amt Ccy="USD">200.00</Amt>
  <CdtDbtInd>DBIT</CdtDbtInd>
  <RvslInd>>true</RvslInd>
  <Sts>BOOK</Sts>
- <BookgDt>
  <Dt>9999-09-16</Dt>
  </BookgDt>
- <ValDt>
  <Dt>2013-09-26</Dt>
  </ValDt>
  <AcctSvcrRef>3333333333333333</AcctSvcrRef>
- <BkTxCd>
- <Prtry>
  <Cd>NDDT</Cd>
  </Prtry>
  </BkTxCd>
- <NtryDtIs>
- <TxDtIs>
- <Refs>
```





TESTI TESTI  
TESTI  
-}

## **9 Appendices**

### **9.1 Interface Description of the WS Channel**

[Interface description](#)