

ISO 20022

Bank-to-Customer Cash Management

Approved by the Payments SEG on 28 January 2013

Message Definition Report - Part 1

Edition 31 May 2013

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1. Introduction

1.1 Terms and definitions

The following terms are reserved words defined in ISO 20022 Edition 2013 – Part1. When used in this document, they will be in italic and follow the *UpperCamelCase* notation.

Term	Definition
<i>BusinessRole</i>	functional role played by a business actor in a particular <i>BusinessProcess</i> or <i>BusinessTransaction</i>
<i>Participant</i>	involvement of a <i>BusinessRole</i> in a <i>BusinessTransaction</i>
<i>BusinessProcess</i>	unrealized definition of the business activities undertaken by <i>BusinessRoles</i> within a <i>BusinessArea</i> whereby each <i>BusinessProcess</i> fulfils one type of business activity and whereby a <i>BusinessProcess</i> may include and extend other <i>BusinessProcesses</i>
<i>BusinessTransaction</i>	particular solution that meets the communication requirements and the interaction requirements of a particular <i>BusinessProcess</i> and <i>BusinessArea</i>
<i>MessageDefinition</i>	formal description of the structure of a <i>MessageInstance</i>

1.2 Glossary

Acronyms

Acronym	Definition
ISTH	International Standards Team Harmonisation
ISITC	International Securities Association for Institutional Trade Communication
IFX	Interactive Financial eXchange Forum
TWIST	Transaction Workflow Innovation Standards Team
OAGi	Open Application Group

Abbreviations

Abbreviation	Definition

1.3 Document Scope and Objectives

This document is the first part of the ISO 20022 Message Definition Report (MDR) that describes the *BusinessTransactions* and underlying message set. For the sake of completeness, the document may also describe *BusinessActivities* that are not in the scope of the project.

This document sets:

- The *BusinessProcess* scope (business processes addressed or impacted by the project)
- The *BusinessRoles* involved in these *BusinessProcesses*

The main objectives of this document are:

- To explain what *BusinessProcesses* and *BusinessActivities* these *MessageDefinitions* have addressed
- To give a high level description of *BusinessProcesses* and the associated *BusinessRoles*
- To document the *BusinessTransactions* and their *Participants* (sequence diagrams)
- To list the *MessageDefinitions*

1.4 References

Document	Version	Date	Author
ISO 20022 Business Justification – Bank-to-Customer Cash Management		2007-04-20	ISTH
ISO 20022 Business Justification – Cash Account Reporting Request and Notification Messages		2011-01-19	SWIFT

2. Scope and Functionality

2.1 Background

This Message Definition Report covers a set of 4 ISO 20022 MessageDefinitions developed by SWIFT, on behalf of IFX, TWIST, OAGi and SWIFT, and have been approved by the ISO 20022 Payments Standards Evaluation Group (SEG) on 28 Jan 2013. These messages are specifically designed to support reporting of cash transactions between an account servicer and its customers.

2.2 Scope

The set of messages covers the cash management requirements in the Bank-to-Customer space. They consist of the debit and credit advices and statements forwarded by an account servicing institution to its private or corporate account owners to provide information on the cash side of all types of financial transactions. The scope does not include the advices and statements exchanged between financial intermediaries.

2.3 Groups of *MessageDefinitions* and Functionality

This set of messages includes the following messages definitions:

2.3.1 Three reporting messages

- The **BankToCustomerAccountReport** message: sent by the account servicer to an account owner or to a party authorised by the account owner to receive the message. It can be used to inform the account owner, or authorised party, of the entries reported to the account, and/or to provide the owner with balance information on the account at a given point in time;
- The **BankToCustomerStatement** message: sent by the account servicer to an account owner or to a party authorised by the account owner to receive the message. It is used to inform the account owner, or authorised party, of the entries booked to the account, and to provide the owner with balance information on the account at a given point in time;
- The **BankToCustomerDebitCreditNotification** message: sent by the account servicer to an account owner or to a party authorised by the account owner to receive the message. It can be used to inform the account owner, or authorised party, of single or multiple debit and/or credit entries reported to the account.

2.3.2 One request message

- The **AccountReportingRequest** message: sent by the account owner, either directly or through a forwarding agent, to one of its account servicing institutions. It is used to ask the account servicing institution to send a report on the account owner's account in a BankToCustomerAccountReport, a BankToCustomerStatement or a BankToCustomerDebitCreditNotification.

The scopes of the messages are defined in the MDR part 2.

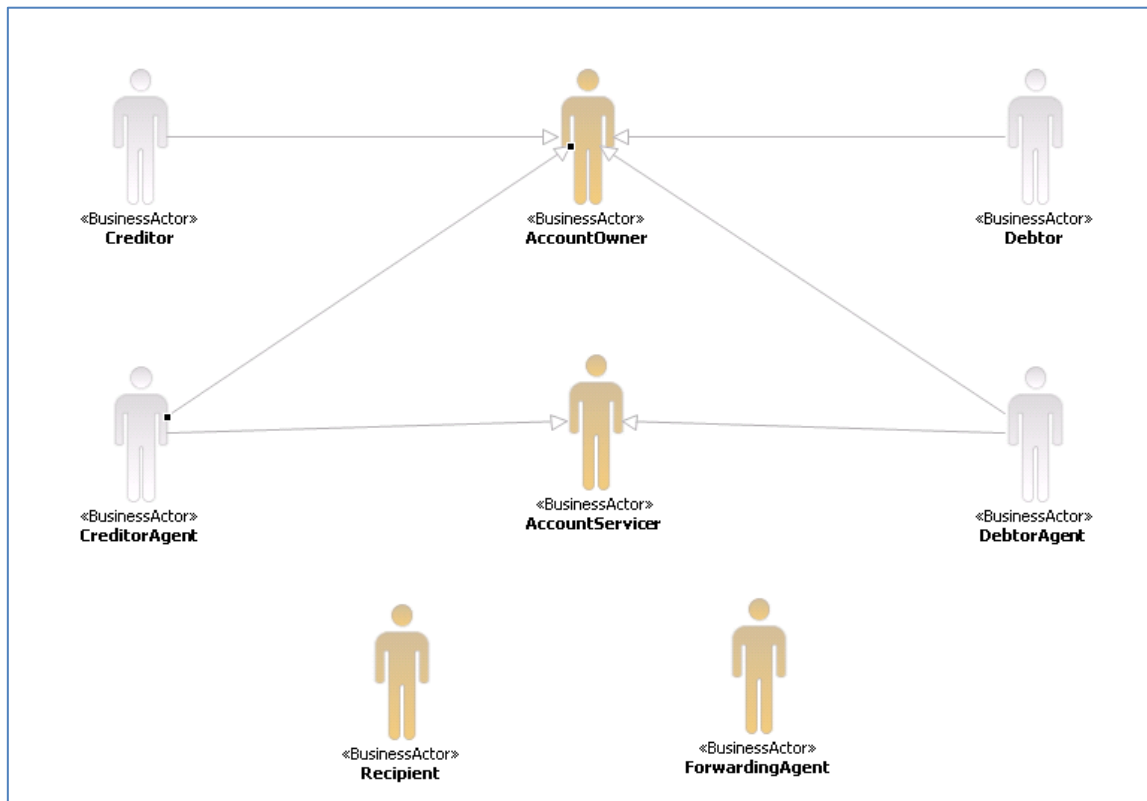
3. *BusinessRoles* and *Participants*

A *BusinessRole* represents an entity (or a class of entities) of the real world, physical or legal, a person, a group of persons, a corporation. Examples of *BusinessRoles*: "Financial Institution", "ACH", "CSD".

A *Participant* is a functional role performed by a *BusinessRole* in a particular *BusinessProcess* or *BusinessTransaction*: for example the "user" of a system, "debtor", "creditor", "investor" etc.

The relationship between *BusinessRoles* and *Participants* is many-to-many. One *BusinessRole* (that is, a person) can be involved as different *Participants* at different moments in time or at the same time: "user", "debtor", "creditor", "investor", etc. Different *BusinessRoles* can be involved as the same *Participant*.

In the context of Bank-to-Customer Cash Management, the high-level *BusinessRoles* and typical *Participants* can be represented as follows.



Participants and BusinessRoles definitions	
Description	Definition
Participants	
(Account) Servicer (Role)	Party that manages the account on behalf of the account owner (that is, manages the registration and booking of entries on the account, calculates balances on the account and provides information about the account), or the party that has a contractual relationship with the owner (for example, market data provider).
(Account) Owner (Role)	Party that legally holds the account or the party in a contractual relationship with the servicer.
Recipient	Party authorised by the account owner to receive information about movements on the account.
Forwarding Agent	Financial institution that receives the instruction from the initiating party and forwards it to the next agent in the payment chain for execution.
BusinessRoles	
Creditor	Party to which an amount of money is due.
Debtor	Party that owes an amount of money to the (ultimate) creditor.
Creditor Agent	Financial institution servicing an account for the creditor.
Debtor Agent	Financial institution servicing an account for the debtor.
Market Infrastructure	Party that processes, monitors and reports on transaction within the system received from the system member.
System Member	Party that instructs the executing/servicing party to process and maintain a transactions in the system.

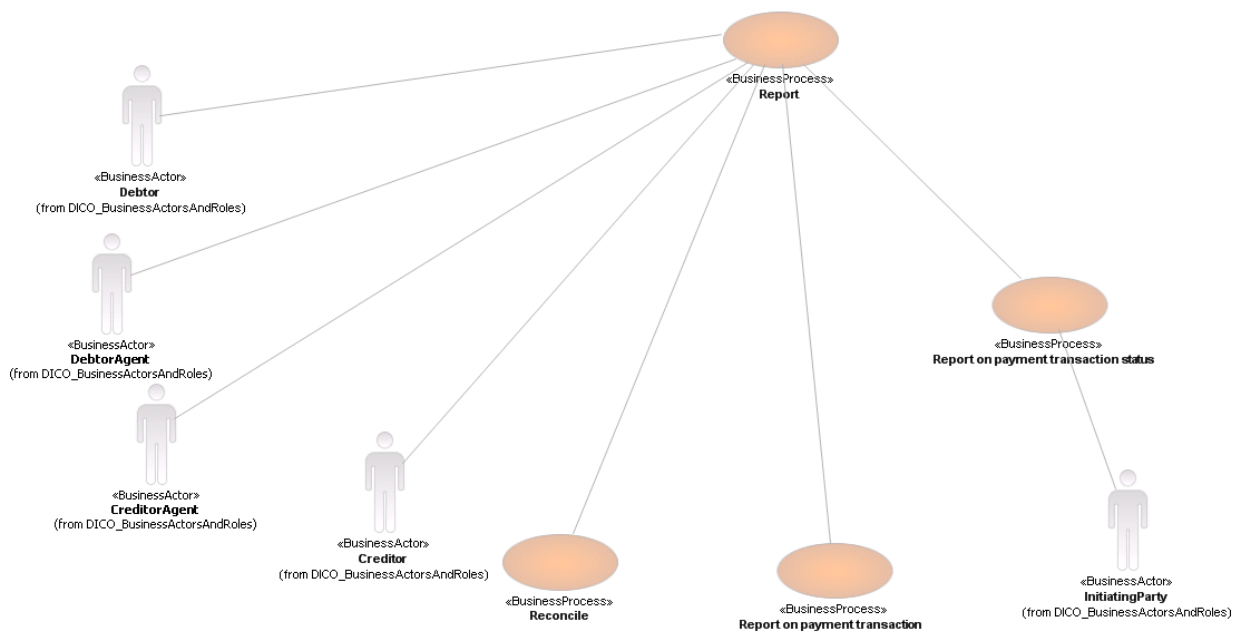
BusinessRoles/Participants Matrix Table

<i>Participants</i> <i>BusinessRoles</i>	(Account) Servicer	(Account) Owner	Recipient	Forwarding Agent
Creditor		X	X	
Debtor		X	X	
Creditor Agent	X		X	X
Debtor Agent	X		X	X
Market Infrastructure	X		X	X
System Member		X	X	X

4. BusinessProcess Description

4.1 BusinessProcess Diagram

This diagram pictures the high level *BusinessProcesses* covered by this project. These high level *BusinessProcesses*, if necessary, can be further split down into more detailed *BusinessProcesses* during the business modelling phase. The aim of the below is to describe the high-level scope of the project, not to be exhaustive.



BusinessProcess Report

Definition: the process includes the financial impact reporting, the reporting on the payment transaction status and the reconciliation process. Further descriptions of these sub-processes are included below.

Note :

- Reporting applies both to interbank reporting (eg nostro account reporting), and bank-to-customer reporting. The definitions below apply to the bank-to-customer reporting.
- Regulatory reporting is described as a separate process.

Pre-condition: an agreement exists between the reporting party and the reported party to do a specific type of reporting, in order to meet legal requirements and business requirements agreed between the reporting and reported party.

Trigger: payment process is completed

Pre-condition: the payment transaction is reported on.

BusinessProcess Reconcile:

Definition: the process includes the financial impact reporting, the reporting on the payment transaction status and the reconciliation process. Further descriptions of these sub-processes are included below.

Note :

- Reporting applies both to interbank reporting (eg nostro account reporting), and bank-to-customer reporting. The definitions below apply to the bank-to-customer reporting.
- Regulatory reporting is described as a separate process.

Pre-condition: an agreement exists between the reporting party and the reported party to do a specific type of reporting, in order to meet legal requirements and business requirements agreed between the reporting and reported party.

Trigger: payment process is completed

Pre-condition: the payment transaction is reported on.

BusinessProcess Report on payment transaction

Definition : reporting done by debtor agent to debtor or party authorised by the debtor to receive the report and reporting by creditor agent to creditor or party authorised by the creditor to receive the report on the financial impact of the processed transaction.

Examples of this type of reporting typically are : debit advices, credit advices, intraday and end-of-day statements, etc)

Pre-condition: debit or credit has been registered to the account (Note : the term 'registered' is used, rather than the term 'booked', as an entry on an account can have 3 statuses : pending, future, booked - as defined in the cash management messages set)

Trigger : completion of the settlement process

Post-condition : the 'financial impact' report is delivered.

BusinessProcess Report on payment transaction status

Report on transaction status : report to initiating party by first or forwarding agent on negative (rejected) and/or positive status (accepted/repaid) of the payment transaction throughout the lifecycle of the transaction.

Note : Report on final execution status is the reporting done by the final agent to the initiating party when he has registered the item to the creditor's account. This reporting has to be conveyed to the initiating

party, either through the chain of preceding agents in the original chain, or through means of investigation by eg forwarding or first agent.

Pre-condition : transaction has been received by any agent in the chain

Trigger : any change in status during the lifecycle of the transaction

Post-condition : status is delivered to the initiating party





5. Description of *BusinessActivities*

This section presents the different *BusinessActivities* within each *BusinessProcess*. *BusinessActivities* of a process are described in swim lane diagrams and are referred in this document as activity diagrams.

The development of an activity diagram is part of the ISO 20022 modelling process and allows capturing the requirements.

The activity diagram provides a zoom-in on the *BusinessActivities* taking place during each of the *BusinessProcesses* described in Section 4. It also shows the *BusinessActivities* that are triggered when another *BusinessActivity* has a negative result.

What is the activity diagram about?

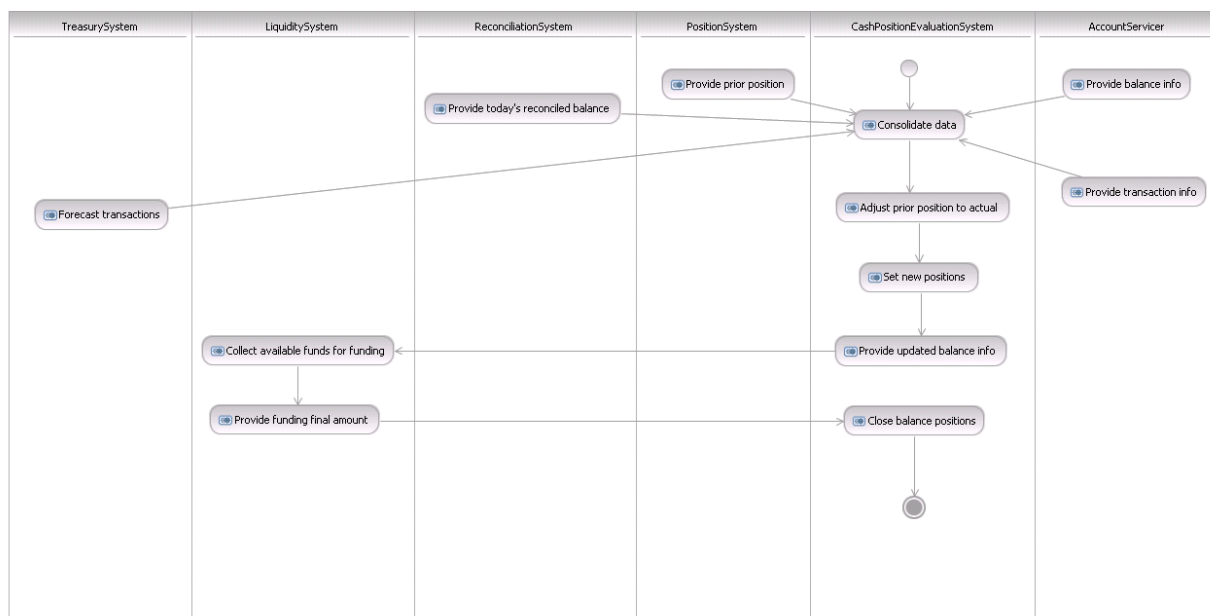
- It is a diagram representing the 'common lifecycle' of a *BusinessProcess*
- A start point  shows where the lifecycle of the business process commences and the end points show  where the lifecycle may possibly end
- A lozenge  means a that a choice between several actions can be made
- A bar  means a that several actions are initiated in parallel
- The flow of activities between the involved *Participants* (parties)
- *BusinessActivities* may result in different actions, that is, information is conveyed from one party to another party.

Both in scope and out of scope activities are included, with a different level of details. There are no information requirements for out of scope activities, except that they should be clearly identified in the diagram.

Activity diagrams are always accompanied with a text describing the *BusinessActivities* and their interactions.

5.1 *BusinessActivity* – Cash Positioning

CashPositioning

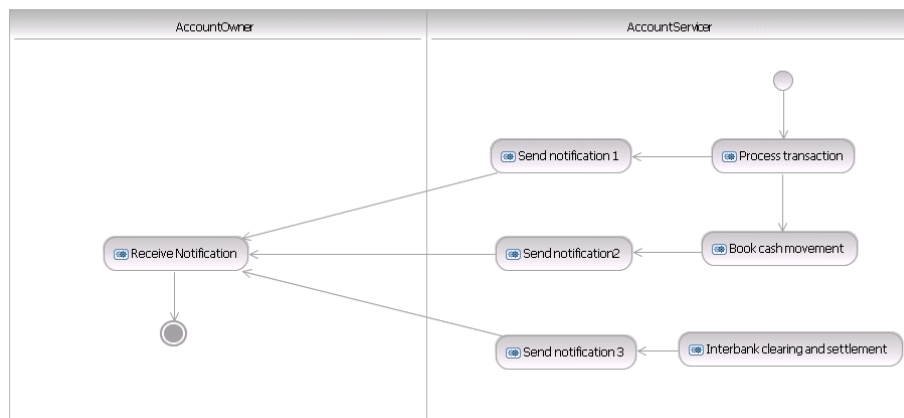


Descriptions of the <i>BusinessActivities</i>	
	Initiator
Consolidate data: A number of different sources of actual and forecast information data is collected	Cash Position Evaluation System
Adjust prior position to actual: Prior position is updated with the information collected : new closing ledger, available and forward balance	Cash Position Evaluation System

Descriptions of the <i>BusinessActivities</i>	
	Initiator
positions are set.	
<u>Set new positions:</u> Prior position is updated with the information collected : new closing ledger, available and forward balance positions are set.	Cash Position Evaluation System
<u>Provide updated balance info:</u> Final balance positions are provided to the investment/liquidity management department.	Cash Position Evaluation System
<u>Collect available funds for investment/funding:</u> All available liquidity is collected throughout the different systems.	Liquidity System
<u>Provide investment/funding final amount:</u> Available liquidity is made available to the cash position system.	Liquidity System
<u>Provide balance info:</u> New actual balance information is received from the bank. This includes information on the booked (ledger) balance (closing balance at end of previous day, opening booked balance at start of current day, available and forward available balances. Note : the different balance types that need to be reported on are further discussed in the data requirements chapter.	Account Servicer
<u>Provide transaction info:</u> If intraday reporting occurs, additional information on transactions posted to the account is received from the account servicing bank during the day. Note : intraday balances may be provided, even though intraday balance reconciliation is usually not done.	Account Servicer
<u>Provide prior position:</u> Prior balance position forecast information is received from the position system.	Position System
<u>Provide today's reconciled balance:</u> Forecasted balance is reconciled with actual balance information received from the bank.	Reconciliation System
<u>Forecast transactions:</u> expected transaction information is collected. This can be a repetitive activity.	Treasury System
<u>Close balance positions:</u> Process terminates once all cash transaction activity ceases for the day, or once funding/investment options are no longer available due to market close.	Cash Position Evaluation System

5.2 BusinessActivity – Notification to Account Owner

Notification To Account Owner

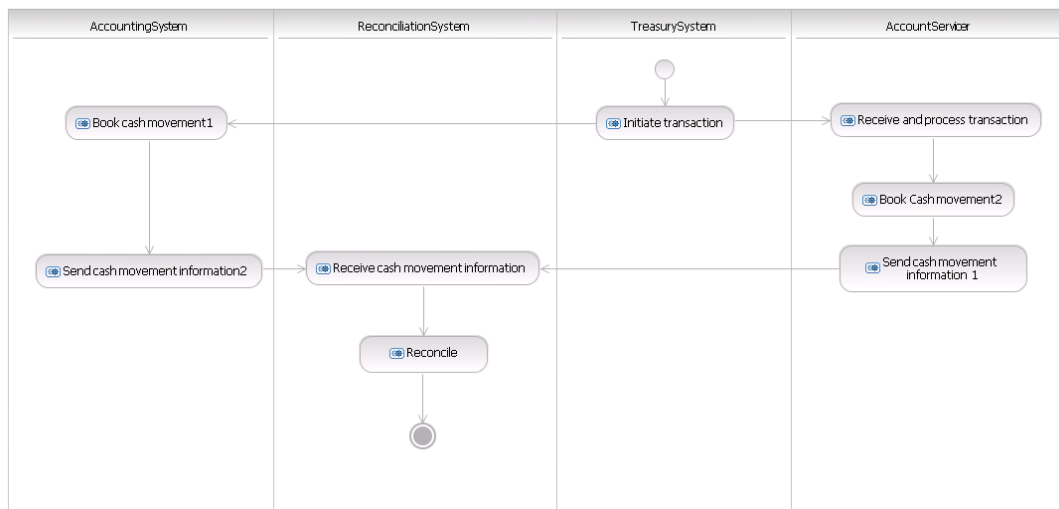


Descriptions of the <i>BusinessActivities</i>	
	Initiator
<u>Process transaction:</u> The account servicer processes the transaction (either received from the account owner, or from another party). On the credit side, it may be important to obtain early visibility of funds as soon as possible. This may be the case for treasury operations, or for commercial reasons (release of goods). Information is not necessarily used to start the reconciliation process, but, depending on the level of info provided, it could serve this activity as well. It could be that booking is not yet completed at the account servicer (such as item is waiting for a booking cycle), but that the account servicer has an agreement with the account owner to inform the owner of certain events that happen on the account, even if these items have not yet obtained 'final' booking status.	Account Servicer
<u>Book cash movement:</u> The account servicer books the movement of cash, which is the result of the processed transaction, to the account of the account owner. The booking may include currency conversion and charges.	Account Servicer
<u>Interbank clearing and settlement:</u> The account servicer will clear and settle the payment order through the next agent/system in the payment chain, including relevant end customer information.	Account Servicer
<u>Receive Notification:</u> The account owner receives the notification. The information contained in the notification may be used for cash positioning, reconciliation, investigations by counterparties, etc.	Account Owner
<u>Send notification 1:</u> Under certain circumstances, the account owner may require a notification of a transaction 'in settlement' at its account servicer. As the diagram shows, the account servicer can send notifications at several stages of the processing and settlement process. As banks' posting and information practices may differ, all of the notification flows shown in the diagram are optional - and will depend on the service agreed between account owner and servicer.	Account Servicer
<u>Send notification 2 / Book cash movement:</u> It may be that booking is done real-time, but that information is usually only provided at pre-agreed intervals. In this case, a notification may be sent for certain (pre-agreed) types of cash movements that hit the account. Notifications can also be used to send details regarding underlying transactions, which are not included in full detail in eg a batched entry on an end-of-day statement.	Account Servicer
<u>Send notification 3 / Interbank clearing and settlement:</u> an account	Account Servicer

Descriptions of the <i>BusinessActivities</i>	
	Initiator
owner that initiated a transaction may want to know whether the transaction has already been settled in a clearing system, as the counterparty requests this information from the initiating account owner.	

5.3 BusinessActivity – Transaction Reconciliation (1)

Transaction Reconciliation (1)

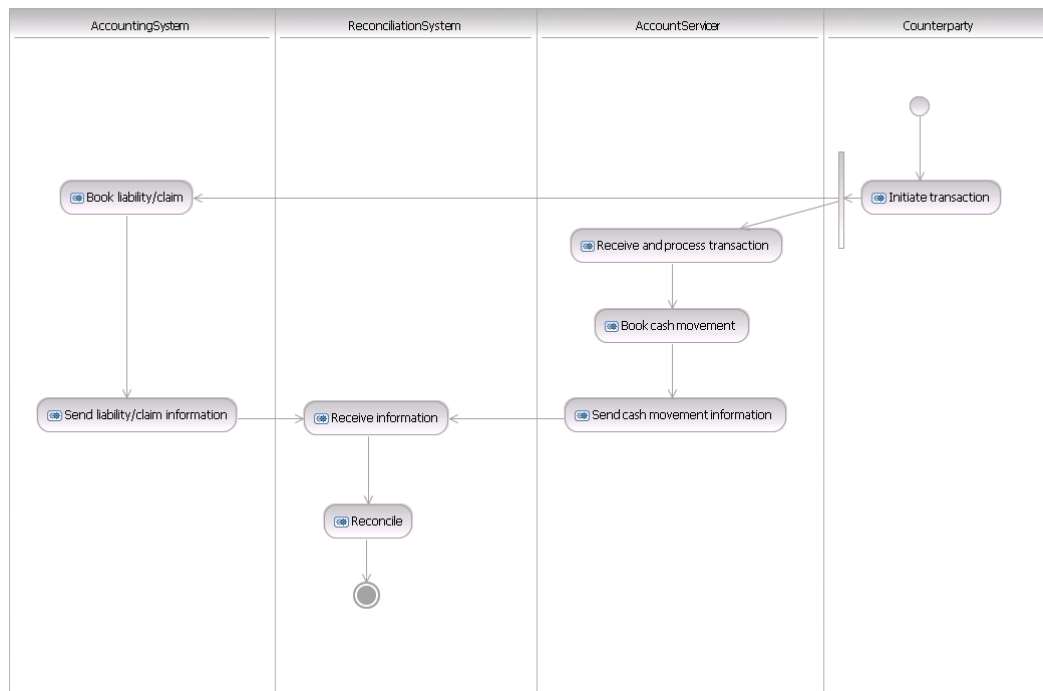


Descriptions of the <i>BusinessActivities</i>	
	Initiator
Initiate transaction: The account owner initiates the financial leg of an underlying transaction with the account servicer. This can be any type of transaction. The underlying transaction can be concluded with a third party, or with the account servicer.	Treasury System
Receive and process transaction: The account servicer will do all necessary checks related to the acceptance of the transaction of the account owner and will process the transaction.	Account Servicer
Book cash movement 1: The account owner will book the movement of cash, which is the result of the submitted transaction, in its internal books.	Accounting System
Book Cash movement 2: The account servicer will book the movement of cash, which is the result of the submitted transaction, to the account of the account owner. The booking may include currency conversion and charges.	Account Servicer
Send cash movement information 1: The account servicer will send information related to the cash movements that have been booked to the account, to the account owner.	Account Servicer
Send cash movement information 2: The account owner's accounting system will feed the reconciliation system with information on the booked items.	Accounting System
Receive cash movement information: The account owner's reconciliation system receives the cash movement information, both from the external feed (ie the account servicer) and the internal accounting system.	Reconciliation System
Reconcile: The account owner's reconciliation system matches the information from the internal accounting system with the information received from the external feed (that is the account servicer). It identifies items which are not matched. These mismatched items may trigger an investigation process. Note : in case the cash movement information sent by the account servicer contains aggregate amounts, a "Financial Reconciliation Process" finally analyses total amounts paid according to the initial cash movement information provided by the account servicer (such as in a statement), with	Reconciliation System

Descriptions of the <i>BusinessActivities</i>	
	Initiator
the specifications provided in information reports provided by the account servicer that provide detailed, individual information.	

5.4 BusinessActivity – Transaction Reconciliation (2)

Transaction Reconciliation (2)



Descriptions of the <i>BusinessActivities</i>	
	Initiator
Initiate transaction: The counterparty initiates a transaction with the account owner. This can be any type of transaction (such as securities, trade, purchase of goods, etc.). The counterparty will also initiate the financial leg of the transaction with its account servicer. The counterparty's account servicer may be or may not be equal to the account servicer of the account owner.	Counterparty
Receive and process transaction: The account servicer will do all necessary checks related to the acceptance of the transaction (received from the counterparty directly, or through intermediary financial institutions) and will process the transaction.	Account Servicer
Book cash movement: The account servicer will book the movement of cash, which is the result of the submitted transaction, to the account of the account owner. The booking may include currency conversion and charges.	Account Servicer
Send cash movement information: The account servicer will send information related to the cash movements that have been booked to the account, to the account owner.	Account Servicer
Receive information: The account owner's reconciliation system receives the cash movement information from the external feed (that is the account servicer) and receives information on the liabilities/claims from the internal accounting system.	Reconciliation System
Book liability/claim: The accounting system of the account owner will book a 'liability/claim' for the transaction concluded with the counterparty in its internal books.	Accounting System
Send liability/claim information: The account owner's accounting system will feed the reconciliation system with information on the open items (liabilities/claims).	Accounting System
Reconcile: The account owner's reconciliation system matches the information from the internal accounting system with the information received	Reconciliation System

Descriptions of the <i>BusinessActivities</i>	
	Initiator
from the external feed (ie the account servicer). It identifies items which are not matched. These mismatched items may trigger an investigation process. Note : in case the cash movement information sent by the account servicer contains aggregate amounts (such as in case of a lockbox scenario), a "Financial Reconciliation Process" finally analyses total amounts paid according to the initial cash movement information provided by the account servicer (eg in a statement), with the specifications provided in information reports provided by the account servicer that provide detailed, individual information.	

6. *BusinessTransactions*

This section describes the message flows based on the activity diagrams documented above. It shows the typical exchanges of information in the context of a *BusinessTransaction*.

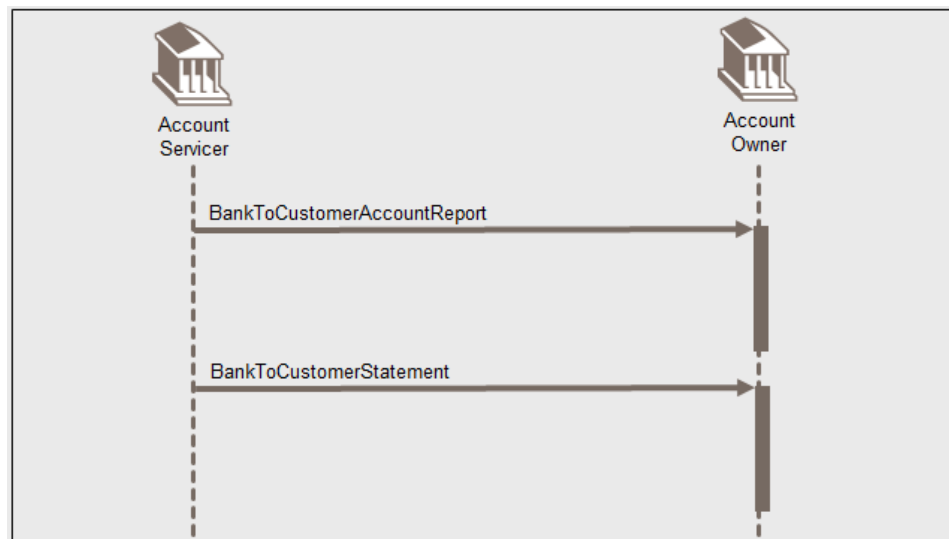
6.1 Reporting *BusinessTransaction*

The Bank-to-Customer Cash Management messages are sent from the Account Servicer to the Account Owner, or a party authorised by the Account Owner to receive the account information (i.e. the Message Recipient).

The scenarios illustrate the reporting from Account Servicer to Account Owner

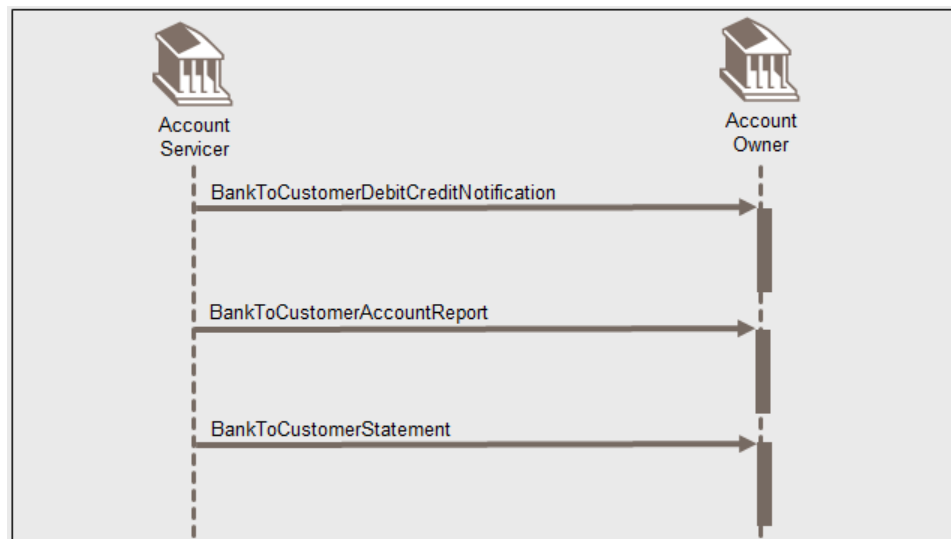
Scenario 1

The following service has been agreed between Account Owner and Account Servicer: During the day, the Account Servicer sends one or more BankToCustomerAccountReport messages to inform the Account Owner of any intraday movements (booked and pending) on the account. At the end of the business day, the Account Servicer summarizes all booked entries in the BankToCustomerStatement and provides booked and available balance information.



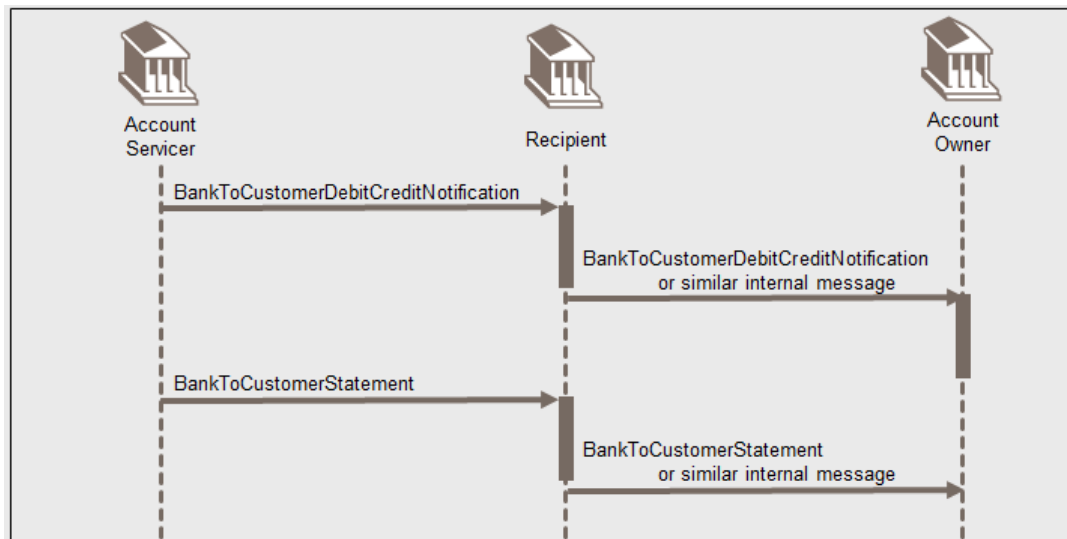
Scenario 2

The following service has been agreed between Account Owner and Account Servicer: During the day, the Account Servicer will send a BankToCustomerDebitCreditNotification for any incoming credits above a certain threshold. At a pre-agreed time during the day, the Account Servicer will also provide an intraday BankToCustomerAccountReport, summarizing all movements (booked and pending) which have been posted to the account since the start of the business day. The Account Servicer will also include balance information (booked and expected) in the message. At the end of the business day, the Account Servicer summarizes all booked entries in the BankToCustomerStatement and provides booked and available balance information.



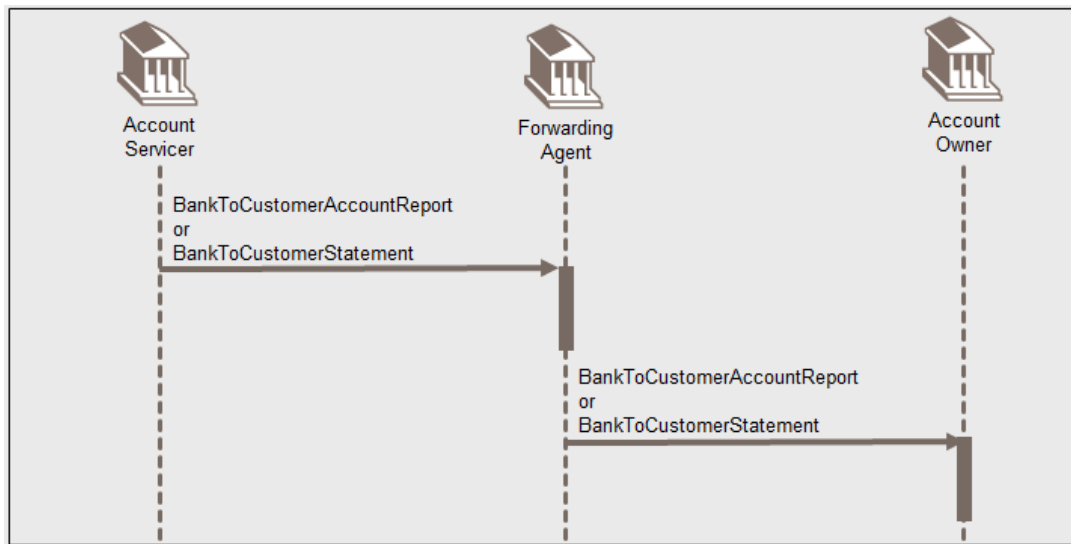
Scenario 3

This scenario shows that the Bank to Customer Cash Management messages can also be delivered to a party authorised by the Account Owner to receive the account information (i.e. the Message Recipient).



6.2 Reporting through a Forwarding Agent *BusinessTransaction*

The Bank-to-Customer Cash Management messages are sent from the Account Servicer through a Forwarding Agent (who plays the role of 'concentrating institution' for the account owner) to the Account Owner, or a party authorised by the Account Owner to receive the account information (i.e. the Message Recipient). Which messages will be sent will be agreed between the three parties.

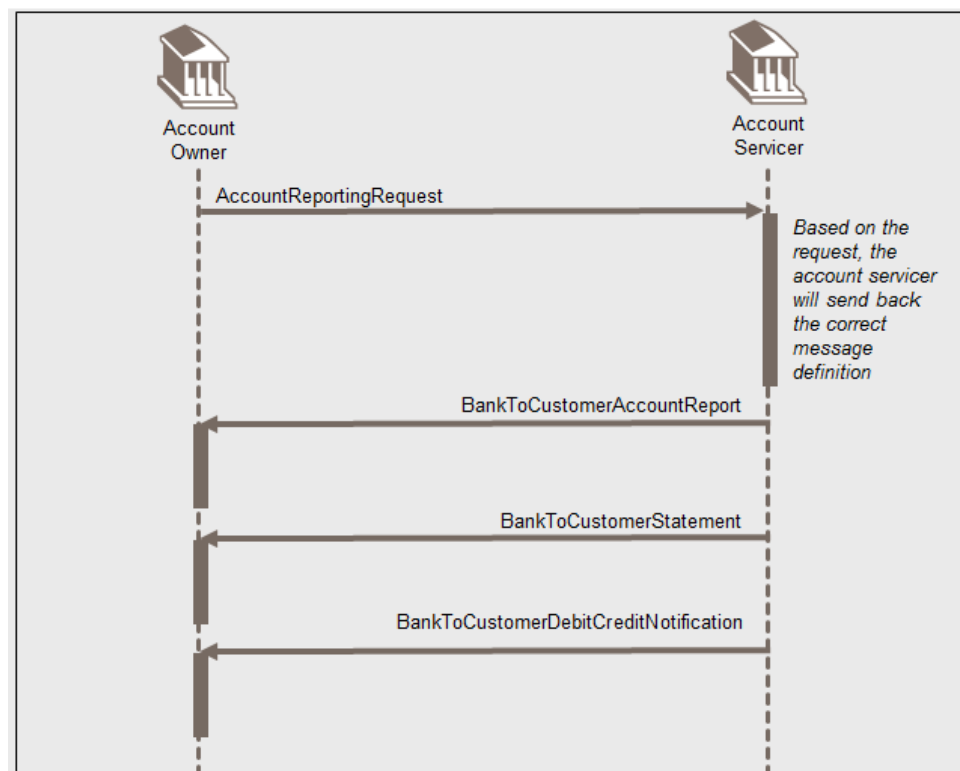


6.3 Reporting Request to Account Servicer *BusinessTransaction*

Direct Scenario

In this scenario, an account owner requests a statement directly from its account servicing institution

- The account owner sends the `AccountReportingRequest` directly to its account serving institution
- The account servicing institution sends the requested message to the account owner

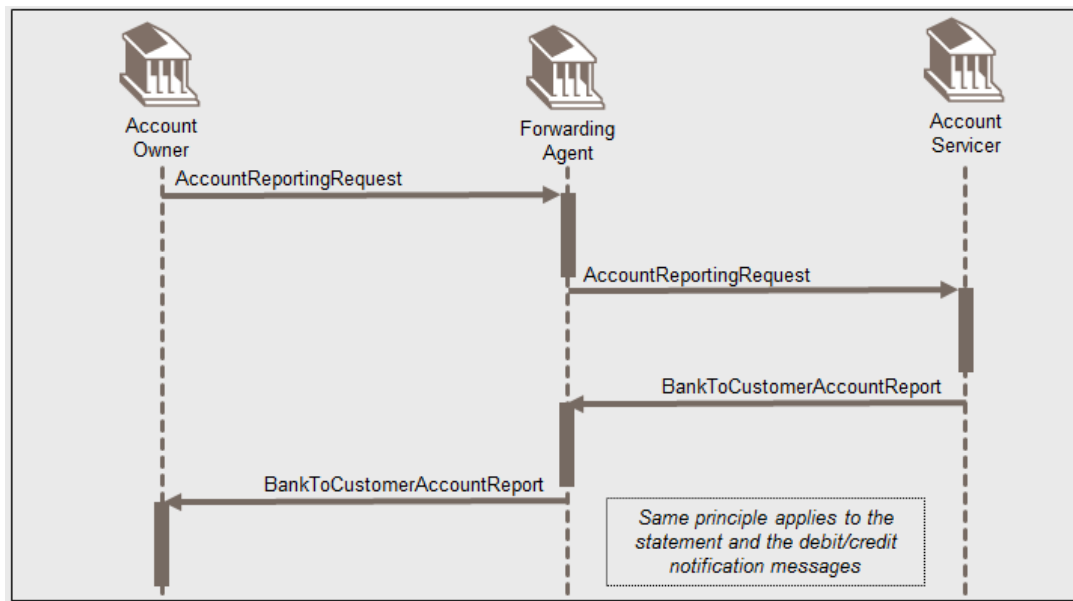


Relay Scenario

An account owner wishes to request its account servicing institution to send a statement of the account owner's account however, the account owner uses a forwarding agent for all its communication with the account servicing institution.

- The account owner sends the `AccountReportingRequest` to the forwarding agent or requests a forwarding agent to issue an `AccountReportingRequest`

- The forwarding agent forwards the AccountReportingRequest to the account servicing institution
- The account servicing institution sends the requested message to the forwarding agent- The forwarding agent forwards the message to the account owner.



7. Business examples

7.1 BankToCustomerAccountReport - *Business Example 1*

Narrative

AAAA Banken has agreed to provide an intraday account report to its customer Finpetrol. Each business day, at 12.30PM, AAAA Banken will provide Finpetrol with an overview of all booked and expected entries since the start of the business day. On 18 October 2010, at 12.30 PM, AAAASESS sends such an intraday BankToCustomerAccountReport to Company Finpetrol. It contains two entries: one booked, and one expected item. It has been pre-agreed between account servicer and account owner that AAAA Banken will not include (expected) balance info in this intraday report.

Business Description

Element	<XML Tag>	Content
Group Header	<GrpHdr>	
MessageIdentification	<MsgId>	AAAASESS-FP-ACCR001
CreationDateTime	<CreDtTm>	2010-10-18T12:30:00+01:00
MessagePagination	<MsgPgntn>	
PageNumber	<PgNb>	1
LastPageIndicator	<LastPgInd>	TRUE
Report	<Rpt>	
Identification	<Id>	AAAASESS-FP-ACCR001
CreationDateTime	<CreDtTm>	2010-10-18T12:30:00+01:00
FromToDate	<FrToDt>	
FromDateTime	<FrmDtTm>	2010-10-18T08:00:00+01:00
ToDateTime	<ToDtTm>	2010-10-18T12:30:00+01:00
Account	<Acct>	
Identification	<Id>	
Other	<Othr>	
Identification	<Id>	50000000054910000003
Owner	<Ownr>	
Name	<Nm>	FINPETROL
Servicer	<Svcr>	
FinancialInstitutionIdentification	<FinInstnId>	
Name	<Nm>	AAAA BANKEN
PostalAddress	<PstlAdr>	
Country	<Ctry>	SE
Entry	<Ntry>	
Amount	<Amt>	SEK 200000
CreditDebitIndicator	<CdtDbtInd>	DBIT
Status	<Sts>	BOOK

BookingDate	<BookgDt>	
DateTime	<DtTm>	2010-10-18T10:15:00+01:00
ValueDate	<ValDt>	
Date	<Dt>	2010-10-18
AccountServicerReference	<AcctSvcrRef>	AAAASESS-FP-ACCR-01
BankTransactionCode	<BkTxCd>	
Domain	<Domn>	
Code	<Cd>	PAYM
Family	<Fmly>	
Code	<Cd>	0001
SubFamilyCode	<SbFmlyCd>	0003
EntryDetails	<NtryDtls>	
Batch	<Btch>	
MessageIdentification	<Msgld>	FINP-0055
PaymentInformationId	<PmtInfID>	FINP-0055/001
NumberOfTransactions	<NbOfTx>	20
Entry	<Ntry>	
Amount	<Amt>	SEK 30000
CreditDebitIndicator	<CdtDbtInd>	CRDT
Status	<Sts>	PDNG
ValueDate	<ValDt>	
Date	<Dt>	2010-10-18
AccountServicerReference	<AcctSvcrRef>	AAAASESS-FP-CONF-FX
BankTransactionCode	<BkTxCd>	
Domain	<Domn>	
Code	<Cd>	TREA
Family	<Fmly>	
Code	<Cd>	0002
SubFamilyCode	<SbFmlyCd>	0000
EntryDetails	<NtryDtls>	
TransactionDetails	<TxDtls>	
References	<Refs>	
InstructionIdentification	<InstrId>	FP-004567-FX
EndToEndIdentification	<EndToEndIdentification>	AAAASS1085FINPSS
Amount	<Amt>	EUR 3255
CreditDebitIndicator	<CdtDbtInd>	CRDT
AmountDetails	<AmtDtls>	
CounterValueAmount	<CntrValAmt>	
Amount	<Amt>	EUR 3255
CurrencyExchange	<CcyXchg>	
SourceCurrency	<SrcCcy>	EUR

ExchangeRate	<XchRate>	0.1085
--------------	-----------	--------

XML Instance

```

<BkToCstmrAcctRpt>
  <GrpHdr>
    <MsgId>AAAASESS-FP-ACCR001</MsgId>
    <CreDtTm>2010-10-18T12:30:00+01:00</CreDtTm>
    <MsgPgntn>
      <PgNb>1</PgNb>
      <LastPgInd>true</LastPgInd>
    </MsgPgntn>
  </GrpHdr>
  <Rpt>
    <Id>AAAASESS-FP-ACCR001</Id>
    <CreDtTm>2010-10-18T12:30:00+01:00</CreDtTm>
    <FrToDt>
      <FrDtTm>2010-10-18T08:00:00+01:00</FrDtTm>
      <ToDtTm>2010-10-18T12:30:00+01:00</ToDtTm>
    </FrToDt>
    <Acct>
      <Id>
        <Othr>
          <Id>500000000054910000003</Id>
        </Othr>
      </Id>
      <Ownr>
        <Nm>FINPETROL</Nm>
      </Ownr>
      <Svcr>
        <FinInstnId>
          <Nm>AAAA BANKEN</Nm>
          <PstlAdr>
            <Ctry>SE</Ctry>
          </PstlAdr>
        </FinInstnId>
      </Svcr>
    </Acct>
    <Ntry>
      <Amt Ccy="SEK">200000</Amt>
      <CdtDbtInd>DBIT</CdtDbtInd>
      <Sts>BOOK</Sts>
      <BookgDt>
        <DtTm>2010-10-18T10:15:00+01:00</DtTm>
      </BookgDt>
      <ValDt>
        <Dt>2010-10-18</Dt>
      </ValDt>
      <AcctSvcrRef>AAAASESS-FP-ACCR-01</AcctSvcrRef>
      <BkTxCd>
        <Domn>
          <Cd>PAYM</Cd>
          <Fmly>
            <Cd>0001</Cd>
            <SubFmlyCd>0003</SubFmlyCd>
          </Fmly>
        </Domn>
      </BkTxCd>
      <NtryDtls>
        <Btch>

```

```

        <MsgId>FINP-0055</MsgId>
        <PmtInflId>FINP-0055-001</PmtInflId>
        <NbOfTxs>20</NbOfTxs>
    </Btch>
</NtryDtls>
</Ntry>
<Ntry>
    <Amt Ccy="SEK">30000</Amt>
    <CdtDbtInd>CRDT</CdtDbtInd>
    <Sts>PDNG</Sts>
    <ValDt>
        <Dt>2010-10-18</Dt>
    </ValDt>
    <AcctSvcrRef>AAAASESS-FP-CONF-FX</AcctSvcrRef>
    <BkTxCd>
        <Domn>
            <Cd>TREA</Cd>
            <Fmly>
                <Cd>0002</Cd>
                <SubFmlyCd>0000</SubFmlyCd>
            </Fmly>
        </Domn>
    </BkTxCd>
    <NtryDtls>
        <TxDtls>
            <Refs>
                <InstrId>FP-004567-FX</InstrId>
                <EndToEndId>AAAASS1085FINPSS</EndToEndId>
            </Refs>
            <Amt Ccy="EUR">3255</Amt>
            <CdtDbtInd>CRDT</CdtDbtInd>
            <AmtDtls>
                <CntrValAmt>
                    <Amt Ccy="EUR">3255</Amt>
                    <CcyXchg>
                        <SrcCcy>EUR</SrcCcy>
                        <XchgRate>0.185</XchgRate>
                    </CcyXchg>
                </CntrValAmt>
            </AmtDtls>
        </TxDtls>
    </NtryDtls>
</Ntry>
</Rpt>
</BkToCstmrAcctRpt>

```

7.2 BankToCustomerStatement - *Business Example 1*

Narrative

On 18 October 2010, at 5.00 PM, AAAASESS sends an end-of-day BankToCustomerStatement to Company Finpetrol. It contains all booked items during the business day.

Business Description

Element	<XML Tag>	Content
Group Header	<GrpHdr>	
MessageIdentification	<MsgId>	AAAASESS-FP-STAT001
CreationDateTime	<CreDtTm>	2010-10-18T17:00:00+01:00
MessagePagination	<MsgPgntn>	
PageNumber	<PgNb>	1
LastPageIndicator	<LastPgInd>	True
Statement	<Stmt>	
Identification	<Id>	AAAASESS-FP-STAT001
CreationDateTime	<CreDtTm>	2010-10-18T17:00:00+01:00
FromToDate	<FrToDt>	
FromDateTime	<FrmDtTm>	2010-10-18T08:00:00+01:00
ToDateTime	<ToDtTm>	2010-10-18T17:00:00+01:00
Account	<Acct>	
Identification	<Id>	
Other	<Othr>	
Identification	<Id>	50000000054910000003
Owner	<Ownr>	
Name	<Nm>	FINPETROL
Servicer	<Svcr>	
FinancialInstitutionIdentification	<FinInstnId>	
Name	<Nm>	AAAA BANKEN
PostalAddress	<PstlAdr>	
Country	<Ctry>	SE
Balance	<Bal>	
Type	<Tp>	
Code	<Cd>	OPBD
Amount	<Amt>	SEK 500000
CreditDebitIndicator	<CdtDbtInd>	CRDT
Date	<Dt>	2010-10-15
Balance	<Bal>	
Type	<Tp>	CLBD
Code	<Cd>	
Amount	<Amt>	SEK 435678.50
CreditDebitIndicator	<CdtDbtInd>	CRDT

Date	<Dt>	
Date	<Dt>	2010-10-18
Entry	<Ntry>	
Amount	<Amt>	SEK 105678.50
CreditDebitIndicator	<CdtDbtInd>	CRDT
Status	<Sts>	BOOK
BookingDate	<BookgDt>	
DateTime	<DtTm>	2010-10-18T13:15:00+01:00
ValueDate	<ValDt>	
Date	<Dt>	2010-10-18
AccountServicerReference	<AcctSvcrRef>	AAAASESS-FP-CN-
BankTransactionCode	<BkTxCd>	
Domain	<Domn>	
Code	<Cd>	PAYM
Family	<Fmly>	
Code	<Cd>	0001
SubFamilyCode	<SbFmlyCd>	0005
EntryDetails	<NtryDtls>	
TransactionDetails	<TxDtls>	
References	<Refs>	
EndToEndIdentification	<EndToEndId>	MUELL/FINP/RA12345
Amount	<Amt>	SEK 0
CreditDebitIndicator	<CdtDbtInd>	CRDT
RelatedParties	<RltdPties>	
Debtor	<Dbtr>	
Name	<Nm>	MUELLER
Entry	<Ntry>	
Amount	<Amt>	SEK 200000
CreditDebitIndicator	<CdtDbtInd>	DBIT
Status	<Sts>	BOOK
BookingDate	<BookgDt>	
DateTime	<DtTm>	2010-10-18T10:15:00+01:00
ValueDate	<ValDt>	
Date	<Dt>	2010-10-18
AccountServicerReference	<AcctSvcrRef>	AAAASESS-FP-ACCR-01
BankTransactionCode	<BkTxCd>	
Domain	<Domn>	
Code	<Cd>	PAYM
Family	<Fmly>	
Code	<Cd>	0001
SubFamilyCode	<SbFmlyCd>	0003

EntryDetails	<NtryDtls>	
Batch	<Btch>	
MessageIdentification	<MsgId>	FINP-0055
PaymentInformationIdentificati	<PmtInfID>	FINP-0055/001
NumberOfTransactions	<NbOfTx>	20
Entry	<Ntry>	
Amount	<Amt>	SEK 30000
CreditDebitIndicator	<CdtDbtInd>	CRDT
Status	<Sts>	BOOK
BookingDate	<BookgDt>	
DateTime	<DtTm>	2010-10-18T15:15:00+01:00
ValueDate	<ValDt>	
Date	<Dt>	2010-10-18
AccountServicerReference	<AcctSvcrRef>	AAAASESS-FP-CONF-FX
BankTransactionCode	<BkTxCd>	
Domain	<Domn>	
Code	<Cd>	TREA
Family	<Fmly>	
Code	<Cd>	0002
SubFamilyCode	<SbFmlyCd>	0000
EntryDetails	<NtryDtls>	
TransactionDetails	<TxDtls>	
References	<Refs>	
InstructionIdentification	<InstrId>	FP-004567-FX
EndToEndIdentification	<EndToEndID>	AAAASS1085FINPSS
Amount	<Amt>	EUR 3255
CreditDebitIndicator	<CdtDbtInd>	CRDT
AmountDetails	<AmtDtls>	
CounterValueAmount	<CntrValAmt>	
Amount	<Amt>	EUR 3255
CurrencyExchange	<CcyXchg>	
SourceCurrency	<SrcCcy>	EUR
ExchangeRate	<XchRate>	0.1085

XML Instance

```

<BkToCstmrStmt>
  <GrpHdr>
    <MsgId>AAAASESS-FP-STAT001</MsgId>
    <CreDtTm>2010-10-18T17:00:00+01:00</CreDtTm>
    <MsgPgntn>
      <PgNb>1</PgNb>
      <LastPgInd>true</LastPgInd>
    </MsgPgntn>
  </GrpHdr>

```

```

<Stmt>
  <Id>AAAASESS-FP-STAT001</Id>
  <CreDtTm>2010-10-18T17:00:00+01:00</CreDtTm>
  <FrToDt>
    <FrDtTm>2010-10-18T08:00:00+01:00</FrDtTm>
    <ToDtTm>2010-10-18T17:00:00+01:00</ToDtTm>
  </FrToDt>
  <Acct>
    <Id>
      <Othr>
        <Id>50000000054910000003</Id>
      </Othr>
    </Id>
    <Ownr>
      <Nm>FINPETROL</Nm>
    </Ownr>
    <Svcr>
      <FinInstnId>
        <Nm>AAAA BANKEN</Nm>
        <PstlAdr>
          <Ctry>SE</Ctry>
        </PstlAdr>
      </FinInstnId>
    </Svcr>
  </Acct>
  <Bal>
    <Tp>
      <CdOrPrtry>
        <Cd>OPBD</Cd>
      </CdOrPrtry>
    </Tp>
    <Amt Ccy="SEK">500000</Amt>
    <CdtDbtInd>CRDT</CdtDbtInd>
    <Dt>
      <Dt>2010-10-15</Dt>
    </Dt>
  </Bal>
  <Bal>
    <Tp>
      <CdOrPrtry>
        <Cd>CLBD</Cd>
      </CdOrPrtry>
    </Tp>
    <Amt Ccy="SEK">435678.50</Amt>
    <CdtDbtInd>CRDT</CdtDbtInd>
    <Dt>
      <Dt>2010-10-18</Dt>
    </Dt>
  </Bal>
  <Ntry>
    <Amt Ccy="SEK">105678.50</Amt>
    <CdtDbtInd>CRDT</CdtDbtInd>
    <Sts>BOOK</Sts>
    <BookgDt>
      <DtTm>2010-10-18T13:15:00+01:00</DtTm>
    </BookgDt>
    <ValDt>
      <Dt>2010-10-18</Dt>
    </ValDt>
    <AcctSvcrRef>AAAASESS-FP-CN_98765/01</AcctSvcrRef>
    <BkTxCd>

```

```

    <Domn>
      <Cd>PAYM</Cd>
      <Fmly>
        <Cd>0001</Cd>
        <SubFmlyCd>0005</SubFmlyCd>
      </Fmly>
    </Domn>
  </BkTxCd>
  <NtryDtls>
    <TxDtls>
      <Refs>
        <EndToEndId>MUELL/FINP/RA12345</EndToEndId>
      </Refs>
      <Amt Ccy="SEK">0</Amt>
      <CdtDbtInd>CRDT</CdtDbtInd>
      <RltdPties>
        <Dbtr>
          <Nm>MUELLER</Nm>
        </Dbtr>
      </RltdPties>
    </TxDtls>
  </NtryDtls>
</Ntry>
<Ntry>
  <Amt Ccy="SEK">200000</Amt>
  <CdtDbtInd>DBIT</CdtDbtInd>
  <Sts>BOOK</Sts>
  <BookgDt>
    <DtTm>2010-10-18T10:15:00+01:00</DtTm>
  </BookgDt>
  <ValDt>
    <Dt>2010-10-18</Dt>
  </ValDt>
  <AcctSvcrRef>AAAASESS-FP-ACCR-01</AcctSvcrRef>
  <BkTxCd>
    <Domn>
      <Cd>PAYM</Cd>
      <Fmly>
        <Cd>0001</Cd>
        <SubFmlyCd>0003</SubFmlyCd>
      </Fmly>
    </Domn>
  </BkTxCd>
  <NtryDtls>
    <Btch>
      <MsgId>FINP-0055</MsgId>
      <PmtInflId>FINP-0055/001</PmtInflId>
      <NbOfTxs>20</NbOfTxs>
    </Btch>
  </NtryDtls>
</Ntry>
<Ntry>
  <Amt Ccy="SEK">30000</Amt>
  <CdtDbtInd>CRDT</CdtDbtInd>
  <Sts>BOOK</Sts>
  <BookgDt>
    <DtTm>2010-10-18T15:15:00+01:00</DtTm>
  </BookgDt>
  <ValDt>
    <Dt>2010-10-18</Dt>

```

```

</ValDt>
<AcctSvcrRef>AAAASESS-FP-CONF-FX</AcctSvcrRef>
<BkTxCd>
  <Domn>
    <Cd>TREA</Cd>
    <Fmly>
      <Cd>0002</Cd>
      <SubFmlyCd>0000</SubFmlyCd>
    </Fmly>
  </Domn>
</BkTxCd>
<NtryDtls>
  <TxDtls>
    <Refs>
      <InstrId>FP-004567-FX</InstrId>
    </Refs>
    <EndToEndId>AAAASS1085FINPSS</EndToEndId>
    </Refs>
    <Amt Ccy="EUR">3255</Amt>
    <CdtDbtInd>CRDT</CdtDbtInd>
    <AmtDtls>
      <CntrValAmt>
        <Amt Ccy="EUR">3255</Amt>
        <CcyXchg>
          <SrcCcy>EUR</SrcCcy>
        </CcyXchg>
      </CntrValAmt>
    </AmtDtls>
  </TxDtls>
</NtryDtls>
</Ntry>
</Stmt>
</BkToCstmrStmt>

```


7.3 BankToCustomerDebitCreditNotification - *Business Example 2*

Narrative

Besides providing an intraday AccountReport at 12.30 PM (see example with BankToCustomerAccountReport), AAAA Banken and Finpetrol have agreed on a credit notification service, for all incoming credits above a certain threshold. On 18 October 2010, at 1.20 PM, AAAASESS sends a BankToCustomerDebitCreditNotification to Company Finpetrol, to advise Finpetrol of an incoming credit on its account.

Business Description

Element	<XML Tag>	Content
Group Header	<GrpHdr>	
MessageIdentification	<MsgId>	AAAASESS-FP-00001
CreationDateTime	<CreDtTm>	2010-10-18T13:20:00+01:00
Notification	<Ntfctn>	
Identification	<Id>	AAAASESS-FP-CN-98765
CreationDateTime	<CreDtTm>	2010-10-18T13:20:00+01:00
Account	<Acct>	
Identification	<Id>	
Other	<Othr>	
Identification	<Id>	50000000054910000003
Owner	<Ownr>	
Name	<Nm>	FINPETROL
Servicer	<Svcr>	
FinancialInstitutionIdentificatio	<FinInstnId>	
Name	<Nm>	AAAA BANKEN
PostalAddress	<PstlAdr>	
Country	<Ctry>	SE
Entry	<Ntry>	
Amount	<Amt>	SEK 105678.50
CreditDebitIndicator	<CdtDbtInd>	CRDT
Status	<Sts>	BOOK
BookingDate	<BookgDt>	
DateTime	<DtTm>	2010-10-18T13:15:00+01:00
ValueDate	<ValDt>	
Date	<Dt>	2010-10-18
AccountServicerReference	<AcctSvcrRef>	AAAASESS-FP-CN-
BankTransactionCode	<BkTxCd>	
Domain	<Domn>	
Code	<Cd>	PAYM
Family	<Fmly>	
Code	<Cd>	0001
SubFamilyCode	<SbFmlyCd>	0005
EntryDetails	<NtryDtls>	

TransactionDetails	<TxDtIs>	
References	<Refs>	
EndToEndIdentification	<EndToEndId>	MUELL/FINP/RA12345
Amount	<Amt>	SEK 0
CreditDebitIndicator	<CdtDbtInd>	CRDT
RelatedParties	<RltdPties>	
Debtor	<Dbtr>	
Name	<Nm>	MUELLER

XML Instance

```

<BkToCstmrDbtCdtNtfctn>
  <GrpHdr>
    <MsgId>AAAASESS-FP-00001</MsgId>
    <CreDtTm>2010-10-18T13:20:00+01:00</CreDtTm>
  </GrpHdr>
  <Ntfctn>
    <Id>AAAASESS-FP-CN-98765</Id>
    <CreDtTm>2010-10-18T13:20:00+01:00</CreDtTm>
    <Acct>
      <Id>
        <Othr>
          <Id>50000000054910000003</Id>
        </Othr>
      </Id>
      <Ownr>
        <Nm>FINPETROL</Nm>
      </Ownr>
      <Svcr>
        <FinInstnId>
          <Nm>AAAA BANKEN</Nm>
          <PstlAdr>
            <Ctry>SE</Ctry>
          </PstlAdr>
        </FinInstnId>
      </Svcr>
    </Acct>
    <Ntry>
      <Amt Ccy="SEK">105678.50</Amt>
      <CdtDbtInd>CRDT</CdtDbtInd>
      <Sts>BOOK</Sts>
      <BookgDt>
        <DtTm>2010-10-18T13:15:00+01:00</DtTm>
      </BookgDt>
      <ValDt>
        <Dt>2010-10-18</Dt>
      </ValDt>
      <AcctSvcrRef>AAAASESS-FP-CN-98765/01</AcctSvcrRef>
      <BkTxCd>
        <Domn>
          <Cd>PAYM</Cd>
          <Fmly>
            <Cd>0001</Cd>
            <SubFmlyCd>0005</SubFmlyCd>
          </Fmly>
        </Domn>
      </BkTxCd>
    </Ntry>
  </Ntfctn>
</BkToCstmrDbtCdtNtfctn>

```

```
      <NtryDtls>
        <TxDtls>
          <Refs>
            <EndToEndId>MUELL/FINP/RA12345</EndToEndId>
          </Refs>
          <Amt Ccy="SEK">0</Amt>
          <CdtDbtInd>CRDT</CdtDbtInd>
          <RltdPties>
            <Dbtr>
              <Nm>MUELLER</Nm>
            </Dbtr>
          </RltdPties>
        </TxDtls>
      </NtryDtls>
    </Ntry>
  </Ntfctn>
</BkToCstmrDbtCdtNtfctn>
```

7.4 AccountReportingRequest - Business Example 1

Narrative

On 27 January 2011, AAAABEBB sends an AccountReportingRequest message to its account servicer BBBBUS33 to request a BankToCustomerStatement for that day.

Business Description

Element	<XML Tag>	Content
Group Header	<GrpHdr>	
MessageIdentification	<MsgId>	EXAMPLE camt.060
CreationDateTime	<CreDtTm>	2011-01-27T17:15:00
ReportingRequest	<RptgReq>	
RequestedMessageNameIdentification	<ReqdMsgNmId>	camt.052.001.03
Account Identification	Acct	
Other Identification	<Id>	
Other Identification	<Othr>	
Other Identification	<Id>	310141014141
AccountOwner	<AcctOwnr>	
Agent	<Agt>	
FinancialInstitutionIdentification	<FinInstnId>	
BICFI	<BICFI>	AAAABEBB
ReportingPeriod	RptgPrd	
FromToDate	FrToDt	
FromDate	FrDt	2011-01-27
FromToTime	FrToTM	
FromTime	FrTm	07:30:00
Type	Tp	ALLL

XML Instance

```

<AcctRptgReq>
  <GrpHdr>
    <MsgId>EXAMPLE camt.060</MsgId>
    <CreDtTm>2011-01-27T17:15:00</CreDtTm>
  </GrpHdr>
  <RptgReq>
    <ReqdMsgNmId>camt.052.001.03</ReqdMsgNmId>
    <Acct>
      <Id>
        <Othr>
          <Id>310141014141</Id>
        </Othr>
      </Id>
    </Acct>
    <AcctOwnr>
      <Agt>
        <FinInstnId>
          <BICFI>AAAABEBB</BICFI>
        </FinInstnId>
      </Agt>
    </AcctOwnr>
  </RptgReq>
</AcctRptgReq>

```

```
</AcctOwnr>
<RptgPrd>
  <FrToDt>
    <FrDt>2011-01-27</FrDt>
  </FrToDt>
  <FrToTm>
    <FrTm>07:30:00</FrTm>
  </FrToTm>
  <Tp>ALLL</Tp>
</RptgPrd>
</RptgReq>
</AcctRptgReq>
```

8. Revision Record

Revision	Date	Author	Description	Sections affected
1.0	31/05/2013	SWIFT	First version in line with ISO20022 – Edition 2013	All

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