



Terms and Conditions for RIX and monetary policy instruments Annex H3 – RIX instructions

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RIX Instructions

1 Background

RIX is the Swedish central settlement/transfer system for large payments, owned and operated by the Riksbank. RIX is a standard system that has been further developed to meet the Riksbank's and the participants' requirements for functionality and efficiency.

RIX Instructions are part of the Terms and Conditions for RIX and monetary policy instruments and an annex to the Master Document. The Terms and Conditions regulate the legal relationship between RIX Participants and the Riksbank as provider and operator of RIX.

The Master Document contains the basic provisions of the Terms and Conditions. There are supplementary terms and conditions in the RIX Instructions and their annexes, which are legally binding on the parties even if reference to these terms and conditions is lacking in the Master Document.

In addition to the Terms and Conditions, the RIX Participant may be obliged to comply with agreements between the RIX Participants and between the RIX Participants and operators of other instructions, clearing and settlement systems which are connected to RIX.

RIX Instructions describe the application of RIX by the RIX Participants and the Riksbank, the technical infrastructure which supports the system, administration of users and access rights, participation in RIX, basic data, account management, liquidity management, Settlement Procedures, notifications and monitoring, message formats and reserve routines. RIX Instructions are supplemented by more detailed descriptions in the Guides and by routine descriptions of the system's functionality and applicable routines. RIX Participants shall ensure that the people with working tasks related to RIX have the necessary skills and training so that the Terms and Conditions are correctly applied.

Certain terms and abbreviations used in RIX Instructions with a capital letter have been defined in the glossary included in Annex H1. Unless it is otherwise evident from the context, these terms and abbreviations shall have the meaning given in the glossary.

2 General principles

An institution that fulfils the Riksbank's access criteria can, on application, become a participant in RIX. A RIX participant can decide to act in two different roles: as an Account Holder (on its own behalf), or as an Authorised Settlement Agent (on behalf of a third party). An Account Holder may choose between either sending Funds Settlement Instructions and receiving information from the system itself or wholly or partly using an Authorised Settlement Agent which has approved by the Riksbank for this function.

RIX participants can communicate with RIX in different ways. Messages and notifications can be sent and received either directly via SWIFT's FINCopy service or via RIX Online to RIX. Every RIX Participant must, however, have made sure of its ability to send and receive Funds Settlement Instructions both directly via SWIFT's FINCopy service and via RIX Online, see Section 3

For the RIX participants that participate on their own behalf, the Riksbank opens a Principal Account, which is used for debits and credits in connection with transfers and repayments of Intraday Credit received. In addition, the Riksbank opens additional accounts, LOM Accounts, for the specific Settlement Procedures for liquidity optimisation which the RIX Participant participates in, see below. Furthermore, a Loan Account is opened where the current credit facility is registered if the RIX Participant has a right to Credit. RIX Participants with a right to Credit may provide collateral which has been approved by the Riksbank in the form of Swedish and foreign securities or in the form of foreign currency which is described in the Collateral Instructions, see Annex H4. The administration of collateral is, for the most part, automated, and credit limits are calculated in the Riksbank's collateral information system, QCMS.

RIX consists of eight Settlement Procedures. Transfer in RTM is effected immediately provided that the aggregate funds available in the Principal Account and the Loan Account are equal to or larger than the amount specified in the Funds Settlement Instruction when the sufficient funds check is made. If the aggregate funds available are insufficient, the Funds Settlement Instruction will be discarded, see Section 12.

Besides RTM, there are seven other Settlement Procedures, LOM, for various purposes. The procedure handling the majority of transfers in RIX is called RIX LOM. The procedures handling transfers related to the participant Clearing Organisation are identified normally by the name of the Clearing Organisation. The Settlement Procedures are BGC LOM, CLS LOM, OMX LOM, PRT LOM, VPC LOM and ACH LOM.

Functions for liquidity management, the prioritisation of transfers and optimisation are provided through the Settlement Procedures for LOM. Optimisation means that RIX simultaneously executes several transfers by offsetting outgoing transfers against incoming transfers. Simultaneous transfers can be executed bilaterally and multilaterally between the LOM accounts of the RIX participants involved. Decisions on setting parameters which control how the functions for liquidity management, prioritisation and optimisation are to be used for the respective LOM are made by the Riksbank, normally after consultation with the RIX user group, see Section 2.1. Applicable parameter decisions are specified in Annex A4.

In connection with Funds Settlement Instructions and other administrative events being processed in RIX, notifications are created to the RIX Participant concerned and/or Authorised Settlement Agents automatically. RIX Participants are able to choose themselves which events are to lead to notification. However, certain administrative notifications will be mandatory. In addition to these notifications, the Riksbank provides reports of various kinds in RIX Online which can be ordered and question and monitoring functions through which information about Funds Settlement Instructions and other types of events can be obtained via RIX Online.

RIX is open all Business Days. The opening hours follow a specific timetable, see Section 9. The schedule is divided into different time periods, referred to as "windows" and shows which events take place in RIX in each window in the schedule.

Contingency routines are available in the event of disruptions occurring in RIX, in communication networks used to send messages between RIX and RIX Participants and in RIX Participants' own technical systems which are used for dealing with messages. The contingency routines make it possible for the RIX participants affected during a disruption to settle critical transfers and receive status information in the Settlement Procedure, see Section 18.

As RIX operator, the Riksbank offers a support function to RIX participants, RIX Helpdesk. RIX participants should contact RIX Helpdesk if they have any questions about RIX or if disruptions occur. If disruptions arise in RIX or at a RIX participant, the RIX Helpdesk will provide information on the disruption and on what contingency routines should be applied in connection with the decision made by the Riksbank.

2.1 RIX coordinator

All RIX participants shall appoint one person as chief contact person, whom the Riksbank can contact on issues regarding RIX. The participants should also appoint a substitute for the chief contact person.

Notification of the RIX coordinator and substitute is made on form R4.B1.

2.2 Cooperation between the Riksbank and the RIX Participants

The RIX user group is a cooperation group to which each RIX participant appoints a member. The chairman of the group is appointed by the RIX participants and shall be a person who is a member of the RIX Council (see below). The Riksbank is responsible for the group's secretariat. At its meetings the group discusses operational issues and the Riksbank reports on accessibility and incidents in the RIX system and among RIX Participants. The RIX user group drafts and presents proposals for the further development of RIX. The Riksbank receives proposals for further development from the RIX user group and redrafts them. As RIX is a standard system, the Riksbank works to ensure that new functionality in RIX will be implemented as general functions in future releases and versions. The Riksbank also cooperates with other central banks as part of this work. The Riksbank's drafting work shows whether proposals for further development are recommended as well as the estimated cost of and appropriate time for their introduction.

The RIX Council is a group that discusses strategic issues concerning the provision of systems and payment system services such as objectives and preconditions, costs, charges and pricing, crisis and continuity, regulations, projects and IT services. The Riksbank appoints the chairman of the group. The RIX Council includes representatives of the Riksbank and of the RIX participants.

Both the RIX user group and the RIX Council are drafting groups. Neither of the groups can create rights or obligations between the Riksbank and the RIX Participants through decisions or otherwise.

3 Communication with RIX

3.1 In general

The Riksbank has two facilities for the operation of RIX. These are located at geographically separated sites. The operation of these facilities is monitored around the clock.

Adjacent systems to RIX are QCMS, which is the Riksbank's system for collateral management and the General Ledger, the Riksbank's financial and accounting system. As operator of RIX, the Riksbank provides access for local rights administrators at the RIX Participant to manage the access of individual users to RIX.

To ensure access to RIX to be able to send and receive Funds Settlement Instructions and other information, each RIX Participant is obliged, at their own expense and on their own responsibility, to have access to communication both via SWIFT's FINCopy service and via RIX Online. This access can be ensured in various ways. RIX participants can either process messages themselves via the FINCopy service or use a service agency for message processing.

Another alternative is for a RIX participant that normally intends to use RIX Online to enter into an agreement with an Authorised Settlement Agent that is willing to handle the management of transfers via the FINCopy service if so required. Authorised Settlement Agents willing to manage transfers via the FINCopy service for other RIX participants are to provide the messages for which the RIX participant normally uses RIX Online.

3.2 Opening hours

RIX Participants shall keep their connections to RIX open and have them sufficiently staffed during the times that RIX is open. A RIX participant can apply to limit its daily opening hours, although cannot be given the right to open later than 08.00 or to close earlier than 17.00.

3.3 Communication and technical connection

In order for RIX to be used, RIX Participants must be able to communicate with the system. Some of this communication is through the communication paths used by RIX. And some of it is through the RIX Participants' own systems and infrastructure. A RIX Participant shall have the technical equipment required to be able to send and receive Funds Settlement Instructions and other information arising from participation in RIX via the communication paths specified below.

3.3.1 Communication via SWIFT

Communication via SWIFT requires that the RIX participant sending the messages is connected to SWIFT and is a member of the special Closed User Group (CUG) used for RIX. The RIX participant requests Membership in CUG via SWIFT, which then contacts the Riksbank for approval. A further requirement is that the Riksbank and the RIX participant exchange encryption keys for the addresses (Bank Identification Code, BIC) involved.

3.3.2 Communication via RIX Online and RIX Access

The other alternative is to register transfers in RIX Online, a web client which is connected to a RIX web server, see Annex A10.

Despite the communication service having been procured by the Riksbank, according to 10.1. (e). ii) of the Master Document the Riksbank is not responsible for any damage ensuing from disruptions in the communications channel. In the event of procured communication channel becoming unavailable, Internet may also be used as a continuity solution for RIX Online.

Transfers initiated via RIX Online will normally be sent to SWIFT's FINCopy service by RIX to be subsequently handled as an incoming Funds Settlement Instruction sent via the FINCopy service. This means that, after settlement has taken place, SWIFT's FINCopy service will be informed of this and the recipient will receive notification via the FINCopy service. This function enables the recipient to integrate the flow of messages with its own systems with the aim of achieving STP (Straight Through Processing) regardless of the communications channel used by the sender.

Via RIX Online, the RIX participant can monitor the status of the Funds Settlement Instruction sent to and handled in RIX, current balances in the Principal Account and the LOM accounts, and statistics for settled transfers. Furthermore, RIX Online is used to change (reprioritise, change queue order or cancel) Funds Settlement Instructions that have not been implemented.

All menus and functions provided via RIX Online are in English. See Section 4 for a description of how access and logging on to RIX Online are administered.

3.3.3 Choice of communications channel

RIX Participants choose on every occasion which communication channel to use. RIX Participants can send all transfers via SWIFT's FINCopy service, a part via the FINCopy service and a part via RIX Online or all transfers via RIX Online. RIX Participants are responsible for the Funds Settlement Instructions sent to RIX via SWIFT's FINCopy service or another network being designed in accordance with the Riksbank's message specifications, see Annex A1.

3.3.4 Reserve workplaces

To ensure continuity for RIX Participants, workplaces have also been made available at the Riksbank's premises where the RIX Participant can obtain access to RIX Online without being dependent on their own IT support and external communication network. The number of workplaces is limited. The Riksbank determines to what extent a RIX participant will be given access to such a workplace.

4 Access rights

The access rights system in RIX is administrated via a special application, RIX Access (Perago: web client access). The function of the access rights system is to provide access to and check an individual user's use of RIX. In its role of operator of RIX, only the Riksbank is able to adapt access rights for every individual user of the system.

The SWIFT system also contains rules about availability and access which stem from the RIX Participant's connection with that system. These rules are not taken up in the Terms and Conditions.

A RIX Participant is always bound by a Funds Settlement Instruction if it has been submitted to the Riksbank using the routines for communication referred to in the Terms and Conditions and with the aid of applicable access right codes (SecurID and PINcode or equivalent SWIFT codes) and Certificates referred to in the RIX Instructions.

4.1 Users

A user is a person which is authorised, on behalf of a RIX Participant, to send Funds Settlement Instructions to and/or receive information from RIX via RIX Online. However, a user is not authorised for the access rights system in the RIX Access application. When logging on to RIX, the system checks that the user is authorised by he or she identifying themselves using the Certificate, SecurID and PIN code. The Certificate must be installed for the user at the work station used for logging in. Certificates for one and the same user may be installed at a number of different work stations. In order to obtain access to RIX, the person must belong to the right groups in the Riksbank's central access rights register, which contains a list of all authorised users of RIX Online.

RIX Participants shall notify the Riksbank which persons have the right to register new users. This is done on a power of attorney provided by the Riksbank. New users are registered on a special form, R3.B1, stating which parts of the RIX system the user is to have access to in RIX. Access rights are registered on form R2.B1.

The Riksbank then adds the user to the central access rights register. The Riksbank also creates a Certificate which is sent by e-mail to the user at the e-mail address notified to the Riksbank. The Riksbank then produces a SecurID which is sent by registered post to the user at the postal address notified to the Riksbank, and a password to the Certificate and a PIN code to SecurID which is to be sent in a separate letter addressed to the user at the same postal address.

4.1.1 Verification levels and access times

RIX Participants decide the extent to which messages need to be verified. If verification is required, a message registered in RIX Online will not be dealt with until it has been verified. RIX Access keeps a register on whether verification is necessary for specific messages. A daily schedule for RIX is available where RIX Participants state the time during which RIX Participants' user shall have access to RIX.

4.1.2 Roles

RIX Participants shall state in RIX Access which roles they wish to apply for their user. There are three different roles for the participant's user in RIX Online:

- i. "Capturer" – this role means that the user can register all instructions

- ii. "Authoriser" – this role means that the user can verify all instructions (exists only to the extent that the RIX Participant has decided that verification is required)
- iii. "Enquirer" – this role means that the user can ask questions, i.e. all functions except those covered by "capturer"

One and the same user can have all roles. However, a user cannot verify instructions that the user has registered him or herself. New notification and change of roles for users are made on form R3.B1.

4.2 The role of the Riksbank

In its role of operator, the Riksbank is responsible for register maintenance in the central access rights register and administration of RIX Access. These entail creation and cancellation of a user, in the central access rights system and affected systems at the Riksbank. The Riksbank is also responsible for providing Certificates, SecurIDs and PIN codes for all RIX Participants.

The Riksbank creates and maintains domains and connects functions in RIX to the respective domain for every RIX Participant.

4.3 The responsibility of the RIX Participant

In connection with administration of access rights, RIX Participants are responsible for the accuracy of the information provided to the Riksbank on forms. It should be noted that the Riksbank or RIX never check the identity of users who send messages and receive information from the Riksbank. RIX only checks that the sender of the message – regardless of who it is – uses the codes and Certificates that the Riksbank has provided to the RIX Participant according to the routines specified in the Terms and Conditions.

Communication via SWIFT requires the RIX participant sending the messages to be a member of the special Closed User Group (CUG) used for RIX. A further requirement is that the Riksbank and the RIX participant exchange encryption keys for the addresses (Bank Identification Code, BIC) involved. For RIX Online, the user must use the access codes (SecurID and PIN code) and Certificates mentioned above. Note that a RIX Participant is always bound by a message sent to the Riksbank using the communication routines specified in the Terms and Conditions. This applies regardless of whom has actually initiated the message.

5 Participation in RIX

A RIX Participant can choose to act in two different roles: as Account Holder (on own behalf) and as Authorised Settlement Agent (on behalf of another) or in both roles. The roles of Account Holder or Authorised Settlement Agent are unique in RIX. The difference for the RIX Participant which chooses to act both as Account Holder and as Authorised Settlement Agent consists of the RIX Participant being allotted a unique BIC (Bank Identification Code) for the role as Agent, e.g. a special "branch code". The same applies if a RIX Participant is an Authorised Settlement Agent for itself, i.e. in order to carry out Concurrent Batch of Funds Settlement Instructions requiring the participation of an Authorised Settlement Agent.

Participation in RIX as an Account Holder and/or Authorised Settlement Agent and information about other contractors is registered on form R4.B1.

5.1 Account Holder

An institution that complies with the Riksbank's access criteria can apply to be a participant in RIX. Participants who participate on their own behalf will become Account Holders and the Riksbank will open a Principal Account and a Loan Account for them. In addition, one or more LOM accounts can be opened at the request of the Account Holder if the RIX Participant has requested to participate in a particular Settlement Procedure.

5.2 Authorised Settlement Agent

In the role of Authorised Settlement Agent, the RIX Participant acts on behalf of another and does not therefore have a Principal Account. A participant may be an Authorised Settlement Agent for one or more Account Holders. The same access criteria are imposed on both Account Holders and Authorised Settlement Agents. The participant who chooses to act as an Authorised Settlement Agent may not represent another RIX Participant before the Account Holder has issued a specific power of attorney for the Authorised Settlement Agent, see form O.B2.

An Account Holder can check an Authorised Settlement Agent used both by letting the agent only send Funds Settlement Instructions which are carried out via a LOM Account where the Account Holder can control the available liquidity, and by ensuring that the Account Holder itself activates all transfers sent by the Authorised Settlement Agent.

An Authorised Settlement Agent is not debited any charges for the messages and notifications that the Agent sends or receives in the system in the capacity of Authorised Settlement Agent. These charges are payable by the Account Holder whom the Authorised Settlement Agent represents.

5.3 Other contractors

An Account Holder may also use a contractor who participates in the transfer procedure, e.g. a service agency for handling Funds Settlement Instructions via SWIFT. Account Holders have a duty of information to the Riksbank with respect to the use of contractors and the extent to which the Account Holder intends to use contractors. If an Account Holder uses a service agency for handling Funds Settlement Instructions, notifications relating to these Funds Settlement Instructions will be sent to the service agency unless the Account Holder has stated that the notification shall be sent to the Account Holder's SWIFT address.

5.4 Extra Identity

A RIX Participant can have one or more Extra Identities in RIX. For each Extra Identity, one Principal Account and one or more LOM accounts will be opened. No Loan Account can be opened for an Extra Identity, meaning that intraday credit cannot be received. When the system closes, the balance of the Principal Account belonging to the RIX Participant's Extra Identity is automatically transferred to the RIX Participant's other Principal Account.

6 Basic data

In principle, all basic data is registered and maintained in RIX by the Riksbank.

6.1 System parameters

RIX contains a number of system parameters which are registered and maintained by the Riksbank as operator. These parameters are fixed settings in RIX which affect and control the outcome of certain procedures and are registered in conjunction with installation of RIX. Decisions on parameter setting are taken by the Riksbank after consultation with the RIX user group. Applicable parameter decisions are specified in Annex A4.

6.2 Clearing codes

All Funds Settlement Instructions must contain information about a Clearing Code which is stated by the sender of a Funds Settlement Instruction. The Clearing Code determines the Settlement Procedure in which the Funds Settlement Instruction is to be carried out. At the same time, the RIX Participant who receives the transfer will obtain information from the Clearing Code about the type of transfer involved and may, if they wish, automate their own handling of incoming Funds Settlement Instructions.

The Riksbank administers the register of Clearing Codes which are permissible for Funds Settlement Instructions. See Annex A3 for information on valid Clearing Codes.

6.3 Priority classes

The Riksbank administers a register of the priority classes which are permitted in LOM Accounts. The register shows which of these priority classes are permitted in each respective LOM Account in RIX. The priority classes are important for the order in which Funds Settlement Instructions are carried out.

It is also possible to state that Funds Settlement Instructions with a special Clearing Code, which are to be carried out in a Settlement Procedure, shall always belong to a particular priority class.

See Annex A3 for information on valid priority classes.

6.4 Interest rates

Information is available in RIX on interest rates for deposits and lending, both current interest rates and those that applied previously. Information is also provided if a new interest rate has been decided upon but not yet come into effect.

6.5 RIX Participant

6.5.1 Basic data

Basic data is registered in RIX by the Riksbank for all Institutions which the Riksbank has approved as RIX Participants. The register also contains information for every RIX Participant stating which role or roles (Account Holder and/or Authorised Settlement Agent) which the respective RIX Participant has chosen to act in and information about contact persons as well as other information about the RIX Participant. The

information to be submitted to the Riksbank in connection with registration of basic data is shown on form R4.B1.

7 Accounts

Transfers in RIX take the form of debits and credits to the RIX participants' accounts. Thus, a central part of RIX is the different types of account the Riksbank opens for the RIX participants.

7.1.1 Principal Account and LOM accounts

The Riksbank opens a Principal Account for the RIX Participant who is an Account Holder. In addition, a Principal Account is opened for each approved Extra Identity. The Principal Account is connected to a Settlement Procedure (RTM) in RIX which means that the transfer takes place immediately. The Riksbank also opens additional accounts, LOM accounts, for the Settlement Procedures in which the Account Holder participates. Besides RTM, there are seven Settlement Procedures in which RIX Participants can participate, namely RIX LOM, BGC LOM, CLS LOM, OMX LOM, PRT LOM, VPC LOM and ACH LOM. RIX Participants wishing to participate in a LOM shall complete form R4.B1 and send it to the Riksbank. When an Account Holder starts to participate in a LOM or no longer participates in such a Settlement Procedure, all RIX Participants are informed by notification in RIX Online. Participation in a LOM does not begin before the Riksbank has confirmed this to the Account Holder.

When the respective LOM has been closed for the current Settlement Day, balances from the Account Holder's LOM Account for this procedure are transferred to the Account Holder's Principal Account.

A RIX Participant who is not entitled to the Riksbank's standing deposit facility may not have a balance at the end of the day in excess of SEK 100 million unless the Riksbank allows otherwise. If the balance exceeds this amount, various sanctions will be applied.

A RIX participant without entitlement to the Riksbank's standing deposit facility will receive no interest on its Principal Account balance. If the Riksbank's deposit rate is negative, the Participant shall pay interest on the balance of its Principal Account at a rate calculated in accordance with the deposit rate applied by the Riksbank.

If there are reasons of stability or efficiency, the Riksbank may decide that special terms shall be applied for a Principal Account under the condition that this does not affect the Riksbank's ability to carry out its tasks. According to such special terms, the Riksbank can decide a) that the balance of a Principal Account belonging to an Extra Identity may remain when the system closes, b) that the balance at the end of the day may exceed 100 million kronor and, c) that interest shall be payable on a balance in the Principal Account even though the RIX Participant does not have access to the Riksbank's standing deposit facility. The interest rate shall be equivalent to the Riksbank's deposit rate.

7.1.2 Loan account

A Loan Account is also opened for the Account Holder. If a RIX Participant has a right to Credit, the Principal Account is used for crediting and repayment of the Intraday Credit received within the framework of the credit facility.

7.1.3 Deposits

A positive balance in the Principal Account at the end of the Settlement Day means that the RIX Participant utilises the Riksbank's standing deposit facility if the RIX Participant has the right to do this (i.e. is a Monetary Policy Counterparty). The

interest amount due to the RIX Participant, or, in case of a negative interest rate, the amount the Participant has to pay is calculated on the basis of the lending rate decided upon by the Riksbank. When RIX at the time of closure has calculated the interest for overnight Deposit, a system-generated Funds Settlement Instruction with the interest amount as the transfer amount is automatically created, with the following Business Day as Settlement Day and the Riksbank as payer. Transfers are carried out in the RTM Settlement Procedure immediately on opening this procedure on the following Settlement Day.

The interest rate for overnight deposits is calculated as follows;

Interest rate = (the Riksbank's interest rate/100 * the balance on the Principal Account * the number of days from the Business Day in RIX on which the balance constitutes the closing balance for the next Settlement Day/360).

A RIX Participant who does not have the right to the Riksbank's standing deposit facility, and thus may not be credited with interest on a balance in the Principal Account, may, if an agreement is reached with another RIX Participant, automatically have the balance in the Principal Account transferred to this RIX Participant's Principal Account. The transfer of the balance takes place at the closure of the Settlement Day. Requests for automatic transfer are made on form R5.B1.

7.2 Credit and credit facility

7.2.1 Intraday Credit

Account holders who have credit agreements with the Riksbank can use their Loan Account dynamically. The negative balance on a Loan Account may not exceed the credit limit registered at that time. This credit limit is determined by the value of the collateral provided by the Account Holder as collateral for the Account Holder's Credits in RIX. In relevant cases, the credit facility may be reduced by the size of other commitments to the Riksbank which the collateral is primarily intended for, e.g. fine-tuning loans.

If the balance in the Principal Account is inadequate after a sufficient funds check of the account, RIX checks whether there is still a sufficiently large credit facility in the Loan Account. If the credit facility is sufficient, the Loan Account is debited and the Principal Account at the same time credited with the same amount¹, after which the transfer is carried out.

Every payment of Credit entails a claim on the total credit facility, which means that the remaining available credit is reduced to a corresponding extent. Payments into the Principal Account during the day do not mean that the Credit on the Loan Account is repaid. At close of business, as much of the balance on the Loan Account that corresponds to the balance on the Principal Account is automatically repaid. Any balance in the LOM Accounts have previously been automatically transferred to the Principal Account.

If the Account Holder wishes to reduce the collateral provided for Credits in RIX so that the calculated credit facility after withdrawal of collateral is less than the absolute value of the current balance in the Loan Account, RIX will automatically check if there are available funds in the Principal Account in order to reduce the credit on the Loan Account to the level of the new limit. RIX will automatically transfer the amount required to make a withdrawal of collateral possible from the Principal Account to the Loan Account. If the balance on the Principal Account is insufficient, the repayment of loan will not be initiated by RIX, although there are

¹ If the Account Holder in RIX has stated that the minimum credit amount is to be a certain amount that is greater than the amount required, this larger amount will be transferred given that there is still a sufficient credit facility for this amount.

funds available in the LOM Accounts. However, the RIX Participant can him- or herself initiate a transfer from LOM Accounts to the Principal Account in order to enable repayment of credit in the Loan Account. Such a transfer will not, however, automatically trigger repayment of credit in the Loan Account. If a RIX Participant due to a revaluation of collateral or for some other reason has a balance in the Loan Account, which is less than the total credit facility, the participant will not be able to carry out transfers from the Principal Account before the balance in the Loan Account covers the whole credit facility. Incoming transfers to the Principal Account will automatically be used to amortise the balance in the Loan Account until it is within the total credit facility.

7.2.2 RIX Participants who have a right to the Riksbank's standing loan facility

If the Credit cannot be repaid at the end of the day, it goes from being an Intraday Credit to Credit to the following Settlement Day, i.e. the Riksbank's standing loan facility will be utilised, provided that the RIX Participant has the right to this (i.e. is a Monetary Policy Counterparty). The interest amounts that the RIX Participant has to pay are calculated on the basis of the lending rate decided upon by the Riksbank, see the Riksbank's website www.riksbank.se. When RIX at the time of closure has calculated the interest for overnight Deposit, a system-generated Funds Settlement Instruction with the interest amount as the transfer amount is automatically created, with the following Business Day as Settlement Day and the Riksbank as payee. Transfers are carried out in the RTM Settlement Procedure immediately on opening this procedure on the following Settlement Day on condition that there are sufficient funds to cover the interest amount in the RIX Participant's RTM account. If there are insufficient funds, the Funds Settlement Instruction will be discarded. If the Funds Settlement Instruction is discarded, the RIX Participant shall, before RIX closes its Settlement Day, ensure that sufficient funds are provided to the RIX Participant's Principal Account and register a Fund Settlement Instruction with the Riksbank as payee and the Clearing Code RAR.

The interest rate for overnight deposits is calculated as follows:

Interest rate = (the Riksbank's interest rate/100 * the balance on the Principal Account * the number of days from the Business Day in RIX on which the balance constitutes the closing balance for the next Settlement Day/360).

7.2.3 RIX Participants who do not have a right to the Riksbank's standing loan facility

RIX Participants who have no right to the Riksbank's standing loan facility shall, before RIX closes its Settlement Day, ensure that the Credit can be repaid. A RIX Participant (indebted RIX Participant) can achieve this by entering into an agreement with another RIX Participant that this will automatically take over the indebted RIX Participant's negative balance in the Principal Account and Loan Account. The RIX Participant that takes over another RIX Participant's negative balance of the Principal Account and Loan Account can register a limit on the maximum size of the negative balance that may be transferred in RIX. If the negative balance exceeds the registered limit, the remaining amount will remain in the indebted RIX Participant's Loan Account. Transfer of negative net balance may moreover be limited by sufficient liquidity in the RIX Participant's accounts which take over the RIX Participant's negative net balance. Requests for automatic transfer shall be submitted on form R5.B1.

For the RIX Participants who do not have the right to the Riksbank's standing loan facility, the following also applies: Before RIX closes for the Settlement Day, at a time specified as the *First Cut-off Point for Overnight Credit* in Section 9.7, a sufficiently large part of the balance in the Loan Account as to correspond to the deposit in the

Principal Account is repaid automatically. RIX Participants who do not have the right to utilise the Riksbank's standing loan facility can subsequently not increase their credit in RIX. Before repayment of the Credit is made, a notification shall be made to the RIX Participants whose Loan Accounts are to be credited and to the RIX Participant which takes over the indebted RIX Participant's negative net balance.

A charge is made for a negative balance in the Loan Account for a RIX Participant who does not have a right to the Riksbank's standing loan facility in accordance with the Riksbank's rules.

8 Collateral

The RIX Participants that have credit agreements with the Riksbank may provide collateral in the form of Swedish and foreign securities registered at Euroclear Sweden or in Euroclear Bank, in the form of foreign currency deposited on account at Danmarks Nationalbank (DKK) and Norges Bank (NOK) within the framework of the Scandinavian Cash Pool, SCP, or paid in to the Riksbank via Deutsche Bundesbank (EUR). Moreover, collateral registered at VP in Denmark and VPS in Norway can be used to a certain extent, with the respective central bank acting as Authorised Settlement Agent for the Riksbank.

The handling of the securities registered at Euroclear Sweden, or which consist of foreign currency, is wholly automated. Automation means that the RIX Participant's registration at Euroclear Sweden or payment of foreign currency leads to a recalculation of the credit facility at the Loan Account in RIX with the aid of the Riksbank's collateral information system, QCMS. All collateral is reassessed every day in QCMS and a new credit facility is calculated and registered for the respective RIX Participant's Loan Account before RIX opens the Settlement Procedures. This reassessment also takes place when any changes to the pledged collateral occur during the day. More detailed information about the haircuts applied to the collateral by the Riksbank can be found in the Collateral Instructions, Annex H4 to the Master Document.

RIX Participants which belong to SCP, according to a special agreement, may pledge collateral to Danmarks Nationalbank or Norges Bank by making a payment in RIX to a pledged account at the Riksbank. These accounts and information to and from foreign central banks are handled outside RIX.

QCMS has information about balances in the accounts (Liquidity Settlement Accounts, LAK) and Credits (Central Bank Credits, CBK) for securities settlement administered by Euroclear Sweden on behalf of the Riksbank as well as information about collateral for these Credits. QCMS checks that there is sufficient collateral for these Credits. QCMS has further information about collateral pledged to other central banks and where the Riksbank acts as Authorised Settlement Agent for this central bank. QCMS also has information about which securities have been approved as collateral for RIX by the Riksbank and the price (after a haircut) used to value the collateral.

RIX contains functions that enable RIX Participants to access the information in QCMS. More detailed information about this function is available in Annex A9:1. More detailed information about collateral and its management is contained in the Collateral Instructions, Annex H4 of the Master Document.

9 Schedule for RIX

The time schedule in RIX consists of a series of pre-determined events which are linked to various time intervals. The pre-determined events, in combination with given time intervals, govern and control the Settlement Procedures, other system-generated processes and the opening hours of RIX. Decisions on parameter setting are taken by the Riksbank, normally after consultation with the RIX user group. Applicable parameter decisions are specified in Annex A4. The following pre-determined events exist for the Settlement Day schedule in RIX.

9.1 Opening of RIX

When RIX opens, the following happens:

- i. Funds Settlement Instructions for Intra-Account Transfers are created on the basis of the standing standard arrangements that RIX Participants have registered in RIX. In cases where RIX Participants have registered exceptions from the standard arrangement, Funds Settlement Instructions are created based on these exceptions.

When RIX has opened, it is available to the Riksbank and the RIX Participants. The following functions are available:

- ii. RIX is open for questions, report orders and statements of account via RIX Online.
- iii. RIX Participants can send Funds Settlement Instructions to RIX via RIX Online and the FINCopy service. The Funds Settlement Instructions are validated and stored in the system pending the opening of the Settlement Procedures.
- iv. RIX Participants can change, set a specific time or event when a Funds Settlement Instruction is to be carried out and recall queued Funds Settlement Instructions prior to the opening of the Settlement Procedures.

9.2 Temporary closure of RIX

When RIX is temporarily closed, RIX is not available via RIX Online for RIX Participants. Incoming Funds Settlement Instructions via the FINCopy service to RIX are stored pending the opening of the Settlement Procedures. Stored Funds Settlement Instructions are not validated and it is not possible to change or cancel stored Funds Settlement Instructions.

9.3 Start of RIX

At the start of RIX all credit limits are updated in RIX Participants' Loan Accounts. When updating of the credit limits has been completed for all RIX Participants, RIX is again available according to 9.1.

9.4 Opening of Settlement Procedures

When the RTM Process opens for the implementation of Funds Settlement Instructions, all Funds Settlement Instructions, those that are diarised and those entered on the same day, which refer to the LOM Processes, will be placed in the Liquidity Queue. All Funds Settlement Instructions which refer to the RTM Process, those that have been diarised in RIX and incoming transfers will then be processed.

When each respective LOM Process opens for the implementation of Funds Settlement Instructions, the queued transfers, one by one, will be tested for implementation in the manner set forth in 12.3.6.2.

Before the Settlement Procedures in RIX are opened for implementation of the Funds Settlement Instructions, liquidity can be transferred to a LOM Account before start of the LOM process by initiating an Intra-Account transfer. Cut-off time for bilateral limits

When the cut-off time for bilateral limits occurs, the bilateral limits lose their effect. RIX then considers whether it is possible to carry out the Funds Settlement Instructions which are queued in the Settlement Procedure due to the bilateral limit.

9.5 Closure of Settlement Procedures with LOM accounts

The following events take place in connection with the Settlement Procedures being closed for the LOM Accounts.

- i. Intra-Account Transfers which are linked to this event are carried out.
- ii. RIX discards all Funds Settlement Instructions in the Conditional Release Mechanism regardless of the reason. RIX notifies the sender about which Funds Settlement Instructions have been discarded.
- iii. RIX carries out a final optimisation process to implement, if possible, the Funds Settlement Instructions which have been placed in the Liquidity Queue. In the first step of the optimisation process, available liquidity in the participants' LOM Accounts is used, and in the second step in those cases where this has been stated for in the respective LOM according to Annex A4 p. 9, also available liquidity in the RIX Participants' Principal Accounts and available credit facility to carry out Funds Settlement Instructions is used. If liquidity is transferred from the RIX Participant's RTM Account, an amount is transferred that corresponds to the net position of the Funds Settlement Instructions which have been placed in the Liquidity Queue and which are to be debited from or credited to the RIX Participants' LOM Account, reduced by the balance in the LOM Account in question. If the balance in the Principal Account together with the remaining credit facility does not amount to the calculated transfer amount, RIX transfers the outgoing balance to the Principal Account and the remaining credit facility to the LOM Account.
- iv. The optimisation procedure is carried out using the current balance in the LOM Account in the way described in Section 12.3.6.2.
- v. The Funds Settlement Instructions which are still placed in the Liquidity Queue are discarded with the status *Insufficient liquidity*. RIX notifies the sender of Funds Settlement Instructions which of them have been discarded.
- vi. If a number of Settlement Procedures have the same time for closing (Cut-off time for LOM Account), the above procedure will be carried out in the order that the Settlement Procedures are presented in the schedule (see Section 9.10).
- vii. RIX then transfers the closing balances in the respective LOM Account to the RIX Participant's Principal Account and all LOM Accounts are closed.

Since transfer of liquidity from the Principal Account according to p.iii is done by calculated net transfer amounts, the RIX Participant is dependent on the liquidity situation of other RIX Participants. To avoid this, it is possible to register a standing Intra-Account Transfer (cf p.i) which transfers the amount required to implement all outgoing transfers (see Section 10.1).

9.6 First final cut-off point for overnight Credit

RIX Participants that do not have the right to use the Riksbank's standing credit facility must ensure that the Credit can be repaid before RIX closes.

For a RIX Participant without the right to the Riksbank's standing credit facility, an automatic repayment of Credit takes place of a sufficiently large portion of the balance in the Loan Account that corresponds to the balance in the Principal Account. These RIX Participants cannot subsequently increase their Credit in RIX.

RIX Participants without the right to use the Riksbank's standing credit facility can still receive incoming transfers which are credited to their Principal Account. If Credit still exists for the RIX Participant when new incoming transfers are credited to the Principal Account, the Credit is automatically repaid by RIX.

RIX Participants without the right to use the Riksbank's standing credit facility can still initiate new transfers provided that there is sufficient liquidity in the Principal Account.

9.7 Closure of Settlement Day

New incoming Funds Settlement Instructions to RIX are not accepted and Funds Settlement Instructions which have not been Validated are discarded.

A RIX Participant without the right to use the Riksbank's standing credit facility, and who has not repaid Credit at the time of closure of the Settlement Day, can obtain automatic repayment of the remaining Credit at this time. Automatic repayment takes place if the RIX Participant has concluded an agreement with another RIX Participant to take over the negative net balance in the Principal Account and Loan Account of the indebted RIX Participant. RIX automatically creates a Funds Settlement Instruction where the net balance of the Principal Account and Loan Account are transferred to RIX Participants who have entered into such agreements. RIX notifies both parties of the amounts that are to be repaid.

The RIX Participant that takes over the indebted RIX Participant's negative balance of the Principal Account and Loan Account can register a limit on the maximum size of the negative balance that may be transferred in RIX. If the negative balance exceeds the registered limit, the remaining amount will remain in the RIX Participant's Loan Account. A charge will be made for a negative balance in the Loan Account for a RIX Participant who does not have a right to overnight Credit according to the Riksbank's rules.

9.8 Closure of RIX

The following procedures take place when RIX closes:

- i. Standard reports are created automatically by RIX for all RIX Participants.
- ii. RIX calculates charges and interest for all RIX Participants and creates system-generated Funds Settlement Instructions for the coming Settlement Day.
- iii. RIX creates a data file for updating by the Riksbank's financial and accounting system.

9.9 Schedule

Event	Time
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Opening of RIX (Open value day)	Around 18.10, RIX opens, see also Section 9.1
Temporary closure of RIX (Pause)	19.00 - 06.30
Start of RIX (Start value day)	06.30 - 07.00
Opening of Settlement Procedures (RTM/LOM settlement trigger)	07.00 (RTM, VPC LOM, RIX LOM, CLS LOM, BGC LOM, OMX LOM, PRT LOM, ACH LOM)
Cut-off time for bilateral limits (Bilateral limit cut-off)	11.00
Closure of Settlement Procedures for LOM accounts (LOM cut-off)	17.00 (BGC LOM, OMX LOM, VPC LOM, CLS LOM, RIX LOM, ACH LOM, PRT LOM)
First final cut-off point for overnight Credit (Pre-finalisation)	17.30
Closure of Settlement Day (Finalisation/Square-off)	18.00 (RTM)
Closure of RIX (End value day)	18.00

9.10 Extended opening hours

The Riksbank can decide on extended opening hours if there are special reasons for so doing. Special reason may for example exist in the following cases:

- i. Incidents in the Riksbank's system environment or in the communication environment used for sending Funds Settlement Instructions between RIX participants and RIX and the Funds Settlement Instructions which it is considered not possible to process before the ordinary closing time of RIX are of such importance that the Riksbank considers that they could have a substantial negative impact on one or more other RIX participants.
- ii. The Riksbank considers that extended opening hours could improve a position in the Swedish banking system which the Riksbank deems to be negative from the point of view of monetary policy.
- iii. The Riksbank considers that extended opening hours reduce the risk for negative impact on financial stability or limit, in the view of the Riksbank, an otherwise considerable restriction in the performance of the banking system.

Requests for extended opening hours shall be in writing by e-mail to RIX Helpdesk. Such a request shall normally be provided at the latest 30 minutes before closure of the Settlement Procedure to which the request of extended hours refers. Information about decisions on extended opening hours is provided by RIX Helpdesk.

10 Liquidity management

RIX Participants administer the liquidity in their accounts, the Principal Account and the LOM Accounts, via RIX Online. Intra-Account Transfers of liquidity can either be made by a single Intra-Account Transfer or via automatic and recurrent time-controlled Intra-Account Transfers.

10.1 Facilities for transfer of liquidity between RIX Participants' own accounts

When transferring liquidity, a RIX Participant shall always state which accounts the Funds Settlement Instruction regarding the Intra-Account Transfer refer to and the intended amounts. There are five alternative for amounts:

- i. Fixed amount. If there are insufficient funds for a fixed amount in the event of a sufficient funds check, the fixed amount is automatically converted into a part amount by RIX.
- ii. Current balance of the account from which the Intra-Account Transfer is made.
- iii. The current balance and the remaining credit facility. This alternative is only applicable in the case of a transfer from the Principal Account.
- iv. Amount required to be able to implement outgoing Funds Settlement Instructions in the Liquidity Queue. This alternative is only applicable in the event of an Intra-Account Transfer to a LOM Account. The amount is calculated as the total of the transfer amounts for the outgoing transfers in the Liquidity Queue in the applicable LOM, less the current balance in the LOM Account in question.
- v. Net amount required to be able to implement outgoing and incoming Funds Settlement Instructions in the Liquidity Queue. This alternative is only applicable in the event of an Intra-Account Transfer to a LOM Account. The amount is calculated as the net total of the transfer amounts for the outgoing and incoming transfers which are in the Liquidity Queue in the applicable LOM, less the current balance in the LOM Account in question.

RIX Participants which wish to register a transfer shall state the time and frequency. The following alternatives exist for time:

- i. Immediately
- ii. Set future time
- iii. Linked to an event in the RIX schedule (e.g. *the cut-off time for LOM Accounts*²). If several events take place at the same time, the Intra-Account Transfers will be implemented in the order presented in the schedule for the respective Settlement Procedures.

The following alternatives exist for frequency:

- i. One-off transfer
- ii. Standing transfer every day

The RIX Participant sends the Funds Settlement Instructions regarding Intra-Account Transfers for liquidity management to RIX either via SWIFT as MT 202 (not SWIFT FIN Y-Copy) or via RIX Online.

² If the Intra-account Transfer is linked to Closure of Settlement Procedures for LOM Accounts, the transfer shall take place before the optimisation procedure described in Section 12.3.6.2 starts.

Special rules apply for Intra-Account Transfers. Intra-Account Transfers are implemented within each priority class in accordance with the FIFO principle, which means that they are carried out in chronological order, although adjusted for any change in order which took place while the Intra-Account Transfer was placed in the Conditional Release Mechanism. An Intra-Account Transfer is implemented in two steps. In the first step, the stated amount is reserved at the Account Holder's account through a debit. In the second step, there is a simultaneous implementation of the reserved amount and crediting of the Account Holder's account. If the crediting of the account cannot be implemented during the opening hours of RIX, the reserved amount is restored to the Account Holder's account. Intra-Account Transfers which lack sufficient liquidity will not be queued (regardless of the intended Settlement Procedure).

10.2 Loan transactions

The Riksbank will make disbursements of fine-tuning loans (and other loans in Swedish kronor) via system-generated transactions in RIX implemented at the same time as the Credit limit in RIX is lowered by the same amount. If the Credit limit in RIX prior to the payment is less than the loan amount, the disbursement will not be made. Disbursements will be credited to the Principal Account specifying the clearing code DAG. Payments of fine-tuning loans are made shortly after the loan transaction has been registered by the Riksbank. Disbursements regarding other loan payments are made at the time applicable to the loan in question (and that is given in the loan conditions). The RIX Participant receives an MT-202 message (not FinCopy) as a notification. The RIX Participant can also receive notification in accordance with 16.2 iv.

The Riksbank will make reimbursements of fine-tuning loans (and other loans in Swedish kronor) via system-generated transactions in RIX implemented at the same time as the Credit limit in RIX is lowered by the same amount. Reimbursements will be credited to the Principal Account specifying the clearing code ADG. Reimbursements of fine-tuning loans are made at 07.05 on the due date. Reimbursements regarding other loan payments are made at the time applicable to the loan in question (and that is given in the loan conditions). The RIX Participant can receive notification in accordance with 16.2 iv.

10.3 Deposit transactions

The Riksbank will make pay-ins of fine-tuning deposits via system-generated transactions in RIX. The pay-in will be credited to the Principal Account specifying the clearing code DAG. Pay-ins of fine-tuning loans are made shortly after the loan transaction has been registered by the Riksbank. The RIX Participant can receive notification in accordance with 16.2 iv.

The Riksbank will make reimbursements of fine-tuning deposits via system-generated transactions in RIX. Reimbursements will be credited to the Principal Account specifying the clearing code ADG. Reimbursements of fine-tuning deposits are made at 07.15 on the due date. The RIX Participant receives an MT-202 message (not FinCopy) as a notification. The RIX Participant can also receive notification in accordance with 16.2 iv.

10.4 Matured coupons

Disbursements of interest on securities issued and registered in Euroclear Sweden and pledged to the Riksbank will be made via system-generated transactions in RIX implemented at the same time as the Credit limit in RIX is lowered by the same amount. Disbursements will be credited to the Principal Account specifying the clearing code KUP. Disbursements of matured coupons are made after the Riksbank

has given notification of the fact that its liquidity settlement account at Euroclear Sweden has been credited with the matured coupon. The RIX Participant receives an MT-202 message (not FinCopy) as a notification. The RIX Participant can also receive notification in accordance with 16.2 iv.

10.5 Matured securities

Disbursements of liquidity for matured (redeemed) securities issued and registered in Euroclear Sweden and pledged to the Riksbank will be made via system-generated transactions in RIX implemented at the same time as the Credit limit in RIX is lowered by the same amount. Disbursements will be credited to the Principal Account specifying the clearing code INL. Disbursements of matured securities are made after the Riksbank has given notification of the fact that its liquidity settlement account at Euroclear Sweden has been credited with the matured security. The RIX Participant receives an MT-202 message (not FinCopy) as a notification. The RIX Participant can also receive notification in accordance with 16.2 iv.

11 Messages and status

11.1 Funds Settlement Instructions

Funds Settlement Instructions can be sent to RIX either via SWIFT's FINCopy service or via RIX Online. The Funds Settlement Instructions supported by RIX are MT 103, MT 103+, MT 202 and MT202COV. In the case of transfer of liquidity between the Participant's own transfer accounts via SWIFT FIN, MT202 is used without FINCopy.

11.2 Cancellation and approval

RIX Participants which wish to cancel a Funds Settlement Instruction or activate a Funds Settlement Instruction which is conditional for implementation can either send a message to this effect via SWIFT (not FINCopy) or via RIX Online. When cancelling a Funds Settlement Instruction via SWIFT, MT 192/292 is used and when the RIX Participant wishes to activate a conditional transfer, message MT 198/298 is used.

11.3 Notifications and transaction summaries

RIX creates notifications for different types of events. Some of these notifications are mandatory for RIX Participants while others are ordered. Orders for notifications are made by RIX Participants by sending special forms R10.B1 and R10.B2 to the Riksbank.

The messages used for notifications are MT196/296, MT198/298, MT900/MT910 and MT941/MT942. Transactions or balance summaries are ordered using MT920.

Statements of account can be obtained in the form of MT 950. These statements of accounts can be obtained separately for (i) the Principal Account, (ii) each of the LOM Accounts and (iii) the Loan Account. The statements of account are sent on closure of RIX. Orders for statements of accounts, both in the form of MT 950 and those that can be obtained in RIX Online, are carried out by RIX Participants via RIX Online.

11.4 Status of messages

For messages processed by RIX, all events are logged from the time the message arrives until processing has been completed. For every event, the message is given a unique status which is logged in RIX. The status contains information about the type of status and date and the time of the event. Information about status changes for the messages is received via reports which can be initiated by RIX Participants and via RIX Online in the Incoming message list.

The following types of status can exist for messages:

Status	Description
<u>Funds Settlement Instructions and other messages</u>	
Registered (Registered)	The message has been received and does not contain any basic faults. The message is given a unique reference number.
Batched (Batched)	A Funds Settlement Instruction which is part of the Concurrent Batch of Funds Settlement has been received and Validated by RIX and complies with RIX format requirements.

Invalid (Invalid)	The message has been received and Validated and does not comply with RIX format requirements.
Processed (Processed)	The incoming message has been processed by RIX, but can still be subject to further processing as an approved Funds Settlement Instruction (see below).
<u>Approved Funds Settlement Instructions which relate to a request for transfer³</u>	
Registered (Registered)	The Funds Settlement Instruction has been entered into RIX and registered in the register of approved Funds Settlement Instructions relating to a transfer request.
Diarised (Diarised)	A Funds Settlement Instruction where the sender has stated that the instruction shall be considered for implementation at a future date.
Discarded (Discarded)	A Funds Settlement Instruction which has been discarded automatically by RIX due to it no longer being possible for RIX to settle it.
Insufficient funds (Insufficient funds)	A Funds Settlement Instruction which has been discarded by RIX due to insufficient liquidity.
Queued (Queued)	A Funds Settlement Instruction which cannot be effected in the LOM Account due to insufficient liquidity and which has therefore been placed in the Liquidity Queue.
Removed (Removed)	A Funds Settlement Instruction which has been removed by the sending RIX Participant or Authorised Settlement Agent.
Settled (Settled)	A Funds Settlement Instruction which has been effected in RIX.
<u>Other messages than Funds Settlement Instructions which concern the request for transfer</u>	
Discarded (Discarded)	A Funds Settlement Instruction which has been discarded automatically by RIX due to it no longer being possible for RIX to settle it.
Processed (Processed)	The message has been completely processed by RIX.

³ Status is reported in RIX Online in the Fund settlement instructions (FSI) list

12 Transfer procedure

12.1 In general

The Riksbank settles transfers in accordance with the Funds Settlement Instructions sent from the Account Holder or its Authorised Settlement Agent. Transfers can take place between the Account Holder's own accounts or between accounts held by different RIX Participants. Funds Settlement Instructions shall be drawn up in accordance with the current message specifications (see Annex A1). The transfer is settled in the Settlement Procedure specified by the sender in the Funds Settlement Instruction.

12.2 Priority

The sender of a Funds Settlement Instruction can state that a transfer shall have a particular priority. The priority governs the order that arises between different Funds Settlement Instructions in the Liquidity Queue in each Settlement Procedure. A Funds Settlement Instruction with a higher priority class (lower figure) is settled before a Funds Settlement Instruction with a lower priority class (higher figure). Priority can only be used for instructions that are to be settled in RIX LOM, BGC LOM, VPC LOM, CLS LOM, PRT LOM, OMX LOM and ACH LOM.

For transfers which are to be settled in RIX LOM, the RIX Participant may set the priority class from 1 to 9. For instructions to be settled in BGC LOM, priority classes 1,5 and 6 are used, depending on which Clearing Code is used. For instructions to be settled in CLS LOM, VPC LOM and ACH LOM priority classes 1 and 6 can be used and for OMX LOM and PRT LOM only priority class 6 can be used. If the priority class is not stated, it will be set automatically in certain cases as shown by Annex A3.

12.3 The six steps of the transfer procedure

The transfer procedure consists of the following six steps:

- i. In the first step, the Funds Settlement Instruction is interpreted. This means that if the information in the instruction is simplified in certain cases, it can be complemented in accordance with set rules (see Section 12.3.1)..
- ii. In the second step, Validation of the Funds Settlement Instruction takes place. Validation means checking that a Funds Settlement Instruction complies with the format requirements and the applicable specifications in the system.
- iii. In the third step, RIX checks whether any special conditions are attached to the Funds Settlement Instruction (see Section 12.3.3). If the Funds Settlement Instruction is conditional (future time, future event or activation), it will be placed in the RIX Conditional Release Mechanism.
- iv. In the fourth step, it will be checked whether the recipient is subject to Stop Receiving and whether the paying RIX Participant is subject to Stop Paying and whether bilateral limits are registered. In cases where bilateral limits are registered, it is checked whether settlement of the transfer would mean that a paying RIX Participant's bilateral limit on the recipient participant would be exceeded.
- v. In the fifth step, certain renewed Validation is made of the Funds Settlement Instructions which have been placed in the Conditional Release Mechanism.

- vi. In the sixth step, the transfer is implemented. This means that the sender's account is debited and the recipient's account credited. Both parties are notified when this has taken place. Before the transfer is implemented by RIX, there is always a check to ensure that there are sufficient funds in the account which is to be debited.

12.3.1 Step 1 – Interpretation of instructions

- i. Unless specifically stated on the Funds Settlement Instruction from which RIX Participant's account the transfer amount is to be debited, it is assumed to be the account of the RIX Participant specified as sender of the Funds Settlement Instruction. However, an Authorised Settlement Agent may be the sender of a Funds Settlement Instruction. In the field shown by the current instruction specifications, the Authorised Settlement Agent then states the designation for the RIX Participant from whose account the transfer amount is to be debited.
- ii. Unless specifically stated on the Funds Settlement Instruction to which RIX Participant the transfer is to be credited, it is assumed to be the RIX Participant specified as recipient of the Funds Settlement Instruction.
- iii. Unless specifically stated otherwise in the Funds Settlement Instruction which Settlement Procedure the instruction is intended for, it is assumed to be the Settlement Procedure which, according to Annex A3, applies for the Clearing Code stated in the instruction.
- iv. Unless specifically stated otherwise in the Funds Settlement Instruction which priority class is to apply, it is assumed to be the priority class which, according to Annex A3, applies for the Clearing Code stated in the instruction.
- v. If the information on who is the sender does not tally with the basic data registered in RIX, the Funds Settlement Instruction will be discarded as an incorrect instruction.

12.3.2 Step 2 - Validation

When a Funds Settlement Instruction is received by RIX and it is not discarded as an incorrect instruction according to 12.3.1, it is registered as an incoming Funds Settlement Instruction and given a unique reference number. An instruction of this kind is registered in RIX on the *Incoming message list*. Validation then takes place whereupon the system checks:

- i. that the instruction has been worded in accordance with current message specifications and is supported by the system
- ii. that the instruction does not have the same identity as another incoming instruction with the same sender. When checking identity, the original date of the instruction⁴ and the sender's reference code⁵ are used, and the check is case-sensitive. If RIX receives an instruction with the same original date and reference as an instruction that has already been settled, the instruction is checked. If the PDE/PDM marking is missing, the instruction will be handled as a duplicate and will be discarded as an incorrect Funds Settlement Instruction (see Section 14.1 second paragraph). If the instruction has a PDM marking, the details are compared in the two instructions and if the details are identical, the second instruction is discarded locally without

⁴ In the case of Funds Settlement Instructions not initiated in RIX Online, but sent directly via SWIFT, the date is used which SWIFT appends to the instruction when it is forwarded to the Riksbank.

⁵ Sender's Reference/Transaction Reference Number, field: 20 according to SWIFT-standard.

any instruction being sent to SWIFT. If the instruction has a PDE marking, the details are compared in the two instructions and if the details are identical the second instruction is discarded as an incorrect Funds Settlement Instruction (see Section 14.1 third paragraph).that the stated Settlement Date, i.e. the Settlement Date when the instruction is to be implemented in RIX, is not earlier than the current Settlement Day

- iii. that there is information on the earliest time for transfer on the stated Settlement Day, i.e. the Business Day when the check is to be made
- iv. that the time stated in iii is not later than the time when the Settlement Procedure in which the instruction is to be implemented, closes according to the schedule for RIX (see Section 9)
- v. that the stated Settlement Day is not later than ten calendar days after the Riksbank has received the instruction
- vi. that the instruction has a Clearing Code which is recognised by the system.
- vii. if Settlement Procedure has been stated in the instruction that this tallies with the procedure which, according to Annex A3, applies for the Clearing Code stated in the instruction
- viii. if the instruction has been given a priority class, that this is valid in the Settlement Procedure that the instruction is intended for
- ix. that none of the RIX Participants who are parties in the transfer has been excluded
- x. that the RIX Participants who are parties in the transfer participate in the Settlement Procedure that the instruction relates to
- xi. that the sender has not been excluded if it is an Authorised Settlement Agent
- xii. that, if the sender is an Authorised Settlement Agent, its commission according to the power of attorney covers the Account Holder and the Settlement Procedure that the instruction relates to
- xiii. that the Clearing Code is /CLS/ if CLS (CLSBUS33) is specified as recipient.

Additional checks are made of Funds Settlement Instructions which are included in Concurrent Batch of Fund Settlement Instructions with respect to:

- xiv. that Concurrent Batch of Funds Settlement Instructions are permitted in the Settlement Procedure that the Funds Settlement Instruction is intended for
- xv. that Concurrent Batch of Funds Settlement Instructions are covered by the Authorised Settlement Agent's commission according to the power of attorney
- xvi. that the Concurrent Batch of Funds Settlement Instructions has a unique transfer number for the Settlement Day in question
- xvii. that the individual Funds Settlement Instruction has a unique run number within the Concurrent Batch of Funds Settlement Instructions
- xviii. that the total sums (number and transfer amounts) do not differ for Funds Settlement Instructions with the same unique transfer number.

Funds Settlement Instructions which are included in Concurrent Batch of Funds Settlements Instructions and which comply with the validation requirements as above are approved in Validation. However, this approval is preliminary and conditional on additional Validation for all of the Funds Settlement Instructions included in one and the same Concurrent Batch of Funds Settlement.

Additional Validation concerning all Funds Settlement Instructions included in one and the same Concurrent Batch of Funds Settlement Instructions takes place when the total number of Funds Settlement Instructions with the same unique transfer number amounts to the total number specified in at least one of the instructions. The following checks are made in the course of this Validation:

- xix. that the total of the transfer amount for Funds Settlement Instructions with the same unique transfer number tallies with the total amount stated in at least one of the instructions
- xx. that all Funds Settlement Instructions comply with all of the above conditions.

A Funds Settlement Instruction which does not comply with the validation requirements stated above will be discarded by RIX. Funds Settlement Instructions which are included in Concurrent Batch of Funds Settlement Instructions which are not finally approved in Validation at a time, which occurs the number of minutes (established for every Authorised Settlement Agent agreement according to Annex A5 p. 5) after the first Funds Settlement Instruction with the same unique transfer number has been preliminary validated, will also be discarded by RIX.

The sender will always be notified that the transfer has been discarded. A message to this effect will be sent to the RIX Participant via RIX Online or via SWIFT's FINCopy service. Notification of or a message about a discarded Funds Settlement Instruction will be sent to the sender via the same communication channel which the sender used when the instruction was sent to RIX.

A Funds Settlement Instruction which complies with all of the above validation requirements, provisionally or definitely, will be deemed entered into RIX and will be given the status "registered" in the list of approved Funds Settlement Instructions relating to requested transfers. These instructions are reported in RIX Online in the *Fund settlement instruction (FSI) list*.

An approved Funds Settlement Instruction, which does not concern an Intra-Account Transfer, is a request to debit the account which

- i. is associated with the Settlement Procedure specified in the Funds Settlement Instruction or which is considered to be the intended Settlement Procedure after interpretation according to 12.3.1 iii, and which
- ii. is held by the RIX Participant specified as payer or whom is considered to be the intended payer after interpretation according to 12.3.1 i.

The approved Funds Settlement Instruction is at the same time a request to credit the account which is associated with the same Settlement Procedure and which is held by the RIX Participant stated as recipient or who is considered to be recipient after interpretation according to 12.3.1 ii.

12.3.3 Step 3 – Conditional transfers

After a Funds Settlement Instruction has been approved in Validation, RIX checks whether the Funds Settlement Instruction is conditional. The following conditions may be attached to a Funds Settlement Instruction:

12.3.3.1 Future time and future event

One condition may be that the transfer is to take place at a specific future time and/or on a specific Settlement Day or that a future event has taken place in the schedule.

A Funds Settlement Instruction may be sent to RIX at the earliest ten calendar days before the Settlement Day. Funds Settlement Instructions with future Settlement Days are diarised in RIX pending the opening of the specified Settlement Procedure on the Settlement Day.

A RIX Participant may also choose to specify the earliest time (HH: MM) when a Funds Settlement Instruction shall continue to be processed in the Settlement Procedure. If no such time is specified, it is assumed that the time is immediate, or if the Funds Settlement Instruction has a Settlement Day which is later than the current Business Day, it is assumed that the time is when the Settlement Procedure concerned opens on the Settlement Day. Pending the specified time, the instruction is diarised in RIX.

The sender of a Funds Settlement Instruction may make the transfer conditional on an event taking place which is stated in the Settlement Day's schedule. When the event takes place, a new stage in the Settlement Day, the instruction leaves the Conditional Release Mechanism in order to see whether it can be implemented.

It should be noted that a Funds Settlement Instruction where the earliest time has been specified as a condition cannot be combined with a condition on a link to a future event in the schedule of the Settlement Day and/or with a condition on activation of the Funds Settlement Instruction.

12.3.3.2 Activation of Funds Settlement Instruction

A Funds Settlement Instruction, regardless of whether it is sent by an Authorised Settlement Agent or an Account Holder, can be made conditional so that it can only be implemented after the instruction has been activated (approved) by the RIX Participant from whose account the transfer is to be debited.

Activation of individual Funds Settlement Instructions takes place via a SWIFT message or via RIX Online and can be carried out by a RIX Participant acting as Account Holder. A RIX Participant that acts in the role of Authorised Settlement Agent cannot activate Funds Settlement Instructions.

12.3.3.3 Concurrent Batch of Funds Settlement Instructions

A RIX Participant acting as an Authorised Settlement Agent for a number of other RIX Participants may request several transfers to be implemented simultaneously in a Concurrent Batch of Funds Settlement Instructions. This condition means that a transfer covered by the condition will be implemented only if all transfers included in the Concurrent Batch of Funds Settlement Instructions can be implemented simultaneously.

12.3.4 Step 4 – Check of bilateral limits, Stop Receiving and Stop Paying

After a Funds Settlement Instruction has passed the Conditional Release Mechanism, the other checks take place in RIX. These consist of RIX checking whether the transfer amount is under any bilateral limit between the payer and the beneficiary RIX Participant, whether the beneficiary RIX Participant is subject to Stop Receiving and whether the paying RIX Participant is subject to Stop Paying.

12.3.4.1 Bilateral limits

Bilateral limits may only be applied for the transfers implemented in the RIX LOM Settlement Procedure. The RIX Participant who applies a bilateral limit states an amount for the maximum bilateral position for the RIX LOM Settlement Procedure. The bilateral position consists of the net of implemented transfers, outgoing and incoming in RIX LOM.

When a transfer is to be implemented, RIX checks whether the amount of the transfer exceeds the bilateral facility. The bilateral facility is the bilateral limit reduced by the bilateral position. If the amount of the transfer exceeds the bilateral facility minus the amount for transfers in the Liquidity Queue, it will be placed in the Conditional Release Mechanism. When transfers are implemented, the bilateral facility is updated and the transfers placed in the Conditional Release Mechanism are reconsidered.⁶ A RIX Participant may change its limits for other RIX Participants during RIX opening hours. Bilateral limits lose their effect when the cut-off time for bilateral limits occurs in the schedule on the Settlement Day.

12.3.4.2 Stop receiving

If a RIX Participant is prevented from sending Funds Settlement Instructions due to technical problems, the Riksbank may – if the Riksbank considers it appropriate – stop the implementation of Funds Settlement Instructions in which the RIX Participant has been specified as beneficiary of the transfer (Stop Receiving). Stop Receiving means that RIX until further notice will not implement transfers to the RIX Participant from the time the stop was registered in RIX. Stop Receiving is cancelled at the request of the RIX Participant. The Riksbank has furthermore right to cancel Stop Receiving without the approval of the RIX Participant if the Riksbank deems there no longer to be reasons for Stop Receiving to continue to be activated. Stop Receiving is only applied in RIX for transfers implemented in RIX LOM. Stop Receiving is moreover applied to individual transfers included in one and the same Concurrent Batch of Funds Settlement Instructions provided that the participant subject to Stop Receiving is the beneficiary of a net amount.⁷

During the period that the RIX Participant is subject to Stop Receiving, all incoming transfers to the RIX Participant are diarised in the Conditional Release Mechanism.

The Funds Settlement Instructions placed in the Liquidity Queue when Stop Receiving is applied are transferred to the Conditional Release Mechanism. The order in the Conditional Release Mechanism is, however, that which applied when the Funds Settlement Instructions were originally moved to the Liquidity Queue. This means that changes in the order made during the period that the Funds Settlement Instructions were in the Liquidity Queue are not taken into account when the Funds Settlement Instructions are transferred from the Liquidity Queue to the Conditional Release Mechanism. When Stop Receiving is cancelled, all diarised Funds Settlement Instructions are processed according to priority and order in the Settlement Procedure.

12.3.4.3 Stop Paying

To enable RIX Participants to cancel Funds Settlement Instructions which may have been implemented according to contingency routines, the Riksbank may stop

⁶ If Participant A has transferred 250 to Participant B during the day, and Participant B has in turn transferred 150 to Participant A, Participant A has a bilateral position of 100 in relation to Participant B. If A has a bilateral position of 300 in relation to B, the bilateral facility is 200. If the transfer amount is 225, it is not within the bilateral facility and will therefore be placed in the Conditional Release Mechanism. If B transfers 40 to A, the bilateral position is reduced to 60 and the bilateral facility becomes 240, which means that the Funds Settlement Instruction will leave the Conditional Release Mechanism and be implemented.

⁷ Concurrent Batches of Funds Settlement are not normally implemented in RIX LOM, making this rule of limited significance.

outgoing transfers from the RIX Participants concerned via the Stop Paying function. Stop Paying is normally activated at the initiative of the RIX Participant(s). Stop Paying is cancelled at the request of the RIX Participant(s). The Riksbank has furthermore the right to cancel Stop Paying without the approval of the RIX Participant if the Riksbank deems there no longer to be reasons for Stop Paying to continue to be activated.

During the period that the RIX Participant is subject to Stop Paying, all outgoing transfers to the RIX Participant are diarised in the Conditional Release Mechanism. Stop Paying is only applied in RIX for transfers implemented in RIX LOM. Stop Paying is moreover applied to individual transfers included in one and the same Concurrent Batch of Funds Settlement Instructions provided that the participant subject to Stop Paying is the payer of a net amount.⁸

The provisions of the third paragraph of Section 12.3.4.2 on Stop Receiving are correspondingly applied to Stop Paying.

12.3.5 Step 5 - Renewed Validation

Before a Funds Settlement Instruction which has been placed in the Conditional Release Mechanism is released for implementation in step 6, renewed Validation takes place. This Validation involves checks:

- i. that the Settlement Procedure in which the instruction is to be implemented is still open
- ii. that the parties in the transfer are still participants in the Settlement Procedure
- iii. that if the Funds Settlement Instruction has been sent by an Authorised Settlement Agent registered as an Authorised Settlement Agent in RIX.

12.3.6 Implementation of Funds Settlement Instructions

RIX consists of eight Settlement Procedures. In one of these procedures, RTM, transfers are implemented gross in real time. In addition, there are seven other Settlement Procedures, LOM, for different purposes. These specific Settlement Procedures are RIX LOM, CLS LOM, BGC LOM, OMX LOM, PRT LOM, VPC LOM and ACH LOM. Functions for liquidity management, the prioritisation of transfers and optimisation are provided via the Settlement Procedures for LOMs. The Funds Settlement Instruction is processed in the Settlement Procedure specified in the incoming Funds Settlement Instruction or which has been interpreted in accordance with the specifications in Section 12.3.1.

12.3.6.1 Transfers in RTM

All incoming Funds Settlement Instructions that are to be implemented in the Settlement Procedure RTM are processed in strict chronological order, FIFO. The FIFO principle, "first in first out" means that Funds Settlement Instructions are processed in the order that they have been received by the Settlement Procedure RTM. Settlement of transfers in RTM can take place with both all liquidity in the Principal Account and the remaining credit facility. A transfer in RTM takes place immediately provided that, in a check of sufficient funds, the sum of the current balance in the Principal Account and the total credit facility reduced by the absolute value of the balance in the Loan Account is equal to or larger than the amount specified in the Funds Settlement Instruction. If the total capacity is insufficient, the Transfer Order is discarded.

⁸ Concurrent Batches of Funds Settlement are not normally implemented in RIX LOM, making this rule of limited significance.

The current balance in the Principal Account is updated for paying and beneficiary RIX Participants when the transfer is implemented. If the balance in the paying RIX Participant's Principal Account is less than the transfer amount, the difference will be booked in the payer's Principal Account and Loan Account.

When a Funds Settlement Instruction concerns an Intra-Account Transfer from RTM, the Intra-Account Transfer is implemented with the transfer amount in the instruction if there is sufficient liquidity in the Principal Account. If the current balance in the Principal Account is less than the Funds Settlement Instruction's amount, the liquidity available when a sufficient fund check of the Principal Account and the remaining credit facility is carried out will be transferred.

Notification of implemented transfers are sent to the sending and beneficiary RIX Participants via SWIFT's FINCopy service or RIX Online. The RIX Participants involved may also have requested additional notification which is obtained via SWIFT or RIX Online.

Notification of discarded Funds Settlement Instructions will be sent to the sender via SWIFT's FINCopy service or RIX Online depending on the communication path used for the original instruction. The RIX Participants involved may also have requested additional notification which is obtained via SWIFT or RIX Online.

12.3.6.2 Transfers in LOM

A Funds Settlement Instruction can be destined for a LOM Account if the RIX Participant, according to its accession agreement with the Riksbank, has chosen to participate in a LOM.

Funds Settlement Instructions in LOM may only be implemented with the liquidity reserved for the LOM account in question. When a Funds Settlement Instruction is to be implemented in a LOM, a sufficient funds check is made of the balance in the LOM account concerned. If there are already Funds Settlement Instructions with higher priority in the Liquidity Queue, the transfer cannot be implemented and is instead placed in the Liquidity Queue. If this is not the case, the transfer can be implemented if the amount is covered by the balance in the LOM account in question. This also applies when there are other Funds Settlement Instructions in the Liquidity Queue with the same priority. The principle applied by RIX for all Settlement Procedures is called *FIFO next first-fit bypass*.

Funds Settlement Instructions for Intra-Account Transfers always have higher priority than other Funds Settlement Instructions. If a Funds Settlement Instruction concerns an Intra-Account Transfer which is to be made from a LOM account, the Intra-Account Transfer is effected at the specified transfer amount if there is sufficient liquidity in the LOM Account in question, regardless of whether there are Funds Settlement Instructions in the Liquidity Queue or not. If the current balance in the LOM Account is less than the specified transfer amount, the liquidity available when a sufficient funds check of the LOM Account is carried out will be transferred.

When a Funds Settlement Instruction is placed in the Liquidity Queue and there is a change in the current balance in the LOM Account due to instructions in the Liquidity Queue being cancelled or changed, this event is identified by RIX. RIX then starts a procedure to see what effect the event has had on the RIX Participant's LOM Account. This procedure is called Impact Intervention and, during the period that it is in process, only Intra-account Transfers will be implemented by RIX. If there is sufficient liquidity in a sufficient funds check, the transfers will be implemented according to their order of priority in the Liquidity Queue.

At certain specified intervals, stated in Annex A4 p. 6, an optimisation procedure will also take place in RIX for the LOM Accounts. Optimisation⁹ means that RIX

⁹ "Gridlock buster"

simultaneously implements several transfers by offsetting outgoing transfers against incoming transfers. Simultaneous transfers can be implemented bilaterally and multilaterally between the LOM accounts of the RIX participants involved.

In the optimisation procedure RIX attempts to implement all queued transfers multilaterally. If this is not possible, RIX then attempts to effect as many queued transfers as possible, first multilaterally and then bilaterally.

- i. Effectuation through the *multilateral optimisation procedure* takes place in strict chronological order within each priority class from that point of time when the Funds Settlement Instruction arrived in the Liquidity Queue. All Funds Settlement Instructions that are in the Liquidity Queue are sorted in priority and chronological order.
- ii. If the multilateral net position of all Funds Settlement Instructions in the Liquidity Queue is positive, i.e. the total of the transfer amount for all incoming transfers is more than or equal to the total of outgoing transfers for all RIX Participants' in the specific LOM, all transfers in the Liquidity Queue will be implemented for the RIX Participant in question. If all Settlement Instructions cannot be implemented, the optimisation process is then carried out in three steps.
- iii. In step one, RIX takes all queued Funds Settlement Instructions and tries chronologically, starting from the front of the queue, taking into consideration prioritised Funds Settlement Instructions one by one, until it finds the best number that can be implemented simultaneously.
- iv. In step two, RIX starts with all queued Funds Settlement Instructions and then gradually removes Funds Settlement Instructions from the back of the queue for those RIX Participants which have a negative calculated position, until such a position arises where all remaining Funds Settlement Instructions can be settled. RIX does not remove any Funds Settlement Instructions which would put the receiving Participant in a negative position. If there is no such Funds Settlement Instruction, the latest queued Funds Settlement Instruction is removed.
- v. Step three involves testing Funds Settlement Instructions bilaterally. First the Funds Settlement Instructions are sorted according to their specified priority class, sequence order and time at which they were placed in the queue. Concurrent Batch of Funds Settlement Instructions are not covered by the bilateral optimisation procedure.
- vi. RIX checks the bilateral relationship between the sending and beneficiary RIX Participant by deducting outgoing from incoming transfers. Successively, one Funds Settlement Instruction at a time is placed in a strict sorting order. As long as the transfers result in a positive net position for both RIX Participants, the transfers will be implemented. If there are still Funds Settlement Instructions in the Liquidity Queue in RIX, RIX will check if it is possible to implement only the Funds Settlement Instructions with the highest priority class. Funds Settlement Instructions with the highest priority class are then sorted according to their sequence and chronological order. RIX then checks the bilateral relationship and removes Funds Settlement Instructions, one at a time, in order to find a bilateral net position that is either null or positive for both RIX participants. If that is the case, all transfers will be implemented and the process will be repeated. In the event of a negative net position, the Funds Settlement Instructions with the highest priority class which constitute the best bilateral net position will be implemented.
- vii. If there are still Funds Settlement Instructions in the Liquidity Queue in RIX, the Funds Settlement Instructions are sorted according to priority class and amount. RIX then checks the bilateral relationship and removes Funds

Settlement Instructions, one at a time, in order to find a bilateral net position that is either null or positive for both RIX participants. If that is the case, all transfers will be implemented and the process will be repeated.

The current balance in the LOM account is updated for paying and beneficiary RIX Participants when the transfer is implemented.

Notification of implemented transfers is sent to the sending and beneficiary RIX Participants via SWIFT's FINCopy service or RIX Online (depending on where the original Funds Settlement Instruction was created).

12.3.6.3 Concurrent Batch of Funds Settlement Instructions

A RIX Participant acting as an Authorised Settlement Agent for a number of other RIX Participants may request several transfers to be implemented simultaneously in a Concurrent Batch of Funds Settlement Instructions. This condition means that a Funds Settlement Instruction covered by the condition will be implemented only if all transfers included in the Concurrent Batch of Funds Settlement Instructions can be implemented simultaneously.

All Funds Settlement Instructions which are to be included in the same Concurrent Batch of Funds Settlement Instructions shall have a common identity and a unique run number in the transfer. The total number of Funds Settlement Instructions and the total amount for the Concurrent Batch of Funds Settlement Instructions shall be stated on at least one of the instructions. RIX checks that the number of individual transfers and total amount transferred for the received Funds Settlement Instructions with the same identity is the same as the totals given for the Concurrent Batch of Funds Settlement Instructions. If the totals are exceeded or the totals are not reached within the number of minutes stipulated for the respective Authorised Settlement Agent agreement (see Annex A5 p. 5), all Funds Settlement Instructions in the Concurrent Batch of Funds Settlement Instructions will be discarded. Only when information about the number of transfers and the total amount correspond, or if the earliest time for implementation has been specified, will RIX check whether the RIX Participants to be debited in the transfer have sufficient liquidity. When there is sufficient liquidity, the individual transfers included in the Concurrent Batch of Funds Settlement Instructions are simultaneously implemented.

13 Revocation and other change of Funds Settlement Instruction

13.1 Revocation in general

The sender of a Validated Funds Settlement Instruction that contains a request for transfer can revoke the Funds Settlement Instruction as long as it has not been implemented.

A message containing a request for revocation of a Funds Settlement Instruction is implemented in RIX after it has been approved in Validation as set out in Section 12.3.1 and Section 12.3.2. Revocation takes place when the Funds Settlement Instruction intended to be revoked is removed from the transfer procedure and is given the status "removed".

If the Funds Settlement Instruction is in step 6 of the transfer procedure when the request for revocation is to be implemented, see, Section 12.3.6 the request for revocation is processed as follows:

- i. If the Settlement Procedure in which the Funds Settlement Instruction is to be implemented, is subject to an ongoing optimisation process, see, Section 12.3.6.2, the revocation is implemented when the optimisation process has been completed.
- ii. If the Funds Settlement Instruction has been implemented during the optimisation process, the request for revocation is discarded.

13.2 Change and revocation of Funds Settlement Instructions in the Conditional Release Mechanism and the Liquidity Queue

A RIX Participant can, as and when necessary, update the Funds Settlement Instructions which are in the Conditional Release Mechanism (i.e. queuing in RTM or in a LOM) and the Liquidity Queue (i.e. queuing in a LOM) for implementation by sending a message. A message of this kind can only apply to a change or revocation as follows:

- i. *Change of priority class* for the transfer given that the Settlement Procedure designated in the Funds Settlement Instruction applies several priority classes. A change of this kind cannot be initiated by an Authorised Settlement Agent for Concurrent Batch of Funds Settlement Instructions. Neither can the change refer to Funds Settlement Instructions which are to be implemented in RTM.
- ii. *Change of order* between Funds Settlement Instructions with the same priority level by the instruction being placed first or last or moved to an optional place. This kind of change can only be initiated by a paying RIX Participant.¹⁰
- iii. *A change which is intended to add conditions for a future time or event* for the transfer. This can only entail that implementation through the change will be conditional on activation. A change of this kind can only be initiated by the paying RIX Participant for a Funds Settlement Instruction which is in the Liquidity Queue.
- iv. *Revocation of a Funds Settlement Instruction* means that it will never be implemented. A revocation can only be initiated by the sender. Revocation may – in the event of payments by Authorised Settlement Agents – not be implemented by the RIX Participant whose account is to be debited.

¹⁰ An Authorised Settlement Agent cannot change the order of Funds Settlement Instructions.

- v. *Revocation of an Intra-Account Transfer* can only be initiated when the Intra-Account Transfer is in the Conditional Release Mechanism.

When required, a Concurrent Batch of Funds Settlement Instructions and Funds Settlement Instructions which belong to a Concurrent Batch of Funds Settlement Instructions can be changed by sending a message. A message of this kind can apply to a change or revocation as follows:

- i. *Change of order between Concurrent Batch of Funds Settlement Instructions* may only be initiated by the RIX Participant who is an Authorised Settlement Agent for a number of other RIX Participants.
- ii. *Change of order* between Funds Settlement Instructions with the same priority level by moving it to first or last place or to an optional place. This kind of change can only be initiated by a paying RIX Participant.
- iii. *Revocation of a Concurrent Batch of Funds Settlement Instructions* means that the transfer will never be implemented. A revocation may only be initiated by the RIX Participant who is an Authorised Settlement Agent for a number of other RIX Participants. Revocation may – in the event of payments by Authorised Settlement Agents – not be implemented by the RIX Participant whose account is to be debited.

It should be noted that a change of the earliest time for implementation can only take place by the Funds Settlement Instruction being cancelled and replaced by a new Funds Settlement Instruction.

If a RIX Participant needs to take measures when a Funds Settlement Instruction has been queued for a particular time, the RIX Participant may, if warnings for Funds Settlement Instructions that have been placed in the Liquidity Queue for a longer time (see Annex A4, p. 15) are applied in a LOM procedure, order notification of such warnings as sender of a Funds Settlement Instruction.

14 Discarding of Funds Settlement Instructions

In the cases specified in 14.1-14.8, RIX will automatically discard Funds Settlement Instructions. Discarding means that the Funds Settlement Instruction will never be implemented. The RIX Participant must accordingly send a new Funds Settlement Instruction to RIX for implementation to take place.

The sender will always be notified that the transfer has been discarded. Notification of a discarded Funds Settlement Instruction will be sent to the sender via the same communication channel which the sender used when the instruction was sent to RIX.

In addition to discarding in the cases mentioned below, implementation of a Funds Settlement Instruction can be discontinued by the sender revoking the instruction in the way shown in Section 13. The error code 65 is used for notification of a revocation of this kind.

14.1 Incorrect Funds Settlement Instructions

If it is not at all possible to process a Funds Settlement Instruction, for example, due to the information on the identity of the sender not being compatible with basic data registered in RIX, the Funds Settlement Instruction will be discarded it as an incorrect instruction. The error code 61 is used when notifying a discarding of this kind.

If a Funds Settlement Instruction is possible to process, although does not comply with the Validation requirements according to Section 12.3.2, the Funds Settlement Instruction will be discarded as an incorrect instruction. The error code 62 is used when notifying a discarding of this kind.

If a Funds Settlement Instruction is possible to process, although has a PDE marking and is a duplicate according to validation requirements of Section 12.3.2 ii, the Funds Settlement Instruction will be discarded as an incorrect instruction. The error code 66 is used when notifying a discarding of this kind.

14.2 Incomplete Concurrent Batch of Funds Settlements Instructions

If the number of approved Funds Settlement Instructions with the same unique transfer number for Concurrent Batch of Funds Settlement Instructions received by RIX from the Authorised Settlement Agent does not amount to the total amount stated for this unique transfer number in the waiting period (see Annex A5 p.5) set for the Authorised Settlement Agent agreement in questions, all Funds Settlement Instructions for this Concurrent Batch of Fund Settlement Instructions will be discarded. The error code 64 is used when notifying a discarding of this kind.

14.3 Funds Settlement Instruction for RTM with insufficient liquidity

A Funds Settlement Instruction which is to be implemented in RTM where the total of the balances on the Principal Account and the remaining credit facility is less than the transfer amount, will be immediately discarded with the status "insufficient liquidity". The error code 63 is used when notifying a discarding of this kind.

14.4 Non-activated Funds Settlement Instruction

A Funds Settlement Instruction which is not activated when the Settlement Procedure where the instruction is to be implemented closes is discarded at this time. The error code 62 is used when notifying a discarding of this kind.

14.5 Funds Settlement Instruction placed in the Conditional Release Mechanism due to Stop Paying or Stop Receiving

A Funds Settlement Instruction which is placed in the Conditional Release Mechanism due to Stop Receiving or Stop Paying when the Settlement Procedure where the instruction is to be implemented closes is discarded at this time. The error code 62 is used when notifying a discarding of this kind.

14.6 Funds Settlement Instruction placed in the Conditional Release Mechanism due to a bilateral limit

A Funds Settlement Instruction which is placed in the Conditional Release Mechanism due to a bilateral limit when the Settlement Procedure where the instruction is to be implemented closes is discarded at this time. The error code 62 is used when notifying a discarding of this kind.

14.7 Funds Settlement Instruction placed in the Conditional Release Mechanism due to earliest time for implementation

A Funds Settlement Instruction which concerns the current Settlement Day in RIX may be placed in the Conditional Release Mechanism due to the time (hour) not having arrived. At the time when the Settlement Procedure where the transfer is to be implemented closes, discarding does not take place but the Funds Settlement Instruction is released from the Conditional Release Mechanism for a customary sufficient funds check. However, this may only take place if the time of closure has been brought forward on the day in question.¹¹

14.8 Funds Settlement Instructions which are placed in a Liquidity Queue

When a LOM closes, i.e. when the time for *Closure of Settlement Procedures for LOM Accounts* has arrived, RIX carries out a final optimisation process. The Funds Settlement Instructions which are still in a Liquidity Queue after the optimisation procedure has been carried out are discarded with the status "insufficient liquidity". The error code 63 is used when notifying a discarding of this kind. However, error code 64 is used for Funds Settlement Instructions included in Concurrent Batch of Funds Settlement Instructions since each individual Funds Settlement Instruction does not need to have insufficient liquidity.

14.9 Funds Settlement Instructions registered after closure of LOM (RTM)

A Funds Settlement Instruction registered after the current LOM (RTM) has closed for the day, i.e. when the time for Closure of Settlement Procedures for LOM account has been reached, an error message will be received in RIX Online when the Participant sends the instruction ("submit").

15 Settlement Procedures associated with Clearing Organisations participating in RIX

The Riksbank opens special LOM Accounts (VPC LOM, BGC LOM, OMX LOM, PRT LOM, CLS LOM and ACH LOM) for every Settlement Procedure where RIX Participants choose to participate.

¹¹ Validation checks are made that the time (hour) is within the opening hours of the Settlement Procedure.

15.1 Euroclear Sweden

In a special agreement with Euroclear Sweden, the Riksbank has commissioned Euroclear Sweden to implement transfers in their settlement system on behalf of the Riksbank in connection with securities settlement. To this end, Euroclear Sweden provides, on behalf of the Riksbank, special accounts (LAK) held by RIX Participants, the balances of which are used in securities settlement. Euroclear Sweden has also been commissioned by the Riksbank to provide Intra-day Credits for securities settlement to RIX Participants that have the right to Credit of this kind. To this end, Euroclear Sweden maintains Central Bank Credit Accounts (CBK) on behalf of the Riksbank for the benefit of RIX Participants.

After application from RIX Participants that are settlement banks in the VPC system, the RIX Participant may become a participant in VPC LOM. The Riksbank then opens a VPC LOM Account for the RIX Participant. After special application, the Riksbank can also allow a Liquidity Settlement Account (LAK) and a Central Bank Credit Account (CBK) to be opened and administered by Euroclear Sweden in the VPC system. The Liquidity Settlement Account is a special Riksbank account for securities settlement and the Central Bank Credit Account is a special Intra-day Credit for securities settlement which the Riksbank has commissioned Euroclear Sweden to administer within the VPC system. In order for Euroclear Sweden to be able to administer the transfers of the RIX Participants between VPC LOM in RIX and the Liquidity Settlement Account in the VPC system, the Riksbank has allowed Euroclear Sweden to participate in VPC LOM and open a VPC LOM Account which is a technical account where incoming and outgoing transfers are credited and debited. These registrations do not correspond to the RIX Participants account balances at Euroclear Sweden. The balance still shows the Riksbank's claims at or debts to the RIX Participants in those parts that are subject to Euroclear Sweden's administration of accounts. RIX Participants' individual balances are registered at the participants' LAK and CBK.

The system is constructed in a way that balances at Euroclear Sweden's LOM Account in exceptional cases can be transferred to Euroclear Sweden's RTM Account in the system. Neither in this case does the balance registered at the RTM Account constitute the Riksbank's claim at or debt to Euroclear Sweden. Even in this case, the balance shall be considered as the Riksbank's claim at or debt to the RIX Participants.

For transfers to and from a LAK, the applicable provisions in this Section 15.1 apply in addition to the provisions otherwise laid down in the Terms and Conditions and in Euroclear Sweden's General Terms and Conditions, Section C.

15.1.1 Crediting of LAK

Crediting of LAK takes place either:

- i. due to the RIX Participant receiving payment for securities sold within the framework of the Euroclear Sweden settlement,
- ii. by transfer from another LAK when both LAKs are held by the same RIX Participant,
- iii. by a transfer from the RIX Participant's LOM Account to the RIX Participant's LAK, or
- iv. after the RIX Participant has been granted CB credit.

15.1.2 Disposition of funds in the Liquid Settlement Account (LAK)

A RIX Participant may dispose of a balance in a LAK only by:

- i. carrying out a payment through participation in Euroclear Sweden's settlement in accordance with Euroclear Sweden's regulatory framework, or

- ii. initiate a transfer to its LOM Account, its CBK or another LAK held by a RIX Participant, according to the technical routines and terms and conditions applied by Euroclear Sweden in accordance with its regulatory framework.

15.1.3 Transfers between RIX Participants' accounts in RIX and the VPC system

A transfer in accordance with 15.1.2 ii cannot concern a balance in LAK which has been designated for the RIX Participant in Euroclear Sweden's settlement, but which has not yet been subject to final settlement according to Euroclear Sweden's regulatory framework.

A transfer according to 15.1.2 ii can never concern a larger amount than any negative balance in CBK being covered by the remaining balance in LAK.

When settlement of individual securities instructions is to take place gross and in real time, the liquidity transfer is implemented via the RTM Settlement Procedure in RIX.

15.1.4 Implementation of transfers for Euroclear Sweden's RTGS-settlement

Implementation of transfers in RIX for Euroclear Sweden's RTGS-settlement takes place via the RTM Settlement Procedure. After application from Euroclear Sweden, the Riksbank opens a Principal Account for this purpose where registered balances referring to Euroclear Sweden's RTGS-settlement (Fund Settlement Instructions with clearing code RTG) are held in trust (segregated) under the Funds Accounting Act (1944:181) to the benefit of Euroclear Sweden's clients. Transfer of liquidity for securities takes place by:

- i. A RIX Participant who has bought securities transfers liquidity from its Principal Account to Euroclear Sweden's Principal Account for segregated funds
- ii. Euroclear Sweden transfers liquidity from Euroclear Sweden's Principal Account to the RIX Participant that has sold securities

15.2 **Bankgirot**

After application from a RIX Participant who is an Account Holder and a participant in Bankgirot clearing as well as Bankgirot, a RIX Participant may be a participant in BGC LOM. The Riksbank opens a BGC LOM Account for these RIX Participants. Bankgirot uses two different types of transfers, bilateral and multilateral (Concurrent Batch of Fund Settlement Instructions). Bankgirot is an Authorised Settlement Agent for all RIX Participants that participate in Bankgirot clearing and is thus sender of all Funds Settlement Instructions sent to RIX for bilateral transfer. Every RIX Participant that uses Bankgirot as an Authorised Settlement Agent shall provide a power of attorney for Bankgirot to send Funds Settlement Instructions on their behalf. Concurrent Batches of Fund Settlement Instructions are implemented via BGC's LOM Account. For Bankgirot, participation takes place in BGC LOM not in their capacity as Authorised Settlement Agent but in their capacity as Account Holder.

After application from a RIX Participant who is an Account Holder and a participant in BiR Settlement Service, a RIX Participant may be a participant in PRT LOM. The Riksbank opens a PRT LOM Account for these Participants. The PRT LOM account is used for the transfer of financial transactions for the crediting of the RIX Participant's Settlement Account in BiR, Payments in Real Time. Bankgirot acts as an Authorised Settlement Agent for these financial transactions in RIX, which means that funds are automatically debited from the Participant's PRT LOM account.

15.3 NASDAQ Clearing

After application from a RIX Participant who is an Account Holder and clearing member in Nasdaq-clearing and NASDAQ Clearing, these can be participants in OMX LOM. The Riksbank opens a Nasdaq LOM Account for these RIX Participants.

15.4 CLS

After application, RIX Participants that are Account Holders and members, liquidity providers, nostro agents to members, nostro agents to liquidity providers in CLS and CLS, become participants in CLS LOM. The Riksbank opens a CLS LOM Account for these RIX Participants that is used for all transfers to/from CLS.

15.5 Other clearing organisations

After application, RIX Participants that are Account Holders and clearing members in either LCH or VP Securities can become participants in ACH LOM. The Riksbank opens an ACH LOM Account for these RIX Participants.

16 Notification

Notifications means messages created automatically by RIX which RIX Participants receive concerning transfers and other events taking place in RIX. A distinction is made between transfer-related notifications and administrative notifications. Administrative notifications concern, inter alia, updates of system and participant information.

16.1 Notification via SWIFT's FINCopy service

Via SWIFT's FINCopy service, the RIX Participant can receive notifications of implemented transfers to both senders and beneficiaries according to the rules applicable for SWIFT's service and to the extent that the RIX Participant has so requested from SWIFT. For notification to take place via the FINCopy service to the sender, it is required that the Funds Settlement Instruction sent to RIX has been sent via the FINCopy service.

16.2 Notifications not covered by SWIFT's FINCopy service

RIX can create notifications for situations which are not covered by SWIFT's FINCopy service. These notifications can be divided into different notification groups:

- i. Notification of discarded Funds Settlement Instructions which give detailed information as to why an instruction has been discarded
- ii. Notification of debiting and crediting respectively in an account due to Funds Settlement Instructions sent by an Authorised Settlement Agent
- iii. Notification concerning account transactions due to Intra-Account Transfers
- iv. Notification concerning account transactions due to system-generated transfers
- v. Notification that the Account Holder shall activate a Funds Settlement Instruction sent by an Authorised Settlement Agent
- vi. Notifications of a Funds Settlement Instruction placed in the Conditional Release Mechanism
- vii. Notification of implemented and discarded Concurrent Batch of Funds Settlement Instructions
- viii. Notification of loan transactions

Further information on different notification groups is contained in Annex A6.

16.3 Mandatory and voluntary notifications

RIX Participants choose the transfer-related notification that RIX is to send to the participant by special order. Certain transfer-related notifications are sent automatically to the RIX Participant regardless of whether this has been requested or not. See Annex A6 regarding which notifications are sent automatically or which must be ordered specially.

Notifications are ordered by completing a special form (R10.B1 for Account Holders and R10.B2 for Authorised Settlement Agents) and sending it to the Riksbank. To a certain extent, the order may be limited to apply to a particular Settlement Procedure (LOM) or a particular Authorised Settlement Agent agreement. RIX Participants are notified in RIX Online that the Riksbank has registered new or changed notification rules.

16.4 Communication paths for notifications

RIX Participants choose to receive notifications via SWIFT (FIN service) directly in RIX Online or via EMS, the choice being made per notification group. To receive notification via SWIFT's FIN service, the RIX Participant must use SWIFT.

For RIX Participants who do not use SWIFT, notifications are created in RIX which correspond to those provided by SWIFT's FINCopy service for implemented and discarded transfers whereupon notification takes place via RIX Online. The same applies to notification to the sender of a Funds Settlement Instruction originally created in RIX Online.

16.5 Account notifications

RIX Participants can order different types of account notification. Statements of account can be ordered for the Principal Account, Loan Account and LOM Accounts as well as account position reports and transaction reports. Statements of account in the form of MT 950 which are sent via SWIFT and those sent to RIX Online are ordered by RIX Participants via RIX Online.

17 Inbox, monitoring of position, questions and reports

17.1 Inbox

All messages to RIX are sent by RIX Participants via SWIFT or RIX Online. When the message has been processed, a notification is created which is stored in a special inbox. The inboxes are a function where different types of messages from RIX are stored and which are available for RIX Participants via RIX Online.

17.1.1 Inbox for notifications (Notifications inbox)

The inbox for notifications contains the notifications that the RIX Participant has ordered, broadcasts that has been registered by the Riksbank and other notifications, including changes of basic data and the Settlement Day schedule.

17.1.2 Inbox for reports (Report inbox)

The inbox for reports contains the reports created by RIX and sent to the RIX Participant. Certain standard reports can be ordered by the RIX Participant via RIX Online and other reports are created automatically by RIX.

17.1.3 Inbox for verifications (Authorisation inbox)

The inbox for verifications contains all instructions at the RIX Participant where verification is required. The users at the RIX Participant which have the right to verify instructions have access to the inbox for verifications. When the user opens the inbox for verifications, all instructions awaiting verification are shown. Instructions registered by users themselves are not shown. Users may only verify the instructions that they have been given the right to verify. When an instruction has been verified, it will automatically be processed by RIX.

17.1.4 Inbox for editing (Edit inbox)

The inbox for rectifications contains all the instructions that have been revoked instead of being verified. Users can revoke instructions when they need to be edited.

After editing, the instruction is resent to RIX to be verified.

17.2 Continuous monitoring of positions

There is a function in RIX for continuous monitoring of positions in the Account Holder's accounts. Information is given on the Account Holder's position in all accounts, both in RTM and LOM Accounts. Links exist to different reports where more detailed information is available.

The information provided is updated according to the time interval registered as a system parameter. RIX Participants can themselves change time interval registered by the Riksbank as a system parameter although not to a shorter time interval.

There are two different alternatives for continuous monitoring of positions in RIX, classical and consolidated.

- i. Classical information provides information about position in RTM (i.e. balances in the Principal Account and Loan Account), credit limits, current balance in LOM Accounts and information about incoming and outgoing transfers in the Liquidity Queue. Through links, RIX Participants can obtain information about transfers in the Conditional Release Mechanism on the

present and future Settlement Days in RIX, and on collateral provided for Credit in RIX or administered by the Riksbank for other reasons.

- ii. Consolidated provides besides the information provided by Classical, information on aggregated account transactions via links, the number of implemented and queued transfers and a list of the securities accepted by the Riksbank as collateral for Credit in RIX.

17.3 Questions and standard reports

Functions are supplied via RIX Online in order for RIX Participants to request and receive information from RIX. A RIX Participant requests information by asking specific questions and by ordering different types of standard reports.

17.3.1 Questions

When information is requested in the form of specific questions, RIX will automatically create a report for the user at the RIX Participant who has sent the request to RIX. Information about historical data is available via RIX Online at least 24 months for RIX Participants. Thereafter the Riksbank may decide to provide information about historical data in some other manner. Questions via RIX Online can be divided in different groups:

- i. *Account*, information about interest credited or debited to a RIX Participant who has right to the Riksbank's standing deposit- and loan facility and information about interest rates in RIX.
- ii. *Position at LOM-account*, information about RIX Participant's consolidated position at LOM-accounts, see Section 17.2 ii.
- iii. *Fund Settlement Instruction*, information about transfers, Intra Account Transfers and the sequence for Fund Settlement Instructions that are in the Liquidity Queue.
- iv. *Calendar and schedule for RIX*, information about the business days RIX is open and valid time schedule for the opening hours of RIX
- v. *Credits*, information about the RIX Participant's disbursed credits, claims and remaining credit facility.
- vi. *RIX Participant's roles and system parameters for LOM-accounts*, information about which roles a RIX Participant has in RIX, see also Section 5, and which system parameters control the Settlement Procedures VPC LOM, RIX LOM, CLS LOM, BGC LOM, OMX LOM, PRT LOM and ACH LOM.
- vii. *Fees*, information about the fees that the Riksbank applies to RIX Participants in RIX.
- viii. *Statistics*, information about amount and number of different types of transfer that have been implemented at Principal Accounts and LOM-accounts as well as Loan Account transactions.
- ix. *Messages and reports*, information about incoming messages and error messages from RIX to RIX Participants and a list of available reports in RIX.
- x. *Clearing codes*, information about valid clearing codes in RIX.
- xi. *Standing transfers and bilateral limits*, information about RIX Participants' standing transfers between own accounts and standing arrangements for bilateral limits and positions.

17.3.2 Standard reports

Standard reports that have been ordered by a RIX Participant are created by RIX at recurrent time intervals. Possible time intervals for standard reports are daily or monthly. See Annex A9 for information about which standard reports can be ordered via RIX Online.

18 BI and EMS

18.1 BI (Business Intelligence)

BI is a tool for data storage (data warehouse) where information is continuously transmitted from RIX. The information is stored in a number of “cubes”, where it is available for the generation of reports and raw data. The report element in BI includes standard reports that will satisfy the needs for obtaining information about Funds Settlement Instructions in RIX. BI also serves as an archive for RIX, i.e. it can be used to find information on implemented Funds Settlement Instructions.

Access to BI is based on the user’s access rights in RIX Access.

18.2 EMS (Enterprise Messaging System)

EMS is a closed message handling system in which the Riksbank and RIX participants can receive automatic notifications from RIX regarding events in the RIX system. EMS can also be used for manually created messages between RIX participants. For this purpose there are predefined templates, i.e. templates for the messages that can be sent. The template application, content or design must always be approved by the Riksbank. EMS is used only for RIX-related information.

Access to EMS is based on the user’s access rights in RIX Access.

19 Fees

The Riksbank charges all RIX participants fees for their participation in RIX. The fees consist of a fixed fee and a variable fee. Calculation of variable fees is made daily when RIX closes for the current Settlement Day.

Debiting of the fees determined by the Riksbank for participation in RIX takes place monthly and automatically in RIX when RIX closes on the last Settlement Day of the month. RIX then automatically creates a system-generated Funds Settlement Instruction, with the total of variable and fixed fees as a transfer amount with the Riksbank as beneficiary. The transfer is then implemented in the RTM Settlement Procedure when it opens on the following Settlement Day provided that the RIX Participant has accessible liquidity following a sufficient funds check. If there are insufficient funds, the Funds Settlement Instruction will be discarded. If the Funds Settlement Instruction is discarded, the RIX Participant shall, before closure of the Settlement Day, ensure that sufficient funds are provided to the RIX Participant's Principal Account and register a new Fund Settlement Instruction with the Clearing Code AVG and the Riksbank as beneficiary.

Automatic debiting of fees does not take place via RIX for operators of Clearing Organisations or settlement systems. Instead, these RIX Participants are invoiced.

RIX Participants can ask questions about accumulated fees at any time during the month.

The fees applied by the Riksbank for participation in RIX are shown in the price list published on the Riksbank's website (<http://www.riksbank.se/>).

20 Incident management and contingency routines

Interruptions in the flow of Funds Settlement Instructions are deemed to be especially critical and the contingency routines produced accordingly concentrate on maintaining this procedure. A RIX Participant shall, as soon as it is practically possible, notify the Riksbank if it becomes aware of circumstances that can disrupt the flow of transfers in RIX. The Riksbank shall as soon as it is practically possible notify RIX Participants if it becomes aware of such disruptions.

Incidents that negatively affect the ability and capacity to implement Funds Settlement Instructions between RIX Participants and RIX, in RIX and/or access to RIX Online for RIX Participants can be divided into different scenarios:

- i. scenario 1 relates to incidents in a particular RIX Participant's system environment
- ii. scenario 2 relates to incidents in the Riksbank's system environment
- iii. scenario 3 relates to incidents at one or more of the suppliers used for communication between RIX Participants and RIX.

RIX Participants shall at all times have the requisite contingency procedures, so that the probability of negative consequences due to scenario 1 and 3 is limited.

RIX Participants must moreover at all times have well-functioning, documented and tried and tested routines for incident management and contingency routines. RIX Participants shall carry out such measures as can be undertaken to be able to use alternative channels of communications with a view to reducing the negative consequences of incidents.

RIX Participants shall participate in the exercises arranged by the Riksbank which concern (i) use of different paths of communication to send Funds Settlement Instructions to RIX, (ii) processing of Funds Settlement Instructions implemented without RIX communicating with SWIFT, (iii) participation in and operation of RIX from an alternative place of operation and (iv) manual routines for implementation of transfers.

If the Riksbank must prioritise transfers, this prioritisation is based on the importance for stability of the financial system and the monetary policy significance that individual transfers are deemed to have. Transfers to and from CLS as well as other clearing and settlement systems are considered to be especially important for monetary policy and the stability of the financial system and these shall normally be given priority. However, the Riksbank reserves the right, if special reasons exist, to apply other priorities than those designated or proposed by RIX Participants.

20.1 Contingency routines

20.1.1 Stop for incoming or outgoing Funds Settlement Instructions to/from RIX Participants

When an event occurs which leads to a participant no longer being able to send Funds Settlement Instructions to RIX, a RIX Participant may send a written request by fax for the Riksbank to stop incoming transfers to the RIX Participant concerned, referred to as Stop Receiving. Stop Receiving means that the system until further notice will not carry out transfers to a RIX Participant after Stop Receiving has been registered. Decisions on subjecting a RIX Participant to Stop Receiving are made by the Riksbank. The decision is normally preceded by consultation with the RIX Participant. Stop Receiving is cancelled at the request of the RIX Participant. The Riksbank has furthermore right to cancel Stop Receiving without the approval of the

RIX Participant if the Riksbank deems there no longer to be reasons for Stop Receiving to continue to be activated. After a Stop Receiving has been cancelled, the Funds Settlement Instructions concerned are returned to the Settlement Procedure designated by the sender, with the priority and on the conditions designated in the Funds Settlement Instruction.

There is also a function in RIX to stop the processing of outgoing Funds Settlement Instructions from a RIX Participant to other RIX Participants. To enable RIX Participants to cancel Funds Settlement Instructions which may have been implemented according to contingency routines, the Riksbank may stop outgoing transfers from the RIX Participants concerned via the Stop Paying function. Stop Paying is normally activated at the initiative of the RIX Participant(s). Stop Paying is cancelled at the request of the RIX Participant(s). The Riksbank has furthermore the right to cancel Stop Paying without the approval of the RIX Participant if the Riksbank deems there no longer to be reasons for Stop Paying to continue to be activated.

20.1.2 Alternative channels of communication

In the event of an incident taking place in the RIX Participant's system environment (scenario 1) or at one of the suppliers used for communication between RIX Participants and RIX (scenario 3), there are alternative communication channels which RIX Participants can use to send Funds Settlement Instructions to RIX. Every RIX Participant decides themselves on every occasion on which communication channel, SWIFT's FINCopy service or RIX Online, is to be used to send Funds Settlement Instructions to RIX. In the event of procured communication channel becoming unavailable, Internet may also be used as a continuity solution for RIX Online.

RIX Participants are obliged to undertake preventive measures with a view to enable sending of Funds Settlement Instructions via these communication channels. If RIX Participants intend to use an Authorised Settlement Agent to send Funds Settlement Instructions via an alternative communication channel, the RIX Participant shall have made an agreement in advance with their Authorised Settlement Agent on the routines for this. Changeover to alternative communication channels shall be possible immediately.

20.1.3 The Riksbank's reserve workplaces

The Riksbank provides two workplaces which are connected to RIX in the event of a RIX Participant not being able to maintain communication with RIX. RIX Participants may then, subject to available space, have access to RIX Online without being dependent on their own IT support and external communications network. RIX Participants wishing to use the Riksbank's reserve workspaces shall always contact RIX Helpdesk and make an oral request to use a reserve workspace. The user shall take with them their own SecurID device.

20.1.4 Extended opening hours

The Riksbank can in certain cases adopt extended opening hours. The prerequisites for this are presented in Section 9.10.

20.1.5 Contingency routines for CLS

In the event of incidents taking place in the CLS system environment or in SWIFT's communication network, the Riksbank can activate contingency routines for transfers to/from CLS. See Annex A7 for more information about these routines.

20.1.6 Contingency routines for SWIFT

Implementation of transfers can take place without the Riksbank and the RIX Participants having access to communication via SWIFT. See Annex A7 for more information about these routines.

20.1.7 Manual routines for implementation of transfers

In the event of incidents taking place in the Riksbank's system environment and/or that all communication channels between the RIX Participants and RIX have ceased to function, the Riksbank can decide to apply manual routines for the implementation of transfers. Decisions on changeover from implementing transfers via RIX to manual implementation of transfers are made by the Riksbank.

Manual routines for implementation of transfers assume that RIX Participants can minimise the number of commissions that are to be processed. This means that every individual RIX Participant must aggregate certain types of transfer commissions which the participant instructs the Riksbank to implement via this routine according to established routines in Annex A7.

On changeover to manual routines for the implementation of transfers, the balances in all LOM Accounts will be transferred to the Principal Account. Furthermore, the Loan Account will be debited up to the total credit facility. The increased balance in the Loan Account will be credited to the RIX Participant's Principal Account. All Funds Settlement Instructions are implemented in the Principal Account when applying manual routines. RIX Participants shall give their consent to the Riksbank being able to effect Funds Settlement Instructions sent by an Authorised Settlement Agent without the paying RIX Participant approving the instruction or earmarking liquidity for it.

See Annex A7 for more information about manual routines for the implementation of transfers.

21 Support function

21.1 The role of the Riksbank

The Riksbank provides a support function, RIX Helpdesk. RIX Helpdesk's task is to assist participants and to inform about disruptions and applicable contingency routines according to decisions taken by the Riksbank. RIX Helpdesk is staffed from 06.30 to 18.10 all Business Days. In the event of extended opening hours, RIX Helpdesk is open at least 15 minutes after closure. RIX Helpdesk can be reached on 08-787 05 99 or at rix@riksbank.se.

21.2 Information to participants

The Riksbank needs to communicate information to participants. This information may be urgent, for instance, information about disruptions at a participant or the Riksbank, and also of another nature, for example, information about system changes, changed Terms and Conditions, or coming exercises.

Urgent information is sent via RIX Online as an Information Broadcast and can be found in the Notifications Inbox and by e-mail. RIX Participants must provide an e-mail address which is continuously read during the opening hours. The Riksbank also requires participants to provide a telephone number which is staffed during opening hours and a fax number. The Riksbank may, in the event of disruptions, also hold a telephone conference with all participants. Information about telephone conferences is sent via RIX Online and via e-mail. Participants call the telephone number stated in the telephone conference notification.

The Riksbank may, in the event of matters which are not urgent, send information to the persons stated by the RIX Participant as RIX coordinators. This information may either be sent by e-mail or by post. RIX Participants must notify who is their RIX coordinator and provide contact details.

RIX Participants shall ensure that contact details on form R4.B1 are updated and correct.

Annexes

- Annex A1 – Message specifications
- Annex A2 – Incoming messages
- Annex A3 – Clearing Codes
- Annex A4 – LOM parameters
- Annex A5 – Authorised Settlement Agent Agreements parameters
- Annex A6 – Notification groups
- Annex A6:1 – Notification codes
- Annex A7 – Incident routines
- Annex A7:1 – Form instructions in the event of disruptions
- Annex A8 – Central access rights administration
- Annex A9 – List of questions and reports
- Annex A9:1 – Reports on collateral
- Appendix A10 – Technical specifications
- Annex A11 – Form instructions
- Annex A12 – RIX Online Guide
- Annex A13 – RIX Access Guide

Forms

- O.B2 – Power of Attorney for Authorised Settlement Agent
- R2.B1 – Access right requirements for RIX Online
- R2.B2 – Access right requirements for RIX Access
- R3.B1 – Order – RIX Online user
- R3.B2 – Order – RIX Access administrator
- R3.B3 – Order – RIX Access rights coordinator
- R4.B1 – Notification of customer details
- R4.B2 – Power of attorney
- R4.B4 – Order – Firewall opening for RIX Online
- R4.B5 – Notification of Extra Identity
- R5.B1 – Transfer of balance
- R10.B1 – Ordering of notification – Account Holder
- R10.B2 – Ordering of notification – Authorised Settlement Agent
- R13.B1 – Incident report
- R13.B2 – Funds Transfer Instruction for aggregated transfers
- R13.B3 – Funds Transfer Instruction for single transfers

R13.B4 – Funds settlement instruction to CLS.

R13.B5 – Funds Transfer Instruction for aggregated transfer from clearing houses

S.B1 – Application for approval of securities as collateral for credit

S.B2 – Confirmation of a repo transaction