RESERVE BANK INFORMATION AND TRANSFER SYSTEM

RITS Low Value Feeder Project

Industry Consultation Paper 3: Some Initial Design Aspects proposed for the Low Value Feeder

March 2009

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1. INTRODUCTION

This consultation paper continues the RBA's dialogue with the low value payments industry on initiatives to improve the settlement and clearing of low value payments through the development of the RITS Low Value Feeder (LVF). Previous consultation papers and working group discussions have been used to keep the industry informed about the progress of this initiative and to seek feedback from the industry on the design of the LVF. The feedback already received has helped the RBA to significantly progress the design of the LVF, some aspects of which are presented in this paper.

The objective of the LVF project is to provide Exchange Settlement Account (ESA) holders with the ability to undertake same-day settlement of their low value payment obligations as an alternative to the current next-day (9am) settlement arrangements. With the development of this functionality, the RBA will strongly encourage industry migration away from 9am settlement over a reasonable transition period (in the order of two to three years). The recent survey of values and times of exchange of BECS clearing files will be an important input into the RBA's strategy to achieve this. The RBA expects to provide further information on its proposed approach to transitioning from the 9am settlement arrangements around the middle of the year. Low value payments will continue to be cleared in accordance with the applicable APCA clearing system regulations and procedures, which will be amended to facilitate use of the new settlement functionality.

More recently, the RBA has agreed to assist the industry with its clearing processes by developing a capability within the LVF to transfer clearing files between RITS Members that use different networks or file transfer protocols (the Clearing Interconnector). This is a response to APCA clearing system members indicating different network preferences as they look to replace existing bilateral communication links. This paper only envisages file transfers through the Clearing Interconnector across SWIFT FileAct and the Telstra COIN. However, if other industry-preferred networks were to emerge in the future, they will be considered for access to the Clearing Interconnector.

In developing the LVF, the RBA is aiming to provide a facility that allows flexibility and choice to RITS Members, as well as equal access to clearing arrangements across its Membership. The RBA also wishes to minimise the development effort and cost to RITS Members in its implementation. Nevertheless, considerations of security and efficiency are important and the RBA must carefully consider these issues as it looks to integrate the LVF into the existing RITS infrastructure.

This paper explains the proposed design of the LVF Settlement Interconnector using a 'life-cycle' approach that follows how an ESA holder generates a settlement instruction, sends it to RITS, the creation and management of the settlement transaction on the RITS System Queue, and the responses that are sent back to the ESA holder. The discussion of the Clearing Interconnector is structured to address the questions that readers may have about this recent addition to the project.

This paper sets out the use of SWIFT FileAct, not FileAct Copy, as the RBA believes it will provide a less complicated architecture that will benefit the industry and the RBA in systems build and implementation. However, recognising the desire of some participants to utilise FileAct Copy if practicable, the RBA is continuing detailed discussions with SWIFT to determine the feasibility of FileAct Copy within the broad architecture outlined here. The RBA will advise the industry as soon as possible of the outcome of these discussions.

The proposed design outlined in this paper takes into account the feedback from industry participants to the RITS Low Value Feeder Project Consultation Paper 2. The March meeting of the LVS Working Group will enable the RBA to present the design outlined in this paper and for RITS Members to provide further views on the design. The appendix to this paper summarises the feedback to Consultation Paper 2.

Issues relating to the settlement rules that will govern the operation of the RITS Low Value Feeder – such as settlement times and multilateral settlement arrangements – are not discussed in this paper. These issues will be examined in separate consultation with ESA holders.

2. GLOSSARY OF TERMS

Collator File An Exchange Summary file sent to the RBA National Collator

containing information on settlement obligations to be used to

determine net settlement obligations in the 9am Batch.

Clearing File File(s) exchanged between two APCA CS1 or CS2 members in

order to process and clear transactions in CS1 or CS2 (i.e presentment files, acknowledgement files, transaction files,

summary files etc.)

Clearing Interconnector RBA facility that allows two RITS Members to exchange low value

clearing files where those Members are not connected to the same network, or where they use different networks or file transfer

protocols for that type of file exchange.

COIN Community of Interest Network. Specifically the Telstra COIN in

the process of being approved by APCA for the exchange of low

value payment transactions.

Credit item Individual item in a Clearing File relating to a credit to a customer

account at the Member receiving the file.

account at the Member receiving the file.

File Settlement Instruction (FSI) A file containing a single settlement instruction for credit or debit

items in a clearing file.

File Settlement Response A file containing a response from RITS relating to a File Settlement

Instruction.

File Recall Instruction A file containing an instruction to recall a settlement transaction

from the RITS System Queue that was originally initiated by a File

Settlement Instruction.

File Recall Response A file containing a response from RITS relating to a File Recall

Instruction.

another in settlement of an FSI.

Low value payments Payments that are cleared under APCA's Regulations and

Procedures for Clearing Systems CS1, CS2, and CS3.

Multilateral settlement Simultaneous settlement of ESA obligations amongst multiple ESA

holders that arises from settlement instructions for low value

payments (i.e. for FSI settlement amounts).

RITS Low Value Feeder (LVF) Proposed feeder system to RITS that comprises the Settlement

Interconnector (for processing same-day settlement instructions & responses for low value payments) and the Clearing Interconnector (for transferring clearing files on behalf of RITS

Members).

Settlement Interconnector RBA facility that accepts FSIs, creates settlement transactions,

accepts File Recall Instructions, recalls FSI-related settlement transactions from the RITS System Queue, and generates

responses to RITS Members about FSIs.

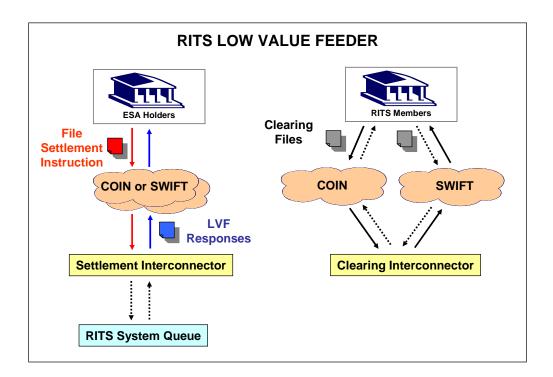
SWIFT FileAct

SWIFT service that will enable RITS Members to send a File Settlement Instruction directly to RITS or to send a Clearing File to another RITS Member via the Clearing Interconnector.

3. OVERVIEW OF RITS LOW VALUE FEEDER

The RITS Low Value Feeder will facilitate the same-day settlement of low-value payments across Exchange Settlement Accounts in RITS and assist RITS Members to transfer Clearing Files to each other. It will consist of two parts:

- a sub-system for processing settlement instructions for low value payments (Settlement Interconnector), and
- a sub-system for transferring Clearing Files across different communication networks, or across the same network but using different file transfer protocols (Clearing Interconnector).



3.1 Settlement Interconnector

ESA holders will be able to send settlement instructions to the Low Value Feeder via the COIN or SWIFT FileAct. Each instruction will be in the form of a file (a 'File Settlement Instruction' or 'FSI') that will have a standard format so that it can be sent across either type of network. The Settlement Interconnector will accept FSIs and convert them to settlement transactions that will be placed on the RITS System Queue. ESA holders will be able to manage these transactions through existing RITS functionality. These transactions may be marked for real time testing, in which case they will be tested for settlement in the same way that RTGS transactions currently are. Alternatively, the transactions may be marked for settlement testing during the day as part of an LVF multilateral settlement.

The Settlement Interconnector will provide ESA holders with a suite of new LVF responses (pertaining to FSIs and recall instructions) that they can choose to receive to advise them of the status of FSIs. ESA holders will also be able to elect to use the existing SWIFT AIF functionality for advices and queue management relating to FSIs. Alternatively, ESA holders will be able to manually monitor and manage these transactions via RITS enquiry and update functions.

3.2 Clearing Interconnector

RITS Members will be able to send clearing files to the RBA's Clearing Interconnector to be forwarded on to other RITS Members on a different network. The Clearing Interconnector will also be available to transfer files between RITS Members that are both connected to the COIN but that use different file transfer protocols. Clearing files will include all types of CS1 electronic presentment and dishonour files, and transaction and summary files for CS2. The Clearing Interconnector will not support transaction messaging of the type used in APCA CS3 for ATM/EFTPOS transactions.

4. SCOPE OF THE LOW VALUE FEEDER

4.1 Eligible Networks

The RITS Low Value Feeder will send and receive files via the APCA-endorsed Telstra COIN or via SWIFT FileAct service.

In addition, the RBA is also willing to exchange collator files with ESA holders via either the COIN or SWIFT FileAct.

4.2 Eligible Payments and Clearing Systems

The RITS Low Value Feeder will be used by ESA holders to submit instructions to RITS for the sameday settlement of low-value payments resulting from clearing exchanges between RITS Members. This includes, but is not limited to, low value payments that are cleared and settled as part of an APCA clearing system. Settlement obligations are generated when bulk payments files (i.e. 'Clearing Files') are exchanged between institutions as part of the clearing process. It is expected that obligations arising out of APCA's Clearing System 2 (Bulk Electronic Clearing System - BECS) will be the first payments to be settled using the LVF. FSIs will be sent to the RBA by Tier 1 Members of these clearing systems.

The RITS Low Value Feeder is not intended to be a substitute for high value payments from APCA Clearing System 4 that are currently settled on an RTGS basis through the SWIFT PDS (the APCA "HVCS").

The RITS Low Value Feeder's Clearing Interconnector will accept and transfer clearing files that are part of the clearing process associated with CS1 and CS2.

4.3 Settlement Rules and Business Arrangements

The RBA will develop business rules and arrangements to govern the settlement in RITS of Low Value Feeder payments, including RITS session times and other arrangements, in consultation with the industry. These rules and arrangements are outside the scope of this paper.

4.4 Clearing System Regulations and Procedures

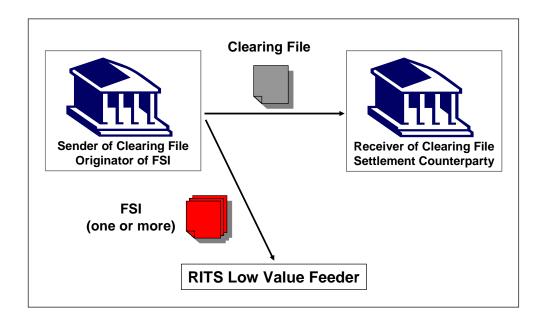
APCA and its members will need to assess and determine the changes that may be required to Clearing System Regulations and Procedures in order to support same day settlement and the use of the LVF. The RBA acknowledges the close relationship between the clearing and settlement processes that underpin the use of the LVF. To this end, the RBA supports the cross representation between the various RBA and APCA groups working on issues associated with this initiative.

5. SETTLEMENT INTERCONNECTOR

This section provides further details on the proposed processing arrangements for FSIs. It covers the generation and sending of FSIs by the ESA holder, the settlement transaction being created and managed in RITS, and responses being sent back to the ESA holder.

5.1 Who sends an FSI?

The Low Value Feeder will accept a File Settlement Instruction (FSI) from either the payer or payee of ESA funds. Where the FSI is sent to RITS by the payer of ESA funds, the sender of the FSI may determine the statuses for the RITS System Queue. Where the sender of the FSI is the payee (i.e. it is requesting payment from another ESA holder), statuses of 'deferred' will be automatically applied by RITS. The RITS Low Value Feeder will not identify whether the FSI has been sent by the originator or receiver of a clearing file. However, based on feedback from the industry, it is the view of the RBA that the originator of the clearing file should send the FSI to RITS.



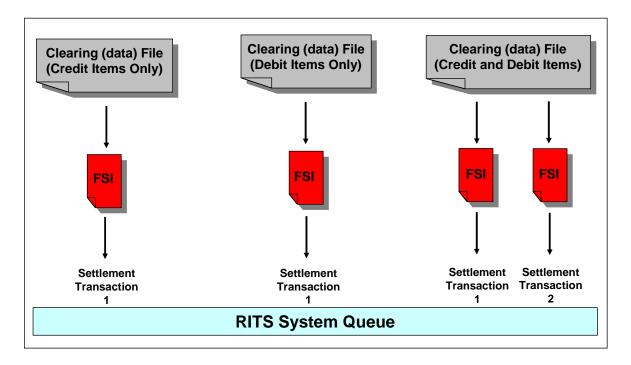
Feedback from the industry clearly indicated favour for both a payer of ESA funds and a payee being able to send an FSI to RITS. This was largely the by-product of the widely held preference for the originator of the clearing file to generate and send the FSI. This approach was seen by many as the least complex and least disruptive to existing systems and processes, and the most efficient way for a payment instruction to get to the RITS System Queue for settlement testing. Some feedback did question what would happen in the case of exceptions processing and non-validation of clearing files by the receiver if the FSI has already been sent to RITS. These issues are partly dealt with by the proposed separation of FSIs for credit and debit items and the ability of the receiver of debit items to effect settlement when they are ready. (Please see subsequent sections for further discussion.)

5.2 How should an FSI be created from a Clearing (data) File?

The RITS Low Value Feeder will accept an FSI for the credit items contained in a clearing file and a separate FSI for the debit items that may be contained in the same clearing file. This means that two FSIs should be sent to RITS for a clearing file that contains both credit items and

debit items. Each FSI will contain one settlement amount that becomes one settlement transaction that is tested for settlement on the RITS System Queue.

The Low Value Feeder is not intended to be used for submitting FSIs containing a net settlement amount. Separate multilateral settlement capability for FSIs will be provided within RITS to assist Members with their liquidity management.



Feedback from the industry indicated that there may be some benefit in separating settlement instructions for credit items and debit items so that they can potentially be managed independently throughout the RITS day. It would also avoid instances where debit items are settled as part of a mixed file (net credits) without consent of the paying ESA holder. Any liquidity benefits of netting would still be available by including the transactions in a multilateral settlement. The RBA believes this approach will allow the design to be kept simple whilst still providing full flexibility for settlements to be managed.

5.3 What is contained in an FSI?

The basic design of the FSI is based on the information that the RBA needs to effect settlement, generate LVF responses to ESA holders, and maintain the statistics currently being collected for APCA as part of the National Collator process. These information fields are shown in the following table:

| Field of Information | Example | Description |
|--------------------------|---------|---|
| | | |
| FSI transmission details | | |
| Filename | FSI | Format to be decided. |
| Sender | | Sender of the FSI. |
| Receiver | | Receiver of the FSI, the Settlement Interconnector. |
| Service name | | SWIFT field, not used for COIN. |
| Request type | | SWIFT field, not used for COIN. |
| Date of transmission | | The date the FSI is transferred. |

| Time of transmission | | The time the FSI is transferred. |
|-----------------------------------|-------|---|
| Test/Live indicator | | Indicator for test or live file. |
| | | |
| FSI Content | | |
| TRN | | Sending member may need to give the FSI a TRN which is unique and separate to clearing file reference. To be examined. |
| Clearing File reference | | Identifies the clearing (data) file exchange to which the FSI relates. |
| Clearing system | CS2 | For RBA data collection. |
| Settlement date | | Some instructions will relate to settlement on the day after FSI transmission (such as for GDES payments). |
| Recall | R | This may or may not be included. It is still being examined whether a separate recall instruction is required from a RITS point of view. |
| Multilateral settlement | M | Multilateral settlement process is on a 'next-group' basis (i.e. 'M'). Members leave this field blank if they wish their FSI to be subject to immediate real time gross settlement testing. |
| Payer | | Payer of ESA funds. |
| Payee | | Receiver of ESA funds. |
| Settlement amount | | Amount of ESA funds to be transferred. |
| ESA status | A/P/D | For transactions where the sender of the FSI is the payer. (A deferred status is automatically applied if the sender of the FSI is the payee.) Statuses can be overridden using RITS functionality. |
| Credit status | A/P/D | For transactions where the sender of the FSI is the payer. (A deferred status is automatically applied if the sender of the FSI is the payee.) Statuses can be overridden using RITS functionality. |
| Cash account status | A/P/D | For transactions where the sender of the FSI is the payer. (A deferred status is automatically applied if the sender of the FSI is the payee.) Statuses can be overridden using RITS functionality. |
| Number of underlying credit items | | For RBA data collection. |
| Value of underlying credit items | | For RBA data collection. |
| Number of underlying debit items | | For RBA data collection. |
| Value of underlying debit items | | For RBA data collection. |
| | | |

It is intended that the design of the FSI be standard across COIN and SWIFT networks. To this end there will be only one business design for the FSI and it will ideally conform to ISO 20022 standards. This will enable ESA holders to switch networks more easily if this is required. This has contingency and competitive benefits.

In their feedback to Consultation Paper 2, industry participants indicated a number of additional fields of information that they would like to see included in an FSI. This information is either to help them with their reconciliation and posting or to provide for regular industry reporting of low value payments activity. Please see the Appendix for a listing of these suggestions.

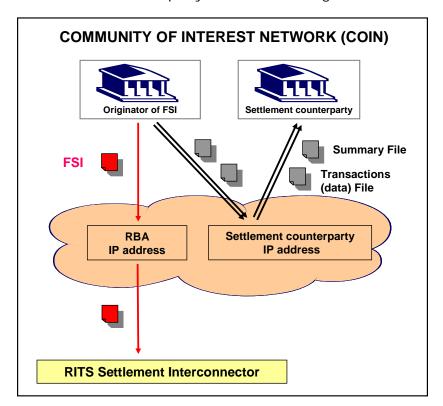
The use of FSIs for collecting ancillary statistical data is beyond the scope of the Low Value Feeder. Nevertheless, the idea of collecting additional information for statistical purposes has some appeal. If it was approached by the industry the RBA would be prepared to consider collecting summary information sent in separate files that could subsequently be used for reporting purposes.

5.4 How do you send an FSI to RITS?

The Low Value Feeder will accept an FSI from the COIN or from the SWIFT network using FileAct.

5.4.1 Community of Interest Network (COIN)

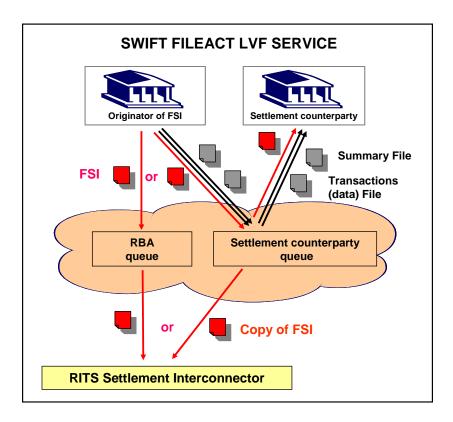
For a COIN, the FSI is a separate file from the clearing (data) file. This is the case whether the clearing file is being sent directly to the counterparty over the same COIN, or it is being sent to the RBA's Clearing Interconnector to be forwarded to another network (or via another protocol). These file transfers are immediate. The RBA expects that BECS participants will continue to send existing Summary Files to their settlement counterparty as well as sending the FSI to RITS.



5.4.2 SWIFT FILEACT

It is expected that ESA holders will be able to use the SWIFT FileAct service to send an FSI directly to the RBA in a similar manner as the COIN file transfer process described above (i.e. where the FSI is sent separately from the clearing (data) file).

The RBA is currently working with SWIFT on whether it is sensible to define a service that can also accommodate the use of the FileAct Copy service over that network.



5.5 How does an FSI become an LVF Settlement Transaction in RITS?

Each FSI becomes a bilateral settlement transaction on the RITS System Queue on the settlement date. FSIs with a future settlement date will be warehoused by RITS (up to 5 days) with the settlement transaction created and placed on the RITS System Queue on that settlement date.

Details extracted from the FSI in RITS processing will include:

- Payer
- Payee
- Settlement amount
- ESA status, credit status, and cash account status, if the originator of the FSI is the payer
- Flag for multilateral settlement if this is specified, if the originator of the FSI is the payer

Details automatically entered by RITS are:

- ESA status, credit status, and cash account status, if the originator of the FSI is the payee
- Branch (LC for credit files, LD for debit files)
- Transaction type

The following tables provide examples of FSIs that become settlement transactions on the RITS System Queue. (They are not intended to be an exact replication of how transactions would appear on a RITS screen, nor do they include every field.)

The first table shows transactions that result from FSIs that are sent by the ESA holder paying ESA funds – in these examples, the ESA holder with mnemonic AAAA. In the first transaction, AAAA has instructed (via the FSI) that the transaction be placed on the RITS System Queue with priority statuses; in the second transaction it has nominated active statuses. These two transactions will be tested for settlement immediately. In the third transaction, AAAA has instructed (via the FSI) that it be included in the next multilaterally settled group of payments; this transaction is held on the RITS System Queue for multilateral settlement, as signified by the 'M' flag. The last two transactions involve AAAA assigning a deferred ESA status so that settlement can be effected at a later time. Transactions with a deferred status are not tested for settlement either individually or as part of a multilateral settlement. Transactions that are created from FSIs that are sent by the paying ESA holder are recorded against a new LC branch (with a dedicated cash account).

| • | Payer | Payee | Amount | Cook | Queue Status | E04 | Multilateral |
|--------|------------------------------|----------------------|-------------------------------------|--|---|--|---|
| 3ank I | 3rancn | Branch | | Casn | Credit | ESA | Settlement |
| XXX | LC | LC | \$500,000 | Р | Р | Р | |
| YYYY | LC | LC | \$150,000 | Α | Α | Α | |
| ZZZZ | LC | LC | \$100,000 | Α | Α | Α | M |
| XXX | LC | LC | \$300,000 | Α | Α | D | |
| YYYY | LC | LC | \$200,000 | Α | Α | D | M |
| | XXXX YYYY ZZZZ XXXX | XXXXLC YYYYLC ZZZZLC | XXXXLCLC YYYYLCLC ZZZZLCLC XXXXLCLC | XXXXLCLC \$500,000 YYYYLCLC \$150,000 ZZZZLCLC \$100,000 XXXXLCLC \$300,000 | XXXXLCLC \$500,000 P XYYYLCLC \$150,000 A ZZZZLCLC \$100,000 A XXXXLCLC \$300,000 A | XXXXLCLC \$500,000 P P YYYYLCLC \$150,000 A A ZZZZLCLC \$100,000 A A XXXXLCLC \$300,000 A A | XXXXLCLC \$500,000 P P P P YYYYLCLC \$150,000 A A A A A A A A A A A A A A A A A |

The table below shows a transaction that results from an FSI that is sent by the ESA holder receiving ESA funds – in this example, the ESA holder AAAA. A default setting is to be put in place for RITS to initially place such transactions on the RITS System Queue with deferred statuses. The paying ESA holder XXXX can then manually change statuses of each transaction to effect settlement. Alternatively, XXXX can pre-define in RITS the preferred override statuses to be applied to these transactions. Transactions that are created from FSIs that are sent by the ESA holder receiving ESA funds are recorded against a new LD branch which has a dedicated cash account.

| Paying Bank | Payee Bank | Payer Branch | Payee Branch | Amount | Cash | Queue Status Credit | ESA | Multilateral Settlement |
|----------------|---------------|-----------------|-----------------|-----------|--------|------------------------|-----------------|--|
| XXXX | AAAA | LD | LD | \$250,000 | D | D | D | |
| XXXX | AAAA | LD | LD | \$250,000 | XXXX s | ets override o | f 'active' A | |
| xxxx | AAAA | LD | LD | \$250,000 | A | A | A | XXXX nominates Multilateral Settlement M |

The table below shows a group of transactions that have been selected for multilateral settlement. They are all marked with an 'M' flag and have statuses set to either priority or active. These transactions will be tested for simultaneous settlement at a specified time during the day. The second table shows the net effect on ESA funds for each ESA holder. Note that an ESA holder's position will only be visible to itself along with its associated transactions.

| Paying | Payee | Payer | Payee | Amount | | Queue Status | 3 | Multilatera |
|--------|-------|--------|--------|-----------|------|--------------|-----|-------------|
| Bank | Bank | Branch | Branch | | Cash | Credit | ESA | Settlemen |
| AAAA | ZZZZ | LC | LC | \$100,000 | Α | Α | Α | М |
| AAAA | YYYY | LC | LC | \$200,000 | Р | Р | Р | M |
| XXXX | AAAA | LD | LD | \$150,000 | Α | Α | Α | M |
| ZZZZ | AAAA | LC | LC | \$500,000 | Α | Α | Α | M |
| YYYY | ZZZZ | LC | LC | \$300,000 | Α | Α | Α | M |
| YYYY | XXXX | LD | LD | \$20,000 | Р | Р | Р | М |
| ZZZZ | YYYY | LC | LC | \$70,000 | Α | Α | Α | M |
| AAAA | XXXX | LD | LD | \$450,000 | Α | Α | Α | M |

| Net Change in ESA funds | Receive | Pay | |
|----------------------------|-----------|-----------|------|
| -\$100,000 | \$650,000 | \$750,000 | AAAA |
| \$320,000 | \$470,000 | \$150,000 | XXXX |
| -\$50,000 | \$270,000 | \$320,000 | YYYY |
| -\$170,000 | \$400,000 | \$570,000 | ZZZZ |

5.6 How do you manage an LVF Settlement Transaction in RITS?

ESA holders will be able to manage an LVF settlement transaction on the RITS System Queue as they currently manage other RITS transactions.

5.6.1 Managing Credit/Debit Items as Settlement Transactions

As noted earlier, the RITS Low Value Feeder will accept payment instructions from the receiver of ESA funds, in addition to payers. For example, if a direct entry file consists of debit items, the FSI will be sent by the file originator and the settlement transaction will be for the receiver of the clearing file to pay ESA funds to the FSI originator. To assist paying ESA holders to mitigate this risk, the Low value Feeder will place these transactions on the RITS System Queue with deferred ESA, Credit and Cash Account Statuses, to give the payer the opportunity to manage these payments. For credit items, the payer/originator will be able to nominate the initial Queue statuses in the FSI that they send to RITS, or in their LC branch and cash account override statuses.

In order to allow an ESA holder to separately manage payments where it has originated the FSI from those where its settlement counterparty has originated the FSI, it is proposed that two new branches (LC and LD) will be used for settlement of FSIs. An FSI will always be settled across either two LC branches or two LD branches.

5.6.2 Override Statuses

ESA holders will be able to set override ESA and/or Credit Status for their LC branch and their LD branch, and on their LC and LD Cash Accounts, separately if desired. Overrides on the LC branch and/or cash account would override the status settings in the FSI where the FSI originator is the payer. Overrides on the LD cash account would override the deferred ESA and Credit statuses, and an override on the LD branch would override the deferred Cash Account Status, applied by the system to incoming FSIs where the FSI originator is not the payer. These override statuses will be applied before the transaction is placed on the queue.

5.6.3 Queue Statuses

Once FSIs have been placed on the RITS System Queue, ESA holders will view individual LVF settlement transactions through existing RITS screens, including ESA, Credit and Cash Account Statuses. ESA holders will be able to change queue statuses to prioritise, activate, or defer those transactions in the normal fashion, ie via on-line RITS screen functions or via the AIF.

5.6.4 Multilateral Settlement

The RBA is currently in the process of developing the detail of how the multilateral settlement process will work. However the basic concept is that all FSI's will become settlement transactions on the RITS System Queue, with those marked with a multilateral settlement flag (indicated in the FSI) being tested and settled simultaneously at specified times during the day.

The RBA currently envisages that a paying ESA holder will be able to add or remove a transaction from a multilateral settlement group when it is on the RITS System Queue. This will be done by adding or removing the multilateral settlement method flag ('M') via a RITS enquiry and update functions.

ESA holders will be able to view their multilateral settlement obligations in isolation by using filters on RITS enquiry and update functions. ESA holders will need to be aware, as with ES positions, that such positions are snapshots and do not update dynamically as settlements occur and statuses are changed.

Other details related to such things as the specific times for multilateral settlement and the need for a funding period are also in the process of being examined.

5.7 How do you recall an LVF Settlement Transaction from RITS?

ESA holders will be able to recall individual transactions from the RITS System Queue using a File Recall Instruction. This will be sent to RITS by the originator of the FSI, and will travel in the same fashion as an FSI.

Some ESA holders have indicated that they would prefer the FRI and FSI to have the same structure, with an information field that can be used to recall a transaction (or left blank if it is an FSI). They felt that this was better from a processing perspective, and it means that the recall instruction is accompanied by the details of the original settlement instruction (not just a TRN). The RBA is investigating the practicalities of doing this. One consideration is that the recall instruction would probably need to have its own TRN as well as a reference to the TRN of the FSI that it is recalling.

As well as the LVF recall instruction, ESA holders may be able to recall a transaction using existing RITS functionality or the AIF. However, the RBA is considering whether a business rule should apply which would require the recall to come from the same system as the original settlement instruction.

5.8 What LVF Responses will RITS provide to ESA holders?

The Low Value Feeder will generate a suite of responses that relate to their receipt by RITS and their processing on the RITS System Queue. Some are responses to the settlement instruction (the FSI) and some are responses to the recall instruction (the FRI).

The proposed responses to an FSI are:

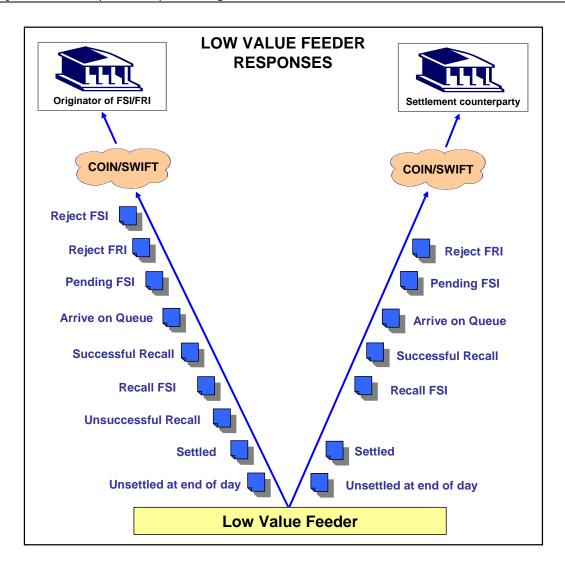
- Reject of FSI File Settlement Response: Reject
- Pending FSI File Settlement Response: Pending
- Arrived on RITS System Queue File Settlement Response: Arrive (equivalent AIF will be available)
- Successful Recall File Settlement Response: Recall of FSI (equivalent AIF will be available)
- Settled File Settlement Response: Settled (equivalent AIF will be available)
- Unsettled at end of day File Settlement Response: Unsettled (equivalent AIF will be available)

The proposed responses to an FRI are:

- Reject of FRI File Recall Response: Reject
- Successful Recall File Recall Response: Successful
- Unsuccessful Recall File Recall Response: Unsuccessful

Two responses have been added since Consultation Paper 2. 'FSR: Pending' will indicate to Members that a future-dated FSI is being held for settlement on the requested date. 'FSR: Recall of FSI' will indicate that the FSI has been recalled.

ESA holders will have a choice as to which responses they wish to receive. It is proposed that a RITS screen be provided in which ESA holders can indicate whether they wish to receive a particular response, and where that response should be sent. The Low Value Feeder will send responses to ESA holders via a COIN or SWIFT, using the same services described earlier in this paper. Only a 'Reject FSI' and 'Unsuccessful Recall' will not be made available to the 'non-originator' of an instruction. One RITS Member has questioned why we would not make a 'Reject-FSI' response available to the settlement counterparty. We believe that it may complicate the reconciliation process for ESA holders and have not had any feedback to indicate why the settlement counterparty has a need for it.



The final structure and naming of LVF responses is being examined and will be finalised in consultation with the industry. The current thinking is that ESA holders may wish to receive the details from the original FSI or FRI. RITS will be adding some information where appropriate, such as the settlement time.

Apart from the LVF responses, ESA holders will also be able to receive pre- and post-settlement advices for LVF transactions through the AIF.

6. CLEARING INTERCONNECTOR

6.1 What is it for?

The RBA recognises that some participants may wish to use SWIFT's FileAct Service to exchange clearing files, and others will use the COIN. It is also possible that members of the COIN will have preferences for different file transfer protocols for file transfers over the COIN. To accommodate this, as a service to the industry, the RBA proposes to build a facility to allow file transfers between different networks/protocols to occur. This facility will be called the Clearing Interconnector.

Whilst they share the same network connectivity arrangements, the Clearing Interconnector functionality is quite separate to the Settlement Interconnector and will be able to be implemented separately. The Clearing Interconnector will go live later this year in order to assist with the industry's move away from the leased line DDN bilateral links currently used for many clearing and collator file exchanges.

6.2 How will it work?

If two RITS Members do not bilaterally agree to use a common network, or to use a common file transfer protocol for transfers over the COIN, they will be able to choose to exchange files via the Clearing Interconnector. The Clearing Interconnector will connect to the SWIFT FileAct Service and the COIN. It will support a number of different file transfer protocols for file transfers over the COIN if this is demanded and practicable. The two parties will simply send their files to a specified destination for the Clearing Interconnector via their chosen network (and/or file transfer protocol) to be forwarded to their counterparty using its chosen network (and/or file transfer protocol).

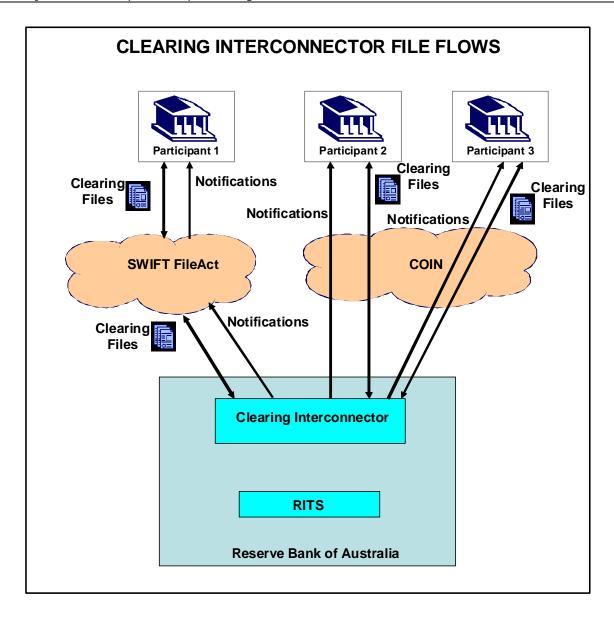
For example, if Member 1 is not a member of the COIN, it may need to exchange direct entry files with Member 2 who is a member of the COIN. Member 1 would send a SWIFT FileAct file to the Clearing Interconnector which would onforward it to Member 2 on the COIN. Alternatively, Member 2, using a file transfer protocol such as Connect:Direct, may wish to send a file to Member 3, also a COIN member, but Member 3 does not support Connect:Direct. If the RBA has agreed to support Connect:Direct and Member 3's file transfer protocol, Member 2 could send to the Clearing Interconnector using Connect:Direct, and the Clearing Interconnector would onforward the file to Member 3 using its preferred file transfer protocol.

The RBA will not need to "open" the files for them to be onforwarded to recipients. Determining the appropriate routing information to be applied will be achieved via file naming standards and file transfer destinations.

RBA staff will monitor the system. Online access to RITS Members is not proposed at this time; the RBA will look at developing a series of acknowledgements on the status of files. RITS Members can also contact the RBA if they need to know the status of their clearing files.

The following diagram shows the file flows that will occur via the Clearing Interconnector. Two COIN participants are shown, where Participant 2 and Participant 3 have elected to use different file transfer protocols.

More detail on file flows, including provision and content of notifications, will be provide in a later industry information paper.



6.3 Who can use it and what for?

The Clearing Interconnector will be available initially for eligible members of APCA Clearing Systems CS1 and CS2. Other clearing schemes may be added in the future.

It will be able to be used for all file exchanges approved under APCA rules. This would include CS1 and CS2 clearing files. It is envisaged that both test and production files will be able to be sent.

The RBA will advise which networks and which file transfer protocols will be supported by the Clearing Interconnector. At this stage, it is expected that only SWIFT (FileAct) and the Telstra COIN would be supported. If APCA were to approve another IP network for clearing exchanges in the future, the RBA would consider supporting that network. It would provide a migration solution from one network to another. Where a RITS Member wishes to use a file transfer protocol for COIN file transfers that its counterparties do not support, it could approach the RBA to have that file transfer protocol added to the Clearing Interconnector's supported file transfer protocols. The RBA can not guarantee that all requests will be able to be met.

6.4 What doesn't it do?

The Clearing Interconnector will not be used for CS3 transaction approval and message processing.

It is expected that the COIN will introduce standardised security requirements for COIN file transfers. Security arrangements for the Clearing Interconnector are still being determined. RITS Members will be able to agree bilaterally on additional security measures if they wish to do so.

6.5 Does this mean that I don't have to join the APCA COIN?

The RBA does not intend to support bilateral connections to the Clearing Interconnector. It will only accept files transferred to it via the COIN or SWIFT FileAct (or potentially another APCA approved network if one was to be approved in the future).

6.6 File naming and other transfer conventions

It is proposed that files to be exchanged via the Clearing Interconnector should be named according to a standardised file naming convention. This is to ensure that there is no conflict between files in the Clearing Interconnector that might otherwise share the same name. It may also be useful to recipients for their internal processing. One suggestion is to adopt a file naming convention such as the following:

clearingsystem.filetype.subtype.sender.receiver.date.Test/ProdIndicator.

For example:

CS2.DET.1000.BK1.BK2.16032009.P

Some examples of file types and subtypes currently anticipated are shown below:

| Туре | Sub-type | Description |
|------|----------|---|
| DET | 1000 | Direct entry transaction file, 10.00 am exchange time, or alternatively, simply a count of exchanges for the day. |
| DES | 1300 | Direct entry summary file, 1.00 pm exchange time |
| DGT | 1815 | Government direct entry transaction file, 6.15 pm exchange time, or alternatively, simply a count of exchanges for the day. |
| DGS | 2000 | Government direct entry summary file, 8.00 pm exchange time |
| EPD | A | Cheque electronic presentment file, sub-types as per the APCA APCS contingency file naming conventions |

This means that file names will not necessarily be unique. If a file is resent, it will have the same name as the original file.

6.7 What will it cost to use?

The RBA has previously stated that it will assist the industry in moving to a new network platform by absorbing the development costs of providing the Clearing Interconnector. The operational costs of the Clearing interconnector will be passed back to the users of the service. At this point in time it is

not possible to provide detailed estimates of the cost of using the service or how these costs will be allocated.

For the COIN, the costs to be recovered from users will comprise those marginal costs incurred beyond what the RBA requires for its operation of the Settlement Interconnector and its activities as a transactional banker. This is likely to comprise some additional bandwidth and some system maintenance costs. These costs are not expected to be large.

Any SWIFT charges associated with file transfers through the Clearing Interconnector will be borne by the SWIFT user and not by the COIN user. SWIFT has recently announced its intention to waive messaging costs that would normally be incurred by the RBA for passing files to SWIFT users for a period of two years. After that time, a reverse billing arrangement with the SWIFT user is likely to be adopted.

7. NEXT STEPS

The RBA is still investigating some of the more detailed design considerations for the LVF. These considerations need to take into account the requirements of RITS Members and the current and prospective clearing and settlement arrangements for low value payments. The proposed industry standards for the use of the Telstra COIN (eg minimum security requirements) as well as advice from SWIFT regarding the use of FileAct will also have a bearing on the final detailed design.

Nevertheless, the RBA is also mindful of the need for RITS Members to make system changes in order to take full advantage of the new functionality and of the significant lead times required for institutions to enable these changes. In order to assist institutions in planning for their system development the RBA will continue to make available information pertaining to the design development of the LVF. More detailed design specifications will be provided in due course.

RITS Members are encouraged to provide feedback to the RBA at their earliest convenience on any aspect of the LVF design presented above.

The next steps are to:

- (a) Obtain feedback from Members on the latest proposed design aspects of the Low Value Feeder.
- (b) Provide an information paper to Members on Clearing Interconnector operational arrangements.
- (c) Examine the liquidity impact of same-day settlement for low value payments.
- (d) Develop detailed specifications of LVF message content and format.
- (e) Present a more detailed timetable for delivery of LVF detailed design documentation and functionality.

8. APPENDIX – SUMMARY OF FEEDBACK ON CONSULTATION PAPER 2

There were eight written responses to Consultation Paper 2 for the Low Value Feeder Project. Some respondents limited their responses to answering the questions contained in the paper. Others provided additional comments and raised their own questions.

The following table provides a summary of respondents' answers to the questions in the Consultation Paper. More detailed comments by respondents are outlined after the table.

| Questions | N | umber o | f Responses | Comment |
|---|-----|---------|-------------------------|--|
| | Yes | No | Unsure/non- commital | |
| Q1a. Standard model with manual settlement across networks? | 5 | 2 | 1 | Some respondents felt that one network solution should be chosen. One respondent preferred a simple batch settlement model over the models described in the paper. |
| Q1b. Option of SWIFT FileAct Copy? | 5 | 2 | 1 | Two respondents indicated they would use SWIFT FileAct Copy. Some felt the option of SWIFT FileAct Copy should be included even though they would probably not use it. |
| Q2a. Only Payer sends settlement instructions? | 0 | 5 | 3 | |
| Q2b. Payee can also send settlement instructions? | 5 | 0 | 3 | The 'Yes' response is largely the result of the view that the originator of clearing file should send the settlement instruction to RITS (therefore, it has to be payee as well as payer). |
| Q3. Single settlement and netting delivered together? | 7 | 1 | | |
| Q4. Would use single settlement if delivered earlier? | 2 | 1 | 5 | |
| Q5. Contents of FSI? | | | | See separate table & comments. |
| Q6. Standard ESA/Credit statuses for FSI? (No for configurable) | 3 | 2 | 3 | Some felt it depends on whether payer or payee is sending the FSI. |
| Q7. Standard receipt of FSR? (No for configurable) | 3 | 2 | 3 | Not sure that this question was fully understood. |
| Q8. Separate message for FRI? | 0 | 5 | 3 | Most wanted the recall instruction included in the FSI framework. |
| Q9. Use Clearing Interconnector? | 2 | 5 | 1 | The 'No' answers reflected a preference not to have to use it and a desire not to incur additional cost because of it. |

Networks and Member Processes

Respondents want a consistent network model. Most agreed that this could be achieved with multiple networks using a standard LVF message approach. They also opined that this would improve access and provide competition and choice. However, it was also pointed out that even though the COIN has been adopted by APCA as the default network for CS1, CS2, and CS3, it does not have the track record of SWIFT which is a proven communications system in terms of availability, security, standards etc. The setup cost for a SWIFT solution was seen as low, while the potential prospect of having to support different file delivery protocols across the COIN creates some uncertainty.

Respondents generally acknowledged the advantages of automatic reconciliation between clearing files and settlement confirmations. However, while some prefer to rely on SWIFT FileAct Copy to achieve this, others felt that Members themselves could automate reconciliation based on the receipt of LVF responses.

While respondents were happy for SWIFT FileAct Copy to be made available to others, they made the point that this should not impact on the way that they manage their payments through a COIN. They felt that they should not be required to modify/add to their own preferred processes for generating settlement instructions and for reconciliation and posting to customer accounts. They also felt that they should not bear any additional cost that may arise from counterparties that choose to use SWIFT.

Respondents indicated that they do not want the development of SWIFT capability for the Low Value Feeder to hold back the implementation of a COIN for the exchange of clearing files.

<u>Originator of Settlement Instructions (FSIs)</u>

Respondents were mostly of the view that the originator of a clearing file should be the party that sends the settlement instruction (FSI) to RITS. This approach was seen as more efficient and less disruptive to existing processes. It also means that a payee of ESA funds as well as the payer should be able to originate an FSI. Some respondents reserved their opinion on this issue until they understand more about the management and processing of low value settlements (specifically debit item instructions) in RITS.

Settlement Instructions for Credit Items and Debit Items

Some respondents highlighted the differences in the processing of credit items and debit items by Members and flagged the possibility of treating them separately in terms of clearing and settlement. This includes the prospect of clearing files with credit items only or debit items only. One respondent felt that credit items could be settled promptly throughout the day while settlement of debit items might be delayed until later in the day. Respondents called for further analysis of this issue.

Some respondents also felt that the receiver of a clearing file should confirm the details of that file before settlement in RITS occurs. The question was asked, what happens if a clearing file is rejected by the receiver but the settlement instruction has already been sent to RITS? This is especially significant for debit items. The need to examine what happens with exceptions processing was also mentioned.

Single Settlement, Netting, and Liquidity Concerns

Liquidity concerns were raised by most respondents. While multilateral (net) settlement was seen as an important addition to the Low Value Feeder settlement system, the timing of those settlements throughout the day was also considered to be very important.

One respondent suggested an early morning multilateral (net) settlement including settlement of the 10.30pm clearing exchange from the previous night, government DE (excluding RBA GDES payments), and clearing files with unusually large values. They also suggested automated settlement against eligible securities in the late evening (i.e. funding payments through automated repo with the RBA). Respondents also contemplated possible clearing times as well as the appropriate RITS session times and arrangements.

Another respondent felt that rules were needed to prevent the withholding of transactions to artificially inflate liquidity positions.

It was recognised that all these issues need to be examined in more detail in a forum such as a Treasury/Liquidity managers working group.

Content of FSI, Statuses, Recall Instructions, and Responses

Respondents made a number of suggestions of information fields to be included in an FSI. In regard to settlement information, the configuration of RITS System Queue statuses in an FSI (for ESA, Credit, Cash) was seen by some respondents as dependant on the nature of the settlement model chosen. There was, however, a widespread preference for a field to be included in an FSI structure for the recall of a settlement instruction, rather than a separate and differently structured File Recall Instruction.

Apart from those fields that the RBA requires for settlement and continuation of National Collator statistics, there were some fields that provided more information for Member reconciliation and posting to customer accounts, and some that added to the statistics currently collected about the industry. It was felt that the FSI provided an opportunity to consolidate and improve the current piecemeal collection of statistics by the industry. The suggested non-RBA required fields are shown below.

| Field of Information | Description |
|--|--|
| | |
| Additional non-settlement information | |
| Exchange date | Date that the associated clearing file is exchanged. |
| Sequence of exchanges | Progressive count of exchanges during day. |
| Value date | Date of posting to customer accounts. |
| Largest individual credit/debit item in file | For monitoring transaction limits. |
| BECS credit items – Type 1 original - number | Reconciliation & posting/statistical |
| BECS credit items – Type 2 return - number | Reconciliation & posting/statistical |
| BECS credit items – Type 3 refusal - number | Reconciliation & posting/statistical |
| BECS debit items – Type 1 original - number | Reconciliation & posting/statistical |
| BECS debit items – Type 2 return - number | Reconciliation & posting/statistical |
| BECS debit items – Type 3 refusal - number | Reconciliation & posting/statistical |
| BECS credit items – Type 1 original - value | Reconciliation & posting/statistical |
| BECS credit items – Type 2 return - value | Reconciliation & posting/statistical |
| BECS credit items - Type 3 refusal - value | Reconciliation & posting/statistical |
| BECS debit items – Type 1 original - value | Reconciliation & posting/statistical |
| BECS debit items – Type 2 return - value | Reconciliation & posting/statistical |
| BECS debit items – Type 3 refusal - value | Reconciliation & posting/statistical |
| BPAY bill payments - number | Reconciliation & posting/statistical |
| BPAY error corrections - number | Reconciliation & posting/statistical |
| BPAY reversals - number | Reconciliation & posting/statistical |

| BPAY bill payments - value | Reconciliation & posting/statistical |
|--------------------------------|---|
| BPAY error corrections - value | Reconciliation & posting/statistical |
| BPAY reversals - value | Reconciliation & posting/statistical |
| 'On-us' credits - number | Statistical collection – not part of clearing process |
| 'On-us' credits - value | Statistical collection – not part of clearing process |
| 'On-us' debits - number | Statistical collection – not part of clearing process |
| 'On-us' debits - value | Statistical collection – not part of clearing process |

Clearing Interconnector

Respondents that prefer to use a COIN made the point that they should not have to adapt their processes or incur additional costs if a counterparty chooses to use SWIFT and the Clearing Interconnector.

One respondent highlighted the possible need for the RBA to provide COIN-COIN capability in the Clearing Interconnector to facilitate the transfer of clearing files across different file transfer protocols. Alternatively, Members could be required to support a standard protocol, either COIN-based or SWIFT-based.

Some respondents flagged the possibility that RITS Members themselves could connect to both COIN and SWIFT and offer a clearing interconnector service.

Some respondents were still uncertain about how the Clearing Interconnector would work.

Other Comments

Some other issues raised by respondents were:

- The short term focus for the Low Value Feeder must be on existing electronic payments systems, especially BECS and BPAY.
- Existing customer service levels should not be adversely impacted by the move to same-day settlement.
- All payments exchanged prior to a clearing system's cut-off must be settled the same day.
- Effective "fall-back" arrangements are essential to ensure that customers aren't disadvantaged or inconvenienced if a payment file is delayed.
- The RBA should consider the merits of a 'Hub and Spoke' communications model where all transactions are transmitted by all Members to a central organisation such as the RBA or SWIFT.
- Technical issues related to security, network link performance, link availability, link certification, test environments and file referencing all need to be examined.
- The future of 9am settlement.