



Federal Reserve Banks

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February 9, 2001
Clearing Memo #221

TO: All Fedwire Book-Entry Securities Participants

SUBJECT: Expansion of Services for the National Book-Entry System - Repo Tracking
(Revised 08/14/01)

In our ongoing efforts to improve the service level of the securities transfer system and meet our customers' needs, we plan to implement an operational enhancement referred to as Repo Tracking. Repo Tracking consists of two components: (1) Repo balance recordkeeping; (2) Claim Adjustment processing. We plan to make this service available for customer testing on October 15, 2001, and implement production on February 4, 2002.

Fedwire[®] system participants will be able to identify, for the purpose of Repo Tracking, securities transfer messages by using new identifiers. This will allow the Federal Reserve to record and maintain two balances (Repo Out and Repo In) for each participant. These balances will be maintained in terms of the Contra Account for all participants. On Record Date, a Claim Adjustment will occur based upon a participant's Repo balances. A Claim Adjustment will result in a transfer of funds from the holder of a Repo In balance to the holder of a Repo Out balance.

The Federal Reserve is **not** changing its current principal and interest processing or making changes to the transfer component of the Computer Interface Protocol Specifications ("CIPS"). The enhancement described in this clearing memo is in addition to our existing services. This enhancement will be activated at a securities product level, e.g., FMPC, FNMS. Initially, this feature will be used for all mortgage-backed securities on the Fedwire securities transfer system. Prior to implementation, we will publish a list of the securities products eligible for this feature.

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A. PROCESS

When originating a securities transfer message, a Fedwire participant has the option to enter a field-tag in free text line 1 or 2 to indicate the Repo Tracking identifier. (See Attachment 1.) These field-tags affect Repo Out and Repo In balances. The use of these field-tags does not alter the way par and cash are transferred under the current securities transfer message type codes. The following are the optional repo tracking identifier field-tags, their associated type codes and cut-off-times:

Field-Tag	Description	Type Codes	Cutoff Time
{22F:RPST}	Repo Start	2000 & 2002	1515 & 1530 ET
{22F:RPRV}	Repo Start Reversal	2000 & 2002	1515 & 1530 ET
{22F:CLRP}	Repo Close	2000 & 2002	1515 & 1530 ET
{22F:CLR V}	Repo Close Reversal	2000 & 2002	1515 & 1530 ET
{22F:ADRP}	Repo Balance Only Adjustment	2090	1900 ET
{22F:ADRV}	Repo Balance Only Adjustment Reversal	2090	1900 ET

Note:

1. The Repo Balance Only Adjustment/Reversal will be subject to the current par transfer limit (i.e. \$50,000,000).
2. The Repo Balance Only Adjustment/Reversal will not be reflected on the Clearing Summary.

The following table indicates the change to a repo position by field tag:

Repo – Balances

Increase / Decrease to position by field tag

Field-Tag	Description	Originator		Receiver	
		Repo In	Repo Out	Repo In	Repo Out
{22F:RPST}	Repo Start	NA	Increase	Increase	NA
{22F:RPRV}	Repo Start Reversal	Decrease	NA	NA	Decrease
{22F:CLRP}	Repo Close	Decrease	NA	NA	Decrease
{22F:CLR V}	Repo Close Reversal	NA	Increase	Increase	NA
{22F:ADRP}	Repo Balance Only Adjustment	NA	Increase	Increase	NA
{22F:ADRV}	Repo Balance Only Adjustment Reversal	Decrease	NA	NA	Decrease

If the field-tag is found in the message, the securities transfer system will perform the following edits:

<u>EDIT</u>	<u>ACTION</u>
1. Invalid type code and Repo field-tag combination	Message will be rejected to originator
2. More than one Repo field-tag	Message will be rejected to originator
3. Repo Balance Only Adjustment/Reversal with a payment amount greater than zero	Message will be rejected to originator
4. The message originator of a Repo Close, Repo Start Reversal, or Repo Balance Only Adjustment Reversal has an insufficient Repo In Balance	Message will be rejected to originator

New error codes will be provided in a subsequent clearing memo.

B. BILATERAL AND UNILATERAL ADJUSTMENTS

Fedwire participants have the ability to notify the Federal Reserve to change the Claim Adjustment, after proper authorization, prior to the release of the adjustments at 2:00 pm ET. Additional information on the procedures will be provided in a subsequent clearing memo.

C. CLAIM ADJUSTMENTS

Claim Adjustments due to Repo Tracking balances will be netted by securities account. The net debits and credits will be functioned using the Federal Reserve's enhanced Net Settlement Service ("NSS") and posted to the customer's account on the NSS line in the Account Balance Monitoring System ("ABMS"). Claim Adjustments occur at approximately 2:00 pm ET on the next payment date.

D. REPORTS

To help customers reconcile their Repo Out and Repo In balances, and upcoming Claim Adjustments the Federal Reserve will send two reports:

1. **"BE Repo Balance Statement"** - This report will be transmitted to customers, each evening, in the same medium they currently receive their Holdings Statements. (See Attachment 2.)

2. **“BE Adjustment Notification--Repo”** - This report will be sent the evening prior to the date of the adjustment indicating the net adjustment amount and supporting details. This report will be transmitted to customers in the same medium they currently receive their Immediate Principal and Interest Notifications. (See Attachment 3.)

The CIPS for these reports are being published and made available to affected parties separately.

E. PRICING/FEES

The Federal Reserve will assess a surcharge for each message that includes a Repo Tracking identifier. Additional information will be provided in a subsequent clearing memo.

F. EXAMPLES OF REPO TRACKING

See Attachment 4 for examples of Repo Tracking scenarios. Also included is a decision tree that the Federal Reserve will use to determine if a securities transaction results in a Claim Adjustment. (See Attachment 5)

Questions regarding this announcement should be directed to the Federal Reserve Bank of New York at (201) 531-3341.

Glossary and Attachments (5)

Glossary

Beneficiary Date – The date on which the accrual period ends. On the Fedwire system, the beneficiary date is reflected as the start of business on the day following the end of the accrual period.

Claim Adjustment – A transfer of funds from one Fedwire participant to another Fedwire participant.

Contra – The offsetting ABA and securities account on a securities transfer message with a Repo tracking indicator.

Contract Date – The date specified by the participant as the initially agreed upon contractual settlement date.

Record Date – The date in which the holder of record is identified for payment of Principal & Interest. On the Fedwire system, the record date is reflected as the start of business on the day following.

Repo In Balance – The record created for each participant that reflects the accumulation of Repo activity which will result in a debit Claim Adjustment.

Repo Out Balance – The record created for each participant that reflects the accumulation of Repo activity which will result in a credit Claim Adjustment.

Settlement Date – The date upon which the securities transaction is processed by the Fedwire system. (Clearance Date.)

Fedwire securities transfer message
(with Repo Tracking indicator field-

BA Incoming Message

Receiver	Type	Reference Input Key
021000021	2000	

Sender	Reference Number	Amount
021000018	5680	\$4,957,357.75

BK OF NYC	/ DEAN WITTER	/ sender info
CHASE NYC	/PAINE	/ receiver info
Free Text.....	Free Text	Free Text.....Free Text
{22F:RPST}	Free Text	Free Text..... Free Text...

CUSIP	Description	Par	DEAL	15:04
912810DX3	7 1/2 BOND 16	\$5,000,000.00		

IMAD	URC	OMAD
0622 B1Q1339K 5310 06221503		0622 B1Q0216K 06221504 BA1B

Example of a Repo Balance Statement

MSG-ID LN-TYPE

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BA2080 0 PAGE 1 12/16/01 11:26:23 BE REPO BALANCE STATEMENT
1
2 DI: 021000018 BANK OF NEW YORK ACCOUNT: 1010 DEALER
Z
Z BANK OF NEW YORK
Z BANK ADDRESS LINE 1
Z BANK ADDRESS LINE 2
Z BANK ADDRESS LINE 3
Z BANK ADDRESS LINE 4
Z ATTENTION SECURITIES TRANSFER STAFF
Z
3 SCTY: 9128275W8 4 ¼ TRIN A 10 01/15/10 LST ACT: 12/16/2001
Z
4 OTHER DI: 021000021 CHASE NYC ACCOUNT: 1020 GENERAL
Z
Z REPO CLOSING BALANCE INCREASE DECREASE
5 OUT: $5,000,000,000.00 $25,000,000.00 $0.00
6 IN: $100,000,000.00 $45,000,000.00 $0.00
Z
Z IMAD RP CODE PAR AMT IN/OUT INC/DEC
7 1216 B1QT011D 000017 RPST $25,000,000.00 OUT INC
7 1216 B6TV032D 000001 CLRP $45,000,000.00 IN INC
Z
4 OTHER DI: 021000021 CHASE NYC ACCOUNT: 1050 TRUST
Z
Z REPO CLOSING BALANCE INCREASE DECREASE
5 OUT: $10,000,000.00 $0.00 $5,000,000.00
6 IN: $100,000,000.00 $0.00 $0.00
Z
Z IMAD RP CODE PAR AMT IN/OUT INC/DEC
7 1216 B1QT311D 000005 ADRV $5,000,000.00 OUT DEC
Z
8 SCTY TOT REPO CLOSING BALANCE INCREASE DECREASE
8 OUT: $5,010,000,000.00 $25,000,000.00 $5,000,000.00
9 IN: $200,000,000.00 $45,000,000.00 $0.00

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Example of a Claims Adjustment Notification

MSG-ID LN-TYPE
BA2072 0 PAGE 1 11/20/00 19:07:45 BE ADJUSTMENT NOTIFICATION—REPO
1
Z CITIBANK, N.A.
Z 111 WALL STREET
Z NEW YORK, NY 10043
Z
2 DI: 0210-0008-9 ACCT: 1010 DEALER
Z
3 ADJUSTMENT DT: MM/DD/CCYY ADJ AMT: \$90,911,000.00 DR
Z
Z DETAILS
4 REPO IN: 021000089 / GENERAL REPO OUT: 021000018 / DEALER
Z CUSIP NUM CUSIP DESCRIPTION BENEFICIARY DT RECORD DT
5 3133MBAP2 7.01 FHLB 01-02 II MM/DD/CCYY MM/DD/CCYY
6 PAR AMT: \$3,820,000.00 ADJ AMT: \$137,711,000.00 DR
Z
7 INT: 35.050000000 \$133,891,000.00
7 PPD: 1.000000000 \$3,820,000.00
7 BV: 1.000000000 3,820,000.00
Z
Z
9 **TOTALS: DR COUNT: 1 AMT: \$137,711,000.00
Z
Z
Z DETAILS
4 REPO IN: 021000018 / INVESTMENT REPO OUT: 021000089 / GENERAL
Z CUSIP NUM CUSIP DESCRIPTION BENEFICIARY DT RECORD DT
5 3133MBBC0 7.20 FHLB 02-03 JU MM/DD/CCYY MM/DD/CCYY
6 PAR AMT: \$1,300,000.00 ADJ AMT: \$46,800,000.00 CR
Z
7 INT: 36.000000000 \$46,800,000.00
7 BV: 1.000000000 1,300,000.00
Z
Z
9 **TOTALS: CR COUNT: 1 AMT: 46,800,000.0

EXAMPLE 1 (Continued)**Transaction 1:**

Sender	Bank X / Any Dealer
Receiver	Bank Y / Trust
Settlement Date	1/24
PAR	10,000
CUSIP	CUSIP A
Repo Tracking Indicator	RPST

Transaction 2:

Sender	Bank X / Any Dealer
Receiver	Bank Z / Inv
Settlement Date	1/24
Par	20,000
CUSIP	CUSIP B
Repo Tracking Indicator	RPST

Repo Balance After Transactions:**Bank X / Dealer:**

CUSIP	Opening Repo Out Balance	Repo Out Increase	Repo Out Decrease	Opening Repo In Balance	Repo In Increase	Repo In Decrease	Contra
CUSIP A	0	10,000	0	0	0	0	Bank Y / Trust
CUSIP B	0	20,000	0	0	0	0	Bank Z / Inv

Bank Y / Trust

CUSIP	Opening Repo Out Balance	Repo Out Increase	Repo Out Decrease	Opening Repo In Balance	Repo In Increase	Repo In Decrease	Contra
CUSIP A	0	0	0	0	10,000	0	Bank X / Dealer

Bank Z / Inv

CUSIP	Opening Repo Out Balance	Repo Out Increase	Repo Out Decrease	Opening Repo In Balance	Repo In Increase	Repo In Decrease	Contra
CUSIP B	0	0	0	0	20,000	0	Bank X / Dealer

EXAMPLE 2 - Builds upon results in example 1
(Fedwire business date is 1/24)

Repo Balance Prior to Transaction:

Bank X / Dealer:

CUSIP	Opening Repo Out Balance	Repo Out Increase	Repo Out Decrease	Opening Repo In Balance	Repo In Increase	Repo In Decrease	Contra
CUSIP A	0	10,000	0	0	0	0	Bank Y / Trust
CUSIP B	0	20,000	0	0	0	0	Bank Z / Inv

Bank Y / Trust

CUSIP	Opening Repo Out Balance	Repo Out Increase	Repo Out Decrease	Opening Repo In Balance	Repo In Increase	Repo In Decrease	Contra
CUSIP A	0	0	0	0	10,000	0	Bank X / Dealer

Bank Z / Inv

CUSIP	Opening Repo Out Balance	Repo Out Increase	Repo Out Decrease	Opening Repo In Balance	Repo In Increase	Repo In Decrease	Contra
CUSIP B	0	0	0	0	20,000	0	Bank X / Dealer

EXAMPLE 2 (Continued)

Transaction 1:

Sender	Bank Y / Trust
Receiver	Bank X / Any Dealer
Settlement Date	1/24
PAR	10,000
CUSIP	CUSIP A
Repo Tracking Indicator	RPRV

Transaction 2:

Sender	Bank Z / Inv
Receiver	Bank X / Any Dealer
Settlement Date	1/24
Par	40,000
CUSIP	CUSIP B
Repo Tracking Indicator	RPST

Repo Balance After Transaction:

Bank X / Dealer:

CUSIP	Opening Repo Out Balance	Repo Out Increase	Repo Out Decrease	Opening Repo In Balance	Repo In Increase	Repo In Decrease	Contra
CUSIP A	0	10,000	10,000	0	0	0	Bank Y / Trust
CUSIP B	0	20,000	0	0	40,000	0	Bank Z / Inv

Bank Y / Trust

CUSIP	Opening Repo Out Balance	Repo Out Increase	Repo Out Decrease	Opening Repo In Balance	Repo In Increase	Repo In Decrease	Contra
CUSIP A	0	0	0	0	10,000	10,000	Bank X / Dealer

Bank Z / Inv

CUSIP	Opening Repo Out Balance	Repo Out Increase	Repo Out Decrease	Opening Repo In Balance	Repo In Increase	Repo In Decrease	Contra
CUSIP B	0	40,000	0	0	20,000	0	Bank X / Dealer

EXAMPLE 3 - Builds upon results in example 2
(Fedwire business date is 1/25)

Repo Balance Prior to Transactions:

Bank X / Dealer:

CUSIP	Opening Repo Out Balance	Repo Out Increase	Repo Out Decrease	Opening Repo In Balance	Repo In Increase	Repo In Decrease	Contra
CUSIP B	20,000	0	0	40,000	0	0	Bank Z / Inv

Bank Y / Trust

CUSIP	Opening Repo Out Balance	Repo Out Increase	Repo Out Decrease	Opening Repo In Balance	Repo In Increase	Repo In Decrease	Contra
	0	0	0	0	0	0	

Bank Z / Inv

CUSIP	Opening Repo Out Balance	Repo Out Increase	Repo Out Decrease	Opening Repo In Balance	Repo In Increase	Repo In Decrease	Contra
CUSIP B	40,000	0	0	20,000	0	0	Bank X / Dealer

EXAMPLE 3 (Continued)

Transaction 1:

Sender	Bank Z / Inv
Receiver	Bank X / Any Dealer
Settlement Date	1/25
PAR	5,000
CUSIP	CUSIP B
Repo Tracking Indicator	CLRP

Transaction 2:

Sender	Bank Y / Trust
Receiver	Bank Z / Inv
Settlement Date	1/25
Par	30,000
CUSIP	CUSIP B
Repo Tracking Indicator	ADRP

Repo Balance After Transactions:

Bank X / Dealer:

CUSIP	Opening Repo Out Balance	Repo Out Increase	Repo Out Decrease	Opening Repo In Balance	Repo In Increase	Repo In Decrease	Contra
CUSIP B	20,000	0	5,000	40,000	0	0	Bank Z / Inv

Bank Y / Trust

CUSIP	Opening Repo Out Balance	Repo Out Increase	Repo Out Decrease	Opening Repo In Balance	Repo In Increase	Repo In Decrease	Contra
CUSIP B	0	30,000	0	0	0	0	Bank Z / Inv

Bank Z / Inv

CUSIP	Opening Repo Out Balance	Repo Out Increase	Repo Out Decrease	Opening Repo In Balance	Repo In Increase	Repo In Decrease	Contra
CUSIP B	0	0	0	0	30,000	0	Bank Y / Trust
CUSIP B	40,000	0	0	20,000	0	5,000	Bank X / Dealer

**EXAMPLE 4 - Builds upon results in example 3
(Fedwire business date is 1/26)**

Repo Balance Prior to Transactions:

Bank X / Dealer:

CUSIP	Opening Repo Out Balance	Repo Out Increase	Repo Out Decrease	Opening Repo In Balance	Repo In Increase	Repo In Decrease	Contra
CUSIP B	15,000	0	0	40,000	0	0	Bank Z / Inv

Bank Y / Trust

CUSIP	Opening Repo Out Balance	Repo Out Increase	Repo Out Decrease	Opening Repo In Balance	Repo In Increase	Repo In Decrease	Contra
CUSIP B	30,000	0	0	0	0	0	Bank Z / Inv

Bank Z / Inv

CUSIP	Opening Repo Out Balance	Repo Out Increase	Repo Out Decrease	Opening Repo In Balance	Repo In Increase	Repo In Decrease	Contra
CUSIP B	0	0	0	30,000	0	0	Bank Y / Trust
CUSIP B	40,000	0	0	15,000	0	0	Bank X / Dealer

EXAMPLE 4 (Continued)**Transaction 1:**

Sender	Bank X / Any Dealer
Receiver	Bank Z / Inv
Settlement Date	1/26
PAR	5,000
CUSIP	CUSIP B
Repo Tracking Indicator	CLRV

Transaction 2:

Sender	Bank Z / Inv
Receiver	Bank Y / Trust
Settlement Date	1/26
Par	15,000
CUSIP	CUSIP B
Repo Tracking Indicator	ADRV

Repo Balance After Transactions:**Bank X / Dealer:**

CUSIP	Opening Repo Out Balance	Repo Out Increase	Repo Out Decrease	Opening Repo In Balance	Repo In Increase	Repo In Decrease	Contra
CUSIP B	15,000	5,000	0	40,000	0	0	Bank Z / Inv

Bank Y / Trust

CUSIP	Opening Repo Out Balance	Repo Out Increase	Repo Out Decrease	Opening Repo In Balance	Repo In Increase	Repo In Decrease	Contra
CUSIP B	30,000	0	15,000	0	0	0	Bank Z / Inv

Bank Z / Inv

CUSIP	Opening Repo Out Balance	Repo Out Increase	Repo Out Decrease	Opening Repo In Balance	Repo In Increase	Repo In Decrease	Contra
CUSIP B	0	0	0	30,000	0	15,000	Bank Y / Trust
CUSIP B	40,000	0	0	15,000	5,000	0	Bank X / Dealer

**EXAMPLE 5 - Builds upon results in example 4
(Fedwire business date is 1/31)**

Repo Balance as of Close of Business 1/31, which is the Record Date for CUSIP B:

Bank X / Dealer:

CUSIP	Opening Repo Out Balance	Repo Out Increase	Repo Out Decrease	Opening Repo In Balance	Repo In Increase	Repo In Decrease	Contra
CUSIP B	20,000	0	0	40,000	0	0	Bank Z / Inv

Bank Y / Trust

CUSIP	Opening Repo Out Balance	Repo Out Increase	Repo Out Decrease	Opening Repo In Balance	Repo In Increase	Repo In Decrease	Contra
CUSIP B	15,000	0	0	0	0	0	Bank Z / Inv

Bank Z / Inv

CUSIP	Opening Repo Out Balance	Repo Out Increase	Repo Out Decrease	Opening Repo In Balance	Repo In Increase	Repo In Decrease	Contra
CUSIP B	0	0	0	15,000	0	0	Bank Y / Trust
CUSIP B	40,000	0	0	20,000	0	0	Bank X / Dealer

RESULT: Claim Adjustments will be made, to be included in the net Repo Claim Adjustment for Payment Date 2/15:

Bank X / Dealer - Adjustment amounts will be calculated based on the Repo Out balance and Repo In balance. The two amounts will be netted to a single debit Repo Claim Adjustment.

Bank Y / Trust - Adjustment amount will be calculated based on the Repo Out balance, resulting in a credit Repo Claim Adjustment.

Bank Z / Inv - Adjustment amounts will be calculated based on the Repo Out balance and its two Repo In balances. The three amounts will be netted to a single credit Repo Claim Adjustment.

Fed Transaction Processing Flow for Repo Tracking, Fail Tracking and Interim Accounting

