



CCF/CCF-II/MDH Transmission Guides

16.11 Investors Voluntary Redemption and Sales System IVR1 and IVR5 Function User's Guide



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16.11 Investors Voluntary Redemption and Sales System via CCF and MDH: MDH IVR1 and CCF IVR5 Function User's Guide

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1 Objectives of This Chapter

The objectives of this chapter are to:

- Give an overview of the Investors Voluntary Redemption and Sales System (IVR1 and IVR5) function.
- Illustrate the formats of the required records.

2 Introduction

This document describes how Transfer Agents and Sponsors use the newly developed service for transmitting settlement detail for Participant Investors Voluntary Redemption and Sale instructions to DTC.

Transfer Agents and sponsors should familiarize themselves with the DTC document Interface Control Manager CCF and MDH User’s Guide for Transaction Input. This ICM document describes new standards for transaction processing using DTC’s automated systems. Specifics relating to the operation, error processing and recovery of CCF and MDH transmissions are addressed in the ICM document.

2.1 Function Description

The settlement details that can be supplied are the Settlement Date, Transaction Type, BuyBack/Redeem decision, Bid Price per unit and Accrued Interest per unit. Each Settlement detail field has a corresponding change indicator field that must be changed from N to Y when modifying the corresponding detail field. DTC will bypass any detail field that does not have its corresponding change indicator updated to Y.

The function names, start and cutoff times associated with each interface are as follows:

Function Name	Start time - Cutoff Time
MDH - IVR1	7 p.m. - 11:00 p.m. (Eastern Time)
CCF - IVR5	7 p.m. - 10:45 p.m. (Eastern Time)



2.2 Holiday Processing

Describe the availability of processing for the various types of holidays that DTC is subject to.

- All Closed; Banks, Exchange and DTC closed: (New Year’s Day, Martin Luther King Day, President’s Day, Memorial Day, July 4th, Labor Day, Thanksgiving Day, and Christmas Day). No processing.
- Banks Closed, Exchange Open and DTC Open (Columbus Day, Veterans Day). File available.
- Banks Open, DTC Open, Exchange Closed (Good Friday). File Available.

2.3 Communication Protocol Requirements

Although the DATA record formats are consistent over MDH and CCF, each system requires additional control records to aid in processing the data records. Following is an example of what is required as input from the User and what is returned from DTC in the response file:

Input	Output
MDH DATA Records only	See MDH User’s Guide
CCF Data Records Trailer Record	CCFSUM Record

Note: Any data records in error will follow the CCFSUM record.



3 Record Formats

The input record for IVR1, IVR5 is defined below. This record contains a Transaction Header and Application Detail Data and has a record length of 474 bytes.

Note: For MDH a maximum of 10 records or, depending on the input record length, the total number of records that can fit in a 4000-byte input block.

3.1 Standard Transaction Header for CCF and MDH

The Transaction Header is prefixed to every application record. The field layout of the 26-byte header is defined as:

Standard Transaction Header for CCF and MDH				
Position	Length	Format	Field Name	Field Contents
1	1	Character	Feedback Indicator	Used to indicate if any errors were encountered during processing; this field is to be left blank on input.
2	1	Character	Production/Test Indicator	This is a required field. P = Production T = Test
3	6	Character	Record Type	IVREOD
9	2	Numeric	Record Suffix	Used to indicate the Record Number on single and multiple data records within a transaction.
11	2	Numeric	Version Number	Used to indicate which version the data is in; for example, latest or previous format.
13	6	Character	User Reference Number	Used by transmitting party to uniquely identify the transaction (optional).
19	8	Character	Addressee	The entity on behalf of whom the transaction is being processed; right aligned, zero filled for numeric addressee or Mnnnnnnn for non-numeric addressee.



3.2 IVR1 and IVR5 Detail Record

Note: File size including the Header is 500 bytes. The 26-byte Standard Transaction Header always precedes the Detail Record and is described in section 3.1 on page 3.

Investors Voluntary Redemption and Sales				
Position	Length	Format	Field Name	Field Description
27	15	Character	Transaction Identifier	<i>ccyymmddxxxxxxx</i> Trade date + entry sequence number.
42	12	Numeric	CUSIP Number	Position 1; 2 US Position 3; 11 9-character CUSIP number Position 12 0
54	40	Character	Security Name	Name of security.
94	6	Numeric	Status Code	Six-digit code to indicate the status of a transaction.
100	34	Character	Status Description	Description of the transaction's status.
134	14	Numeric 9(9)V9(5)	Share Quantity	Face value of the security.
148	8	Character	Trade Date	<i>Ccyymmdd</i> Date on which the transaction was entered.
156	8	Character	Settlement Date	<i>ccyymmdd</i> Date of final settlement.
164	1	Character	Settlement Date Change Indicator	Indicates the settlement date has been modified for update; Y or N.
165	8	Character	Participant Number	Participant ID.
173	20	Character	Participant Name	Participant name.
193	8	Character	Sponsor Number	Sponsor's ID.
201	20	Character	Sponsors Name	Sponsor's name.
221	8	Character	TA Number	Transfer Agent's ID.
229	8	Character	TA's Participant Number	TA's Participant ID.



Investors Voluntary Redemption and Sales				
Position	Length	Format	Field Name	Field Description
237	20	Character	TA's Participant Name	TA's Participant Name.
257	2	Character	Transaction Type	RC redeem in cash. RI redeem in kind. SC sale to sponsor.
259	1	Character	Transaction Type Change Indicator	Indicates the transaction was modified for update; Y or N.
260	1	Character	Buy Back/Redeem Decision	Indicates the Buy Back/Redeem decision was modified for update.
261	1	Character	Buy Back/Redeem Decision Change Indicator	Indicates that the Buy Back/Redeem decision was modified for update; Y or N.
262	15	Numeric 9(9)V9(6)	Bid Price per Unit	
277	1	Character	Bid Price Indicator	Indicates the Bid Price was modified for update; Y or N.
278	15	Numeric 9(9)V9(6)	Accrued Interest per Unit	
293	1	Character	Accrued Interest per Unit Change Indicator	Indicates that the Accrued Interest per Unit was modified for update; Y or N.
294	13	Numeric 9(11)V99	Settlement Amount	
307	1	Character	Bypass Settlement	Flag to indicate the settlement has to be passed or not; Y or N.
308	8	Character	Last Maintenance Date	<i>ccyymmdd.</i>
316	78	Character	Transaction comments	Transaction comments.
394	10	Character	Filler	DTC use only; do not use.



Investors Voluntary Redemption and Sales				
Position	Length	Format	Field Name	Field Description
404	1	Character	Record Type	Indicates type of record: T = Transfer Agent. S = Sponsor.
405	96	Character	Filler	DTC use only; do not use.

3.3 CCF Trailer Record

The following record layout is for the CCF Trailer Record, which must be the last record of every CCF input transmission to DTC:

CCF Trailer Record				
Position	Length	Format	Field Name	Field Contents
1	10	Character	Filler	
11	1	Character	Feedback Indicator	Blank on input. ? on output, if any errors were encountered during processing.
12	1	Character	Production/Test Indicator	This is a required field. P = Production. T = Test.
13	6	Character	Record Type	TRAILR
19	2	Numeric	Record Suffix	Must be 01
21	2	Numeric	Version Number	Must be 01
23	6	Character	User Reference Number	This field is optional - to be used by User.
29	8	Character	Addressee	
37	7	Numeric	Total Record Count	The total number of data records in this transmission; excludes the Trailer Record and must equal the DTC-calculated total record count.



CCF Trailer Record				
Position	Length	Format	Field Name	Field Contents
44	13	Numeric	Total Quantity Amount	The total quantity amount in all the data records in this transmission; must equal the DTC-calculated total quantity amount or zero if not applicable.
57	15	Numeric	Total Dollar Amount	The total dollar amount in all the data records in this transmission; must equal the DTC-calculated total dollar amount, or zero if not applicable.
72	20	Character	Filler	Spaces; "?" is the ending position of the data record being transmitted.
92	418	Character	Remainder	Spaces

3.4 CCF Summary Record

The following is the record layout for the CCF Summary Record which is returned to all CCF Users in the transmission response file.

CCF Summary Record				
Position	Length	Format	Field Name	Field Contents
1	1	Character	Feedback Indicator	"?" indicating an error has occurred.
2	1	Character	Production/Test Indicator	P = Production. T = Test.
3	6	Character	Record Type	CCFSUM
9	2	Numeric	Record Suffix	01
11	2	Numeric	Version Number	01
13	6	Numeric	REFERENCE	
19	8	Character	ADDRESSEE	



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27	1	Character	FILLER	
28	7	Numeric	COUNT	
35	7	Numeric	Total Valid Records	Total number of valid (error free) records received by DTC, including the (valid) Trailer Record.



CCF Summary Record				
Position	Length	Format	Field Name	Field Contents
42	7	Numeric	Total Invalid Records	Total number of invalid (erroneous) records received by DTC, including the (invalid) Trailer Record.
49	13	Numeric	Total Valid Quantity	Total quantity for all valid transactions received.
62	13	Numeric	Total Invalid Quantity	Total quantity for all invalid transactions received.
75	15	Numeric	Total Valid Dollar Amount	Total dollar amount for all valid transactions received.
90	15	Numeric	Total Invalid Dollar Amount	Total dollar amount for all invalid transactions received.
105	4	Numeric	Transmission Number	The User-assigned number identifying the transmission.
109	4	Character	Function Name	Function name.
113	1	Character	REPLY-SUM-RSP-CODE	Values 'T', 'P', 'E', 'X'
114	8	Character	REPLY-SUM-DATE	System date
122	8	Character	REPLY-SUM-TIME	System time



4 Message Types

There are two possible sources of messages:

- The CCF Response File is returned to the User immediately upon completion of the transmission. This is also known as a "Front End Error."
- An application reject is also known as a "Back End Reject."

4.1 CCF Response File

After the end of a transmission, DTC returns a Response File containing two types of computer-readable records to the Participant. Users are responsible for appropriate processing of these computer-readable records, using them to determine which transactions have been accepted or rejected, along with other information regarding the status of the transmission.

The two record types that appear within the Response File are described below:

- Summary Total Record (called "CCFSUM" in the record type field of the transaction record): contains summary information regarding the entire transmission, including totals for accepted and rejected transactions. The Summary Total Record will always be the first record in the Response File.
- Application Data Records: returned to the User in response to any edit errors detected within the transmission. Error records, if any, will follow the Summary Total Record in the Response File. This type of edit reject is also known as a "Front End Reject."

4.2 Back End Rejects

These messages will be created when an input transaction, which has been accepted by the front-end editing module, is rejected later by the application processing program. Back-end Rejects will be queued back to the message queue associated with the password that was used to transmit the input transaction initially. The length and format of an output message are different for each application; however, all messages will have a ? in the first byte to distinguish a "Back End Reject."



5 Error Codes

5.1 List of Error Codes for ICM Input Function

Error Code	Description
101	DTC APPLICATION ERROR: CONTACT DTC
103	INVALID SIGNON ID
104	USER ALREADY LOGGED ON
105	INVALID PASSWORD
107	INVALID FUNCTION - NOT CCF FUNCTION
108	USER NOT ELIGIBLE FOR CCF FUNCTION
109	FUNCTION NOT AVAILABLE, PAST CUTOFF TIME
110	CCF FUNCTION TEMPORARY UNAVAILABLE - QUIESCED
111	DUPLICATE TRANID
112	INVALID RECORD LENGTH USED FOR FUNCTION REQUESTED
113	FUNCTION UNAVAILABLE - FILES MAY BE UNAVAILABLE
121	FUNCTION UNAVAILABLE - CCFUSER MAY BE UNAVAILABLE
123	SYNTAX ERROR IN THE REQUEST
124	LOGICAL ERROR IN THE REQUEST
224	PARTID DOES NOT MATCH SIGNON IN THE PASSWORD R
720	INPUT FILE INCOMPATIBLE FOR RJE INPUT
820	INPUT FILE EMPTY
900	DTC INTERNAL ERROR - CONTACT DTC
902	ERROR WITH CALL TO CCFUSER - CONTACT DTC
903	CCFII REBLOCK PROBLEM FOR RJE USERS
904	OUTPUT FILE INCOMPATIBLE FOR RJE USERS



5.2 Error Conditions

If any errors occur during processing, the following occurs:

- CCF Users receive their input record with 40 bytes of errors appended to the end of the record.
- MDH Users receive a 40-byte area for errors in their '06' return block.

The following describes the errors that can be received during the edit of an IVR1 and IVR5 transaction. This error list describes both the Field Identifier and the Error Code. These codes are defined in the DTF files.



5.3 ICMFLD for Field Identifiers/ICMERR for Error Codes

Note: Refer to the Interface Control Management document for specifics relating to the way errors are returned to your system. The following table lists the application errors which were detected by DTC.

ICMFLD for Field Identifiers/ICMERR for Error Codes	
Field Identifier	Error Identifier
CAGN	9AAA
GAAA	9AAA
GADG	9AAA
EAG3	9AAA
DAAA	I2E2
DABL	9AAA
EAG5	9AAF
DAAT	9AAF
DAAT	I2E2
BAAB	9AAA
BAAA	9AAA
BAAA	I2E1
CAAY	9AAA
GAGX	9AAA
CAHB	9AAA
CAHC	9AAA
BAAA	9ABR
BACA	I2E2
EAB7	9AAA
JCCC	9AAA



ICMFLD for Field Identifiers/ICMERR for Error Codes	
Field Identifier	Error Identifier
HAE0	9AAA
HAEP	9AAA
HAEM	9AAM
IVCD	9AAA
EAG7	9AAA
IVCC	9ACP
GAAA	9ACP
EAG4	9AAA
EAG6	9AAA
GAAA	9AAM
GAAA	I2E4
JAAL	9AAA
GABN	9ABG
7EAG	9ABG
BAAA	9ABG
DABL	9ABG
EAG3	9ABG
EAG3	IABQ
EAG4	IAQT
EAG5	IABQ



6 Appendices

6.1 CCF Tape Backup Procedure

If for any reason a User is unable to submit a transmission via CCF, the following steps should be taken:

- 1) Contact DTC's Network Operation Department at (212) 240-1569. Notify them that you are unable to transmit your data and that you will be sending an ICM backup tape containing your data.
- 2) The User should prepare a magnetic tape containing his transactions. This magnetic tape must be in the format specified in this function User's Guide. CCF Users must add a CCF-II password to the input data set for processing.
- 3) Each tape must arrive at DTC with the CCF Backup Procedure Form (see next page) attached with all information supplied.
- 4) The User should send this tape to DTC's Production Control Department at 55 Water Street, on the second sub-level (2SL). DTC will submit the transaction from the magnetic tape and return the tape containing the transactions to the User.

Participants that, in an emergency, will not be able to deliver a magnetic tape to DTC before the appropriate cutoff time, are responsible for making other arrangements for backup in case of modem or telephone equipment failures.

Participants should realize that when using CCF-II to submit transactions to DTC, they are bound by computer and data communications equipment availability at their site. DTC cannot afford to delay its entire processing cycle in order to accommodate equipment failures at any participant site. It is strongly suggested that all Users maintain redundant CCF-II equipment (computers, communication controllers, modems, telephone lines, etc.).

IN NO EVENT will DTC accept ANY responsibility for a Participant's inability to submit transactions.



6.2 Backup Procedure Form

CCF Backup Procedure job = CCFICMB1

Date: _____

Participant/Sign-on Number _____

Participant/User Name _____

Participant Contact _____

Phone Number: () _____

-

Scheduler Overrides

DFUNC _____ (Transaction name eg. TRAC or AFFC)

PARTID _____ (Participant Number)

LRECL _____ (Input Record Length)

LRCL _____ (Output Record Length)

TRANID _____ (Transmission Number)

Example:

CCFICMB1,DFUNC=TRAC,PARTID=9999,LRECL=807,LRCL=847,TRANID=0001



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