



CCF-II/MQ Transmission Guides

9.01 SMART/Track for Buy-ins (PEX1/5) Via CCF-II and MQ: Function User's Guide (version 2)



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DOCUMENT HISTORY:

04/10/2008 – Participant Exchange Services (PEX1/5) via CCF/CCF-II and MDH User's Guide was modified and renamed.

08/17/2017 - Updated the field description for position 151 Balance Order Number to describe how clients may input the CTS Balance Order Control Number.

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1 Overview

SMART/Track for Buy-ins is a Web-based system that standardizes and automates the creation, delivery and tracking of CNS and non-CNS buy-in and M.S.R.B. close-out notices for the securities industry, providing a single point of entry for brokers sending or receiving buy-in notices.

This document describes how Participants can use this service for transmitting buy-in instructions to SMART/Track for Buy-ins application.

This function is being currently offered over CCF-II (NDM and FTP) and MQ. This is a combined user guide describing *PEX1/PEX5* for CCF-II and MQ.

CCF-II FTP users should familiarize themselves with the DTCC documents: File Transfer Protocol (FTP): Functional User's Guide, 2.03 Interface Control Manager (Transaction Input): Function User's Guide, and 2.04 Interface Control Manager (Messaging Output): Function User's Guide.

CCF-II NDM users should familiarize themselves with the DTCC documents: Network Data Mover (NDM): Functional User's Guide, 2.03 Interface Control Manager (Transaction Input): Function User's Guide, and 2.04 Interface Control Manager (Messaging Output): Function User's Guide.

MQ users should familiarize themselves with the DTCC documents "CICS ICM/MQ Processing User Guide" and 22.01 The Depository Trust & Clearing Corporation Standards for MQSeries. The incoming messaging queue is ICM.PEX_PEX1.INP01.

These ICM documents describe standards for transaction processing using DTCC's automated systems. Specifics relating to the operation, error processing of CCF-II and MQ transmissions are addressed in the ICM documents.

1.1 PEX1/5 Function Description

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

Function Name	Start time - Cutoff time:
• MQ - <i>PEX1</i>	
MDHPEX	0300 - 1545
PEXRPLY	0300 - 1700
PEXCNSBI (CNS Orders)	0300 - 0945
PEXCNSEX (CNS Intents)	0300 - 1745
• CCF-II - <i>PEX5</i>	
CCFPEX	0300 - 1545
PEXRPLY	0300 - 1700
PEXCNSBI (CNS Orders)	0300 - 0945
PEXCNSEX (CNS Intents)	0300 - 1745

1.2 Holiday Processing

PEX1 and PEX5 **will not be available** on the following holidays:

- New Year's Day
- Martin Luther King Day
- Presidents Day
- Good Friday
- Memorial Day
- July 4th
- Labor Day
- Columbus Day
- Veterans Day
- Thanksgiving Day, and
- Christmas Day

1.3 CNS Buy-in Business Rules

	Cut-off Time	Changes or Canceling	Archiving
Intents	You can submit buy-in intents to SMART/Track by 6:00 p.m. Eastern time or by 5:45 p.m. Eastern time for file transmissions.	<p>You can change or cancel a CNS Buy-in Intent when the status is Pending.</p> <p>You cannot change or cancel a CNS Buy-in intent when the status is Sent. A status of Sent is an acknowledgement of receipt by CNS.</p> <p>You cannot change or cancel a CNS Buy-in Intent when the status is Canceled.</p>	60 days after the creation date.
Orders	You must submit CNS buy-in orders by 10:00 a.m. Eastern time if you are planning to buy in an unsatisfied position that afternoon or by 9:45 a.m. Eastern time for file transmissions.	<p>You can change or cancel a CNS Buy-in Order when the status is Pending.</p> <p>You cannot change or cancel a CNS Buy-in Order when the status is Sent. A status of Sent is an acknowledgement of receipt by CNS.</p> <p>You cannot change or cancel a CNS Buy-in Order when the status is</p>	60 days after the creation date.

		Cancelled.	
Retransmittals	You can retransmit the buy-in notice to CNS up until 12:00 noon on the day before execution (Browser only, file-transmission is not allowed)	You cannot change or cancel a CNS Buy-in Retransmittal.	60 days after the creation date.
Executions	You can enter buy-in executions after the CNS recycle completes (at approximately 3:10 p.m. Eastern time) until 6:00 p.m. Eastern time. (Browser only, File-transmission is not allowed)	You cannot change or cancel a CNS Buy-in Execution.	60 days after the creation date.

1.4 Non-CNS Buy-in Business Rules

	Cut-off Time	Changing or Canceling	Accepting/Rejecting	Archiving
Non-CNS Intent	You can submit a non-CNS buy-in intent until 4:00 p.m. eastern time or until 3:45 p.m. Eastern time for file transmissions.	<p>You can change the quantity, settlement price, settlement amount, delivery date, delivery time, contact name, contact telephone and contact telephone extension fields for notices in pending, accepted, date extended or rejected status until 4:00 p.m. on the delivery date or until 3:45 p.m. Eastern time on the delivery date for file transmissions.</p> <p>You can extend the delivery date for notices in accepted or date extended status until 5:15 p.m. on the delivery date or until 5:00 p.m. Eastern time on the delivery date for file</p>	You can accept or reject liability notices in pending status until 5:15 p.m. Eastern time on the delivery date or until 5:00 p.m. Eastern time on the delivery date for file transmissions.	One day after the delivery date.

		<p>transmissions.</p> <p>You can cancel notices in pending, accepted, date extended or rejected status up until 5:15 p.m. Eastern time on the delivery date or until 5:00 p.m. Eastern time on the delivery date for file transmissions.</p>		
<p>Non-CNS Retransmittals</p>	<p>You can retransmit a non-CNS buy-in notice until 4:00 p.m. Eastern time or until 3:45 p.m. Eastern time for file transmissions.</p> <p>Note: Industry practice is to retransmit by 12 noon Eastern time.</p>	<p>You can change the quantity, settlement price, settlement amount, delivery date, delivery time, contact name, contact telephone and contact telephone extension fields for notices in pending, accepted, date extended or rejected status until 4:00 p.m. Eastern time on the delivery date or until 3:45 p.m. Eastern time on the delivery date for file transmissions.</p> <p>Can extend the delivery date for notices in accepted or date extended status until 5:15 p.m. on the delivery date or until 5:00 p.m. Eastern time on the delivery date for file transmissions.</p> <p>Can cancel notices in pending, accepted, date extended or rejected status up until 5:15 p.m. eastern time on the delivery date or until 5:00 p.m. Eastern time on the delivery date for file transmissions).</p>	<p>You can accept or reject liability notices in pending status until 5:15 p.m. Eastern time on the delivery date or until 5:00 p.m. Eastern time on the delivery date for file transmissions.</p>	<p>One day after the delivery date.</p>

1.5 M.S.R.B. Close-outs Business Rules

	Transmitting/ Retransmitting Notices	Changes or Cancelling	Accepting/ Rejecting	Archiving
MSRB Original Close-out	You can submit an MSRB original close-out notice until 4:00 p.m. Eastern time or until 3:45 p.m. Eastern time for file transmissions.	<p>You can change the quantity, contract amount, contract price, delivery date, delivery time, close-out from date, close-out to date, contact name, contact telephone and contact telephone extension fields for notices in pending, accepted, date extended or rejected status until 4:00 p.m. Eastern time on the "close-out to" date or until 3:45 p.m. Eastern time on the "close-out to" date for file transmissions.</p> <p>You can extend the delivery date, close out from date and close out to date for notices in accepted or date extended status until 5:15 p.m. Eastern time on the "close-out to" date or until 5:00 p.m. Eastern time on the "close-out to" date for file transmissions.</p> <p>You can cancel notices in pending, accepted, date extended or rejected status up until 5:15 p.m. Eastern time on the "close-out to date" or until 5:00 p.m. Eastern time on the "close-out to" date for file transmissions.</p>	You can accept or reject liability notices in pending status until 5:15 p.m. Eastern time on the "close-out to" date or until 5:00 p.m. Eastern time on the "close-out to" date for file transmissions.	One day after the "close-out to" date.
MSRB Retransmittal of Original Close-out	You can retransmit an MSRB original close-out notice until 4:00 p.m. Eastern time or until 3:45 p.m.	You can change the quantity, contract amount, contract price, delivery date, delivery time, close-out from date, close-out to date, contact	You can accept or reject liability notices in pending status until 5:15 p.m. Eastern time on the "close-out	One day after the "close-out to" date.

	<p>Eastern time for file transmissions.</p> <p>Note: Industry practice is to retransmit by 12 noon.</p>	<p>name, contact telephone and contact telephone extension fields for notices in pending, accepted, date extended or rejected status until 4:00 p.m. on the close-out date or until 3:45 p.m. Eastern time on the "close-out to" date for file transmissions.</p> <p>You can extend the delivery date, close-out from date and close-out to date for notices in accepted or date extended status until 5:15 p.m. Eastern time on the "close-out to" date or until 5:00 p.m. Eastern time on the "close-out to" date for file transmissions.</p> <p>You can cancel notices in pending, accepted, date extended or rejected status up until 5:15 p.m. Eastern time on the "close-out to" date or until 5:00 p.m. Eastern time on the "close-out to" date for file transmissions.</p>	<p>to" date or until 5:00 p.m. eastern time on the "close-out to" date for file transmissions.</p>	
MSRB Execution of Original Close-out	<p>You can submit an MSRB execution of original close-out notice until 4:00 p.m. Eastern time or until 3:45 p.m. eastern time for file transmissions.</p>	<p>You cannot change or cancel an execution.</p>	<p>You can only accept liability notices in pending status until 5:15 p.m. Eastern time on execution date or until 5:00 p.m. Eastern time on execution date for file transmissions.</p> <p>Cannot reject</p>	<p>One day after the execution date.</p>
MSRB Execution of Retransmittal	<p>You can submit an MSRB execution of retransmittal notice until 4:00</p>	<p>You cannot change or cancel an execution</p>	<p>You can only accept liability notices in pending status until 5:15 p.m.</p>	<p>One day after the execution date.</p>



	p.m. Eastern time or until 3:45 p.m. Eastern time for file transmissions.		Eastern time on execution date or until 5:00 p.m. Eastern time on execution date for file transmissions. Cannot reject	
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2 Communication Protocol Requirements

Although the DATA record formats are consistent over CCF-II and MQ, 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 DTCC in the response file:

	<u>INPUT</u>	<u>RESPONSE</u>
CCF-II	PASSWORD Record DATA Records TRAILER Record	CCFSUM Record or CF2ERR Record
MQ	MQ Message Descriptor ICM Header DATA Records	See MQ User Guide ICM Acknowledgment Record

**** Please Note:** Any DATA records in error will follow the CCFSUM record.

2.1 CCF-II Message Types

There are two possible sources of messages:

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

2.1.1 CCF-II Response File

After the end of a transmission, DTCC 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 and can use them to determine which transactions have been accepted or rejected. These records also contain other information regarding the status of the transmission.

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

- 1) 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.

2) 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".

2.1.2 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 is different for each application. However all messages will have a ? in the first byte to distinguish a "Back End Reject".

3 File Specifications

3.1 Input - PEX1/5 record detail.

The input record for *PEX1* and *PEX5* is defined below. This record contains a transaction header and application detail data and has a total record length of 605 bytes.

3.1.1 Transaction Header for CCF-II and MQ.

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

Position	Length	Format	Field Name	ICM Transaction Header Field Description
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	Values: T = Test P = Production This is a required field.
3	6	Character	Record Type	PEXC01
9	2	Numeric	Record Suffix	Used to indicate the Record # on single and multiple data records within a transaction.
11	2	Numeric	Version Number	Used to indicate which version (e.g.: "latest" or "previous" format) the data is in. Must be "02".
13	6	Character	Filler	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 justified, zero filled for numeric addressee or "Mnnnnnnn" for non-numeric addressee.

3.1.2 PEXC01 Detail Record Format

Position	Length	Format	Field Name	Record Field Description
27	1	Character	Notice Type	Must contain one of the following values and is required for all Product types: "B" - CNS Intents, Non-CNS Intents, MSRB Original Close-outs "E" - CNS Orders, MSRB Executions "U" – Update (Can be used for all product types. For Product Type "90" – CNS, Action Code "C" is the only allowed action.) Note: For CNS Notices, new transmission will update (replace) previous transmission.
28	2	Character	Product Type	Must contain one of the following values and is required for all Product types: "10" - NASD "20" - NSCC "30" - NYSE "40" - AMEX "50" – MSRB "60" – OTC "70" - OTHER "90" - CNS
30	1	Character	Retransmission ID	Must contain one of the following values and is required for all Product types: "0" - Originator "1" - Retransmission NOTE: <u>MUST</u> be "0" for CNS transactions.
31	8	Character	Sending Participant	Participant number of the firm that sends the notice.

Position	Length	Format	Field Name	Record Field Description
39	8	Character	Receiving Participant	Participant number of the firm that will receive the notice. This is required for all Product types except Product Type "90" – CNS. Must be spaces for Product type "90" – CNS.
47	9	Character	Quantity (whole number)	The whole number portion of the amount of shares per security. This is required for all Product types. Must be 0 for Product Type "90" – CNS.
56	3	Character	Quantity (fractional number)	The fractional portion of the amount of shares per security. This is required for all Product types. Must be 0 for Product Type "90" – CNS.
59	12	Character	CUSIP	The security number used to identify the issue. This is required for all Product types. (The first 2 bytes are zeroes followed by a 9-byte CUSIP number, followed by another zero). Alpha characters must be in upper case.
71	20	Character	CUSIP Description	The description if the issue is not DTC-eligible. (This is generated for DTC-eligible issues). This is required for all Product types except Product Type "50" - MSRB.
91	8	Character	Contract Date	The original trade date (CCYYMMDD). This is required for all Product types except Product Type "90" – CNS.
99	11	Character	Contract Amount (whole number)	The whole number portion (dollars) of the actual amount of the contract. Combination of Contract Amount (whole and fractional) can not be equal to zero. This is required for all Product types except Product type "90" – CNS.

Position	Length	Format	Field Name	Record Field Description
110	2	Character	Contract Amount (fractional number)	The fractional portion (cents) of the actual amount of the contract. Combination of Contract Amount (whole and fractional) can not be equal to zero. This is required for all Product types except Product type "90" – CNS.
112	8	Character	Settlement Date	The date transaction should be processed (CCYYMMDD). This is required for all Product types except Product type "90" – CNS.
120	8	Character	Original Participant Number	For RETRANSMITTALS only. Participant number of the firm that sent the original notice. If retransmitted more than five times, the Original Participant Number will be the first of the previous participants retransmitting the notice. (Note that in relation to Positions 240 – 263, the Original Participant Number is considered the 5th in the allowed chain of 5 participants.)
128	8	Character	Prior Participant Number	Required for RETRANSMITTALS only. Participant number of the firm from whom the notice was received by the sender of this notice. (Note that in relation to Positions 240 – 263, Prior Participant is considered 1 st in the allowed chain of 5 participants.)
136	6	Character	Buy-In/ Close-Out Delivery Time	The time the Buy-In/Close-Out will take effect (Military Time) (HHMMSS). This is required for all Product types except Product type "90" - CNS and Product type "50" - MSRB with Notice Type "E" - Executions.

Position	Length	Format	Field Name	Record Field Description
142	8	Character	Buy-In/ Close-Out Delivery Date	The date the Buy-In/Close-Out will take effect (CCYYMMDD). This is required for all Product types except Product type "90" - CNS and Product type "50" - MSRB with Notice Type "E" - Executions.
150	1	Character	Buy-In Type	<p>Must contain one of the following values:</p> <p>"1" - Cash "2" - Next Day "3" - Regular Way</p> <p>For all product types, a space will default to Regular Way. This is required for all Product types except Product type "90" - CNS and Product type "50" - MSRB.</p>
151	10	Character	Balance Order Number	<p>This identifies the Buy-In with a unique 10-character number. For Product type "20" - NSCC, Balance Order Number or CNS Date is required. Not required for Product type "50" – MSRB and Product type "90" – CNS. Optional for all other Product Types.</p> <p>Clients inputting the CTS Balance Order Control Number may use bytes 3-12 of that value to populate this field.</p>
161	8	Character	CNS Date	Unique date to identify the transaction (CCYYMMDD). For Product type "20" - NSCC, Balance Order Number or CNS Date is required. Not required for Product type "50" – MSRB and Product type "90" – CNS. Optional for all other Product Types.

Position	Length	Format	Field Name	Record Field Description
169	20	Character	Deliverer Contact Name	The name of the person who is entering the information into the system. This is required for all Product types.
189	10	Character	Deliverer Contact Telephone Number	The phone number of the person who is entering the information into the system. Format 3-3-4 (Area Code - Exchange - Number). This is required for all Product types.
199	4	Character	Deliverer Contact Phone Extension	The phone extension of the person who is entering the information into the system. This is optional for all Product types.
203	8	Character	FILLER	
211	8	Character	Close-out from Date	The date the close-out period starts (CCYMMDD). This is required for Product type "50" - MSRB and Notice Type "B" - Original Close-Out. Not required for all other Product types.
219	8	Character	Close-out to Date	The date the close-out period ends (CCYMMDD). This is required for Product type "50" - MSRB and Notice Type "B" - Original Close-Out. Not required for all other Product types.

Position	Length	Format	Field Name	Record Field Description
227	1	Character	Action Code	<p>Required for Notice Type "U" only. Must be space for all other Notice Types.</p> <p>Action against existent Notice. Must contain one of the following values:</p> <p>"1" – Accept NON-CNS or MSRB Transaction.</p> <p>"2" – Reject NON-CNS or MSRB Transaction (Reject Reason Code is required for this Action Code).</p> <p>"3" – Update NON-CNS or MSRB Transaction (All fields required for original create are required for the update).</p> <p>"4" – Cancel CNS, NON-CNS, MSRB Transaction.</p> <p>"5" – Extend Delivery Date for NON-CNS or MSRB Transaction (Buy-In/Close-Out Delivery Time and Buy-In/Close-Out Delivery Date are required for this Action Code. Close-out from Date and Close-out to Date are required for this Action Code and Product Type "50" - MSRB)</p> <p>NOTE: Notice Type, Product Type, Sending Participant, Receiving Participant, Control Number are required for all Action Codes.</p>
228	10	Character	Control Number	<p>A 10-character key that uniquely identifies a transaction. This must be a valid existent Buy-in ID. Required for Notice Type "U" only. Control number must be right aligned, zero filled.</p>

Position	Length	Format	Field Name	Record Field Description
238	2	Character	Reject Reason Code	<p>Required for Action Code "2" – Reject only.</p> <p>Must contain one of the following values:</p> <p>"01" - Don't know "02" - Invalid settle date "03" - Comparison needed "05" - DK. Need proof of trade "06" - Know different money "07" - Bad CUSIP "08" - Already delivered "99" – Other (Comment in position 264 is required)</p> <p>Should be space if it is not a reject.</p>
240	8	Character	Retransmittal Participant 2	2 nd in a chain of up to 5 participants, after prior participant number. This is optional for RE-TRANSMITTALS only.
248	8	Character	Retransmittal Participant 3	3 rd in a chain of up to 5 participants. This is optional for RE-TRANSMITTALS only.
256	8	Character	Retransmittal Participant 4	4 th in a chain of up to 5 participants, before original participant number. This is optional for RE-TRANSMITTALS only.
264	145	Character	Comment	<p>A maximum of 145 characters of comments may be entered.</p> <p>Comment for a new notice will be preserved and transmitted throughout the life of the Notice.</p> <p>Comments for a Notice Type "U" – Update can be entered in this field.</p>
409	48	Character	CUSIP Description (long)	The description if the issue is not DTC- eligible. (This is generated for DTC-eligible issues.) Required for Product type "50" – MSRB.

Position	Length	Format	Field Name	Record Field Description
457	1	Character	CNS Exchange/Market:	Values are: "N" - NYSE "A" - AMEX "O" - OTC "T" - Other This is required for CNS Buy-In Order Transactions only – Product Type "90" - CNS and Notice Type "E". Not required for all other Product types.
458	12	Character	CNS Regular Quantity	The share quantity required for "REGULAR" CNS Sub-Account where the position is held. Required for Product Type "90" - CNS. Not required for all other Product types.
470	12	Character	CNS Stock Borrow Quantity	The share quantity required for "STOCK BORROW" CNS Sub-account where the position is held. Required for Product Type "90" - CNS. Not required for all other Product types.
482	12	Character	CNS Fully Paid For Quantity	The share quantity required for "FULLY PAID FOR" CNS Sub-account where the position is held. Required for Product Type "90" - CNS. Not required for all other Product types.
494	11	Character	Contract Price (whole number)	The whole number portion (dollars) of price of buy-in contract. Not required for Product Type "90" – CNS. Optional field for all other Product Types.
505	2	Character	Contract Price (fractional number)	Fractional portion (cents) of price of buy-in contract. Not required for Product Type "90" – CNS. Optional field for all other Product Types.

Position	Length	Format	Field Name	Record Field Description
507	13	Character	Accrued Interest (whole number)	Whole number portion (dollars) of accrued interest of buy-in contract. Optional for Product type "50" – MSRB and Notice Type "E" - Executions. Not required for all other Product types.
520	2	Character	Accrued Interest (fractional number)	Fractional number portion (cents) of accrued interest of buy-in contract. Optional for Product type "50" – MSRB and Notice Type "E" - Executions. Not required for all other Product types.
522	1	Character	ACATS indicator	Values are: "Y" – Yes "N" - No Space will default to "N" – No. Not required for Product type "90" – CNS.
523	20	Character	Receiving Contact Name	Person contacted on the receiving side. Required for Product type "50" – MSRB. Not required for all other Product types.
543	11	Character	Owed Amount (whole number)	The whole number portion (dollars) of amount of the securities that were not delivered to buyer. Required for Product type "50" – MSRB and Notice Type "E". Not required for all other Product types.
554	2	Character	Owed Amount (fractional number)	Fractional portion (cents) of amount of the securities that were not delivered to buyer. Required for Product type "50" - MSRB and Notice Type "E". Not required for all other Product types.

Position	Length	Format	Field Name	Record Field Description
556	11	Character	Execution Amount (whole number)	The whole number portion (dollars) of amount at which the close-out is being executed. Required for Product type "50" - MSRB and Notice Type "E". Not required for all other Product types.
567	2	Character	Execution Amount (fractional number)	Fractional portion (cents) of amount at which the close-out is being executed. Required for Product type "50" - MSRB and Notice Type "E". Not required for all other Product types.
569	8	Character	Execution Date	The date of the close-out execution. Format CCYYMMDD. Required for Product type "50" - MSRB and Notice Type "E". Not required for all other Product types.
577	1	Character	Method of Close-Out Execution	This is required for Product type "50" - MSRB and Notice Type "E" – MSRB Executions only. Values are: "B" - Buy-In "S" - Substitute "R" - Re-Purchase Not required for all other Product types.
578	8	Character	FILLER	
586	8	Character	Contact Date	Format CCYYMMDD. This is required for Product type "50" – MSRB. Not required for all other Product types.
594	9	Character	Execution Quantity (whole number)	The whole number portion of the executed amount of shares per security. Required for Product type "50" - MSRB and Notice Type "E". Not required for all other Product types.

Position	Length	Format	Field Name	Record Field Description
603	3	Character	Execution Quantity (fractional number)	The fractional portion of the executed amount of shares per security. Required for Product type MSRB and Notice Type "E". Not required for all other Product types.

3.2 CCF-II Trailer Record

The following record layout is for the CCF-II Trailer Record which must be the last record of every CCF-II input transmission to DTCC.

Position	Length	Format	Field	Record Field Description
1	1	Character	Feedback Indicator	Must be blank on input. This field will contain a "?" if returned in error in the response file.
2	1	Character	Test/Production Indicator	Must be a "T" or "P", indicating test or production.
3	6	Character	Record Type	Must contain the literal "TRAILR".
9	2	Numeric	Record Suffix	Must be "01".
11	2	Numeric	Version Number	Must be "02".
13	6	Character	User Reference Number	This field is optional - to be used by User.
19	8	Character	Addressee	
27	7	Numeric	Total Record Count	The total number of Data Records in this transmission. This total excludes the Trailer Record, and must equal the DTCC-calculated total record count.
34	13	Numeric	Total Quantity Amount	The total quantity amount in all the Data Records in this transmission. Must equal the DTCC-calculated total quantity amount or zero if not applicable.
47	15	Numeric	Total Dollar Amount	The total Dollar amount in all the Data records in this transmission. Must equal the DTCC-calculated total dollar amount, or zero if not applicable.
62	?	Character	Filler	Value Spaces. "?" is the ending position of the data record being transmitted.

3.3 Output Messages - Machine Readable PEXREC record detail.

The output record for *PEX1* and *PEX5* is defined below. This record contains a header and application detail data and has a record length of 864 bytes.

3.3.1 Machine Readable Output Header

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

Position	Length	Format	Field Name	Record Field Description
1	1	Character	Feedback Indicator	Used to indicate if any errors were encountered during processing. This field will contain a value of "*".
2	1	Character	Test/Production Indicator	Used to indicate transaction being processed in the "Production" environment. This will contain value of "P".
3	6	Character	Record Type	"PEXREC"
9	2	Numeric	Record Suffix	"01"
11	2	Numeric	Version Number	"01"
13	6	Character	User Reference #	Used by transmitting party to uniquely identify the transaction. (Will be spaces) .
19	8	Character	Filler	

3.3.2 Machine Readable Detail Record

Position	Length	Field Name	Format	Detail Record Field Description
27	2	Product Type	Character	Contains one of the following values: "10" - NASD "20" - NSCC "30" - NYSE "40" - AMEX "50" - MSRB "60" - OTC "70" - Other "90" - CNS
29	1	Notice Type	Character	Contains one of the following values: "B" - Non-CNS Intents, CNS Intents, MSRB Original Close-outs "E" - CNS Orders, MSRB Executions "X" - CNS Executions
30	1	Retransmission Id	Character	Contains one of the following values: "0" = Originator "1" = Retransmission
31	8	Processing Date	Character	Date of transaction: MMDDCCYY format.
39	10	Control number	Character	Smart/Track for Buy-ins ID that uniquely identifies a particular transaction.
49	6	Time of Notice	Character	Time of transaction: HHMMSS format.
55	1	Action (Reply) Code	Character	Contains one of the following values: " " - (space) New Notice Created "1" - Accepted "2" - Rejected "4" - Updated "5" - Cancelled "6" - Delivery Date Extended
56	8	Sending Participant	Character	Participant number of the firm that sends the notice.



Position	Length	Field Name	Format	Detail Record Field Description
64	8	Receiving Participant	Character	Participant number of the firm that will receive the notice.
72	10	Sending Participant Signon	Character	First 10 bytes of the individual user ID of the creator of the notice. For CCF and MQ transmissions, this is the user's signon. For the browser, this is user's login ID.
82	9	Quantity (whole number)	Numeric	The whole number portion of the amount of shares per security.
91	3	Quantity (fractional number)	Numeric	The fractional number portion of the amount of shares per security.
94	12	CUSIP	Character	The security number used to identify the issue. (The first 2 bytes are zeroes followed by a 9-byte CUSIP number, followed by another zero).
106	20	CUSIP Description	Character	The description of the issue (short).
126	48	CUSIP Description (long)	Character	The description of the issue (long).
174	11	Contract Price (whole number)	Numeric	The whole number portion (dollars) of price of buy-in contract for Product type "50" –MSRB and "90" – CNS. The whole number portion (dollars) of the contract amount for all other Product types.
185	2	Contract Price (fractional number)	Numeric	The fractional number portion (cents) of price of buy-in contract for Product type "50" – MSRB and Product type "90" – CNS. The fractional number portion (cents) of the contract amount for all other Product types.



Position	Length	Field Name	Format	Detail Record Field Description
187	8	Contract Date	Character	The original trade date (MMDDCCYY). For Product type "50" – MSRB.
195	8	Settlement Date	Character	The date transaction should settle (MMDDCCYY).
203	3	Reject Reason Code	Character	Values: "001" - Don't know "002" - Invalid settle date "003" - Comparison needed "005" - DK. Need proof of trade "006" - Know different money "007" - Bad CUSIP "008" - Already delivered "099" – Other Will be space if it is not a reject.
206	8	Original Participant Number	Character	Participant number of the firm that sent the original notice. Applicable only for Retransmittals.
214	8	Prior Participant Number	Character	Participant number of the firm from whom the notice was received prior. Applicable only for Retransmittals.
222	4	Buy-In/ Close-Out Delivery Time	Character	The time the Buy-In/Close-Out will take effect (Military Time) (HHMM).
226	8	Buy-In/ Close-Out Delivery Date	Character	The date the Buy-In/Close-Out will take effect (MMDDCCYY).
234	8	Extended Delivery Date	Character	The date that is negotiated beyond the normal Delivery Date because of extenuating circumstances (MMDDCCYY). Populated for Action (Reply) Code "4" – Updated and "6" – Delivery Date Extended.



Position	Length	Field Name	Format	Detail Record Field Description
242	8	Extended from Date	Character	Date from which MSRB Close-Out from Date is being extended (MMDDCCYY). For Product type "50" – MSRB and Action (Reply) Code "4" – Updated and "6" – Delivery Date Extended.
250	8	Extended to Date	Character	Date to which MSRB Close-Out to Date is being extended (MMDDCCYY). For Product type "50" – MSRB and Action (Reply) Code "4" – Updated and "6" – Delivery Date Extended.
258	11	Owed Amount (whole number)	Numeric	The whole number portion (dollars) of the amount of the securities that were not delivered to buyer. For Product type "50" – MSRB. For all other product types, this field will not be populated.
269	2	Owed Amount (fractional number)	Numeric	The fractional portion (cents) of the amount of the securities that were not delivered to buyer. For Product type "50" – MSRB. For all other product types, this field will not be populated.
271	11	Execution Price (whole number)	Numeric	The whole number portion (dollars) of the price at which the close-out is being executed. For Product type "50" – MSRB. For all other product types, this field will not be populated.
282	2	Execution Price (fractional number)	Numeric	The fractional portion (cents) of the price at which the close-out is being executed. For Product type "50" – MSRB. For all other product types, this field will not be populated.
284	8	Execution Settlement Date	Character	Settlement date of execution (MMDDCCYY). For Product type "50" – MSRB.



Position	Length	Field Name	Format	Detail Record Field Description
292	11	Execution Contract amount (whole number)	Numeric	The whole number portion (dollars) of the amount at which the close-out is being executed. For Product type "50" – MSRB. For all other product types, this field will not be populated.
303	2	Execution Contract amount (fractional number)	Numeric	The fractional portion (cents) of the amount at which close-out is being executed. For Product type "50" – MSRB. For all other product types, this field will not be populated.
305	1	Method of Close-Out Execution	Character	Values are: "B" - Buy-In "S" - Substitute "R" - Re-Purchase For Product type "50" – MSRB.
306	9	Execution Quantity (whole number)	Numeric	The whole number portion of the amount of shares per security. For Product type "50" – MSRB and Notice Type "E" - Executions. For all other product types, this field will not be populated.
315	3	Execution Quantity (fractional number)	Numeric	The fractional portion of the amount of shares per security. For Product type "50" – MSRB and Notice Type "E" - Executions. For all other product types, this field will not be populated.
318	8	FILLER		
326	1	CNS Exchange Type	Character	Values are: "1" - NYSE "2" - AMEX "3" – OTC "4" – OTHER For Product type "90" – CNS and Notice Type "E" - CNS Orders.



Position	Length	Field Name	Format	Detail Record Field Description
327	12	CNS Regular Quantity	Numeric	The share quantity for "REGULAR" CNS Sub-account where the position is held. For Product type "90" – CNS. For all other product types, this field will not be populated.
339	12	CNS Stock Borrow Quantity	Numeric	The share quantity for "STOCK BORROW" CNS Sub-account where the position is held. For Product type "90" – CNS. For all other product types, this field will not be populated.
351	12	CNS Fully Paid For Quantity	Numeric	The share quantity for "FULLY PAID FOR" CNS Sub-account where the position is held. For Product type "90" – CNS. For all other product types, this field will not be populated.
363	1	ACATS indicator	Character	Values are: "Y" – Yes "N" - No
364	1	Buy-In Type	Character	Values are: "C" - Cash "N" - Next Day "R" - Regular Way This is populated for all Product types except Product type "90" – CNS and Product type "50" – MSRB. Will contain spaces for Product type "90" – CNS and Product type "50" – MSRB.
365	11	Contract Amount (whole number)	Numeric	The whole number portion (dollars) of the actual amount of the contract.
376	2	Contract Amount (fractional number)	Numeric	The whole number portion (cents) of the actual amount of the contract.



Position	Length	Field Name	Format	Detail Record Field Description
378	8	Closeout from Date	Character	The date the close-out period starts (MMDDCCYY). For Product type "50" – MSRB.
386	8	Closeout to Date	Character	The date the close-out period ends (MMDDCCYY). For Product type "50" – MSRB.
394	10	Balance Order Number	Character	This identifies the buy-in with a unique 10-character number.
404	8	CNS Date	Character	Unique date to identify the transaction (MMCCDDYY).
412	20	Deliverer Contact Name	Character	The name of the person who is entering the information into the system.
432	20	Receiving Contact Name	Character	Person contacted on the receiving side.
452	10	Deliverer Contact Telephone Number	Character	The phone number of the person who is entering the information into the system. Format 3-3-4 (Area Code - Exchange - Number)
462	4	Deliverer Contact Phone Extension	Character	The phone extension of the person who is entering the information into the system.
466	8	Contact Date	Character	Format MMDDCCYY. For Product type "50" – MSRB.
474	13	Accrued Interest (whole number)	Numeric	The whole number portion (dollars) of accrued interest of buy-in contract.
487	2	Accrued Interest (fractional number)	Numeric	The fractional number portion (cents) of accrued interest of buy-in contract.



Position	Length	Field Name	Format	Detail Record Field Description
489	1	Reorganization Indicator	Character	Indicates if security had an active Corporate Action at time of creation of the Notice. Values are: "Y" – Yes "N" - No
490	1	Chilled for Delivery Orders	Character	Indicates if security was chilled for Delivery Orders at time of creation of the Notice. Values are: "Y" – Yes "N" - No
491	35	FILLER		
526	145	Deliverer Comments	Character	Comments entered by the creator of the notice.
671	114	Receiver Comments	Character	First 114 characters (up to 150 character allowed on the browser) of comments entered by the receiving participant when responding to a notice. (Will contain spaces.)
785	40	Retransmittal chain	Character	Contains up to 5 participant numbers reflecting the chain of retransmitting deliverers. For Retransmittals only. (Will contain spaces.)
825	40	FILLER		

4 Error Processing

4.1 Error Codes for ICM Input Function

.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 RECORD
.230	- INVALID FORMAT OF PASSWORD RECORD
.240	- INVALID FORMAT OF SIGNON OR TRAN-ID IN PSWD RECORD
.334	- FUNCTION REQUESTED DOES NOT MATCH FUNCTION IN PSWD REC
.340	- INVALID LENGTH OF LRCL PARM
.350	- LRCL IS NOT NUMERIC

.360	- LRCL IS ZERO
.370	- LRCL < 121 (SUM REC)
LRCL MUST BE EQUAL TO OR GREATER THAN SUMMARY REC'	
.390	- INPUT LRECL LENGTH IS ZERO FOR RJE
.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

4.2 Error Conditions

If any errors occur during processing, the following occurs:

- CCF-II Users receive their input record with 40 bytes of errors appended to the end of the record
- MQ Users please refer to MQ User Guide for details.

The following describes the errors that can be received during the edit of a **PEXC01 transaction**. This error list describes both the Field Identifier and the Error Code. These codes are defined in the DTF files:

- 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 that were detected by DTCC.

4.3 Error Message List

FIELD IDENTIFIER	ERROR IDENTIFIER	DESCRIPTION
GAAX	9AAA	Product type invalid
EABH	9AAA	Notice type invalid
EABI	9AAA	Retransmission ID invalid
CAAM	9AAA	From clearing number invalid
CAAL	9AAA	To clearing number invalid
CAAL	9ABT	To clearing number must be spaces
DABB	9AAA	Quantity invalid
DABB	9AAF	Quantity not numeric
GAAA	9AAA	Cusip is invalid
GAAA	9ABE	Cusip must not be spaces
GAAA	IAA6	Cusip description is not entered
BAAB	9AAZ	Contract date > settlement date
BAAB	9AAA	Contract date invalid
BAAB	9ABT	Contract date must be spaces
DAAT	9AAA	Settlement price invalid
DAAT	9ABT	Settlement price must be spaces
BAAA	9ABF	Invalid DTC settlement date
CABM	9AAA	Invalid original clearing number
CABM	9ABE	Original clearing number must not be spaces
CABM	9ABT	Original clearing number must be spaces
CAAW	9AAA	Prior clearing number invalid
CAAW	9ABT	Prior clearing number must be spaces
BADA	9AAA	Buy-in delivery time invalid
BADA	9ABT	Buy-in delivery time must be spaces
BABO	9AAA	Delivery date invalid
BABO	9ABT	Delivery date must be spaces
EABJ	9AAA	Invalid buy-in type

FIELD IDENTIFIER	ERROR IDENTIFIER	DESCRIPTION
EABJ	9ABT	Buy-in type must be spaces
CABQ	9ABE	Balance order number must not be spaces
CABQ	9ABT	Balance order number must be spaces
BABE	9AAA	CNS date invalid
BABE	9ABE	CNS date must not be spaces
BABE	9ABT	CNS date must be spaces
HAAH	9ABE	Contact name is required
HAAI	9ABE	Telephone number is required
HAEI	IAA6	Cusip description long is not entered
BACP	9AAA	Extended delivery date invalid
BACP	9ABT	Extended delivery date must be spaces
BACI	9AAA	Close out from date invalid
BACI	9ABT	Close out from date must be spaces
BACJ	9AAA	Close out to date invalid
BACJ	9ABT	Close out to date must be spaces
HAEJ	9ABE	Acquisition purpose must not be spaces
HAEJ	9ABT	Acquisition purpose must be spaces
BACK	9AAA	Default date invalid
BACK	9ABT	Default date must be spaces
DAAC	9AAA	Return quantity invalid
DAAC	9ABT	Return quantity must be spaces
EABK	9AAA	NSCC Exchange type invalid
EABK	9ABT	NSCC Exchange type must be spaces
DAAG	9AAA	NSCC Regular quantity invalid
DAAG	9ABT	NSCC Regular quantity must be spaces
DABA	9AAA	NSCC Stock Borrow quantity invalid
DABA	9ABT	NSCC Stock Borrow quantity must be spaces
DABZ	9AAA	NSCC Fully paid for quantity invalid

FIELD IDENTIFIER	ERROR IDENTIFIER	DESCRIPTION
DABZ	9ABT	NSCC Fully paid for quantity must be spaces
DACB	9AAA	Contract amount invalid
DACB	9ABT	Contract amount must be spaces
BACL	9AAA	Extended from date invalid
BACL	9ABT	Extended from date must be spaces
BACM	9AAA	Extended to date invalid
BACM	9ABT	Extended to date must be spaces
HAFE	9ABE	Receiving contact name must not be spaces
HAFE	9ABT	Receiving contact name must be spaces
DACC	9AAA	Owed amount invalid
DACC	9ABT	Owed amount must be spaces
DACD	9AAA	Execution price amount invalid
DACD	9ABT	Execution price amount must be spaces
BACN	9AAA	Execution settlement date invalid
BACN	9ABT	Execution settlement date must be spaces
EABL	9AAA	Execution type invalid
EABL	9ABT	Execution type must be spaces
EABM	9AAA	Retransmitting clearing ID invalid
EABM	9ABT	Retransmitting clearing ID must be spaces
BACO	9AAA	Contact date invalid
BACO	9ABT	Contact date must be spaces
DACA	9AAA	Execution quantity invalid
DACA	9ABT	Execution quantity must be spaces
GAHS	9AAA	Action Code Invalid
GAHS	9ABT	Action Code must be equal to spaces
GAHT	9AAA	Control number invalid
GAHT	9ABT	Control number must be equal to spaces
GABI	9AAA	Reject code invalid

FIELD IDENTIFIER	ERROR IDENTIFIER	DESCRIPTION
GABI	9ABT	Reject code must be equal to spaces
CAH2	9AAA	Retransmittal Participant 2 invalid
CAH2	9ABT	Retransmittal Participant 2 invalid must be equal to spaces
CAH3	9AAA	Retransmittal Participant 3 invalid
CAH3	9ABT	Retransmittal Participant 3 invalid must be equal to spaces
CAH4	9AAA	Retransmittal Participant 4 invalid
CAH4	9ABT	Retransmittal Participant 4 invalid must be equal to spaces
JCCC	9ABE	Comments required
EAHP	9AAA	Accrued interest invalid
EAHP	9ABT	Accrued interest must be equal to spaces
GAHU	9AAA	ACATS indicator invalid
GAHU	9ABT	ACATS indicator must be equal to spaces
BADG	9AAA	Execution date invalid
BADG	9ABT	Execution date must be equal to spaces
BADI	9ABE	CNS Date or Balance Order Number required
BADH	IABR	Delivery Date/Time must be greater than current date
BACJ	9AHI	Close-out To Date must be greater than or equal to Close-out From Date
BACI	9AHJ	Close-out From Date must be greater than or equal to Delivery Date
EAHQ	9ABB	Notice not found
EAHQ	IAB1	Notice already accepted
EAHQ	IABD	Notice already rejected
EAHQ	IAA1	Notice already cancelled
EAHQ	9AHA	Notice not eligible to be accepted
EAHQ	9AHC	Notice not eligible to be rejected
EAHQ	9AHD	Notice not eligible to be updated

FIELD IDENTIFIER	ERROR IDENTIFIER	DESCRIPTION
EAHQ	9AHE	Notice not eligible to be cancelled
EAHQ	9AHF	Notice not eligible to be date extended
BADH	9AHG	Delivery Date/Time must be greater than current Delivery Date/Time
BACJ	9AHH	Close-out To Date must be greater than current Close-out To Date

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