



CF2/MQ Transmission Guides

20.01 MQ USER GUIDE FOR DELIVER ORDER OUTPUT (Both Day and Night Activity)

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Preface

This document describes, specifically, the output requirements for Deliver Order activity processing via MQ.

Document History

09/04/01	Revision – Added new FED fields to expanded DO-Output record.
03/01/13	Revision – Settlement Matching Updates for RAD Stage 3
08/01/13	Revision – Amended RAD Zero dates for RAD Stage 3 target implementation
11/01/13	Revision – Amended IMS TID, Filler and RAD Sequence #
04/01/14	Revision – Added ID Net Output indicator in filler position 773
04/01/14	Revision – Added CNS ACAT subaccount types R and S
09/01/15	Revision – Added references to the current MQSeries IBM protocol and inserted the 74-character DTC MQ message data for output into the layout for positions 1-74. Added MMI Finality Through Optimization Changes. Added new Pend and Drop Reason indicators shown in Exhibits 1 and 2. Added values for position 130 Pend Reason; position 259 DO DTC Processing Status; position 511 DTC Current Record on ATP; position 529 DTC's Pend Drop reason; and position 535 DO Pend new share position.
12/18/15	Revision – Updated DO DTC Processing Status Values within MQ DO Output.
05/31/17	Revision – Updated field attributes for DO-OUT-DTC-CURR-REC# position 511 with 8 zeros for transactions in the MMI Finality Staging Engine and Optimizer.
11/30/2018	Removed formatting and references to old changes.

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1. Overview

The types of Deliver Order (DO) data available are types '026' through '028' and '046' through '049'.

2. MQ Message Header

The fields in starting positions 01-74 make up the MQ message Header.

Position	Length	Field Name	Field Description
01	02	Message Type	'A1' for original messages 'R2' for replayed messages
03	02	Version Number	Currently must be "01"
05	06	Timestamp	When message sent by DTCC(HHMMSS)
11	08	User ID	User ID of message receiver
19	02	Box#	Box# associated with message
21	23	Reserved	Reserved for future use
44	01	Response Code	For replay only 'A' = Accepted 'R' = Rejected
45	02	Reason Code	For replay only
47	08	Control File Number	Control File ID Control Number (YYYYDDDS)
55	04	Message Count	Currently set to '0001'
59	08	Total Length of all messages (including the length field)	Length of message(s) following the header
67	08	Length of following message (including length field)	Length of each message(s) including this field

3. MQ DO Output

The format below is an example of a deliver order transaction.

Field Name	Position	Length	Field Attributes
Filler	75	02	For DTC internal use only
Filler	77	01	Value space
DEST-PARTIC-ACCOUNT	78	08	Individual Participant # or Group User #
DEST-SYMBOL	86	02	Destination Symbol - Numeric
Filler	88	01	Value ' '
DEST-ACCOUNT-SEQ-#	89	06	Sequence of the transaction unique for each account destination
TYPE-OF-08-RESPONSE	95	01	Value 'D' (DO data)
DO-OUT-ORIGIN-CODE	96	01	DTC System origination code. Values: 2 = CF2 3 = PTS 4 = ID 5 = MQ 0 = Other
DO-OUT-DLV-PART-NUM	97	08	Delivering participant number

Field Name	Position	Length	Field Attributes
DO-OUT-COPY-IND	105	01	Values: Space = Original copy 'Q' = Duplicate copy
DO-OUT-VERSION-CONTROL (Formerly : 'filler')	106	01	Value '1' = IPO Tracking (560) Value '2' = FED/GNMA fields (724)
DO-OUT-CUSIP	107	09	CUSIP number
DO-OUT-CMO-FACTOR	116	14	CMO Factor Format 9(2)V9(12)
DO-OUT-RSN-FOR-PEND-IND	130	01	Values: '-' No Pend 'A' = Delivering participant has insufficient position for C.P. 'C' = Delivering participant has insufficient collateral 'D' = Receiving participant debit cap reached 'F' = Pending for FIFO processing 'O' = Receiving participant has insufficient collateral 'S' = Delivering participant has insufficient position 'T' = Pending Funding Decision 'W' = Pending MMI Optimization
DO-OUT-MQ-TIME	131	06	Time when MQ processed the record to the output queue (HHMMSS format)

Field Name	Position	Length	Field Attributes
DO-OUT-ACCOUNT-TYPE	137	03	Account type. Value: '010' (General unpledged) Value: 'IPO' (IPO Tracking)
DO-OUT-ACTION-CODE	140	01	Action Code. Values: '0': No action. '1': Add to account if Activity Code is '27,' '28' or '46' '49' '2': Subtract from account if Activity Code is '26','28','46' '49'
DO-OUT-ACTIVITY-CODE	141	03	Activity Code. Values: '026' = DO Delivery '027' = DO Receive '028' = DO Deliver/Receive for CP Maturity Presentment '046' = DO Partic-IPO-acct to the same Partic-Free- acct '047' = DO DLV-IPO-acct to RCV-IPO-acct '048' = DO DLV-IPO-acct to RCV-Free-acct '049' = DO DLV-Free-acct to RCV-IPO-acct
DO-OUT-RCV-PART-NUM	144	08	Receiving participant number (Zeros if activity-code = '46')
DO-OUT-PTA-IND	152	01	Pending transaction indicator. Permissible values:

Field Name	Position	Length	Field Attributes
			<p>'N' = No Position has been reserved for 'pending' Deliver Orders</p> <p>'Y' = Position has been reserved for 'pending' Deliver Orders</p> <p>Blank = Default to 'no'</p>
DO-OUT-FOSP-IND	153	01	<p>Values:</p> <p>'0' = Security is not eligible for Foreign Ordinary Shares Processing</p> <p>'1' = Security is eligible for Foreign Ordinary Shares Processing</p>
DO-OUT-ORIG-INPUT-SRCE (Was: DO-TRADE-DATE)	154	04	Originating system input source (assigned by D.T.C.)
DO-OUT-MATURITY-DATE	158	08	Maturity date for a BOND issue. Format CCYYMMDD
DO-OUT-SUBACT-CODE	166	03	<p>Sub-activity code.</p> <p>Values:</p> <p>'100' = MMI Reorg Presentment</p> <p>'926' = DO/PO Matched Reclaim</p>
DO-OUT-MONEY-VALUE	169	13	<p>Dollars and cents value of the trade (decimal point is assumed).</p> <p>PIC 9(11)V9(2)</p>
DO-OUT-DELV-RECV-IND	182	01	<p>Shows which side the DO is for.</p> <p>Values:</p> <p>'D' = For the Deliverer</p> <p>'R' = For the Receiver</p>

Field Name	Position	Length	Field Attributes
DO-OUT-RAD-INDICATOR	183	01	Values: ' ' = Did not process thru RAD 'R' = Was processed thru RAD
DO-OUT-JOURNAL-CODE	184	01	Journal code Values: '0' = Non-journal '1' = Journal
DO-OUT-BATCH-VAR-CON	185	06	Defines the source of input to DTC (internal code).
DO-OUT-DLV-ACCOUNT-NUM	191	17	Deliverer's account number
DO-OUT-RCV-ACCOUNT-NUM	208	17	Receiver's account number
DO-OUT-SUB-BANK-ACCT-NUM	225	17	Subordinate Bank's account number
DO-OUT-SETTLE-DATE	242	06	Settlement Date (MMDDYY format)
DO-OUT-REASON-CODE	248	03	Reason Code
DO-OUT-COND-DO-ID-IND	251	01	Conditional DO/ID indicator. Values: 'C' = Conditional DO 'R' = Conditional DO Return 'I' = Institutional Delivery DO

Field Name	Position	Length	Field Attributes
DO-OUT-THIRD-PARTY-ID	252	06	Third Party Identifier
DO-OUT-DUE-BILL-IND	258	01	Due-Bill Indicator values: 'Y' = Due-Bill 'N' = No Due-Bill ' ' No Due-Bill (ID-originated)
DO-OUT-DTC-STATUS-IND (Was: DO-OUT-PEND-IND)	259	01	DO DTC Processing Status Values: ' ' = DO 'made' 'P' = DO 'pending' (recycling) 'X' = DO 'made' after originally 'pending' 'C' = CNS Deliver DO 'drop', that is, Reclaim due to overage 'D' = SDFS Prevent-Pend Drop 'K' = 'Kill' of Pending DO 'T' = Pending Funding Decision 'W' = Pending MMI Optimization 'Q' = 'Kill' of Transaction Pending in Staging Area 'E' = Edit Reject in ATP Note: For SDFS CUSIPS, depositories receive 'R's for repended items.
DO-OUT-DAY-NIGHT-IND	260	01	DO 'day' or 'night' indicator Values: 'D' = Day DO 'N' = Night DO
DO-OUT-DATE-STAMP	261	06	Date that the DO was updated at DTC (MMDDYY format)

Field Name	Position	Length	Field Attributes
DO-OUT-TIME-STAMP	267	06	Time that the DO was updated by ATP at DTC (HHMMSS format)
DO-OUT-CUSIP-DESC	273	20	CUSIP description
DO-OUT-COMMENTS	293	210	<p>Comments</p> <p>For Night ID DOs:</p> <p>Pos. 1 - 17 = Filler</p> <p>Pos. 18 - 26 = Confirm Number</p> <p>Pos. 27 - 94 = Filler</p> <p>Pos. 95 - 106 = Agent Acct. #</p> <p>Pos. 107- 174 = Filler</p> <p>Pos. 175- 186 = Bkr Dir #</p> <p>Pos. 187- 210 = Filler</p> <p>For Night ID Dos submitted by other depositories (#6942/6070):</p> <p>Pos. 1 - 156 = Filler</p> <p>Pos. 157- 165 = Confirm Number</p> <p>Pos. 166 - 210 = Filler</p> <p>For non-ID DOs submitted by other depositories (#6942/6070):</p> <p>Pos. 1 - 80 = User's comments</p> <p>Pos. 81 - 87 = Filler</p> <p>Pos. 88 - 99 = Dep-Trans-#</p> <p>Pos. 100- 107 = Filler</p> <p>Pos. 108 - 108 = Dep-Trade-Type</p> <p>Pos. 109 - 210 = Filler</p>

Field Name	Position	Length	Field Attributes
			<p>For DO's with IPO CUSIPS:</p> <p>Pos. 1 - 135 = User's comments</p> <p>Pos. 136- 210 = Filler</p> <p>For Direct Registration (DRS) Dos submitted by transfer agents:</p> <p>Pos. 1 - 13 = Transaction ID</p> <p>Pos. 14 - 15 = Filler</p> <p>Pos. 16 - 52 = Partic. A/C #</p> <p>Pos. 53 - 54 = Filler</p> <p>Pos. 55 = Reason Code</p> <p>Pos. 56 - 57 = Filler</p> <p>Pos. 58 - 67 = Process Date</p> <p>Pos. 68 - 69 = Filler</p> <p>Pos. 70 = Value '1'</p> <p>Pos. 71 - 110 = Participant or Corresp. Name</p> <p>Pos. 111- 112 = Filler</p> <p>Pos. 113- 123 = Soc. Secur. #</p> <p>Pos. 124- 139 = Filler</p> <p>Pos. 140 = Value '2'</p> <p>Pos. 141- 175 = DRS Registr.</p> <p>Pos. 176- 209 = Filler</p> <p>Pos. 210 = Value '3'</p> <p>For DO's from FED/GNMA project;</p> <p>Pos. 1 - 180 = User's comments</p> <p>Pos. 181- 210 = FED rej. Reason</p>

Field Name	Position	Length	Field Attributes
DO-OUT-MUNI-BOND	503	01	'Muni' or 'Bond' CUSIP involved. Value: 'B' = Bond 'M' = Muni Space = Regular Security
DO-OUT-FAST-IND	504	01	'FAST' CUSIP involved. Value: 'F' = FAST Space = Non-FAST
DO-OUT-SDFS-IND	505	01	'Same Day Funds System' CUSIP involved. Value: 'S' = SDFS 'C' = Commercial Paper (SubI=525) 'M' = Medium Term Note (SubI=530) Space = Non-SDFS
DO-OUT-TRANS-SEQ#	506	05	User-assigned seq # of input DO transaction. This will contain spaces if this is a Code '28' (CP Maturity Sweep) generated DO.
DO-OUT-DTC-CURR-REC#	511	08	Pointer to this record on the DTC central ATP data base. '00000000' (8 zeros) for transactions in the Staging Engine and MMI Optimizer
DO-OUT-REPEND-INDIC	519	01	If transaction is 'pending': ' R' = repended ' ' = not repended

Field Name	Position	Length	Field Attributes
DO-OUT-SHARE-QTY-NEW	520	09	Share quantity (new format where 1 = 1 for all issues)
DO-OUT-PEND-DROP-REASON	529	01	DTC's reason for this transaction being 'pending' or 'dropped.' For a list of possible PEND-REASON values see Exhibit 1. For a list of possible DROP- REASON values see Exhibit 2.
DO-OUT-DROP-CODE	530	01	DTC's reason for this transaction being automatically 'dropped.' For a list of possible DROP- CODE values see Exhibit 3.
DO-OUT-SUBISSUE-TYPE	531	03	<p>Sub-Issue type for SDFS CUSIPs.</p> <p>Values:</p> <ul style="list-style-type: none"> '000' = Not applicable '030' = LIMTD PARTNRSH '040' = CMO in Units '041' = ABS in Units '042' = ISSUE in Units '110' = ADR '120' = PFD-CP '320' = MUNI VRDO/CP '330' = MUNI VRDO/CP '340' = BEARER/Zero Cpn '502' = BAs '504' = CDs '505' = CERTIFIED MMI '506' = CERTFD MMI-Periodic '525' = CORPORATE CP

Field Name	Position	Length	Field Attributes
			'526' = CORP. VRDO/CP '530' = MTN's (repl. by 533) '531' = Deposit Notes '532' = M/T Bank Notes '533' = MMI MTNs '540' = CMO '541' = ABC '542' = Non-CMO/ABS Amort. '550' = S/T Bank Notes '551' = ZERO COUPON '560' = DISCOUNT NOTES
DO-OUT-CNS-SUB-ACCT	534	01	Describe processing of CNS-receives. Values: 'A' = Trading account 'C' = Stock Loan acct 'E' = Fully-paid acct 'G' = Reorg account 'H' = Reorg account (for competing offers or election mergers) "S" = CNS ACATS Short Cover "R" = CNS ACATS Long Allocation
DO-OUT-PEND-POS-NEW NUMBER	535	09	Available share position (new format where 1=1 for all issues) on pended DOs (deliverers only) <Spaces> if the transaction is in the Staging Engine/MMI Optimizer Format = alphanumeric

Field Name	Position	Length	Field Attributes
DO-OUT-IPO-ID-AGT-BANK IDENTIFIER (This field will contain data only if the DO-OUT-VERSION = '1')	564	08	Present if CUSIP is IPO-tracked and either party is a Bank. Format = alphanumeric
DO-OUT-IPO-TRADE-DATE	572	08	Present if CUSIP is IPO-tracked and either party is a Bank. Format = MMDDCCYY
DO-OUT-IPO-BROKR-INTRNL ACCOUNT-NUMBER	580	12	Optional Format = alphanumeric
DO-OUT-IPO-CORRESPONDNT ACCOUNT-NUMBER (AKA: EXECUTING-BKR-#)	592	08	Req'd if CUSIP is IPO-tracked and submitting party is clearing for executing broker. Format = numeric, right-aligned/lead zeros
DO-OUT-IPO BUY-SELL	600	01	IPO-tracked BUY/SELL indicator. Values: 'B' = Buy, 'S' = Sell
Filler	601	03	Value spaces
DO-OUT-DTC-ORIG-REC#	604	08	Pointer to the prior record for this transaction. This field will contain data if TRANS-STATUS is 'P' (Pend), 'X' (Make-after-Pend), or 'K' (Pend-Kill). Also present if this transaction is a 'reclaim' of a prior Deliver Order.
DO-OUT-RECLAIM-DATE Format = MMDDYY	612	06	Contains the original date of the DO that is being reclaimed when this TRANS-STATUS is '' or 'X.'

Field Name	Position	Length	Field Attributes
DO-OUT-DIS-TRANS-#	618	12	Contains the Depository transaction number (optional) that is involved in this trade.
Filler	630	01	Value spaces.
EXPANSION	631	164	Following fields available for FED/GNMA project (output version ind. = 2)
DO-OUT-FED-ABA-ACCT	631	09	The bank acct. Identifier for the FED participant (req'd when the Delvr or Rcvr is the FED acct (6072)).
DO-OUT-FED-SUB-ACCT	640	20	The bank Sub acct. Identifier for the FED participant (req'd when the Delvr or Rcvr is the FED acct (6072)).
DO-OUT-3RDPTY-DLV-TEXT	660	40	The Third-party deliverer text/acct information.
DO-OUT-3RDPTY-REC-TEXT	700	40	The Third-party receiver text/acct information.
Filler	740	9	Value spaces
IMS TID (Stage 3 change targeted for June 2014)	749	16	This is the number generated by DTC which uniquely identifies any transaction. (Available in Version 2 only)
RAD Sequence Number (Stage 3 change targeted for June 2014)	765	8	This field is the IMS TID displayed in the "non-displayable character" version. This is the current format used in RAD output (Available in Version 2 only)

Field Name	Position	Length	Field Attributes
IDNETOUT Output Subscription Indicator (Stage 3 change targeted for June 2014)	773	1	Contains "1" if originated from IDNETOUTPUT subscription, and a space " " from all other output types
Filler	774	21	Value Spaces

Exhibit 1- PEND Reason Indicators

Code	Meaning
' '	Not 'pended'
'N'	Pended for Receiver's collateral deficiency
'S'	Pended for shares
'O'	Pended for Receiver's collateral deficiency
'C'	Pended for Deliverer's collateral deficiency
'D'	Pended for Receiver's debit deficiency
'E'	Pended for Deliverer's debit deficiency
'A'	Pended for Deliverer insufficient position
'B'	Pended for Receiver insufficient position
'P'	Pended for Deliverer insufficient pledged position
'F'	Pended for FIFO processing
'T'	Pending for Funding Decision

Exhibit 2 - DROP Reason Indicators

Code	Meaning
' '	If DO-OUT-DTC-STATUS-IND = 'D', please refer to Exhibit 3 following. Otherwise this was not 'dropped.'
'I'	Dropped for Receiver's collateral deficiency
'S'	Dropped for shares
'O'	Dropped for Receiver's collateral deficiency
'C'	Dropped for Deliverer's collateral deficiency
'E'	Dropped for Deliverer's debit deficiency
'A'	Dropped for Deliverer insufficient position
'B'	Dropped for Receiver insufficient position
'P'	Dropped for Deliverer Insufficient Pledged position
'J'	Dropped when Deliverer's settlement bank unavailable
'N'	Dropped when Receiver's settlement bank unavailable
'M'	Dropped when the market value is exceeded
'V'	Dropped when collateral monitor value is exceeded
'L'	Dropped when Deliverer's debit cap limit is reached
'R'	Dropped when Receiver's debit cap limit is reached
'D'	Dropped when the adjustable debit cap is exceeded

Code	Meaning
'Z'	Dropped when PEND (recycle) cutoff was taken at the other Depository
'T'	Dropped due to Refusal to Pay (permanent only) Temporary will not generate a message
'W'	Dropped from MMI Optimizer at cutoff.
'X'	Dropped due to Edit Reject

Exhibit 3 - DROP Code Indicators

Code	Meaning
' '	Not dropped
'C'	PEND (recycle) cutoff taken at DTC
'S'	No short available for CNS transactions
'A'	Shares are not pendable
'T'	Collateral monitor is not pendable
'D'	Debit is not pendable
'X'	Unknown