DTCC

CF2/MQ TRANSMISSION GUIDES

11.01 MONEY MARKET INSTRUMENTS ISSUANCE TRANSACTION INPUT: FUNCTION USER'S GUIDE

December 29, 2023



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<u>1. OBJECTIVES OF THIS CHAPTER</u>

The objectives of this chapter are to:

- Give information about DTC's Money Market Issuance Transaction (MMI) function
- Provide formats for required records
- List MMI error codes

^{1.} Objectives of This Chapter

2. MMI OVERVIEW

This document describes how Participants can transmit Money Market Instrument (MMI) issues to DTC via CF2 and MQ. This guide describes the MMI Issuance processing for both CF2 and MQ.

^{2.} MMI Overview

<u>3. TRANSMISSION MODES</u>

MMI transactions can be transmitted via CF2 or MQ. Participants must familiarize themselves with DTC's document *Computer-to-Computer Facility Procedures Manual*, Chapter 2.03, "Interface Control Management – Transaction Input For CCF, CCF- II, MDH," which describes standards for transaction processing with DTC's automated systems and provides specifics relating to the operation, error processing and recovery for CF2 and MQ transmissions. For more information, contact DTCSupport@dtcc.com.

The function names associated with each interface are as follows:

- CF2 MMIC
- MQ MMIM

The following Section 3.1, MMI Issuance Segment from Participant describes the input record for all MMI Issuances (including CDs). This version of the specification is designed to support enhancements for issuance of information related to providing initial maturity date and exchangeable MMIs.

3.1 MMI Issuance Segment from Participant—Version 2

The MMI Issuance Segment from Participant is a record of 895 bytes. This version of the specification is designed to support enhancements for issuance of information related to providing initial maturity date and exchangeable MMIs. The format of this record is shown below.

	MMI Issuance Segment from Participant Format							
Position	Length	Format	Field Name	Field Description				
1	1	Character	ICMPFX- ERROR-FLAG	Space				
2	1	Character	ICMPFX-TEST- OR-PROD-IND	T or P				
3	6	Character	ICMPFX- RECORD-TYPE	MMICDI				
9	2	Numeric	ICMPFX- RECORD- SUFFIX	01				
11	2	Numeric	ICMPFX- RECORD- VERSION	02				
13	6	Numeric	ICMPFX- RECORD-USR- SEQ-NO	Unique transaction sequence number (optional)				
19	8	Character	ICMPFX- ADDRESSEE	Identifier of entity on behalf of whom the transaction is being processed (required). Must be numeric of Mnnnnnnn.				

		I	MMI Issuance Segm	ent from Participant Format
Position	Length	Format	Field Name	Field Description
27	1	Character	MMI-IN-PROD- TYP	Type of MMI being issued (must be an authorized issuance product type for the issuer number, as established by DTC Underwriting Department prior to the submission of the issuance instruction.) (required).
				A = Institutional Cert of Deposit
				B = Corporate Commercial Paper
				C = Corporate VRDO in CP Mode
				E = Muni Commercial Paper - Tax Exempt
				F = Muni Commercial Paper – Taxable
				G = Muni CP – Tax Exempt VRDO/CP mode
				H = Muni CP – Taxable VRDO in CP mode
				J = Medium Term Note (excl. K & L)
				K = Deposit Note, Medium Term
				L = Bank Note, Medium-Term
				N = Bank Note, Short-Term
				O = Discount Note
				P = Preferred Stock in CP-like mode
				Q = Bankers' Acceptance
28	1	Character	MMI-INST-TYP	Type of transaction being submitted (required)
29	15	Numeric	MMI-IN- TRANS- NO	An internal transaction number used by the issuing agent to identify this transaction, for printing on the deposit ticket and
				issuance deposit; can contain blanks (optional).
44	8	Numeric	MMI-IN- ISSUING-AGT	Number of the DTC participant submitting the issuance instruction; right-justified with leading zeroes (required).
				Note: This must be an authorized issuing agent for the issuer, as established by DTC's Underwriting Department prior to the submission of the issuance instruction.
52	8	Numeric	MMI-IN-PAY- AGT-NO	Number of the DTC participant identified as the paying agent on the issuance instruction; right-justified with leading zeroes (required).
				Note: This must be an authorized paying agent for the issuer, as established by DTC's Underwriting Department prior to the submission of the issuance instruction.
60	12	Character	MMI-IN-CUSIP	Identifier of the MMI issued.

				ent from Participant Format
Position	Length	Format	Field Name	Field Description
				Note: If the issuer number is established on DTC's Issuer Control Table as a discount issuer number, the 7 th and 8 th positions of the CUSIP number are verified on the basis of an industry- accepted algorithm based on a maturity date.
72	1	Character	MMI-IN-ISS- EX- DTC-IND	Indicator of whether the security was issued outside DTC prior to becoming eligible at DTC. N = No Y = Yes Space = Not applicable
73	8	Numeric	MMI-IN-LAST- PAY-DATE	<i>ccyymmdd</i> target payment date of last payment made before security was brought into DTC; only for securities previously issued ex- DTC (zeroes if not applicable).
81	8	Numeric	MMI-IN- SETTLEMENT- DATE	<i>ccyymmdd</i> date the pending deposit and deliver order transaction must be processed (required).
89	8	Numeric	MMI-IN- DATED- DATE	<i>ccyymmdd</i> date from which income is calculated (= effective date of the issuance); back dating of issuances is permitted (required).
97	8	Numeric	MMI-IN- MATURE-DATE	ccyymmdd date on which the security matures (required).
105	19	Numeric	MMI-IN-PRINC- AMOUNT	9(12)V9(7) (for a debt instrument) = original principal (face value) amount (for PFD/CP) = the number of shares (required).
124	15	Numeric	MMI-IN- SETTLEMENT- AMOUNT	9(13)V9(2) dollar amount and cent amount due to change hands upon completion of the MMI issuance deliver order; can be zero (required).
139	8	Numeric	MMI-IN- RECEIVE-PART	Number of the DTC participant receiving the issuance DO; right justified with leading zeroes (required).
147	79	Character	MMI-IN- COMMENT	(Free-form text) settlement instructions associated with the deliver order, if any (optional).
				Note: If comments are supplied and the issuance is for a dealer turnaround DO, the comments are printed on the DO ticket as comment line #1. If comments are supplied as an issuance instruction they are printed on the DO ticket as comment line #2 (comment line #1 on the DO ticket contains a literal indicating the input media).

3. Transmission Modes

		l	MMI Issuance Segme	ent from Participant Format
Position	Length	Format	Field Name	Field Description
226	78	Character	MMI-IN-SPEC- INST	(Free-form text) special instructions related to the issuance, for S&P and IDSI notifications (optional).
304	9	Numeric	MMI-IN-MIN- DENOM	Minimum trading denomination or shares for the security issue (required).
313	9	Numeric	MMI-IN-INC- SHR	Incremental amount of the minimum denomination or shares for the security issue (required).
322	1	Numeric	MMI-IN-AGE- DIR-TYP	Designates the type of sale. It is used for billing purposes. S = Sales Agent Sale (Receiving Participant is billed) D = Direct Sale (Issuing Agent is billed). (Must = space if not applicable).
323	6	Numeric	MMI-IN-SALE- PRICE-PER	9(3)V9(3) sales prices expressed as a percentage of \$1,000 per value. (Must = Zero if not applicable).
329	4	Numeric	MMI-IN- COMMISS-PER	<i>9(1)V9(3)</i> commission rate. (Must = Zero if not applicable).
333	1	Character	MMI-IN-INC- RTE- TYP	Income rate indicator (required). F = fixed V = variable Blank = discount MMI
334	1	Character	MMI-IN-INC- PAY- TYP	Income structure associated with the security being issued (required). P = Periodic Income Payments I = Income at Maturity Z = Discount
335	1	Character	MMI-IN-IND- PRIN-IND	Indicator of whether the principal payments are determined via a specific index; for example, foreign currency or commodity price (required). N = No Y = Yes
336	1	Character	MMI-IN- AMORTIZ-IND	Periodic principal payments indicator (required). N = No Y = Yes
337	1	Character	MMI-IN-FOR- CURR-IND	Security denomination in a currency other than US Dollars (required). N = No Y = Yes

3. Transmission Modes

		I	MMI Issuance Segme	ent from Participant Format
Position	Length	Format	Field Name	Field Description
338	3	Character	MMI-IN-FOR- CURR-CODE	(If MMI-IN-FOR-CURR-IND entry = N) leave blank (If MMI-IN-FOR-CURR-IND entry = Y) denomination currency of security Note: Entry must be a valid ISO currency code.
341	1	Character	MMI-IN-US- IND	 (If MMI-IN-FOR-CURR-IND entry = Y) indicator of whether income and/or principal payments must be made in the denomination foreign currency. N = No Y = Yes (If MMI-IN-FOR-CURR-IND entry = N) (Must = Space if not applicable)
342	1	Character	MMI-IN-PUT- IND	Repayment PUT option terms are in effect. N = No Y = Yes (Must = Space if not applicable)
343	1	Character	MMI-IN-CALL- IND	Issue has a call feature. N = No Y = Yes (Must = Space if not applicable)
344	1	Character	MMI-IN- CHANGE-IND	The security has a feature allowing a change in the frequency of income payments. N = No Y = Yes (Must = Space if not applicable)
345	1	Character	MMI-IN-PUT- DEATH-IND	Bond can be redeemed if the holder of the securities dies. N = No Y = Yes (Must = Space if not applicable)
346	1	Character	MMI-IN-EXT- MAT-IND	MTN has an extendable maturity provision. N = No Y = Yes (Must = Space if not applicable)
347	1	Character	MMI-IN-RATE- RES-IND	(If variable-rate security) Indicator of whether the spread/spread or spread multiplier for a variable rate security can be reset at the option of the Issuer

^{3.} Transmission Modes

		l	MMI Issuance Segme	ent from Participant Format
Position	Length	Format	Field Name	Field Description
				 (If fixed-rate security) Indicator of whether the fixed rate can be reset. N = No Y = Yes
				(Must = Space if not applicable)
348	1	Character	MMI-IN-REN- NOTE-IND	Indicator of whether the security is renewable. N = No Y = Yes (Must = Space if not applicable)
349	1	Character	MMI-IN-STEP- RTE-IND	Indicator of whether the issue being made eligible can have its income rate reset one other time during its life. N = No Y = Yes (Must = Space if not applicable)
350	9	Numeric	MMI-IN-STEP- RTE	9(3)V9(6) Income rate for the issue on the effective date of income rate change. (Must = Zeroes if not applicable)
359	8	Numeric	MMI-IN-STEP- DATE	<i>ccyymmdd</i> effective date of income rate change. (Must = Zeroes if not applicable)
367	13	Numeric	MMI-IN-INC- AMT-1ST	9(7)V9(6) dollar amount of income per \$1,000 face value to be paid on the first income payment date. (Must = Zeroes if not applicable)
380	9	Numeric	MMI-IN-INC- RATE	9(3)V9(6) rate of interest or dividend to be paid by the issued security. (Must = Zeroes if not applicable)
389	2	Numeric	MMI-IN-INC- CALC-TYP	Type of formula to be used for determining income payments. 01 = Actual days elapsed/360-day year 02 = 30-day month/360-day year 03 = Actual days elapsed/Actual days in a year 04 = DTC IAM CP formula 05 = Actual/365 or 366 06 = Actual/365 (Must = Zeroes if not applicable)
391	1	Character	MMI-IN-INC- PAY- INTR-TYP	 (In conjunction with Income Payment Interval Number in next field) Periodic income payment frequency units. Y = Years M = Months

Position	Length	Format	Field Name	Field Description					
				W = Weeks					
				D = Days					
				(Must = Space if not applicable)					
392	3	Numeric	MMI-IN-INC- INTR-NO	 (In conjunction with Income Payment Interval Type in previous field) Periodic Income payment interval number For example, a payment interval number of 90 with a payment interval type of D(ays) indicates payment every 90 days). (Must = Zeroes if not applicable) 					
395	8	Numeric	MMI-IN- TARGET- DATE	<i>ccyymmdd</i> date the holder of the security is targeted to receive the first income payment.					
				(Must = Zeroes if not applicable)					
403	8	Numeric	MMI-IN- ACTUAL- DATE	<i>ccyymmdd</i> date the holder of the security is to receive the first income payment based on evaluating the Targeted First Income Payment Date against the US and London calendars for a valid payment date.					
				(Must = Zeroes if not applicable)					
411	1	Character	MMI-IN-MEAS- TYP	Type of payable date accrual to be used to determine the number of days in the income payment calculation.					
				A = Actual payment to actual payment					
				T = Targeted payment to targeted payment					
				(Must = Space if not applicable)					
412	1	Character	MMI-IN-METH- TYP	Method for calculating the number of days in the income accrua period.					
				R = Record to record date					
				P = Payable to payable date					
				(Must = Space if not applicable)					
413	8	Numeric	MMI-IN- RECORD-DATE	ccyymmdd date on which holders of record are determined for the first income payment (must be different from the entry in the Income Payment Payable/Record Date Difference field).					
				(Must = Zeroes if not applicable)					
421	3	Numeric	MMI-IN-DATE- DIFF	The total number of days that record date precedes the targeted income payment date. This field and the First Income Payment Record Date field are mutually exclusive. (Must = Zeroes if not applicable)					
424	1	Character	MMI-IN-INC- BUS-CAL-IND	Calendar to be used for computing the number of days for payment, or the record date if the previous field is used.					
				B = Business Days					
				C = Calendar Days					
				(Must = Space if not applicable)					

		I	MMI Issuance Segme	ent from Participant Format
Position	Length	Format	Field Name	Field Description
425	1	Character	MMI-IN-INC- WKND-IND	Use day before or day after if the record date is a holiday or weekend. A = After B = Before
				(Must = Space if not applicable)
426	1	Character	MMI-IN-RTE- RES-INTR-TYP	 (In conjunction with the Income Rate Reset Interval Numbernext field) reset frequency unit type. Y = Years M = Months W = Weeks D = Days (Must = Space if not applicable)
427	3	Numeric	MMI-IN-RATE- RES-INTR-NO	 (In conjunction with the Income Rate Reset Interval Type-previous field), reset frequency number. For example, a rate reset interval number of 90 with a rate reset interval type of D(ays) indicates a rate reset every 90 days. (Must = Zeroes if not applicable)
430	1	Character	LINKED-TO- LONDON- CALENDAR	Security's income payments indexed to the London calendar. N = No Y = Yes (Must = Space if not applicable)
431	72	Character	MMI-IN-INC- NAME-1	(Free-form text) name of the index on which the income payment is based (first part of name). (Must = Space if not applicable)
503	72	Character	MMI-IN-INC- NAME-2	(Free-form text) name of the index on which the income payment is based (second part of the name). (Must = Space if not applicable)
575	1	Character	MMI-IN-INDX- MAT-INTR-TYP	Time length of the index used to reset index. Y = Years M = Months W = Weeks D = Days (Must = Space if not applicable)
576	3	Numeric	MMI-IN-INDX- MAT-INTR-NO	000-999 number of index maturity units. (Must = Zeroes if not applicable)
579	1	Character	MMI-IN-INC- PAY- SPR-TYP	+/- sign of the percentage spread, indicating whether the spread is added to (+) or subtracted from (-) the index's value when calculating variable interest rate. (Must = Space if not applicable)

				ent from Participant Format
Position	Length	Format	Field Name	Field Description
580	4	Numeric	MMI-IN-INC- PAY- SPR-PER	9(1)V9(3) amount that is added to or subtracted from the index's value when calculating the variable interest rate.
				(Must = Zeroes if not applicable)
584	2	Numeric	MMI-IN-INC- PAY- DOM	(In conjunction with the Income Payment DOM Business/Calendar Indicator) income payment day of month 01- 31. (Must = Zeroes if not applicable)
586	1	Character	MMI-IN-INC- PAY- DOM-IND	 (In conjunction with the Income Payment Day of Month field) Income payment day. B = Business Days C = Calendar Days
				(Must = Space if not applicable)
587	1	Numeric	MMI-IN-INC- PAY- WOM	 (In conjunction with the Income Payment day of Week field) income payment week of month. 1 = First Week 2 = Second Week 3 = Third Week 4 = Fourth Week
				(Must = Zeroes if not applicable)
588	1	Numeric	MMI-IN-INC- PAY- DOW	 (In conjunction with the Income Payment Week of Month field) Income payment day of week. 1 = Monday 2 = Tuesday 3 = Wednesday 4 = Thursday 5 = Friday (Must = Zeroes if not applicable)
589	1	Character	MMI-IN- REPAY- FREQ- TYP	Frequency of repayment option (only if Repayment Put Option Indicator = Y). A = Annual S = Semi-annual Q = Quarterly M = Monthly O = One Time Only I = Irregular (Must = Space if not applicable)
590	8	Numeric	MMI-IN- START- DATE-	<i>ccyymmdd</i> (only if Repayment Put Option Indicator = Y) start date of first tender period

				ent from Participant Format
Position	Length	Format	Field Name	Field Description
			1ST	(Must = Zeroes if not applicable)
598	8	Numeric	MMI-IN-END- DATE-1ST	<i>ccyymmdd</i> (only if Repayment Put Option Indicator = Y) end date of first tender period
				(Must = Zeroes if not applicable)
606	8	Numeric	MMI-IN-PAY- DATE-1ST	<i>ccyymmdd</i> (only if Repayment Put Option Indicator = Y) pay date of first tender period.
				(Must = Zeroes if not applicable)
614	8	Numeric	MMI-IN-END- DATE-LAST	<i>ccyymmdd</i> (only if Repayment Put Option Indicator = Y) end date of last tender period.
				(Must = Zeroes if not applicable)
622	8	Numeric	MMI-IN-CALL- DATE-1ST	<i>ccyymmdd</i> (only if Repayment Put Option indicator = Y) first date the issue can be called.
				(Must = Zeroes if not applicable)
630	6	Numeric	MMI-IN-CALL- PRICE	9(3)V9(3) (only if Repayment Put Option indicator = Y) percentage of par paid if the security is called on the first CALL date.
				(Must = Zeroes if not applicable)
636	1	Character	MMI-IN-PRIN- TYP	(In conjunction with the Principal Payment Frequency interview number) periodic principal payment frequency unit.
				Y = Years
				M = Months
				W = Weeks
				D = Days
				(Must = Space if not applicable)
637	3	Numeric	MMI-IN-PRIN- NO	(In conjunction with the Principal Payment Frequency interval Type) periodic principal payment unit number.
				For example, a payment interval number of 90 with payment interval type of D(ays) indicates payment every 90 days. (Must = Zeroes if not applicable)
640	2	Numeric	MMI-IN-PRIN- DM	01-31 (in conjunction with the Principal
				Payment DOM Business/Calendar indicator) Income
				payment day of the month.
				(Must = Zeroes if not applicable)
642	1	Character	MMI-IN-PRIN- DOM-IND	(In conjunction with the Principal Payment Day of Month field) Principal Payment Day.
				B = Business Days
				C = Calendar Days
				(Must = Space if not applicable)

			MMI Issuance Segme	ent from Participant Format
Position	Length	Format	Field Name	Field Description
643	1	Numeric	MMI-IN-PRIN- WOM	 (In conjunction with the Principal Payment Day of Week field) Payment week of month. 1 = First Week 2 = Second Week 3 = Third Week 4 = Fourth Week
				(Must = Zeroes if not applicable)
644	1	Numeric	MMI-IN-PRIN- DOW	 (In conjunction with the Principal Payment Week of Month field) payment date of week. 1 = Monday 2 = Tuesday 3 = Wednesday 4 = Thursday 5 = Friday (Must = Zero if not applicable)
645	8	Numeric	MMI-IN-PRIN- TGT-DATE	<i>ccyymmdd</i> date the holder of the security is targeted to receive the first principal amount. (Must = Zeroes if not applicable)
653	8	Numeric	MMI-IN-PRIN- ACT-DATE	<i>ccyymmdd</i> date the holder of the security is to receive the first principal payment (based on evaluating the Targeted First Principal Payment Date against the US and London calendars for a valid Payment date) (Must = Zeroes if not applicable)
661	8	Numeric	MMI-IN-PRIN- REC-DATE	<i>ccyymmdd</i> record date of record for the first principal payment; must be different from entry in the Principal Payment Payable/Record Date Difference field. (Must = Zeroes if not applicable)
669	2	Numeric	MMI-IN-PRIN- REC-DATE- DIFF	Total number of days that record date precedes the targeted principal payment date (this field and the First Principal Payment Record Date field are mutually exclusive). (Must = Zeroes if not applicable)
671	1	Character	MMI-IN-PRIN- BUS-IND	Calendar to be used for computing the number of days for payment, or the record date if the previous field is used. B = Business Days C = Calendar Days (Must = Space if not applicable)
672	1	Character	MMI-IN-PRIN- WKD-IND	Identifies whether to use the day before or the day after if the record date is a holiday or weekend. A = After

		l.	MMI Issuance Segm	ent from Participant Format
Position	Length	Format	Field Name	Field Description
				B = Before (Must = Space if not applicable)
673	1	Character	LINK-TO- LONDON- CALENDAR	Security's principal payments indexed to the London calendar. Y = Yes N = No (Must = Space if not applicable)
674	72	Character	MMI-IN-PRIN- NAME-1	(Free-form text) name of the index on which the principal payment is based (first part of name). (Must = Space if not applicable)
746	72	Character	MMI-IN-PRIN- NAME-2	(Free-form text) name of the index on which the principal payment is based (second part of name). (Must = Space if not applicable)
818	1	Character	MMI-IN-PRIN- MAT-TYP	 (In conjunction with the Principal Payment Indexed Maturity Interval Number) reset frequency unit type. Y = Years M = Months W = Weeks D = Days (Must = Space if not applicable)
819	3	Numeric	MMI-IN-PRIN- MAT-NO	 (In conjunction with the Principal Payment Indexed Maturity Interval Type) reset frequency number. For example, a rate reset interval number of 90 with a rate reset unit type of D(ays) indicates a rate reset every 90 days) (Must = Zeroes if not applicable)
822	1	Character	MMI-IN-PRIN- SPR-TYP	+/- indicator of positive or negative spread percentage. (Must = Space if not applicable)
823	4	Numeric	MMI-IN-PRIN- SPR-PER	9(1)V9(3) percentage spread from 0 to 100%. (Must = Zeroes if not applicable)
827	2	Numeric	MMI-IN-PRIN- SET-DATE	The number of days after the maturity date that final principal payment is to be made. (Must = Zeroes if not applicable)
829	1	Character	MMI-IN-PRIN- FIN-IND	Calendar to be used for computing the number of days for the final principal payment. B = Business Days C = Calendar Days (Must = Space if not applicable)

^{3.} Transmission Modes

		I	MMI Issuance Segme	ent from Participant Format
Position	Length	Format	Field Name	Field Description
830	2	Numeric	MMI-IN-DAYS- INC-PAY	The number of days after the maturity date that final income payment is to be made. (Must = Zeroes if not applicable)
832	1	Character	MMI-IN-FIN- INC- IND	Calendar to be used for computing the number of days for the final income payment. B = Business Days C = Calendar Days (Must = Space if not applicable)
833	8	Numeric	MMI-IN-INIT- MATURE-DATE	<i>ccyymmdd</i> date on which the security matures if the original maturity date is extended (Must =Zeroes if not applicable).
841	1	Character	MMI-IN-FILLER	DTC use only; do not use
842	1	Character	MMI-IN- EXCHG- IND	Indicator of whether the issuance is Exchangeable Y = Yes N = No
843	12	Character	MMI-IN- EXCHG- CUSIP	Original CUSIP of the issuance that was exchanged. (Must = Spaces if not applicable)
855	2	Character	MMI-IRS-INCM- CD	 MMI IRS Income code. Values are: 01 Interest Paid by US Obligors - General 04 Interest Paid by Foreign Corporations 23 Gross Income - Other 29 Deposit Interest Entry of the IRS Income Code is Required <i>except</i>: When POS 27 MMI-IN-PROD-TYPE = E or G (Non-Tax Muni), MMI-IRS-INCM-CD is set to spaces
				 When POS 27 MMI-IN-PROD-TYPE = F or H (Taxable Muni), MMI-IRS-INCM-CD is set to 01 No values are needed to be input if E, G, F, or H. The values E and G are systemically set to spaces, and F and H are set to 01.
857	38	Character	MMI-IN-FILLER	DTC use only; do not use

^{3.} Transmission Modes

4. MMI FIELD REQUIREMENTS

Participants can use this chapter to determine which fields are applicable for specific MMI products. Distinction is made between Income Rate Type – fixed or variable – and Income Payment Type – periodic income payment, zero coupon, or income at maturity only.

This chapter is divided into two parts:

- 1. Field Requirements Part 1 describes fields applicable to the following MMI products:
 - CP-525 Corporate Commercial Paper
 - MC-330 Municipal Commercial Paper, Tax-Exempt (TECP)
 - MT-330 Municipal Commercial Paper, Taxable (TECP)
 - BA-502 Bankers' Acceptance
 - DN-560 Discount Note
 - BS-550 Bank Note, Short-Term
- 2. Field Requirements Part 2 describes fields applicable to the following MMI products:
 - MN-530 Medium-Term Note (excluding DP and BM)
 - BM-532 Bank Note, Medium-Term
 - DP-531 Deposit Note, Medium Term
 - CD-504 Institutional Certificate of Deposit
 - PC-120 Preferred Stock in Commercial Paper-Like Mode
 - CV-526 Corporate VRDO/CP
 - MV-320 Municipal Commercial Paper, Tax-Exempt VRDO/CP
 - MX-320 Municipal Commercial Paper, Taxable VRDO/CP

4.1 MMI Field Requirements (Part 1)

4.1.1 MMI Products: Corporate/Municipal Commercial Paper, Bankers' Acceptance, Discount Note and STBN

The following charts/tables detail the fields applicable to the following MMI products:

- CP-525 Corporate Commercial Paper
- MC-330 Municipal Commercial Paper, Tax-Exempt
- MT-330 Municipal Commercial Paper, Taxable
- BA-502 Bankers' Acceptance
- DN-560 Discount Note
- BS-550 Bank Note, Short-Term

The following abbreviations are used to describe the types of MMIs (based on income rate type and income payment type) that are applicable to a specific field:

• F-PIP: Fixed-rate, periodic income payment MMI (Income Rate Type = F and Income Payment Type = P)

- V-PIP: Variable-rate, periodic income payment MMI (Income Rate Type = V and Income Payment Type = P)
- PIP: Fixed-rate and Variable-rate, periodic income payment MMI (Income Rate Type = F or V and Income Payment Type = P)
- Zero: Zero-coupon MMI Income Payment Type = D)
- F-IAM: Fixed-rate, income at maturity only MMI (Income Rate Type = F and Income Payment Type = I)
- V-IAM: Variable-rate, income at maturity only MMI (Income Rate Type = V and Income Payment Type = I)
- IAM: Fixed-rate and Variable-rate, income at maturity only MMI (Income Rate Type = F or V and Income Payment Type = I)

Fields not applicable to an MMI are indicated by N/A.

4.1.2 Notes:

The following notes apply to the charts/tables that follow:

- 1. If the Indexed Principal Indicator is equal to Y, then the Indexed Principal information must be supplied by the Issuing Agent.
- 2. If the Periodic/Amortizing Principal Indicator is equal to Y, then the Periodic Principal Payment information must be supplied by the Issuing Agent. For MMIs with periodic income payments, the corresponding income payment information (that is, dates and frequency) apply to principal payments also.
- 3. The following fields are the same fields but different literals are used depending on the income rate type and income payment type:
 - Income Rate %
 - Discount Rate
 - Income Rate (1st Payment)

The following fields are the same fields but different literals are used depending on the income rate type and income payment types:

- Income Payment Amount per \$1000 (1st Payment)
- Income Payment Amount per \$1000 (At Maturity)
- 4. If Foreign Currency Indicator is Y, a field is optional. The field is optional for V- PIP.
- 5. The default value for the Accrual Period Method Type is P, payable to payable date accrual for fixed-rate periodic income payment.

^{4.} MMI Field Requirements

4.1.3 Detailed MMI Field Requirements (Part 1)

4.1.3.1 ISSUANCE, DO AND TICKET INFO (PART 1)

Issuance, DO and Ticket Info	(Part 1)				
Field Name	MMI Products				
	СР	MC/MT	BA	DN	BS
Issuance Product Type	PIP Zero IAM	PIP Zero IAM	PIP Zero IAM	Zero	PIP Zero IAM
Instruction Type	PIP Zero IAM	PIP Zero IAM	PIP Zero IAM	Zero	PIP Zero IAM
Income Rate Type	PIP IAM	PIP IAM	PIP IAM	Zero	PIP IAM
Income Payment Type	PIP Zero IAM	PIP Zero IAM	PIP Zero IAM	Zero	PIP Zero IAM

4.1.3.2 ISSUANCE, DO AND TICKET INFO (PART 2)

Issuance, DO and Ticket Info (Part 2)								
Field Name	MMI Products				MMI Products			
	СР	MC/MT	BA	DN	BS			
IA Transaction Number (Optional)	PIP Zero IAM	PIP Zero IAM	PIP Zero IAM	Zero	PIP Zero IAM			
Issuing Agent Number	PIP Zero IAM	PIP Zero IAM	PIP Zero IAM	Zero	PIP Zero IAM			
Paying Agent Number	PIP Zero IAM	PIP Zero IAM	PIP Zero IAM	Zero	PIP Zero IAM			
CUSIP Number	PIP Zero IAM	PIP Zero IAM	PIP Zero IAM	Zero	PIP Zero IAM			
Ex-DTC Issuance Deposit Indicator	N/A	N/A	N/A	N/A	N/A			
Settlement Date	PIP Zero IAM	PIP Zero IAM	PIP Zero IAM	Zero	PIP Zero IAM			

^{4.} MMI Field Requirements

Issuance, DO and Ticket Info (Part 2)					
Field Name		М	MI Produ	ucts	
	CI	P MC/MT	BA	DN	BS
Dated Date	PIP Zero IAM	PIP Zero IAM	PIP Zero IAM	Zero	PIP Zero IAM
Maturity Date	PIP Zero IAM	PIP Zero IAM	PIP Zero IAM	Zero	PIP Zero IAM
Face Value	PIP Zero IAM	PIP Zero IAM	PIP Zero IAM	Zero	PIP Zero IAM
Settlement Amount	PIP Zero IAM	PIP Zero IAM	PIP Zero IAM	Zero	PIP Zero IAM
Receiving Participant Number	PIP Zero IAM	PIP Zero IAM	PIP Zero IAM	Zero	PIP Zero IAM
Deliver Order Comment (Optional)	PIP Zero IAM	PIP Zero IAM	PIP Zero IAM	Zero	PIP Zero IAM
Special Instructions (Optional)	PIP Zero IAM	PIP Zero IAM	PIP Zero IAM	Zero	PIP Zero IAM
Minimum Denomination Amount	PIP Zero IAM	PIP Zero IAM	PIP Zero IAM	Zero	PIP Zero IAM
Incremental Denomination Amount Thereafter	PIP Zero IAM	PIP Zero IAM	PIP Zero IAM	Zero	PIP Zero IAM
Sales Agent/Direct Type	N/A	N/A	N/A	N/A	N/A
Sales Price Percentage	N/A	N/A	N/A	N/A	N/A
Commission Percentage	N/A	N/A	N/A	N/A	N/A

^{4.} MMI Field Requirements

4.1.3.3 FEATURES

Feature	s						
Field Name		MMI Products					
	СР	MC/MT	BA	DN	BS		
Indexed Principal Indicator 1)	PIP Zero IAM	PIP Zero IAM	PIP Zero IAM	Zero	PIP Zero IAM		
Periodic/Amortizing Principal Indicator 2)	PIP Zero IAM	PIP Zero IAM	PIP Zero IAM	Zero	PIP Zero IAM		
Foreign Currency Indicator	PIP Zero IAM	PIP Zero IAM	PIP Zero IAM	Zero	PIP Zero IAM		
Foreign Currency Code ID	PIP Zero IAM	PIP Zero IAM	PIP Zero IAM	Zero	PIP Zero IAM		
US Dollar Payment Option Indicator	PIP Zero IAM	PIP Zero IAM	PIP Zero IAM	Zero	PIP Zero IAM		
Repayment (Put) Option Indicator	N/A	N/A	N/A	N/A	N/A		
Call Indicator	N/A	N/A	N/A	N/A	N/A		
Changeable Income Payment Frequency Indicator	N/A	N/A	N/A	N/A	N/A		
Repayment (Put) Upon Death Indicator	N/A	N/A	N/A	N/A	N/A		
Extendable Maturity Indicator	N/A	N/A	N/A	N/A	N/A		
Income Rate Reset Indicator	N/A	N/A	N/A	N/A	N/A		
Renewable Note Indicator	N/A	N/A	N/A	N/A	N/A		
Income Step-Up Indicator	N/A	N/A	N/A	N/A	N/A		
Income Step-Up Rate	N/A	N/A	N/A	N/A	N/A		
Income Step-Up Date	N/A	N/A	N/A	N/A	N/A		

^{4.} MMI Field Requirements

Income Payment Inform	ation				
Field Name		М	MI Produ	cts	
	СР	MC/MT	BA	DN N/A Zero N/A N/A	BS
Income Rate % (c)	F-PIP F-IAM	F-PIP F-IAM	F-PIP F-IAM	N/A	F-PIP F-IAM
Discount Rate (c)	Zero	Zero	Zero	Zero	Zero
Income Rate (1st Payment) (Optional) (c)	V-PIP	V-PIP	V-PIP	N/A	V-PIP
Income Payment per \$1000 (1st Payment) (d)	F-PIP V-PIP	F-PIP V-PIP	F-PIP V-PIP	N/A	F-PIP V-PIP
Income Payment per \$1000 (At Maturity) (d)	F-IAM	F-IAM	F-IAM	N/A	F-IAM
Income Calculation Formula Type	F-PIP F-IAM	F-PIP F-IAM	F-PIP F-IAM	N/A	F-PIP F-IAM
Income Payment Interval Type	F-PIP V-PIP	F-PIP V-PIP	F-PIP V-PIP	N/A	F-PIP V-PIP
Income Payment Interval Number	F-PIP V-PIP	F-PIP V-PIP	F-PIP V-PIP	N/A	F-PIP V-PIP
Targeted 1st Income Payment Date	F-PIP V-PIP	F-PIP V-PIP	F-PIP V-PIP	N/A	F-PIP V-PIP
Actual 1st Income Payment Date	F-PIP V-PIP	F-PIP V-PIP	F-PIP V-PIP	N/A	F-PIP V-PIP
Income Payment Accrual Period Measure Type	F-PIP V-PIP	F-PIP V-PIP	F-PIP V-PIP	N/A	F-PIP V-PIP
Income Payment Accrual Period Method Type (e)	N/A	N/A	N/A	N/A	N/A
First Income Payment Record Date	N/A	N/A	N/A	N/A	N/A
Income Payment Payable/Record Date Difference (# of days record date precedes pay date)	N/A	N/A	N/A	N/A	N/A
Income Payment Business/Calendar Indicator	N/A	N/A	N/A	N/A	N/A
Income Payment Weekend/ Holiday Indicator	N/A	N/A	N/A	N/A	N/A

4.1.3.4 Income Payment Information

^{4.} MMI Field Requirements

Variable Rate Income P	ayment Informatio	n			
Field Name		М	MI Produ	cts	
	СР	MC/MT	BA	DN	BS
Income Rate Reset Interval Type	V-PIP V-IAM	V-PIP V-IAM	V-PIP V-IAM	N/A	V-PIP V-IAM
Income Rate Reset Interval Number	V-PIP V-IAM	V-PIP V-IAM	V-PIP V-IAM	N/A	V-PIP V-IAM
London Calendar Income Payment Indicator	V-PIP V-IAM	V-PIP V-IAM	V-PIP V-IAM	N/A	V-PIP V-IAM
Variable Rate Index Name–Part 1	V-PIP V-IAM	V-PIP V-IAM	V-PIP V-IAM	N/A	V-PIP V-IAM
Variable Rate Index Name–Part 2	V-PIP V-IAM	V-PIP V-IAM	V-PIP V-IAM	N/A	V-PIP V-IAM
Income Payment Index Maturity Interval Type	V-PIP V-IAM	V-PIP V-IAM	V-PIP V-IAM	N/A	V-PIP V-IAM
Income Payment Index Maturity Interval Number	V-PIP V-IAM	V-PIP V-IAM	V-PIP V-IAM	N/A	V-PIP V-IAM
Income Payment Spread Sign Type	V-PIP V-IAM	V-PIP V-IAM	V-PIP V-IAM	N/A	V-PIP V-IAM
Income Payment Spread Percentage	V-PIP V-IAM	V-PIP V-IAM	V-PIP V-IAM	N/A	V-PIP V-IAM
Income Payment Day of Month (DOM)	V-PIP	V-PIP	V-PIP	N/A	V-PIP
Income Payment DOM Business/Calendar Indicator	V-PIP	V-PIP	V-PIP	N/A	V-PIP
Income Payment Week of Month	V-PIP	V-PIP	V-PIP	N/A	V-PIP
Income Payment Day of Week	V-PIP	V-PIP	V-PIP	N/A	V-PIP

4.1.3.5 Variable Rate Income Payment Information

4.1.3.6 Put Option Information

Put Option Information					
Field Name	MMI Products				
	СР	MC/MT	BA	DN	BS
Repayment Frequency Option Type	N/A	N/A	N/A	N/A	N/A
Start Date of 1st Tender Period	N/A	N/A	N/A	N/A	N/A
End Date of 1st Tender Period	N/A	N/A	N/A	N/A	N/A
Pay Date of 1st Tender Period	N/A	N/A	N/A	N/A	N/A
End Date of Last Tender Period	N/A	N/A	N/A	N/A	N/A

Put Option Information					
Field Name	MMI Products				
	СР	MC/MT	BA	DN	BS
1st Call Date	N/A	N/A	N/A	N/A	N/A
Call Price Percentage	N/A	N/A	N/A	N/A	N/A

4.1.3.7 Periodic Principal Payment Information

Periodic Principal Payment Information							
Field Name	MMI Products						
	СР	MC/MT	BA	DN	BS		
Principal Payment Interval Type (b)	PIP Zero IAM	PIP Zero IAM	PIP Zero IAM	Zero	PIP Zero IAM		
Principal Payment Interval Number (b)	PIP Zero IAM	PIP Zero IAM	PIP Zero IAM	Zero	PIP Zero IAM		
Principal Payment Day of Month (DOM) (b)	PIP Zero IAM	PIP Zero IAM	PIP Zero IAM	Zero	PIP Zero IAM		
Principal Payment DOM Business/Calendar Indicator (b)	PIP Zero IAM	PIP Zero IAM	PIP Zero IAM	Zero	PIP Zero IAM		
Principal Payment Week of Month (WOM) (b)	PIP Zero IAM	PIP Zero IAM	PIP Zero IAM	Zero	PIP Zero IAM		
Principal Payment Day of Week (DOW) (b)	PIP Zero IAM	PIP Zero IAM	PIP Zero IAM	Zero	PIP Zero IAM		
Targeted First Principal Payment Date (b)	PIP Zero IAM	PIP Zero IAM	PIP Zero IAM	Zero	PIP Zero IAM		
Actual First Principal Payment Date (b)	PIP Zero IAM	PIP Zero IAM	PIP Zero IAM	Zero	PIP Zero IAM		
First Principal Payment Record Date (b)	PIP Zero IAM	PIP Zero IAM	PIP Zero IAM	Zero	PIP Zero IAM		
Principal Payment Payable/Record Date Difference (# of days record date precedes pay date) (b)	PIP Zero IAM	PIP Zero IAM	PIP Zero IAM	Zero	PIP Zero IAM		

Periodic Principal Payment Information							
Field Name	MMI Products						
	СР	MC/MT	BA	DN	BS		
Principal Payment Business/Calendar Indicator (b)	PIP Zero IAM	PIP Zero IAM	PIP Zero IAM	Zero	PIP Zero IAM		
Principal Payment Weekend/Holiday Indicator (b)	PIP Zero IAM	PIP Zero IAM	PIP Zero IAM	Zero	PIP Zero IAM		

4.1.3.8 Indexed Principal Payment Information

Indexed Principal Payment Information						
Field Name	MMI Products					
		MC/MT	BA	DN	BS	
London Calendar Principal Payment Indicator (a)	PIP Zero IAM	PIP Zero IAM	PIP Zero IAM	Zero	PIP Zero IAM	
Principal Index/Formula Name - Part 1 (a)	PIP Zero IAM	PIP Zero IAM	PIP Zero IAM	Zero	PIP Zero IAM	
Principal Index/Formula Name - Part 2 (a)	PIP Zero IAM	PIP Zero IAM	PIP Zero IAM	Zero	PIP Zero IAM	
Principal Payment Indexed Maturity Interval Type (a)	PIP Zero IAM	PIP Zero IAM	PIP Zero IAM	Zero	PIP Zero IAM	
Principal Payment Indexed Maturity Interval Number (a)	PIP Zero IAM	PIP Zero IAM	PIP Zero IAM	Zero	PIP Zero IAM	
Principal Payment Spread Sign Type (a)	PIP Zero IAM	PIP Zero IAM	PIP Zero IAM	Zero	PIP Zero IAM	
Principal Payment Spread Percentage (a)	PIP Zero IAM	PIP Zero IAM	PIP Zero IAM	Zero	PIP Zero IAM	
Settlement Days Principal Payment After Maturity Date (Optional) (a)	PIP Zero IAM	PIP Zero IAM	PIP Zero IAM	Zero	PIP Zero IAM	
Final Principal Payment Calendar/Business Day Indicator (a)	PIP Zero IAM	PIP Zero IAM	PIP Zero IAM	Zero	PIP Zero IAM	

Indexed Principal Payment Information							
Field Name		MMI Products					
	СР	MC/MT	BA	DN	BS		
Settlement Days Income Payment After Maturity Date (Optional) (a)	PIP Zero IAM	PIP Zero IAM	PIP Zero IAM	Zero	PIP Zero IAM		
Final Income Payment Calendar/Business Day Indicator (a)	PIP Zero IAM	PIP Zero IAM	PIP Zero IAM	Zero	PIP Zero IAM		

4.1.3.9 Bankers' Acceptance Issuance Information

Bankers Acceptance Issuance Information						
	СР	MC/MT	BA	DN	BS	
BA Draft Date	N/A	N/A	PIP Zero IAM	N/A	N/A	
BA Drawer Name	N/A	N/A	PIP Zero IAM	N/A	N/A	
BA Letter of Credit Bank Name	N/A	N/A	PIP Zero IAM	N/A	N/A	
BA Letter of Credit Number	N/A	N/A	PIP Zero IAM	N/A	N/A	

4.1.3.10 Bankers' Acceptance Commodity Information

Bankers Acceptance Commodity Information							
	СР	MC/MT	BA	DN	BS		
Issuance Product Type	PIP Zero IAM	PIP Zero IAM	PIP Zero IAM	Zero	PIP Zero IAM		
Instruction Type	PIP Zero IAM	PIP Zero IAM	PIP Zero IAM	Zero	PIP Zero IAM		
Income Rate Type	PIP Zero IAM	PIP Zero IAM	PIP Zero IAM	Zero	PIP Zero IAM		

^{4.} MMI Field Requirements

Bankers Acceptance Commodity Information							
	СР	MC/MT	BA	DN	BS		
Income Payment Type	PIP Zero IAM	PIP Zero IAM	PIP Zero IAM	Zero	PIP Zero IAM		
BA Commodity Name	N/A	N/A	PIP Zero IAM	N/A	N/A		
BA Dollar Valuation Amount	N/A	N/A	PIP Zero IAM	N/A	N/A		
BA Valuation Percentage	N/A	N/A	PIP Zero IAM	N/A	N/A		
BA Country/State of Origin	N/A	N/A	PIP Zero IAM	N/A	N/A		
BA Country/State of Destination	N/A	N/A	PIP Zero IAM	N/A	N/A		

4.2 MMI Field Requirements (Part 2)

4.2.1 MMI Products: MTN, MTBN, MTDN, CD, PFD/CP and Corp/Muni VRDO/CP

The following tables/charts below detail the fields applicable to the following MMI products:

- MN-530 Medium-Term Note (excluding DP and BM)
- BM-532 Bank Note, Medium-Term
- DP-531 Deposit Note, Medium-Term
- CD-504 Institutional Certificate of Deposit
- PC-120 Preferred Stock in Commercial Paper-Like Mode
- CV-526 Corporate VRDO/CP
- MV-320 Municipal Commercial Paper, Tax-Exempt VRDO/CP
- MX-320 Municipal Commercial Paper, Taxable VRDO/CP

The following abbreviations are used to describe the types of MMIs (based on income rate type and income payment type) that are applicable to a specific field:

- F-PIP: Fixed-rate, periodic income payment MMI (Income Rate Type = F and Income Payment Type = P)
- V-PIP: VARIABLE-rate, periodic income payment MMI (Income Rate Type = V and Income Payment Type = P)
- PIP: Fixed-rate and Variable-rate, periodic income payment MMI (Income Rate Type = F or V and Income Payment Type = P)

^{4.} MMI Field Requirements

- Zero: Zero-coupon MMI (Income Payment Type = D)
- F-IAM: FIXED-rate, income at maturity only MMI (Income Rate Type = F and Income Payment Type=
 I)
- V-IAM: Variable-rate, income at maturity only MMI (Income Rate Type = V and Income Payment Type = I)
- IAM: Fixed-rate and Variable-rate, income at maturity only MMI (Income Rate Type = F or V and Income Payment Type = I)

The literal N/A is used when the field is not applicable to a MMI.

4.2.2 Notes:

The notes listed below apply to the following tables and charts:

- 1. The following fields are the same fields but different literals are used depending on the issuance product type:
 - Face Value (applicable to all MMIs except Preferred Stock in CP-Like Mode)
 - Number of Shares (applicable only to Preferred Stock in CP-Like Mode)
- 2. The following fields are the same fields but different literals are used depending on the issuance product type:
 - Minimum Denomination Amount (applicable to all MMIs except Preferred Stock in CP-Like Mode)
 - Minimum Number of Shares (applicable only to Preferred Stock in CP-Like Mode)
- 3. The following fields are the same fields but different literals are used depending on the issuance product type:
 - Incremental Denomination Amount Thereafter (applicable to all MMIs except Preferred Stock in CP-Like Mode)
 - Incremental Number of Shares Thereafter (applicable only to Preferred Stock in CP-Like Mode)
- 4. If the Indexed Principal Indicator is equal to Y, then the Index Principal information must be supplied by the Participant.
- 5. If the Periodic/Amortizing Principal Indicator is equal to Y, then the Periodic Principal Payment information must be supplied by the Participant. For MMIs with periodic income payments, the corresponding income payment information (i.e., dates and frequency) apply to principal payments also.
- 6. If the Repayment (Put) Option Indicator is equal to Y, then the Put information must be supplied by the Participant.
- 7. If the Call Indicator is equal to Y, then the Call information must be supplied by the Participant.
- 8. The following fields are the same fields but different literals are used depending on the income rate type and income payment type:
 - Income Rate %
 - Discount Rate
 - Income Rate (1st Payment)
- 9. The following fields are the same fields but different literals are used depending on the income rate type and income payment type:
 - Income Payment per \$1000 (1st Payment)
 - Income Payment per \$1000 (At Maturity)

- 10. The default value for the Accrual Period Method Type is 'P' (Payable to payable date accrual) for fixedrate periodic income payment MMIs.
- 11. The default value for the Income Payment Business/Calendar Indicator is 'C' (calendar days) for fixed-rate periodic income payment MMIs listed below.

4.2.3 Detailed MMI Field Requirements (Part 2)

4.2.3.1 Issuance, Do and Ticket Information (Part 1)

Issuance, DO and Ticket Information (Part 1)							
	MN/BM/DP	CD	PC	CV/MV/MX			
Issuance Product Type	PIP Zero IAM	PIP Zero IAM	PIP IAM	PIP IAM			
Instruction Type	PIP Zero IAM	PIP Zero IAM	PIP IAM	PIP IAM			
Income Rate Type	PIP Zero IAM	PIP Zero IAM	PIP IAM	PIP IAM			
Income Payment Type	PIP Zero IAM	PIP Zero IAM	PIP IAM	PIP IAM			

4.2.3.2 Issuance, Do and Ticket Information (Part 2)

Issuance, DO and Ticket Info–Part 2							
Field Name		MMI Pro	oducts				
	MN/BM/DP	CD	PC	CV/MV/MX			
IA Transaction Number (Optional)	PIP Zero IAM	PIP Zero IAM	PIP IAM	PIP IAM			
Issuing Agent Number	PIP Zero IAM	PIP Zero IAM	PIP IAM	PIP IAM			
Paying Agent Number	PIP Zero IAM	PIP Zero IAM	PIP IAM	PIP IAM			
CUSIP Number	PIP Zero IAM	PIP Zero IAM	PIP IAM	PIP IAM			

^{4.} MMI Field Requirements

Issuance	, DO and Ticket Ir	nfo-Part 2		
Field Name		ММІ	Products	
	MN/BM/DP	CD	PC	CV/MV/MX
Ex-DTC Issuance Deposit Indicator	PIP Zero IAM	PIP Zero IAM	PIP IAM	PIP IAM
Settlement Date	PIP Zero IAM	PIP Zero IAM	PIP IAM	PIP IAM
Dated Date	PIP Zero IAM	PIP Zero IAM	PIP IAM	PIP IAM
Maturity Date	PIP Zero IAM	PIP Zero IAM	PIP IAM	PIP IAM
Face Value (a)	PIP Zero IAM	PIP Zero IAM	PIP IAM	PIP IAM
Number of Shares (a)	N/A	N/A	PIP IAM	N/A
Settlement Amount	PIP Zero IAM	PIP Zero IAM	PIP IAM	PIP IAM
Receiving Participant Number	PIP Zero IAM	PIP Zero IAM	PIP IAM	PIP IAM
Deliver Order Comment (Optional)	PIP Zero IAM	PIP Zero IAM	PIP IAM	PIP IAM
Special Instructions (Optional)	PIP Zero IAM	PIP Zero IAM	PIP IAM	PIP IAM
Minimum Denomination Amount (b)	PIP Zero IAM	PIP Zero IAM	PIP IAM	PIP IAM
Minimum Number of Shares (b)	N/A	N/A	PIP IAM	N/A
Incremental Denomination Amount Thereafter (c)	PIP Zero IAM	PIP Zero IAM	N/A	PIP IAM
Incremental Number of Shares Thereafter (c)	N/A	N/A	PIP IAM	N/A

4. MMI Field Requirements

Issuance, DO and Ticket Info–Part 2							
Field Name		MMI Pro	oducts				
	MN/BM/DP	CD	PC	CV/MV/MX			
Sales Agent/Direct Type	PIP Zero IAM	N/A	N/A	N/A			
Sales Price Percentage	PIP Zero IAM	N/A	N/A	N/A			
Commission Percentage	PIP Zero IAM	N/A	N/A	N/A			

4.2.3.3 Features

Features							
Field Name		MMI P	roduct				
	MN/BM/DP	CD	PC	CV/MV/MX			
Indexed Principal Indicator (d)	PIP Zero IAM	PIP Zero IAM	PIP IAM	PIP IAM			
Periodic/Amortizing Principal Indicator (e)	PIP Zero IAM	PIP Zero IAM	PIP IAM	PIP IAM			
Foreign Currency Indicator	PIP Zero IAM	PIP Zero IAM	PIP IAM	PIP IAM			
Foreign Currency Code	PIP Zero IAM	PIP Zero IAM	PIP IAM	PIP IAM			
US Dollar Payment Option Indicator	PIP Zero IAM	PIP Zero IAM	PIP IAM	PIP IAM			
Repayment (Put) Option Indicator (f)	PIP Zero IAM	N/A	N/A	N/A			
Call Indicator (g)	PIP Zero IAM	N/A	PIP IAM	PIP IAM			
Changeable Income Payment Frequency Indicator	PIP Zero IAM	N/A	N/A	N/A			

Features									
Field Name		MMI Product					MMI Product		
	MN/BM/DP	CD	PC	CV/MV/MX					
Repayment (Put) Upon Death Indicator	PIP Zero IAM	N/A	N/A	N/A					
Extendable Maturity Indicator	PIP Zero IAM	N/A	N/A	N/A					
Income Rate Reset Indicator	PIP IAM	N/A	N/A	N/A					
Renewable Note Indicator	PIP Zero IAM	N/A	N/A	N/A					
Income Step-Up Indicator	PIP IAM	N/A	N/A	N/A					
Income Step-Up Rate	PIP IAM	N/A	N/A	N/A					
Income Step-Up Date	PIP IAM	N/A	N/A	N/A					

4.2.3.4 Income Payment Information

Income Payment Information						
Field Name	MMI Products					
	MN/BM/DP	CD	PC	CV/MV/MX		
Income Rate % (h)	F-PIP F-IAM	F-PIP F-IAM	F-PIP F-IAM	F-PIP F-IAM		
Discount Rate (h)	Zero	Zero	N/A	N/A		
Income Rate (1st Payment) (Optional) (h)	V-PIP	V-PIP	V-PIP	V-PIP		
Income Payment Amount Per \$1,000 (1 st Payment) (i)	F-PIP F-IAM	F-PIP F-IAM	F-PIP F-IAM	F-PIP F-IAM		
Income Payment per \$1000 (At Maturity) (i)	F-IAM	F-IAM	F-IAM	F-IAM		
Income Calculation Formula Type	F-PIP F-IAM	F-PIP F-IAM	F-PIP F-IAM	F-PIP F-IAM		
Income Payment Interval Type	F-PIP V-PIP	F-PIP V-PIP	F-PIP V-PIP	F-PIP V-PIP		
Income Payment Interval Number	F-PIP V-PIP	F-PIP V-PIP	F-PIP V-PIP	F-PIP V-PIP		

Income Payment Information							
Field Name	MMI Products						
	MN/BM/DP	CD	PC	CV/MV/MX			
Targeted 1st Income Payment Date	F-PIP V-PIP	F-PIP V-PIP	F-PIP V-PIP	F-PIP V-PIP			
Actual 1st Income Payment Date	F-PIP V-PIP	F-PIP V-PIP	F-PIP V-PIP	F-PIP V-PIP			
Income Payment Accrual Period Measure Type	F-PIP V-PIP	F-PIP V-PIP	F-PIP V-PIP	F-PIP V-PIP			
Income Payment Accrual Period Method Type (j)	F-PIP V-PIP	F-PIP V-PIP	F-PIP V-PIP	F-PIP V-PIP			
First Income Payment Record Date	F-PIP V-PIP	N/A	F-PIP V-PIP	F-PIP V-PIP			
Income Payment Payable/Record Date Difference (# of days record date precedes pay date)	F-PIP V-PIP	N/A	F-PIP V-PIP	F-PIP V-PIP			
Income Payment Business/Calendar Indicator (k)	F-PIP V-PIP	N/A	F-PIP V-PIP	F-PIP V-PIP			
Income Payment Weekend/Holiday Indicator	F-PIP V-PIP	N/A	F-PIP V-PIP	F-PIP V-PIP			

4.2.3.5 Variable Rate Income Payment Information

Variable Rate Income Payment Information						
	MN/BM/DP	CD	PC	CV/MV/MX		
Income Rate Reset Interval Type	V-PIP	V-PIP	V-PIP	V-PIP		
	V-AM	V-IAM	V-IAM	V-IAM		
Income Rate Reset Interval Number	V-PIP	V-PIP	V-PIP	V-PIP		
	V-AM	V-IAM	V-IAM	V-IAM		
London Calendar Income Payment Indicator	V-PIP	V-PIP	V-PIP	V-PIP		
	V-AM	V-IAM	V-IAM	V-IAM		
Variable Rate Income Index Name - Part 1	V-PIP	V-PIP	V-PIP	V-PIP		
	V-AM	V-IAM	V-IAM	V-IAM		
Variable Rate Income Index Name - Part 2	V-PIP	V-PIP	V-PIP	V-PIP		
	V-AM	V-IAM	V-IAM	V-IAM		
Income Payment Index Maturity Interval Type	V-PIP	V-PIP	V-PIP	V-PIP		
	V-AM	V-IAM	V-IAM	V-IAM		
Income Payment Index Maturity Interval Number	V-PIP	V-PIP	V-PIP	V-PIP		
	V-AM	V-IAM	V-IAM	V-IAM		
Income Payment Spread Sign Type	V-PIP	V-PIP	V-PIP	V-PIP		
	V-AM	V-IAM	V-IAM	V-IAM		

Variable Rate Income Payment Information						
	MN/BM/DP	CD	PC	CV/MV/MX		
Income Payment Spread Percentage	V-PIP V-AM	V-PIP V-IAM	V-PIP V-IAM	V-PIP V-IAM		
Income Payment Day of Month (DOM)	V-PIP	V-PIP	V-PIP	V-PIP		
Income Payment DOM Business/Calendar Indicator	V-PIP	V-PIP	V-PIP	V-PIP		
Income Payment Week of Month	V-PIP	V-PIP	V-PIP	V-PIP		
Income Payment Day of Week	V-PIP	V-PIP	V-PIP	V-PIP		

4.2.3.6 Put Information

Put Information						
	MN/BM/DP	CD	PC	CV/MV/MX		
Repayment Frequency Option Type (f)	PIP Zero IAM	N/A	N/A	N/A		
Start Date of 1st Tender Period (f)	PIP Zero IAM	N/A	N/A	N/A		
End Date of 1st Tender Period (f)	PIP Zero IAM	N/A	N/A	N/A		
Pay Date of 1st Tender Period (f)	PIP Zero IAM	N/A	N/A	N/A		
End Date of Last Tender Period (f)	PIP Zero IAM	N/A	N/A	N/A		

4.2.3.7 Call Information

Call Information					
	MN/BM/DP	CD	РС	CV/MV/MX	
1st Call Date (g)	PIP Zero IAM	N/A	PIP IAM	PIP IAM	
Call Price Percentage (g)	PIP Zero IAM	N/A	PIP IAM	PIP IAM	

^{4.} MMI Field Requirements

Periodic Principal Payment Information					
	MN/BM/DP	CD	PC	CV/MV/MX	
Principal Payment Frequency Interval Type (e)	PIP Zero IAM	PIP Zero IAM	PIP IAM	PIP IAM	
Principal Payment Frequency Interval Number (e)	PIP Zero IAM	PIP Zero IAM	PIP IAM	PIP IAM	
Principal Payment Day of Month (DOM) (e)	PIP Zero IAM	PIP Zero IAM	PIP IAM	PIP IAM	
Principal Payment DOM Business/Calendar Indicator (e)	PIP Zero IAM	PIP Zero IAM	PIP IAM	PIP IAM	
Principal Payment Week of Month (WOM) (e)	PIP Zero IAM	PIP Zero IAM	PIP IAM	PIP IAM	
Principal Payment Day of Week (DOW) (e)	PIP Zero IAM	PIP Zero IAM	PIP IAM	PIP IAM	
Targeted First Principal Payment Date (e)	PIP Zero IAM	PIP Zero IAM	PIP IAM	PIP IAM	
Actual First Principal Payment Date (e)	PIP Zero IAM	PIP Zero IAM	PIP IAM	PIP IAM	
First Principal Payment Record Date (e)	PIP Zero IAM	PIP Zero IAM	PIP IAM	PIP IAM	
Principal Payment Payable/Record Date Difference (# of days record date precedes pay date) (e)	PIP Zero IAM	PIP Zero IAM	PIP IAM	PIP IAM	
Principal Payment Business/Calendar Indicator (e)	PIP Zero IAM	PIP Zero IAM	PIP IAM	PIP IAM	
Principal Payment Weekend/Holiday Indicator (e)	PIP Zero IAM	PIP Zero IAM	PIP IAM	PIP IAM	

4.2.3.8 Periodic Principal Payment Information

^{4.} MMI Field Requirements

Indexed Principal Payment Information					
	MN/BM/DP	CD	PC	CV/MV/MX	
London Calendar Principal Payment Indicator (d)	PIP Zero IAM	PIP Zero IAM	PIP IAM	PIP IAM	
Principal Index/Formula Name–Part 1 (d)	PIP Zero IAM	PIP Zero IAM	PIP IAM	PIP IAM	
Principal Index/Formula Name–Part 2 (d)	PIP Zero IAM	PIP Zero IAM	PIP IAM	PIP IAM	
Principal Payment Indexed Maturity Interval Type (d)	PIP Zero IAM	PIP Zero IAM	PIP IAM	PIP IAM	
Principal Payment Indexed Maturity Interval Number(d)	PIP Zero IAM	PIP Zero IAM	PIP IAM	PIP IAM	
Principal Payment Spread Sign Type (d)	PIP Zero IAM	PIP Zero IAM	PIP IAM	PIP IAM	
Principal Payment Spread Percentage (d)	PIP Zero IAM	PIP Zero IAM	PIP IAM	PIP IAM	
Settle. Days Principal Payment After Maturity Date (Optional) (d)	PIP Zero IAM	PIP Zero IAM	PIP IAM	PIP IAM	
Final Principal Payment Calendar/Business Day Indicator (d)	PIP Zero IAM	PIP Zero IAM	PIP IAM	PIP IAM	
Settle. Days Income Payment After Maturity Date (Optional) (d)	PIP Zero IAM	PIP Zero IAM	PIP IAM	PIP IAM	
Final Income Payment Calendar/Business Day Indicator (d)	PIP Zero IAM	PIP Zero IAM	PIP IAM	PIP IAM	

4.2.3.9 Indexed Principal Payment Information

^{4.} MMI Field Requirements

Bankers' Acceptance Issuance Information							
BA Draft Date	N/A	N/A	N/A	N/A			
BA Drawer Name	N/A	N/A	N/A	N/A			
BA Letter of Credit Bank Name	N/A	N/A	N/A	N/A			
BA Letter of Credit Number	N/A	N/A	N/A	N/A			

4.2.3.10 Bankers' Acceptance Issuance Information

4.2.3.11 Bankers' Acceptance Commodity Information

Bankers' Acceptance Commodity Information					
	MN/BM/DP	CD	PC	CV/MV/MX	
Issuance Product Type	N/A	N/A	N/A	N/A	
Instruction Type	N/A	N/A	N/A	N/A	
Income Rate Type	N/A	N/A	N/A	N/A	
Income Payment Type	N/A	N/A	N/A	N/A	
BA Commodity Name	N/A	N/A	N/A	N/A	
BA Dollar Valuation Amount	N/A	N/A	N/A	N/A	
BA Valuation Percentage	N/A	N/A	N/A	N/A	
BA Country/State of Origin	N/A	N/A	N/A	N/A	
BA Country/State of Destination	N/A	N/A	N/A	N/A	

^{4.} MMI Field Requirements

5. APPENDIX A. MMI ERROR CODES

The following describes the errors that can be received during the edit of a MMI Issuance transaction. This error list describes both the Field Identifier and the Error Code. These codes are defined in DTF file ICMFIL for Field Identifiers and ICMERR for Error Codes.

5.1 MMI Error Codes

	MN	II Error Coo	les
Field Name	Field Code	Error Code	Description
IRS Income Code	BAHA	9AAE	IRS Income code is invalid.
		9AA5	IRS Income code is required and must not be blank.
Issuance Product Type	GAAX	9AAE	Issuance Product Type not equal to A thru C, E thru H, J thru L or N thru Q.
			Note: D, I and M are reserved for current discount CP, IAM CP and MTN, respectively.
		9AAE	Issuance Product Type not equal to the issuance product type on the Issuer Number Table for the issuer number specified.
		9AAE	Issuance Product Type = A (Institutional Certificate of Deposit) and the fields which are not applicable were not initialized to the default value of spaces or zeroes (refer to section 4, MMI Field Requirements, on page 16, for a list of fields which are not applicable to this product type).
		9AAE	Issuance Product Type = B (Corporate Commercial Paper) and the fields which are not applicable were not initialized to the default value of spaces or zeroes (refer to section 4, MMI Field Requirements, on page 16, for a list of fields which are not applicable to this product type).
		9AAE	Issuance Product Type = C (Corporate VRDO in CP Mode) and the fields which are not applicable were not initialized to the default value of spaces or zeroes (refer to section 4, MMI Field Requirements, on page 16, for a list of fields which are not applicable to this product type).

^{5.} Appendix A. MMI Error Codes

	MMI Error Codes						
Field Name	Field Code	Error Code	Description				
		9AAE	Issuance Product Type = E (Tax-Exempt Municipal Commercial Paper) and the fields which are not applicable were not initialized to the default value of spaces or zeroes (refer to section 4, MMI Field Requirements, on page 16, for a list of fields which are not applicable to this product type).				
		9AAE	Issuance Product Type = F (Taxable Municipal Commercial Paper) and the fields which are not applicable were not initialized to the default value of spaces or zeroes (refer to section 4, MMI Field Requirements, on page 16, for a list of fields which are not applicable to this product type).				
		9AAE	Issuance Product Type = G (Tax-Exempt Municipal VRDO/CP) and the fields which are not applicable were not initialized to the default value of spaces or zeroes (refer to section 4, MMI Field Requirements, on page 16, for a list of fields which are not applicable to this product type).				
		9AAE	Issuance Product Type = H (Taxable Municipal VRDO/CP) and the fields which are not applicable were not initialized to the default value of spaces or zeroes (refer to section 4, MMI Field Requirements, on page 16, for a list of fields which are not applicable to this product type).				
		9AAE	Issuance Product Type = J (Medium-Term Note excluding Medium-Term Deposit Note and Bank Note) and the fields which are not applicable were not initialized to the default value of spaces or zeroes (refer to section 4, MMI Field Requirements, on page 16, for a list of fields which are not applicable to this product type).				
		9AAE	Issuance Product Type = K (Deposit Note) and the fields which are not applicable were not initialized to the default value of spaces or zeroes (refer to section 4, MMI Field Requirements, on page 16, for a list of fields which are not applicable to this product type).				
		9AAE	Issuance Product Type = L (Medium-Term Bank Note) and the fields which are not applicable were not initialized to the default value of spaces or zeroes (refer to section 4, MMI Field Requirements, on page 16, for a list of fields which are not applicable to this product type).				
		9AAE	Issuance Product Type = N (Short-Term Bank Note) and the fields which are not applicable were not initialized to the default value of spaces or				

5. Appendix A. MMI Error Codes

	MMI Error Codes					
Field Name	Field Code	Error Code	Description			
			zeroes (refer to section 4, MMI Field Requirements, on page 16, for a list of fields which are not applicable to this product type).			
		9AAE	Issuance Product Type = O (Discount Note) and the fields which are not applicable were not initialized to the default value of spaces or zeroes (refer to section 4, MMI Field Requirements, on page 16, for a list of fields which are not applicable to this product type).			
		9AAE	Issuance Product Type = P (Preferred Stock in CP- Like Mode) and the fields which are not applicable were not initialized to the default value of spaces or zeroes (refer to section 4, MMI Field Requirements, on page 16, for a list of fields which are not applicable to this product type).			
		9AAE	Issuance Product Type = Q (Bankers' Acceptance) and the fields which are not applicable were not initialized to the default value of spaces or zeroes (refer to section 4, MMI Field Requirements, on page 16, for a list of fields which are not applicable to this product type).			
Instruction Type	GAAY	9AAE	Instruction type is not equal to I or C.			
Issuing Agent Number	CAAJ	9AAF	Issuing Agent number is not numeric.			
		9AAH	Issuing agent number = zeroes.			
		9AAT	Issuing agent number is not a DTC Participant.			
		9AAU	Issuing agent number is chilled for SDFS valued DOs.			
		ΜΑΑΑ	Issuing agent number is not a valid issuing agent on DTC Master Table for the specified Issuance Product Type			
			Note: Passing this edit check implies that the issuing agent is SDFS eligible.			
		MAAB	Issuing agent number is not eligible for the issuer number specified; that is, the issuing agent number is not found on the Issuance Control Table for the issuer number specified in the issuance instruction.			
		9AAW	Issuing Agent Number is chilled for SDFS free DOs.			

	MMI Error Codes					
Field Name	Field Code	Error Code	Description			
Paying Agent Number	СААК	CAAK MAAA	Paying Agent Number is not a valid paying agent on DTC Master Table for the specified Issuance Product Type			
			Note: Passing this edit check implies that the paying agent is SDFS eligible.			
		9AAT	Paying Agent Number is not a DTC Participant.			
		MAAB	Paying Agent Number is not eligible for the issuer number specified; that is, the paying agent number is not found on the Issuance Control Table for the issuer number and issuing agent number specified in the issuance instruction.			
		9AAF	Paying Agent Number is not numeric.			
CUSIP Number	GAAA	9AAH	First 6 characters of the CUSIP Number (issuer number) = zeroes.			
		9AA0	CUSIP Number is invalid (positions 1–8 of the CUSIP number is not equal to A-H, J-N, P-Z or 0- 9, or position 9 of the CUSIP number is not equal to 0-9).			
			Note: The letters I and O are not valid characters to be used for the CUSIP number.			
		9AA1	Invalid check digit for CUSIP Number.			
		MAAC	First 6 characters of the CUSIP Number (issuer number) not found on the Issuer Number Table; issuer number status = D (pending delete) on the Issuer Number Table; or the acronym's status = D (pending delete) on the Issuer Acronym Table for the specified issuer number.			
		MAAC	First 6 characters of the CUSIP Number (issuer number) are not found on the Issuer Number Table; the issuer number status = F (frozen) on the Issuer Number Table; or the acronym's status = F (frozen) on the Issuer Acronym Table for the specified issuer number.			

^{5.} Appendix A. MMI Error Codes

MMI Error Codes					
Field Name	Field Code	Error Code	Description		
		9AA9	Seventh and eighth position of the CUSIP Number (issue number) does not equal one of the valid issue numbers established for each possible maturity date month and day.		
			Note: Applies to issuer numbers set up on the Issuer Number Table as discount issuer numbers. This implies that the span from dated date to maturity date is 1 year or less.		
		MAAD	CUSIP Number's Maturity Date on the MFC Security Table (as an active CUSIP) is less than the current date		
			Note: Applies to additional issuance instructions only.		
		MAAE	CUSIP Number is inactive on MFC Security Table.		
		MAAF	Issuance and Deliver Order information on the issuance instruction does not match the original issuance instruction's Issuance and Deliver Order information.		
			Note: Applies to additional issuance instructions only.		
		MAAG	Features on the issuance instruction do not match the original issuance instruction's Features (see the fields listed in Section 4.1.3.3 and 4.2.3.3, Features.		
			Note: This applies to additional issuance instructions only.		

^{5.} Appendix A. MMI Error Codes

	MMI Error Codes				
Field Name	Field Code	Error Code	Description		
		MAAH	Income Payment information on the issuance instruction does not match the original issuance instruction's Income Payment information (see the fields listed in the Section 4.1.3.4 and 4.2.3.4, Income Payment Information).		
			Note: This applies to additional issuance instructions only.		
		MAAI	Variable Rate Income Payment information on the issuance instruction does not match the original issuance instruction's Variable Rate Income Payment information (see the fields listed in Section 4.1.3.5 and 4.2.3.5, Variable Rate Income Payment Information).		
			Note: This applies to additional issuance instructions only.		
		MAAJ	Principal Payment information on the issuance instruction does not match the original issuance instruction's Principal Payment information (see the fields listed in Sections 4.1.3.7, 4.1.3.8, 4.2.3.8, and 4.2.3.9, Principal Payment Information).		
			Note: This applies to additional issuance instructions only.		
		MAAK	Indexed Principal Payment information on the issuance instruction does not match the original issuance instruction's Indexed Principal Payment information (see the fields listed in Sections 4.1.3.8 and 4.2.3.9, Indexed Principal Payment Information).		
			Note: This applies to additional issuance instructions only.		

^{5.} Appendix A. MMI Error Codes

	м	MI Error Co	des
Field Name	Field Code	Error Code	Description
		MAAL	Put Option and Call Information; information on the issuance instruction does not match the original issuance instruction's Put Option and Call information (see the fields listed in Sections 4.1.3.6, 4.2.3.6, and 4.2.3.7, Put Option and Call Information
			Note: Applies to additional issuance instructions only.
		MAAM	CUSIP Number already exists for a Bankers' Acceptance (that is, no additional issuance instructions allowed for a Bankers' Acceptance).
Ex-DTC Issuance Deposit Indicator	EAAM	9AAE	The Ex-DTC Issuance Deposit Indicator is not equal to Y or N.
		9AAE	This indicator = N and the Last Payment Date is not blank.
Last Payment Date	BAAG	9AAJ	Invalid month for Last Payment Date (that is, months not equal to 1–12); or Invalid day for Last Payment Date (that is, day is not equal to 1–31 for months 1, 3, 5, 7, 8, 10, 12; day is not equal to 1–30 for months 4, 6, 9 and 11; day is not equal to 1–28 for month 2 of a non-leap year; day is not equal to 1–29 for month 2 of a leap year); or Invalid year for Last Payment Date (that is, year is not numeric). Note: This can be validated using the CALENDAR routine.
		9AAJ	This date is greater than the DTC Settlement Date.

^{5.} Appendix A. MMI Error Codes

	M	MI Error Co	des
Field Name	Field Code	Error Code	Description
Settlement Date	BAAA	9AAJ	Invalid month for Settlement Date (that is, month is not equal to 1–12); or Invalid day for Settlement Date. (that is, day is not equal to 1–31 for months 1, 3, 5, 7, 8, 10, 12; day is not equal to 1–30 for months 4, 6, 9 and 11; day is not equal to 1–28 for month 2 of a non-leap year; day is not equal to 1–29 for month 2 of a leap year); or Invalid year for Settlement Date (i.e., year is not numeric). Note: This can be validated using the CALENDAR routine.
		9AAE	Settlement Date is less than dated date.
		9AA8	Settlement Date is less than the current date.
		9AAJ	Settlement Date is not a valid DTC settlement date.
		9AAJ	Number of calendar days from the current date to the settlement date is greater than 15 days.
		9AAJ	Settlement date is greater than or equal to the First Income Payment Record Date.
			Note: Applies when the field First Income Payment Record Date is applicable.
		9AAJ	Settlement date is greater than or equal to the First Income Payment Date minus the Income Payment Record/Payable Date Difference.
			Note: Applies when the field Income Payment Record/Payable Date Difference is applicable.

^{5.} Appendix A. MMI Error Codes

	ММ	II Error Cod	es
Field Name	Field Code	Error Code	Description
Dated Date	BAAH	9AAJ	Invalid month for dated date (that is, month is not equal to 1–12); or Invalid day for dated date. (that is, day is not equal to 1–31 for months 1, 3, 5, 7, 8, 10, 12; day is not equal to 1–30 for months 4, 6, 9 and 11; day is not equal to 1–28 for month 2 of a non-leap year; day is not equal to 1–29 for month 2 of a leap year); or Invalid year for dated date (i.e., year is not numeric). Note: This can be validated using the CALENDAR routine.
Maturity Date or Mandatory Tender Date	BAAI	9AAJ	Invalid month for date (that is, month is not equal to 1–12); or Invalid day for date (that is, day is not equal to 1– 31 for months 1, 3, 5, 7, 8, 10, 12; day is not equal to 1–30 for months 4, 6, 9 and 11; day is not equal to 1–28 for month 2 of a non-leap year; day is not equal to 1–29 for month 2 of a leap year); or Invalid year for date (that is, year is not numeric). Note: This can be validated using the CALENDAR routine.
		9AAE	The span from Dated Date to Maturity Date is greater than 1 year.Note:Applies to issuer numbers set up on the Issuer Number Table as discount user numbers. This implies that the span from Dated Date to Maturity Date is one year or less.

^{5.} Appendix A. MMI Error Codes

	MMI Error Codes				
Field Name	Field Code	Error Code	Description		
		9AAE	The seventh and eight position of the CUSIP Number (issue number) is not equal to DTC's calculated maturity date.		
			Note: Applies to issuer numbers set up on the Issuer Number Table as discount user numbers. This implies that the span from Dated Date to Maturity date is one year or less.		
		9AAZ	Date is not greater than the Settlement Date.		
		9AAJ	Date is not a valid DTC Settlement Date and the span from the dated date to the maturity date or mandatory tender date is less than 5 years.		
		9AAE	Date is not greater than dated date.		
		MAAN	First 6 characters of the CUSIP Number (issuer number) is not valid for maturities of the year specified.		
			 Note: 1. Applies to issuer number set up on the Issuer Number Table as discount issuer numbers and the span from dated date to maturity is less than one year. 2. This edit is not applicable to Mandatory Tender Date (used for PFD/CP). 		
		9AAJ	Maturity date is not a valid London settlement date and the span from the dated date to the maturity date is less than 5 years.		
			Note: Applies to MMIs indexed to the London calendar for income or principal payments.		
		9AAJ	Maturity length (span from dated date to maturity date) is less than 6 calendar months.		
			Note: Applies to Bankers' Acceptance.		

^{5.} Appendix A. MMI Error Codes

	М	MI Error Cod	les
Field Name	Field Code	Error Code	Description
		9AAJ	Maturity length (span from dated date to maturity date) is greater than 1 year.
			Note: Applies to Corporate CP.
		9AAJ	The maturity length (span from dated date to maturity date) is less than or equal to 180 calendar days and the Income Payment Type is not equal to I (Income at Maturity Only).
			Note: Applies to Corporate and Municipal VRDO/CP.
		9AAJ	The maturity date is greater than the bond maturity date on Issuer Number Table.
			Note: Applies to Corporate and Municipal VRDO/CP.
Face Values or # of Shares	DAAA	9AAF	Field is not numeric.
		9AAH	Field is equal to zeroes.
		9AA2	Field is greater than 50,000,000 for valued DOs.
		9AA3	Field is greater than 999,999,999 for free DOs.
Settlement Amount	DAAT	9AAF	Settlement amount is not numeric.
		9AA4	Settlement amount is greater than \$9,999,999,999.99.
Receiving Participant Number	CAAL	9AAF	Receiving Participant number is not numeric.
		9AAH	Receiving Participant number is equal to zeroes.
		9AAT	Receiving Participant number is not a DTC Participant.
		9AAY	Receiving Participant number is not SDFS eligible.
		9AAU	Receiving Participant number is chilled for SDFS valued DOs.
		9AAW	Receiving Participant number is chilled for SDFS free DOs.
		MAAO	Receiving Participant number is equal to issuing agent number.

MMI Error Codes			
Field Name	Field Code	Error Code	Description
Minimum Denomination Amount or Number of Shares	DAAU	9AAF	Field is not numeric.
		9AAH	Field is equal to zeroes.
Incremental Denomination Amount or Number of Shares Thereafter	DAAV	9AAF	Field is not numeric.
		9AAH	Field is equal to zeroes.
Sales Agent/Direct Type	GAA1	9AAE	Sales agent/Direct type is not equal to S or D.
Sales Price Percentage	DAAW	9AAF	Sales Price Percentage is not numeric.
		9AAH	Sales Price Percentage is equal to zeroes.
Commission Percentage	DAAX	9AAF	Commission rate is not numeric.
Cutoff Time	AAAH	9AAL	Past cutoff time (3 pm) for valued issuance DOs.
		9AAL	Past cutoff time (5 pm) for free issuance instructions requiring MFC Security Table add.
		9AAL	Past cutoff time (6:15 pm) for free issuance instructions requiring no MFC Security Table add.
		9AAL	Past cutoff time (5:00 pm) for issuance cancellations.
		MAAP	Issuance cancellation does not match a pending issuance instruction.
Miscellaneous Edit Checks	AAAH	9AA6	The issuance instruction is a duplicate issuance instruction based on CUSIP Number, transmission time stamp, input media, individual user signon, individual user number, individual user terminal/transmission ID and instruction type.
		9AA7	The issuance instruction or turnaround DO was rejected by ATP.
	GAAA	9AAN	The CUSIP Number for an issuance instruction or dealer turnaround DO was not eligible (for example, not found on DTC Master Table) at cutoff time.
Income Rate Type	FAAD	9AAE	Rate type is not equal to F or V and Income Payment Type is equal to P or I.
		9AAE	Income Rate Type = V and Variable Rate Type = N on the Issuer Number Table.
Income Payment Type	GAA0	9AAE	Income Payment Type is not equal to P, Z or I.
		9AAE	Income Payment Type is not equal to Z for Discount Notes.

	MMI Error Codes				
Field Name	Field Code	Error Code	Description		
		9AAE	Income Payment Type is not equal to P or I and the Issuance Product Type = C, G, H or P (Corporate VRDO/CP, Tax-exempt and Taxable Municipal VRDO/CP, and Preferred Stock in CP- like mode, respectively).		
		9AAE	Income Payment Type is not equal to Z and the issuer number is set up as a discount issuer number.		
		9AAE	Rate Type = F and Income Payment Type is not equal to P or I.		
		9AAE	Rate Type = V and the Income Payment Type is not equal to P or I.		
		9AAE	Income Payment Type = P, Income Rate Type = F and the fields which were not applicable did not contain the default value of spaces or zeroes.		
			Note: Refer to section 4, MMI Field Requirements, on page 16, for a list of fields not applicable based on income rate type and income payment type.		
		9AAE	Income Payment Type = P and the Income Rate Type = V, and the fields which were not applicable did not contain the default value of spaces or zeroes.		
			Note: Refer to section 4, MMI Field Requirements, on page 16, for a list of fields not applicable based on income rate type and income payment type.		
		9AAE	Income Payment Type = Z, and the fields which were not applicable did not contain the default value of spaces or zeroes.		
			Note: Refer to section 4, MMI Field Requirements, on page 16, for a list of fields not applicable based on income rate type and income payment type.		

^{5.} Appendix A. MMI Error Codes

	м	MI Error Co	des
Field Name	Field Code	Error Code	Description
		9AAE	Income Payment Type = I, and the Income Rate Type = F, and the fields which were not applicable did not contain the default value of spaces or zeroes.
			Note: Refer to section 4, MMI Field Requirements, on page 16, for a list of fields not applicable based on income rate type and income payment type.
		9AAE	Income Payment Type = I, and the Income Rate Type = V, and the fields which were not applicable did not contain the default value of spaces or zeroes.
			Note: Refer to section 4, MMI Field Requirements, on page 16, for a list of fields not applicable based on income rate type and income payment type.
Indexed Principal Indicator	EAAN	9AAE	Indexed principal indicator is not equal to Y or N.
		9AAE	Indicator on the Issuer Number Table is set to N and the indicator on the issuance instruction is equal to Y.
		9AAE	Indexed Principal Indicator = N and the fields that were not applicable do not contain the default value of zeroes or spaces.
			Note: Refer to the Indexed Principal Information subsection of section 4, MMI Field Requirements, on page 16.
Periodic/Amortizing Principal Indicator	EAA0	9AAE	Indicator is not equal to Y or N.
		9AAE	Indicator on the Issuer Number Table is set to N and the indicator on the issuance instruction is equal to Y.

^{5.} Appendix A. MMI Error Codes

	м	MI Error Co	des
Field Name	Field Code	Error Code	Description
		9AAE	Periodic/Amortizing Principal Indicator = N and the fields that were not applicable do not contain the default value of zeroes or spaces.
			Note: Refer to the Principal Payment Information subsection of section 4, MMI Field Requirements, on page 16.
Foreign Currency Indicator	EAAP	9AAE	Foreign Currency Indicator is not equal to Y or N.
		9AAE	Indicator on the Issuer Number Table is set to N and indicator on the issuance instruction is equal to Y
		9AAE	The difference between maturity date and settlement date is less than 30 days
			Note: Applies to Corporate CP with foreign currency indicator = Y.
Foreign Currency Code ID	GAAI	9AAE	Foreign Currency Code ID is not a valid ISO currency code.
		9AAE	Foreign Currency Indicator = N and the Foreign Currency Code ID is not equal to USD (US Dollars).
		9AAE	Foreign Currency Indicator = Y and the Foreign Currency Code ID is equal to USD (US Dollars).
US Dollar Payment Option Indicator	EAAQ	9AAE	US Dollar Payment Indicator must be Y or N when the Foreign Currency Indicator = Y.
		9AAE	US Dollar Payment Indicator is not blank and the foreign Currency Indicator = N.
Repayment (PUT) Option Indicator	EAAR	9AAE	The repayment PUT Option Indicator is not equal to Y or N.
		9AAE	The indicator on the Issuer Number Table is set to N and the indicator on the issuance instruction is equal to Y.

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MMI Error Codes			
Field Name	Field Code	Error Code	Description
		9AAE	Repayment PUT Option Indicator = N and the following fields were not applicable and do not contain the default value of zeroes or spaces:
			Repayment PUT Option Frequency: space default
			Start Date 1st Tender: zero default
			End Date 1st Tender: zero default
			End Date Last Tender: zero default.
Call Indicator	EAAS	9AAE	Call indicator is not equal to Y or N.
		9AAE	Indicator on the Issuer Number Table is set to N and the indicator on the issuance instruction is equal to Y.
		9AAE	If the Call Indicator = N, the following fields are not applicable and do not contain the default value:
			First Call Date (default = zero)
			Call Price Percentage (default = zero).
Changeable Income Payment Frequency Indicator	EAAT	9AAE	Changeable Income Payment Frequency Indicator is not equal to Y or N.
		9AAE	Indicator on the Issuer Number Table is set to N and the indicator on the issuance instruction is equal to Y.
Repayment (PUT) Option Upon Death Indicator	EAAU	9AAE	Repayment (PUT) Option Upon Death Indicator is not equal to Y or N.
		9AAE	The indicator on the Issuer Number Table is set to N and the indicator on the issuance instruction = Y.
Taxable Indicator	EAA2	9AAE	Taxable Indicator is not equal to Y or N.
		9AAE	Indicator on the Issuer Number Table is set to N and the indicator on the issuance instruction = Y.
Extendable Maturity Indicator	EAAV	9AAE	Extension of maturity indicator is not equal to Y or N.
		9AAE	Indicator on the Issuer Number Table is set to N and the indicator on the issuance instruction is equal to Y.
Income Rate Reset Indicator	EAAW	9AAE	Income rate reset indicator is not equal to Y or N.
		9AAE	Indicator on the Issuer Number Table is set to N and the indicator on the issuance instruction is equal to Y.
Renewable Note Indicator	EAAX	9AAE	Renewable note indicator is not equal to Y or N.

	MMI Error Codes				
Field Name	Field Code	Error Code	Description		
		9AAE	Indicator on the Issuer Number Table is set to N and the indicator on the issuance instruction is equal to Y.		
		9AAE	Renewable note indicator is equal to Y and the Extendable Maturity Indicator = Y.		
Income Step-Up Rate Indicator	EAAY	9AAE	Income Step-Up Rate Indicator is not equal to Y or N.		
Income Step-Up Rate	FAAE	9AAF	Income Step-Up Rate is not numeric.		
		9AAH	Income Step-Up Rate is equal to zero and Income Step-Up Rate Indicator = Y.		
		9AAE	Income Step-Up Rate is not equal to zero and Income Step-Up Rate Indicator = N.		
Income Step-Up Rate Effective Date	BAAC	9AAJ	Invalid month for First Payment Date (that is, month is not equal to 1–12); or Invalid day for first payment date (that is, day is not equal to 1–31 for months 1, 3, 5, 7, 8 10, 12; day is not equal to 1–30 for months 4, 6, 9 and 11; day is not equal to 1–28 for month 2 of a non-leap year; day is not equal to 1–28 for month 2 of a non-leap year; day is not equal to 1–29 for month 2 of a leap year); or Invalid year for First Payment Date (that is, year is not numeric). Note: 1. This can be validated using the CALENDAR routine. 2. Applies when Income Step-Up Rate Indicator = Y.		
		9AAE	This date is not equal to zero and Income Step-Up Rate Indicator = N.		
Income, Discount or Income Rate (of 1st Payment)	FAAF	9AAF	Rate is not numeric.		
		9AAH	Rate is equal to zeroes.		

^{5.} Appendix A. MMI Error Codes

MMI Error Codes				
Field Name	Field Code	Error Code	Description	
		9AAE	Rate is greater than 99.999%.	
			Note: Applies to MMIs with an Income Rate Type = F.	
		9AAE	Rate is greater than 99.99999%.	
			Note: Applies to MMIs with an Income Rate Type = V.	
Income Payment Amount Per \$1000 (1st	DAAY	9AAF	Amount per \$1000 is not numeric.	
payment)			Note: Applies if Foreign Currency Indicator = N.	
		9AAH	Amount is zeroes.	
			Note: Applies if Foreign Currency Indicator = N.	
		9AA9	Amount is not equal to DTC's calculated amount.	
		9AAE	Amount is greater than 999.999999.	
Income Payment Amount Per \$1000 (at maturity)	DAAY	9AAF	Amount per \$1000 is not numeric	
			Note: Applies if Foreign Currency Indicator = N.	
		9AA9	Amount is not equal to DTC's calculated amount; an RDP program will be used to verify this amount.	
			Note: Applies if Foreign Currency Indicator = N.	
Income Calculation Formula Type	GAA3	9AAE	Income Calculation Formula Type is not equal to 01, 02, 03 or 04.	
Income Payment Frequency Interval Type	GAA4	9AAE	Income Payment Frequency Interval Type is not equal to Y, M, W or D.	
Income Payment Frequency Interval Number	GAA5	9AAF	Income Payment Frequency Interval Number is not numeric.	

^{5.} Appendix A. MMI Error Codes

	м	MI Error Co	des
Field Name	Field Code	Error Code	Description
		9AAE	Income Payment Frequency Interval Number = zero and the Income Payment Frequency Interval Type = Y, M or W; 9AAE Income Payment Frequency Interval Number is less than 7 and the Income Payment Frequency Interval Type = D; Targeted First Income Payment Date BAA59AAJ Invalid month for First Payment Date (that is, month is not equal to 1–12); or Invalid day for First Payment Date (that is, day is not equal to 1–31 for months 1, 3, 5, 7, 8 10, 12; day is not equal to 1–30 for months 4, 6, 9 and 11; day is not equal to 1–28 for month 2 of a non-leap year; day is not equal to 1–29 for month 2 of a leap year); or Invalid year for First Payment Date (that is, year is not numeric).
		9AAE	This date is not between the Settlement Date and the Maturity Date.
Actual First Income Payment Date	BAA6	9AAJ	Invalid month for First Payment Date (that is, month is not equal to 1–12); or Invalid day for First Payment Date (that is, day is not equal to 1–31 for months 1, 3, 5, 7, 8 10, 12; day is not equal to 1–30 for months 4, 6, 9 and 11; day is not equal to 1–28 for month 2 of a non-leap year; day is not equal to 1–29 for month 2 of a leap year); or Invalid year for First Payment Date (that is, year is not numeric).
			This can be validated using the CALENDAR routine.
		9AAE	Date is not a DTC settlement date or, when applicable, a London business date.

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	MMI Error Codes				
Field Name	Field Code	Error Code	Description		
		9AAE	Date is not between the Settlement Date and the Maturity Date.		
Income Payment Accrual Period Measure Type	GAA6	9AAE	Income Payment Accrual Period Measure Type is not equal to A or T.		
		9AA5	Income Payment Accrual Period Measure Type = spaces and the Income Payment Accrual Period Method Type = P.		
		9AAE	Income Payment Accrual Period Measure Type is not equal to spaces and the Income Payment Accrual Period Method Type = R.		
Income Payment Accrual Period Method Type	EAAZ	9AAE	Income Payment Accrual Period Method Type is not equal to R or P.		
First Income Payment Record Date	BAA7	JAAG	Invalid month for Actual Record Date (that is, month is not equal to 1–12); or Invalid day for Actual Record Date (that is, day is not equal to 1–31 for months 1, 3, 5, 7, 8 10, 12; day is not equal to 1–30 for months 4, 6, 9 and 11; day is not equal to 1–28 for month 2 of a non-leap year; day is not equal to 1–29 for month 2 of a leap year); or Invalid year for Record Date (that is, year is not numeric). Note: 1. Applies when the field Income Payment Record/Payable Date Difference = 0. 2. This can be validated using the CALENDAR routine		
		9AAE	Income Payment Record Date is greater than or equal to the Targeted First Income Payment Date. Note: Applies when the field Income Payment Record/Payable Date difference = 0.		
Income Payment Record/Payable Date Difference (# of days record date precedes pay date)	BAAK	9AAF	Number of days is not numeric.		

	М	MI Error Co	des
Field Name	Field Code	Error Code	Description
		9AAH	Number of days is zeroes and the Targeted First Income Payment Record Date = zeroes.
		9AAE	Number of days is greater than zeroes and the Targeted First Income Payment Record Date is not equal to zeroes (that is, either the number of days or the Targeted First Income Payment Record Date must be supplied, but not both).
Income Payment Business/Calendar Indicator	EAA0	9AAE	Income Payment Business/Calendar Indicator is not equal to B or C.
Income Payment Week- end/Holiday Indicator	EAA1	9AAE	Income Payment Weekend/Holiday Indicator is no equal to A or B.
Income Rate Reset Interval Type	GAA7	9AAE	Income Rate Reset Interval Type is not equal to Y M. D or W.
Income Rate Reset Interval Number	GAA8	9AAF	Income Rate Reset Interval Number is not numeric.
		9AAH	Income Rate Reset Interval Number = zero.
London Calendar Income Payment Indicator	EAAK	9AAE	London Calendar Income Payment Indicator is no equal to Y or N.
Income Payment Variable Rate Index Name	HAAA	9AA5	Index name = blanks.
Income Payment Index Maturity Interval Type	GAA9	9AAE	Index maturity interval type is not equal to Y, M, V or D.
		9AA5	Index Maturity Interval Type is blank and Income Payment Index Maturity Interval Number, Income Payment Spread Sign Type, Income Payment Spread Percentage, are not equal to default values.
Income Payment Index Maturity Interval Number	GABA	9AAE	Index maturity interval number is not equal to 00– 99.
Income Payment Spread Sign Type	EAAL	9AAE	Spread sign type is not equal to + or –.
Income Payment Spread Percentage	DAAZ	9AAF	Spread percentage is not numeric.
Income Payment Day of Month (DOM)	BAAL	9AAE	Income Payment Day of Month is not equal to 1 thru 31.
			Note: Applies if the Income Payment Frequency Interval Type = Y or M.

	м	MI Error Co	des
Field Name	Field Code	Error Code	Description
		9AAE	Income Payment Day of Month is not equal to 0 and Income Payment Frequency Interval Type = W or D.
Income Payment DOM Business/Calendar Indicator	BAAM	9AAE	Income Payment DOM Business/Calendar Indicator is not equal to B or C.
			Note: Applies if the Income Payment Frequency Interval Type = Y or M.
		9AAE	Income Payment DOM Business/Calendar Indicator is not equal to spaces and Income Payment Frequency Interval Type = W or D.
Income Payment Week of Month	BAAN	9AAE	Income Payment Week of Month is not equal to 1– 4.
			Note: Applies if the Income Payment Frequency Interval Type = Y or M.
		9AAE	Income Payment Week of Month is not equal to 0 and Income Payment Frequency Interval Type = W or D.
Income Payment Day of Week	BAAO	9AAE	Income Payment Day of Week of not equal to M, T, W, R or F.
			Note: Applies if the Income Payment Frequency Interval Type = Y or M.
		9AAE	Income Payment Week of Month is greater than zeroes or Income Payment Day of Week is not blank and Income Payment Day of Month is greater than zeroes and Income Payment DOM Business/Calendar Indicator is not blank.
		9AA5	Income Payment Day of Week is blank and Income Payment Frequency Interval Type = W or D.

^{5.} Appendix A. MMI Error Codes

MMI Error Codes				
Field Name	Field Code	Error Code	Description	
Repayment PUT Option Frequency	GABB	9AAE	Repayment Option Frequency is not equal to A, S, Q, M, O, or I Note:	
			Applies when the Repayment Put Option Indicator = Y.	
		9AAE	End date of last tender period is not equal to the end date of first tender period.	
			Note: Applies when Repayment Put Option Indicator =Y and Repayment put option frequency = 0.	
		9AAE	End date of last tender period is less than the pay date of the first tender period.	
			Note: Applies when Repayment put option indicator = Y and repayment put option frequency = A, S, Q, M, or I.	
Start Date of First Tender Period	BAAP	9AAJ	Invalid month for Start Date of First Tender Period. (that is, month is not equal to 1–12); or Invalid day for Start Date of First Tender Period.	
			(that is, day is not equal to 1–31 for months 1, 3, 5, 7, 8 10, 12; day is not equal to 1–30 for months 4, 6, 9 and 11; day is not equal to 1–28 for month 2 of a non-leap year; day is not equal to 1–29 for month 2 of a leap year); or	
			Invalid year for Start Date of First Tender Period (that is, year is not numeric).	
			Note: 1. Applies when the Repayment put Option indicator = Y.	
			2. This can be validated using the CALENDAR routine.	

^{5.} Appendix A. MMI Error Codes

	MMI Error Codes				
Field Name	Field Code	Error Code	Description		
		9AAZ	Start Date of a First Tender Period is less than the Settlement Date.		
			Note: Applies when the Repayment Put Option indicator = Y.		
		9AAE	Start Date of First Tender Period is greater than the Maturity Date.		
			Note: Applies when the Repayment Put Option indicator = Y.		
		9AAE	Start Date of First Tender is greater than the End Date of First Tender, or is greater than the Pay Date of First Tender, or is greater than the End Date of Last Tender Period.		
			Note: Applies when the Repayment put Option indicator = Y.		
End Date of First Tender Period	BAAQ	9AAJ	Invalid month for End Date of First Tender Period. (that is, month is not equal to 1-12); or		
			Invalid day for End Date of First Tender Period (that is, day is not equal to 1–31 for months 1, 3, 5, 7, 8 10, 12; day is not equal to 1–30 for months 4, 6, 9 and 11; day is not equal to 1–28 for month 2 of a non-leap year; day is not equal to 1–29 for month 2 of a leap year);		
			or Invalid year for End Date of First Tender Period (that is, year is not numeric).		
			Note: 1. Applies when the Repayment Put Option Indicator = Y.		
			2. This can be validated using the CALENDAR routine.		

MMI Error Codes				
Field Name	Field Code	Error Code	Description	
		9AAE	End Date of First Tender Period is greater than the Maturity Date.	
			Note: Applies when the Repayment Put Option Indicator = Y.	
		9AAE	End Date of First Tender Period is greater than the Pay Date of the First Tender Period, or is greater than the End Date of Last Tender Period.	
Pay Date of First Tender Period	BAAR	BAAR 9AAJ	Invalid month for Pay Date of First Tender Period. (that is, month is not equal to 1–12); or Invalid day for Pay Date of First Tender Period (that is, day is not equal to 1–31 for months 1, 3, 5, 7, 8 10, 12; day is not equal to 1–30 for months 4, 6, 9 and 11; day is not equal to 1–28 for month 2 of a non-leap year; day is not equal to 1–29 for month 2 of a leap year); or Invalid year for Pay Date of First Tender Period (that is, year is not numeric). Note: 1. Applies when the REPAYMENT PUT OPTION INDICATOR = Y. 2. This can be validated using the CALENDAR routine.	
		9AAE	Pay Date of First Tender Period is greater than the Maturity Date. Note: Applies when the Repayment Put Option Indicator = Y.	

^{5.} Appendix A. MMI Error Codes

	мм	Il Error Code	9S
Field Name	Field Code	Error Code	Description
End Date of Last Tender Period	BAA3	9AAJ	Invalid month for End Date of Last Tender Period (that is, month is not equal to 1–12); or Invalid day for End Date of Last Tender Period (that is, day is not equal to 1–31 for months 1, 3, 5, 7, 8 10, 12; day is not equal to 1–30 for months 4, 6, 9 and 11; day is not equal to 1–28 for month 2 of a non-leap year; day is not equal to 1–29 for month 2 of a leap year); or Invalid year for End Date of Last Tender Period (that is, year is not numeric). Note: 1. Applies when the Repayment Put Option Indicator = Y 2. This can be validated using the CALENDAR routine.
		9AAE	The End Date of Last Tender Period is greater than the Maturity date. Note: Applies when the Repayment Put Option Indicator = Y.
First Call Date	BAA4	9AAJ	Invalid month for First Call Date (that is, month is not equal to 1–12); or Invalid day for First Call Date (i.e., day is not equal to 1–31 for months 1, 3, 5, 7, 8 10, 12; day is not equal to 1–30 for months 4, 6, 9 and 11; day is not equal to 1–28 for month 2 of a non-leap year; day is not equal to 1–29 for month 2 of a leap year); or Invalid year for First Call Date (that is, year is not numeric). Note: 1. Applies when the Call Indicator = Y. 2. This can be validated using the CALENDAR routine.

MMI Error Codes				
Field Name	Field Code	Error Code	Description	
		9AAE	This date is not between the Settlement Date and the Maturity Date.	
Call Price Percentage	DAA0	9AAF	Call price percentage is not numeric.	
			Note: Applies when the Call Indicator = Y.	
		9AAH	Call price percentage = zero.	
			Note: Applies when the Call Indicator = Y.	
Principal Payment Frequency Interval Type	GABC	9AAE	Principal Payment Frequency Interval Type is not equal to Y, M, W or D.	
Principal Payment Frequency Interval Number	GABD	9AAF	Principal Payment Frequency Interval Number is not numeric.	
		9AAH	Principal Payment Frequency Interval Number = zero and the Principal Payment Frequency Interval Type = Y, M or W.	
		9AAE	Principal Payment Frequency Interval Number is less than 7 and the Principal Payment Frequency Interval Type = D.	
		9AAE	Principal Payment Frequency Interval is more frequent than the Income Payment Frequency Interval, or the Principal Payment Frequency Interval does not fall in the cycle of the Income Payment Frequency Interval.	
Principal Payment Day of Month	BAAS	9AAJ	Principal Payment Day of Month is not equal to 1– 31.	
			Note: Applies if Principal Payment Frequency Interval Type = Y or M.	
		9AAE	(Day of the Month or Business/Calendar Days) and (Week of Month or Day of Week) were both entered.	
			Note: Applies if Principal Payment Frequency Interval Type = Y or M.	

5. Appendix A. MMI Error Codes

MMI Error Codes				
Field Name	Field Code	Error Code	Description	
		9AAE	Principal Payment Day of Month is not equal to 0 and the Principal Payment Frequency Interval Type = W or D.	
		9AAE	Principal Payment Day of Month is not equal to Income Payment Day of Month.	
			Note: Applies to MMIs with Income Payment Type = P and Periodic/Amortizing Principal Indicator = Y.	
Principal Payment Day of Month Business/Calendar Indicator	BAAT	9AAE	Principal Payment Day of Month Business/Calendar Indicator is not equal to B or C.	
			Note: Applies if Principal Payment Frequency Interval Type = Y or M.	
		9AAE	The Principal Payment Day of Month Business/Calendar Indicator is not equal to spaces and the Principal Payment Frequency Interval	
			Type = W or D.	
		9AAE	Principal Payment Day of Month Business/Calendar Indicator is not equal to Income Payment Day of Month Business/Calendar Indicator.	
			Note: Applies to MMIs with Income Payment Type = P and Periodic/Amortizing Principal Indicator = Y.	
Principal Payment Week of Month	BAAU	9AAE	The Principal Payment Week of Month is not equal to 1–4.	
			Note: Applies if Principal Payment Frequency Interval Type = Y or M.	
		9AAE	The Principal Payment Week of Month is not equal to 0 and the Principal Payment Frequency Interval Type = W or D.	

^{5.} Appendix A. MMI Error Codes

	м	MI Error Co	des
Field Name	Field Code	Error Code	Description
		9AAE	Principal Payment Week of Month is not equal to Income Payment Week of Month.
			Note: Applies to MMIs with Income Payment Type = P and Periodic/Amortizing Principal Indicator = Y.
Principal Payment Day of Week	BAAV	9AAE	Principal Payment Day if Week is not equal to 1– 5.
			Note: Applies if Principal Payment Frequency Interval = P and Periodic/Amortizing Principal Indicator = Y.
		9AAE	Principal Payment Day of Week is not equal to 0 and the Principal Payment Frequency Interval Type = W or D.
		9AAE	Principal Payment Day of Week is not equal to Income Payment Day of Week.
			Note: Applies to MMIs with Income Payment Type = P and Periodic/Amortizing Principal Indicator = Y.
Targeted First Principal Payment Date	BAA0	9AAJ	Targeted First Principal Payment Date is invalid (for example, day is not valid for month or year is not numeric).
		9AAE	This date is not between the Settlement Date and the Maturity Date.
			Note: Applies to MMIs with Income Payment Type = P and Periodic/Amortizing Principal Indicator = Y.
		9AAE	This date does not fall in the cycle of the Income Payment Frequency Interval.
			Note: Applies to MMIs with Income Payment Type = P and Periodic Amortizing Principal Indicator = Y.
Actual First Principal Payment Date	BAA1	9AAJ	Actual First Principal Payment Date is invalid (for example, day is not valid for month, or year is not numeric).

MMI Error Codes				
Field Name	Field Code	Error Code	Description	
		9AAE	This date is not between the Settlement Date and the Maturity Date.	
		9AAE	Date is not a DTC settlement date or when applicable, a London business date.	
First Principal Payment Record Date	BAA2	9AAJ	First Principal Payment Record Date is invalid (fo example, day is not valid for month, or year is no numeric).	
		9AAE	First Principal Payment Date is greater than or equal to the First Principal Record Date.	
		9AAE	This date is not equal to the First Income Paymen Record Date.	
		9AAE	This date is less than or equal to the Settlement Date.	
Principal Payment Record/Payable Date Difference (# of days prior to payable date)	BAAW	9AAF	Number of days is not numeric.	
		9AAH	Number of days is zeroes and the Targeted First Principal Payment Record Date is zeroes.	
		9AAE	The number of days is greater than zero and the Targeted First Principal Payment Record Date is not equal to zero (that is, either the number of days or the Targeted First Principal Payment Record Date must be supplied, but not both).	
		9AAE	Number of days is not equal to the Income Payment number of days.	
		9AAE	This date is greater than or equal to the Targeted First Principal Payment Date.	
			Note: Applies when the field Principal Payment Record/Payable Date Difference = 0.	
Principal Payment Business/Calendar	EAAH	9AAE	Principal Payment Business/Calendar Indicator is not equal to B or C.	
		9AAE	This indicator is not equal to Income Payment Business/Calendar Indicator.	
Principal Payment Weekend/Holiday Indicator	EAAI	9AAE	Principal Payment Weekend/Holiday Indicator is not equal to A or B.	
		9AAE	This indicator is not equal to Income Payment Weekend/Holiday Indicator.	

	М	MI Error Co	des
Field Name	Field Code	Error Code	Description
London Calendar Principal Payment Indicator	EAAJ	9AAE	London Calendar Principal Payment Indicator is not equal to Y or N.
		9AAE	This indicator is not equal to N when the Indexed Principal Indicator is equal to N and the Periodic Amortizing Principal Indicator is equal to Y.
Principal Payment Variable Rate Index Name	HAAC	9AA5	Index name = blanks.
Principal Payment Index Maturity Interval Type	GABE	9AAE	Index Maturity Interval Type is not equal to Y, M or D.
		9AAE	Index Maturity Interval Type is blank and Principal Payment Maturity Interval Number, and Principal Payment Spread Sign Type, and Principal Payment Spread Percentage are not equal to default values.
Principal Payment Index Maturity Interval Number	GABF	9AAE	Index maturity interval number is not equal to 00– 99.
Principal Payment Spread Sign Type	EAAG	9AAE	Spread sign type is not equal to + or –.
Principal Payment Spread Percentage	DAA1	9AAF	Spread percentage is not numeric.
Settlement Days Principal Payment After Maturity Date	BAAX	9AAF	Number of days is not numeric.
Final Principal Payment Calendar/Business Day Indicator	EAAE	9AAE	Indicator is not equal to B or C; or Indicator is not space. Note:
			This applies if Settlement Days Principal Payment After Maturity Date is zeroes.
Settlement Days Income Payment After Maturity Date	BAAY	9AAF	Number of days is not numeric.
Final Income Payment Calendar/Business Day Indicator	EAAF	9AAE	Indicator is not equal to B or C; or Indicator is not space.
			Note: This applies if Settlement Days Income Payment After Maturity Date is zeroes.

MMI Error Codes			
Field Name	Field Code	Error Code	Description
BA Draft Date	BAAZ	9AAJ	Invalid month for BA Draft Date (that is, month is not equal to 1–12); or Invalid day for BA Draft Date. (that is, day is not equal to 1–31 for months 1, 3, 5, 7, 8 10, 12; day is not equal to 1–30 for months 4, 6, 9 and 11; day is not equal to 1–28 for month 2 of a non-leap year; day is not equal to 1–29 for month 2 of a leap year); or Invalid year for BA Draft Date (that is, year is not numeric). Note: This can be validated using the CALENDAR.
BA Draft Name	HAAE	9AA5	BA Draft Name is equal to spaces.
BA Letter of Credit Name	HAAF	9AA5	BA Letter of Credit Name is equal to spaces.
Error In Calling Internal Module	ZZZZ	9999	Program/System error; call DTC Support.

5.2 Additional Error Codes:

MMI Error Codes			
Field Name	Field Code	Error Code	Description
Exchangeable Indicator	EAHM	9AAE	Exchangeable Indicator is not equal to Y or N or Indicator on the Issuer Table is set to N and the indicator on the issuance instruction is equal to Y.
Exchanged CUSIP	CAJB	9AAH	First 6 characters of the CUSIP Number (issuer number) = zeroes.
		9AA0	CUSIP Number is invalid (positions 1-8 of the CUSIP number is not equal to A-H, J-N, P-Z, or 0- 9, or position 9 of the CUSIP number is not equal to 0-9.
			Note: The letters I and Q are not valid characters to be used for the CUSIP number.

^{5.} Appendix A. MMI Error Codes

MMI Error Codes			
Field Name	Field Code	Error Code	Description
		9AA1	Invalid Check Digit for CUSIP Number
		MAAC	First 6 characters of the CUSIP Number (issuer number) not found on the Issuer Number Table; issuer number status = D (pending delete) on the Issuer Number Table; or the acronym's status = D (pending delete) on the Issuer Acronym Table for the specified issuer number.
		MAAC	First 6 characters of the CUSIP Number (issuer number) not found on the Issuer Number Table; issuer number status = F (frozen) on the Issuer Number Table; or the acronym's status = F (frozen) on the Issuer Acronym Table for the specified issuer number.
		MAAE	CUSIP Number is inactive on MFC Security Table
		9BBD	Exchanged CUSIP is not Exchange Eligible
		9BBE	Exchanged CUSIP acronym is not equal to issuance acronym
		9BBD	Exchanged CUSIP is a Discount base.
Extendable Maturity Indicator	EAAV	9AAE	Extendible Maturity Indicator is not equal to Y
Initial Maturity Date	BADC	9BBG	Initial Maturity Date is greater than Maturity Date
		9AAZ	Initial Maturity Date is less than Settlement Date
	BADC	9AAJ	Invalid month for date (that is, month is not equal is not equal to 1-12);
			or Invalid day for date (that is, day is not equal to 1- 31 for months 1, 3, 5, 7, 8, 10, 12; day is not equal to 1-30 for months 4, 6, 9, 11; day is not equal 1- 28 for month 2 of a non-leap year; day is not equal to 1-29 for month 2 of a leap year); or Invalid year for a date (i.e., year is not numeric).

^{5.} Appendix A. MMI Error Codes

6. RELEASE NOTES

This is the document history reflecting changes to the file.

- 12/29/2023 Changed error code GAAO to GAA0
- ^{10/10/2022} Added new required field IRS Income Code in Position 855. Updated MMI Error Codes table for errors related to the new IRS Income Code field.
- 10/10/2022 Replaced LIBOR with Linked to London Calendar in the MMI Issuance, Variable Rate Income and Principal Payment, and MMI Error Codes sections.
- 04/30/2020 The following changes were made to bring this document up to current standards:
 - Made general updates to remove outdated references and reformat the document.
- 06/01/2007 Document created.

^{6.} Release Notes

FOR MORE INFORMATION

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