

Bold, Underlined text indicates additions

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THE DEPOSITORY TRUST COMPANY

**RULES, BY-LAWS
AND ORGANIZATION CERTIFICATE
OF**

THE DEPOSITORY TRUST COMPANY

RULE 1

DEFINITIONS; GOVERNING LAW

Section 1. Unless the context requires otherwise, the terms defined in this Rule shall, for all purposes of these Rules, have the meanings herein specified:

~~Largest Provisional Net Credit~~

~~—The term “Largest Provisional Net Credit” means, on any Business Day, with respect to an Account Family, the sum of the two largest aggregate net credits to an Account Family attributable to transactions in the MMI Securities of any issuer, determined on an Acronym basis.~~

Section 2. Set forth below are certain other terms defined in these Rules, and the place in these Rules where such other terms are defined and used:

Defined Term

Rule Section

MMI Funding Acknowledgment	Rule 9(C)	Section 1
MMI Optimization	Rule 9(C)	Section 1

RULE 9(A)

TRANSACTIONS IN SECURITIES AND MONEY PAYMENTS

Section 1. Deliveries of Securities through the facilities of the Corporation shall be made in accordance with these Rules and the Procedures.

Any Participant making a Delivery Versus Payment of Securities through the facilities of the Corporation shall provide the Corporation with an instruction specifying the amount of the payment therefor in accordance with the Procedures. After receipt of such instruction (or upon its own initiative pursuant to Section **12** of Rule 9(C)), the Corporation is authorized to, and shall (subject to the right of the Corporation to cease to act for a Participant pursuant to these Rules and the Procedures), credit the Account of the Deliverer with the amount specified and debit the Account of the Receiver with the same amount. **Notwithstanding anything to the contrary, any such instruction with respect to a Delivery Versus Payment of MMI Securities pursuant to Rule 9(C) and the Procedures shall not be effective unless and until the applicable conditions specified in Rule 9(C) have been satisfied.**

Payments through the facilities of the Corporation shall be made in accordance with these Rules and the Procedures.

If a Participant shall present an instruction to the Corporation in accordance with the Procedures specifying that, in connection with a transaction in Securities, an amount or amounts of money shall be credited to its Account currently or in the future and that the same amount or amounts shall at that time be debited to the Account of another Participant, the Corporation is authorized to, and shall (subject to the right of the Corporation to cease to act for a Participant pursuant to these Rules and the Procedures), credit the Account of the Participant which presented the instruction (or which is deemed to have presented the instruction pursuant to Section **12** of Rule 9(C)) for the amount or amounts specified at the time or times specified and debit the Account of the other Participant at the same time or times with the same amount or amounts.

If a Participant shall present an instruction to the Corporation in accordance with the Procedures specifying that, in connection with a transaction in Securities, an amount or amounts of money shall be debited to its Account currently or in the future and that the same amount or amounts shall at that time be credited to the Account of another Participant, the Corporation is authorized to, and shall (subject to the right of the Corporation to cease to act for a Participant pursuant to these Rules and the Procedures), debit the Account of the Participant which presented the instruction (or which is deemed to have presented the instruction pursuant to Section **12** of Rule 9(C)) for the amount or amounts specified at the time or times specified and credit the Account of the other Participant at the same time or times with the same amount or amounts.

Section 2. Except as otherwise provided in the Procedures, payments between Participants pursuant to Section 1 of this Rule shall be made through the facilities of the Corporation as provided in this Section 2. In addition to the debit or credit of amounts pursuant to Section 1 of this Rule, the Corporation shall debit or credit itself, Participants and Pledges with other amounts receivable and payable in accordance with these Rules and the Procedures. On each Business Day, the Corporation shall net all of the debits and credits to all of the Accounts of each Participant and Pledgee. Any agreement between the Participant and the Corporation to the contrary notwithstanding, if a Participant has multiple Accounts, the Corporation may treat them as one Account for the purposes of this Rule.

At the request of the Corporation, a Participant or Pledgee shall immediately furnish the Corporation with such assurances as the Corporation shall require of the financial ability of the Participant or Pledgee to fulfill its commitments and shall conform to any conditions which the Corporation deems necessary for the protection of the Corporation, other Participants or Pledgees, including deposits to the Participants Fund; provided, however, that any such conditions shall not be inconsistent with any applicable laws or rules or regulations of regulatory bodies having jurisdiction over the Participant or Pledgee.

Subject to Rule 9(B):

(a) If at any time a balance is due to the Corporation from a Participant or Pledgee, payment of the amount of such balance shall be made by the Participant or Pledgee to the Corporation in the manner and at the time and place specified in the Procedures.

(b) If at any time a balance is due to a Participant or Pledgee from the Corporation, payment of the amount of such balance shall be made by the Corporation to the Participant or Pledgee in the manner and at the time and place specified in the Procedures.

(c) A Participant or Pledgee shall pay the Corporation the whole or any part of its Net Debit Balance at any time upon the demand of the Corporation.

Section 3. If the Account of a Payee is credited and the Account of a Payor is debited with an amount of money as provided in Section 1 of this Rule, and the Payor shall fail to make payment to the Corporation of such amount or, having made payment thereof, the Corporation shall be required to return such payment to the Payor or its representative, the Payee shall be obligated to return to the Corporation the amount that was not paid by the Payor to the Corporation or the amount required to be returned by the Corporation to the Payor or its representative, and the Corporation shall be entitled to debit the Account of the Payee for such amount at any time.

RULE 9(B)

TRANSACTIONS IN ELIGIBLE SECURITIES

This Rule applies to all services provided by the Corporation, including the services provided by the Corporation in the MMI Program.

Section 1. The Corporation shall not act on an instruction received by the Corporation from an Instructor to effect a Delivery, Pledge, Release or Withdrawal, or any other transaction affecting the Account of the Instructor or another Participant or Pledgee (other than a transaction classified in the Procedures as exempt from this Section), unless the Securities (if the transaction involves Securities) are, prior to the transaction, Deposited Securities or Pledged Securities reflected in the Account of the Instructor, as specified in the Procedures, and:

(a) immediately after the transaction, the Collateral Monitor for the Account Family of the Instructor which includes the Account from which the Securities subject of the instruction are Delivered, Pledged or Withdrawn, ~~as reduced by the amount of the Largest Provisional Net Credit for such Account Family,~~ will not be negative and the Family Net Debit for that Account Family, ~~as increased by the amount of such Largest Provisional Net Credit,~~ will not exceed the Net Debit Cap for such Account Family; and

(b) immediately after the transaction, if the transaction subject of the instruction affects an Account in the Account Family of another Participant or Pledgee or an Account in the same or another Account Family of the Instructor (in either case, a “Contra Party”), the Collateral Monitor for the Account Family of the Contra Party, ~~as reduced by the amount of the Largest Provisional Net Credit for such Account Family,~~ will not be negative and the Family Net Debit for that Account Family, ~~as increased by the amount of such Largest Provisional Net Credit,~~ will not exceed the Net Debit Cap for such Account Family; and

~~(c) if the transaction subject of the instruction involves a Free Delivery, Pledge or Release of Securities or a Delivery, Pledge or Release of Securities substantially undervalued, as specified in the Procedures, the Securities subject of the instruction shall not be MMI Securities subject of an Incomplete Transaction.~~

(c) with regard to any Delivery Versus Payment of MMI Securities, including issuances, Presentments, and applicable Deliveries, such instruction shall not be effective unless and until the applicable conditions specified in Rule 9(C) have been satisfied.

If the transaction subject of the instruction is a Free Delivery, Pledge or Release to a Contra Party and the applicable tests in clauses (a), (b) and (c) of the first paragraph of this Section are satisfied, the transaction shall be an effective transaction as to the Contra Party.

If the transaction subject of the instruction is a Delivery, Pledge or Release Versus Payment to a Contra Party and the applicable tests in clauses (a), (b) and (c) of the first paragraph of this Section are satisfied, the instruction of the Instructor shall constitute an instruction to make the following entries on the books of the Corporation.

(a) the Account of the Instructor is debited, and the Account of the Corporation is credited, by the amount of the obligation or the number of shares or rights subject of the instruction (whereby the Corporation shall be the holder of the Securities subject of the instruction);

(b) the Account of the Instructor is credited, and the Account of the Corporation is debited, by the amount of the payment specified in the instruction; and

(c) as specified in the Procedures, (i) the debits and credits to the Accounts of the Corporation are replicated as Incomplete Transactions in the Accounts of the Contra Party and (ii) the Collateral Monitor for the Contra Party is appropriately adjusted.

An Incomplete Transaction made on a Business Day shall be converted to an effective transaction as to the Contra Party, as specified in the Procedures, at the earliest of:

(a) the time it is finally determined by the Corporation on that Business Day that the balance in the Settlement Account of the Contra Party for that Business Day is not negative;

(b) the time the Contra Party pays the amount of the negative balance in its Settlement Account, as finally determined by the Corporation for that Business Day, to the Corporation, as provided in these Rules and as specified in the Procedures; or

(c) the time during that Business Day when:

- (1) in the case of a Delivery Versus Payment, the Contra Party instructs the Corporation to effect a Delivery, Pledge or Withdrawal of the Securities;
- (2) in the case of a Pledge Versus Payment, the Contra Party instructs the Corporation to effect a Delivery, Release or Withdrawal of Securities;
- (3) in the case of a Release Versus Payment, the Contra Party instructs the Corporation to effect a Delivery, Pledge or Withdrawal of Securities; and
- (4) in each case, the applicable tests in clauses (a), (b) and (c) of the first paragraph of this Section are satisfied.

If the Corporation receives an instruction from a Pledgee to effect a Delivery or Withdrawal of Pledged Securities, such instruction shall have the effect of notifying the Corporation that the Pledgee elects not to Release the Pledged Securities but, rather, to assert its Control over the Pledged Securities by the transfer of a greater interest in the Pledged Securities to itself or another Person. The Corporation shall accept such an instruction as a representation that the Pledgee is acting in accordance with applicable law, rules or regulations, agreements or any adjudication thereof.

A Participant may at any time during a Business Day wire Federal funds to the account of the Corporation at the Federal Reserve Bank of New York by Fedwire in order to reduce or eliminate a negative balance or create a positive balance in its Settlement Account.

Each Participant and the Corporation shall settle the balance of the Settlement Account of the Participant on a daily basis in accordance with these Rules and the Procedures. Except as provided in the Procedures, the Corporation shall not be obligated to make any settlement payments to any Participants until the Corporation has received all of the settlement payments that Settling Banks and Participants are required to make to the Corporation.

Section 2. In the manner and for the purposes set forth in these Rules and the Procedures, and subject to applicable law, (i) the Corporation shall hold the entire interest in, and shall have the authority of a holder of Securities to act, in its sole discretion, with respect to any Securities Delivered Versus Payment, which are the subject of an Incomplete Transaction, to issue or transfer the entire interest in such Securities, including the authority to sell, Pledge or otherwise dispose of such Securities, (ii) the Corporation shall hold a security interest in any Securities Pledged or Released Versus Payment, which are the subject of an Incomplete Transaction, to Pledge for value or Release for value a security interest in such Securities, and shall have the authority of a secured party to sell, Pledge or otherwise dispose of such Securities, and (iii) the Corporation, acting as agent and attorney-in-fact for its Participants, shall have the authority to Pledge or sell on their behalf any of their shares of Preferred Stock.

If a Participant fails to pay the amount of a negative balance in its Settlement Account, as finally determined by the Corporation on a Business Day, at the time and in the manner provided in these Rules and as specified in the Procedures, or if the Corporation determines that, in light of the financial or operating condition of a Participant, it is in the best interests of the Corporation, other Participants or Pledges not to complete certain transactions with respect to the Participant, although it does not cease to act therefor, or the Corporation terminates or suspends some or all of the transactions of a Participant in the MMI Program with respect to some or all MMI Securities subject of those transactions, during the Business Day, the Corporation may, with respect to any such Participant (a "Defaulting Participant"), in such order and in such amounts as the Corporation shall determine, in its sole discretion:

(a) Pledge any or all Net Additions and Preferred Stock of the Defaulting Participant to secure a loan to the Corporation; or

(b) sell any or all Net Additions and Preferred Stock of the Defaulting Participant in the manner specified in Section 4 of this Rule.

The Corporation may Pledge or sell any or all Net Additions of a Defaulting Participant notwithstanding the fact that the proceeds may exceed the negative balance in the Settlement Account of the Defaulting Participant. The proceeds of any Pledge or sale shall be applied as provided in these Rules and as specified in the Procedures.

The Corporation may Pledge or sell any or all shares of the Preferred Stock of a Defaulting Participant notwithstanding the fact that the proceeds may exceed the negative balance in the Settlement Account of the Defaulting Participant. The proceeds of any Pledge or sale shall be applied as provided in these Rules and as specified in the Procedures.

Each Defaulting Participant which fails to settle its Settlement Account at the time specified in the Procedures shall be charged interest on the amount of the required payment. The Corporation may also assess penalties against the Defaulting Participant, as specified in the Procedures, if the Defaulting Participant fails to settle.

The Corporation may borrow from some or all of its Participants, in the manner and to the extent specified in the Procedures, an amount up to the entire amount of the Gross Credit Balances of such Participants on the Business Day on which one or more Participants fails to settle its Net Debit Balance. Such borrowing shall be secured by the Pledge, to the lending Participants, on the books of the Corporation, of the Net Additions of the Defaulting Participant or Participants which failed to settle, in the manner specified in Section 2 of Rule 4(A).

Section 3. A Participant may, during a Business Day, instruct the Corporation to transfer Securities from its Minimum Amount to its Net Additions and from its Net Additions to its Minimum Amount. If a Deliverer instructs the Corporation to Deliver Securities to a Receiver and the instruction cannot be satisfied out of the Net Additions of the Deliverer, the instruction shall be deemed to be an instruction to first transfer from the Minimum Amount of the Deliverer to the Net Additions of the Deliverer sufficient Securities so that the instruction to Deliver Securities from the Deliverer to the Receiver can be satisfied out of the Net Additions of the Deliverer. An instruction to transfer Securities from the Minimum Amount of a Deliverer to the Net Additions of the Deliverer, or which is deemed to be such an instruction, shall constitute a representation by the Deliverer that it has full authority, under applicable law, to do so.

Notwithstanding any other provisions of this Rule, a Participant may restrict Deliveries to its Account by other Participants in the manner specified in the Procedures, and the Corporation may restrict Deliveries in the manner specified in the Procedures if the Corporation determines, in its sole discretion, that a Delivery is overvalued or for other reasons.

A Participant with more than one Account may, in the manner specified in the Procedures, (a) group one or more of its Accounts into one or more Account Families, (b) designate the portion of its Collateral to be allocated to each of its Account Families and (c) designate the portion of its Net Debit Cap to be allocated to each of its Account Families. The Corporation shall not be obligated to make any allocations in accordance with such instructions if the Corporation determines, in its sole discretion that such action might result in financial loss to the Corporation, other Participants or Pledges. The Corporation may allocate, in the manner specified in the Procedures, any portion of the Collateral of a Participant or its Net Debit Cap which is not allocated by the Participant. If a Participant has more than one Account but does not group its Accounts into one or more Account Families, the Corporation shall group all of the Accounts of the Participant into one Account Family.

The Corporation is authorized to establish priorities for the completion of any transaction the Participant instructs the Corporation to make but which is not completed because of limitations set forth in these Rules.

Each Participant shall settle through its Settling Bank or Back-Up Settling Bank, if any, or, if its Settling Bank or Back-Up Settling Bank, if any, refuses to settle on its behalf, the Participant shall settle with the Corporation directly.

A Participant shall be deemed to have failed to settle when (a) the Corporation receives a Settling Bank Refusal (as defined in Rule 9(D)) from the Settling Bank representing the Participant or when the Settling Bank representing the Participant has failed to pay its Net-Net Debit Balance (as defined in Rule 9(D)) by the time specified in the Procedures and (b) the

Participant has not paid its Net Debit Balance to the Corporation by the time specified in the Procedures.

Section 4. If the Corporation shall sell any Securities, the sale may be made in any available market or at public auction or by private sale, and may be made without demand or notice to any Participant. If the sale is made in any market, or if the sale is made at public auction, the Corporation may purchase the Securities sold for its own account.

RULE 9(C)

TRANSACTIONS IN MMI SECURITIES

This Rule applies only to the services provided by the Corporation in the MMI Program:

Section 1. The terms “MMI Funding Acknowledgment” and “MMI Optimization” are defined as follows:

The term “MMI Funding Acknowledgment” means, on any Business Day, with respect to an MMI Issuing and Paying Agent and an Acronym that has Presentments and issuances, the acknowledgment of the Issuing and Paying Agent, provided to the Corporation in accordance with the Procedures, that the Issuing and Paying Agent will: (i) fund the entire aggregate gross amount of Presentments for the Acronym, in accordance with Rules 9(A), 9(B), 9(C) and the Procedures; or (ii) fund a specified amount that is less than the entire amount of the aggregate gross amount of Presentments for that Acronym, in accordance with Rules 9(A), 9(B), 9(C) and the Procedures.

The term “MMI Optimization” means, on any Business Day, with respect to an Issuing and Paying Agent for an Acronym that has Presentments and issuances, as applicable, the process of testing both (i) the satisfaction of Net Debit Cap and Collateral Monitor conditions with respect to all Deliverers and/or Receivers in the Acronym after giving effect to all Presentments and issuances in the Acronym, and (ii) that Delivering Participants maintain adequate position in the Acronym.

Section 1-2. Each MMI Issuing Agent and MMI Paying Agent shall maintain one or more Accounts for its issuing agent activity and its paying agent activity with respect to the issues of MMI Securities for which it acts in that capacity, as specified in the Procedures. One Account may serve a Participant acting in both capacities but that Account shall be governed in each capacity by any Rule relating to that function of the Account as follows:

(a) The Issuing Agent Account with respect to an issue of MMI Securities shall comprise the Account which records the Delivery of such issue of MMI Securities by that MMI Issuing Agent and the Account to which payments therefor are credited as provided in this Rule and as specified in the Procedures.

(b) The Paying Agent Account with respect to an issue of MMI Securities shall comprise the Account to which payments for Presentments with respect to MMI

Securities of that issue are debited and the Account to which MMI Securities of that issue which are the subject of Maturity Presentments or Reorganization Presentments are Delivered.

The instruction of an MMI Issuing Agent to the Corporation to Deliver MMI Securities in connection with their issuance shall constitute a representation that such MMI Securities are issued in accordance with applicable law. MMI Securities may be subject of a Free Delivery or a Delivery Versus Payment.

If, in connection with their issuance, MMI Securities are subject of a Free Delivery, upon the instruction of an MMI Issuing Agent, the MMI Securities shall be credited to the Account of the Receiver designated by the MMI Issuing Agent and, simultaneously, a memo entry shall be made to the Issuing Agent Account reflecting that the MMI Securities have been Delivered as instructed.

If, in connection with their issuance, MMI Securities are subject of a Delivery Versus Payment, such Delivery shall be effected **in accordance with Rules 9(A) and 9(B) as otherwise provided for Deliveries of Securities subject of Incomplete Transactions in Rule 9(B), subject to the further controls/conditions provided in Section 23 of this Rule 9(C) and the applicable Procedures; provided, however, that instead of a debit to the Issuing Agent Account, a memo entry shall be made reflecting that the MMI Securities have been entered on the Account of the Corporation as Securities subject of an Incomplete Transaction and that the credit of payment therefor to the Issuing Agent Account is subject to the further controls provided in Section 2 of this Rule.**

A Presentment with respect to MMI Securities may be initiated by the Corporation or by a Presenting Participant, as specified in the Procedures; if a Delivery Versus Payment is so initiated by the Corporation, the instruction therefor shall be deemed to have been given by the Presenting Participant pursuant to these Rules and the Procedures. **Any such instruction shall only be effective when any applicable MMI Funding Acknowledgment has been received by the Corporation in accordance with the Procedures and the provisions of Rules 9(A), 9(B), and this Rule 9(C) have been satisfied.**

A Delivery of MMI Securities may be initiated by the Corporation or by a Presenting Participant, as specified in the Procedures; if a Delivery Versus Payment is initiated by the Corporation, the instruction therefor shall be deemed to have been given by the Presenting Participant pursuant to these Rules and the Procedures for the Delivery to be effected as otherwise provided for Deliveries of Securities subject of Incomplete Transactions in Rule 9(B), subject to the further controls provided in Section 23 of this Rule. **Any such applicable instruction shall only be effective when any applicable MMI Funding Acknowledgment has been received by the Corporation in accordance with the Procedures and applicable conditions set forth in paragraph (b) of Section 3 of Rule 9(C) have been satisfied.**

~~The further controls provided in Section 2, paragraphs (a), (b) and (c) of this Rule 9(C) shall not apply with respect to an Acronym if, but only if, the following conditions are simultaneously satisfied with respect to that Acronym:~~

- ~~(i) an MMI Paying Agent issues a Payment Refusal with respect to the Acronym;~~
- ~~(ii) there is at least one MMI Paying Agent that is also an MMI Issuing Agent on that day with respect to that Acronym; and~~
- ~~(iii) on that day, for each MMI Paying Agent that is also an MMI Issuing Agent with respect to that Acronym, the aggregate value of issuances of the Acronym processed through an Issuing Agent Account of that Issuing Agent exceeds the aggregate value of all Presentments, other than Reorganization Presentments, of that Acronym processed through a Paying Agent Account by that MMI Paying Agent; and RAD approvals exceed then the agent has given up its right to refuse. The value they have indicated~~
- ~~(iv) each receiving Participant with respect to any Delivery Versus Payment issuances of MMI Securities of that Acronym satisfies the conditions of Rule 9(B) for the processing of such Deliveries as provided in Rule 9(B).~~

~~Section 2.3.~~ Presentments with respect to MMI Securities, ~~including any Deliveries of MMI Securities pursuant to Maturity Presentments and Reorganization Presentments,~~ shall be subject to the following additional controls conditions:

~~(a) On the day of a Payment Refusal, as specified in the Procedures, the Corporation shall not complete any Incomplete Transaction or other transaction (including any instruction with respect to future Delivery) in the MMI Securities of that issuer newly issued that day. Any credits to the Issuing Agent Account of the MMI Issuing Agent or to any intermediate re-Delivering Participant with respect to the new issue shall be cancelled and each potential Receiver of the new issue shall be re-credited in the amount of its payment therefor. The provisional entry of the associated MMI Securities to the Account of a Receiver shall simultaneously be cancelled and every transaction in those MMI Securities, including any re-Delivery by a Receiver, shall be null and void and of no effect. The parties to the transactions affected thereby shall resolve their respective rights and obligations outside the Corporation. Where the MMI Securities of that issuer newly issued that day are subject of an Incomplete Transaction, the credit of the MMI Securities to the Account of the Corporation and debit of payment to the Account of the Corporation shall likewise be cancelled and the Corporation shall be under no obligation to complete the transaction.~~

~~(b) On the day of a Payment Refusal, as specified in the Procedures, the Corporation shall not complete any Maturity Presentment or Reorganization Presentment or Incomplete Transaction in the MMI Securities of that issuer. Any credits to the Accounts of Presenting Participants on account of such Presentment shall be cancelled, the provisional credit of the subject MMI Securities to the Paying Agent Account and debit to the Account of the Presenting Participant shall simultaneously be cancelled and the transactions shall be null and void and of no effect. The parties to the transactions shall resolve their respective rights and obligations outside the Corporation. Where the MMI Securities subject of a Maturity Presentment or Reorganization Presentment are subject of an Incomplete~~

~~Transaction, the credit of the MMI Securities to the Account of the Corporation and the debit of payment to the Account of the Corporation shall likewise be cancelled and the Corporation shall be under no obligation to complete the transaction.~~

~~(c) On the day of a Payment Refusal, as specified in the Procedures, the Corporation shall not complete any Income Presentment or Principal Presentment in the MMI Securities of that issuer. Any credits to the Accounts of the Corporation and Participants, and any debits to the Paying Agent Account on account of such Presentments, shall be cancelled and the transactions shall be null and void and of no effect. The parties to the transactions shall resolve their respective rights and obligations outside the Corporation. If all of the Presentments the Corporation did not complete pursuant to paragraphs (a) and (b) of this Section and the first two sentences of this paragraph are Income Presentments, and if the issuer is not insolvent, as defined in Rule 12, on the Business Day next following the Payment Refusal, the Corporation may re-initiate such Income Presentments and any Incomplete Transactions in newly issued MMI Securities of the issuer that the Corporation did not complete pursuant to the first sentence of paragraph (a) of this Section. If there is another Payment Refusal with respect to the MMI Securities of the issuer on such Business Day, the Corporation may then take the actions described in paragraphs (a) and (b) of this Section and the first two sentences of this paragraph, and all other actions authorized by these Rules.~~

~~(d) On the day of an issuer's insolvency, as defined in Rule 12, the Corporation may take any of the actions set forth in paragraphs (a), (b) and (c) of this Section 2 with respect to some or all of the MMI Securities issued by the insolvent issuer.~~

~~(e) The credit cancellations provided in paragraphs (a), (b), (c) and (d) of this Section may increase the Family Net Debit of the parties to such transactions over and above their Net Debit Caps. The Participants affected thereby are nevertheless fully obligated to satisfy any Net Debit Balances outstanding. The cancellation of debits and credits of payments and of debits and credits of MMI Securities, under the circumstances provided in these Rules and as specified in the Procedures, are not intended to affect or prejudice the underlying rights and obligations of the parties to the transactions as such rights and obligations may be determined outside the Corporation, subject to applicable law, rules or regulations, agreements or any adjudication thereof.~~

(a) On each Business Day on which an Issuing and Paying Agent shall have Presentments with respect to an Acronym, the Issuing and Paying Agent shall provide an MMI Funding Acknowledgment at the times and in the manner provided in the Procedures, except that no MMI Funding Acknowledgment shall be required if, on that Business Day, the aggregate amount of issuances for that Acronym for which the Receiving Participants have approved receipt of Delivery in accordance with the Procedures exceeds the aggregate amount of Presentments of that Acronym to the Issuing and Paying Agent.

(b) (1) Net Debit Cap and Collateral Monitor conditions with respect to the issuance and Presentment of any Acronym shall be satisfied with respect to each Deliverer and Receiver of Securities of the Acronym on that Business Day, including, as applicable, through the application of MMI Optimization, and (2) the acceptance by each Receiver of such Securities in accordance with the Procedures. MMI Optimization shall be applied with respect to an Acronym only when on that Business Day either (a) issuances exceed Presentments for the Acronym and the Issuing and Paying Agent for the Acronym has not provided an MMI Funding Acknowledgment that it will fund the entire aggregate gross amount of Presentments for the Acronym, or (b) the Issuing and Paying Agent has provided an MMI Funding Acknowledgment that it will fund a specified amount that is less than the entire amount of the aggregate gross amount of Presentments for that Acronym.

(c) Any instruction with respect to an issuance or Presentment of MMI Securities of an Acronym on any Business Day shall become effective when (i) the Corporation has received an MMI Funding Acknowledgment, if required, and (ii) the conditions set forth in paragraph (b) of this Section have occurred.

(d) When any such instruction has become effective, the Corporation shall comply with such instruction as provided in these Rules and Procedures, including, but not limited to, Rules 9(A), 9(B) and this Rule 9(C).

(e) The Issuing and Paying Agent, by providing an MMI Funding Acknowledgment, acknowledges and agrees that the Corporation will process instructions with respect to issuances and Presentments of the applicable Acronym in reliance upon such MMI Funding Acknowledgment and that it is an irrevocable obligation of such Issuing and Paying Agent to pay the Corporation the specified amount set forth in such MMI Funding Acknowledgment without regard to whether or not the Issuing and Paying Agent shall have received any payment from the issuer of such Acronym on such Business Day and without regard to any other rights, duties or obligations of the Issuing and Paying Agent to or from the issuer of such Acronym.

(f) If an Issuing and Paying Agent notifies the Corporation, or the Corporation shall otherwise have notice, that an issuer is insolvent as defined in Rule 12, or if an MMI Paying Agent issues a Payment Refusal with respect to an Acronym, then the Issuing and Paying Agent shall not thereafter be required to provide any MMI Funding Acknowledgment with respect to any Acronym of that issuer and the Corporation shall not be required to process any further instructions with respect to any Acronym of the issuer; *provided, however,* the Issuing and Paying Agent shall remain liable for funding pursuant to any MMI Funding Acknowledgment prior thereto.

(g) All MMI Securities of an issuer which is insolvent, as defined in Rule 12, ~~or subject of a Payment Refusal of a MMI Paying Agent, as specified in the Procedures,~~ shall, at the time of such insolvency ~~or Payment Refusal,~~ be Devalued to a Collateral Value of zero and shall not collateralize any transaction. This Devaluation is

intended to serve only to protect the integrity of the MMI Program without prejudice to the underlying rights and obligations of the parties to the transactions as such rights and obligations may be determined outside the Corporation, subject to applicable law, rules or regulations, agreements and any adjudication thereof.

~~(g) A Delivery Versus Payment of MMI Securities shall be effected only if the principal amount of the MMI Securities being Delivered does not exceed the designated amount specified in the Procedures.~~

(h) In the event that a Receiver fails to settle its Net Debit Balance, the Corporation shall resolve the obligations of the parties to the transaction pursuant to the Failure to Settle Procedure included in the Procedures, ~~as such Procedures may apply particularly to MMI Securities.~~

DTC Settlement Service Guide

About Settlement

Overview

This chapter describes DTC's Settlement products. Each section includes a description of the product and how it works, as well as corresponding functions **you a Participant** can use to access the product.

Note- Although DTC makes every effort to provide **you the Participant** with timely information, **you are the Participant is** primarily responsible for obtaining such information without reliance on DTC. **We DTC** recommends that **you Participants** reconcile **your their** records with DTC's records before any critical dates or cutoff times.

About DTC's Settlement Department

DTC's Settlement Department is responsible for overseeing the process of the settlement of **your Participant** transactions. Specifically, the Settlement Department:

- Ensures the collection/disbursement of **your Participant** net settlement obligations and credits through the Fedwire system
- Ensures that major components of DTC's Settlement Service are updating/processing in a timely manner
- Helps resolve problems affecting the settlement process
- Grants input extensions when processing problems arise
- Provides backup to the extent possible when **your Participant** systems go down
- Answers **your** questions regarding all aspects of settlement processing
- Processes deposits and withdrawals of Federal book-entry eligible securities.

Settlement Transactions

There are three main types of transactions processed through the Settlement system.

1. **Deliveries:** DTC's delivery program allows ~~you a~~ Participant to settle securities transactions by making book-entry deliveries to another Participant's account. The securities are immobilized in DTC's custody, eliminating the need for physical movement of certificates. DTC reduces the seller's position and increases the buyer's position without the need to move physical certificates. Deliveries can be made with or without the condition of money payment, depending on ~~your~~ **the applicable Participant's** delivery instructions.
2. **Payment Orders (POs):** The payment order service provides ~~you~~ **Participants** with a convenient method for settling amounts of money related to securities transactions that are effected separately through DTC earlier on the same day or on a previous day. ~~You~~ **Participants** can use payment orders to collect option contract premiums and mark-to-market open contracts such as stock loans.

Collateral loans: The collateral loan service allows ~~you a~~ **Participant** (the pledgor) to pledge securities as collateral for a loan or for other purposes and also request the release of pledged securities. This service allows such pledges and pledge releases to be made free, meaning that the money component of the transaction is settled outside of the depository, or valued, meaning that the money component of the transaction is settled through DTC as a debit/credit to the pledgor's and pledgee's DTC money settlement account. When pledging securities to a pledgee, the pledgor's position is moved from the pledgor's general free account to the pledgee's account which prevents the pledged position from being used to complete other transactions. Likewise, the release of a pledged position would move the pledged position back to the pledgor's general free account where it would then be available to complete other transactions.

Important Terms

The following terms are important to understanding the Settlement Service:

This term	Refers to
Aggregate Affiliated Family Net Debit Cap	A limit to the settlement debit an Affiliated Family can incur at any point during the processing day.
chill	A systemic way DTC can prohibit you a Participant from processing certain activities (for example, valued delivery chill will prevent you <u>the Participant</u> from making valued deliveries from your <u>its</u> account).
Collateral Monitor (CM)	DTC's process for measuring the sufficiency of the collateral in you a Participant's account to cover your <u>its</u> net settlement obligation.
collateral value	The market value of a security less the applicable DTC haircut.
Computer-to-Computer Facility (CCF/CCF II)	A batch transmission system for input/output based on various protocols between your a Participant's mainframe and DTC's mainframe.
Continuous Net Settlement (CNS)	The system employed by NSCC to settle NYSE, AMEX, NASDAQ, and over-the-counter trades.
deliver order	The term used to define a book-entry movement of shares of a

This term	Refers to
(DO)	particular security between two DTC Participants.
drop	A transaction that does not complete because of insufficient position, Risk Management Controls, and so forth.
haircut	The percentage decrease of a security's market value in determining the collateral value of the security.
initial distribution	The delivery of shares of a new issue from the lead manager and syndicate members to their customers. Shares are considered initial distribution shares until they are sold on the secondary market.
Largest Provisional Net Credit (LPNC)	A control that ensures that reversing a failed MMI issue transaction does not cause your Risk Management Controls to be overridden.
long allocations	Deliveries from NSCC's Omnibus Account 888 to you a Participant's DTC account as a result of Continuous Net Settlement processing.
market value	The prior day's closing price of a security for security valuation purposes.
memo segregation	An inventory control mechanism that allows you a Participant to protect fully-paid-for securities in your its general free or IPO control account.
Message Queuing (MQ)	A system for messaging across multiple platforms. Developed as part of IBM's WebSphere family, it is also referred to as "WebSphere MQ" or "MQ Series."
Minimum Amount (MA)	DTC's classification for securities in your a Participant's account that are not considered collateral.
Money Market Instrument (MMI)	Debt securities such as commercial paper or medium-term notes that are eligible for DTC's MMI Program.
Net Additions (NA)	DTC's classification for securities in your a Participant's account that are considered collateral.
net debit cap	A limit to the settlement net debit you a Participant can incur at any point during the processing day.
night deliver order (NDO)	A DO input on the day prior to settlement. A reduced rate is charged for NDO transactions.
payment order (PO)	A transaction in which a Participant charges another Participant for changes in value for outstanding stock loans or option contract premiums.
receive versus	A sub-counter of your NA position that indicates how much

This term	Refers to
payment NA (RVP-NA)	of your NA position was received versus payment during the current day.
Receiver Authorized Delivery (RAD)	A control mechanism that allows you a Participant to review transactions prior to completion of processing. It limits your the Participant's exposure from misdirected or erroneously entered DOs, POs, institutional delivery transactions, MMI transactions, reclaims, pledges and releases of pledged securities.
reclamation or reclaim	The return of a DO, PO, institutional delivery transaction or MMI transaction received by a Participant. All reclaims are considered original transactions for purposes of DTC processing and are subject to DTC's risk management controls Risk Management Controls and RAD.
Risk Management Controls	The controls, primarily net debit cap and CM, that are used to provide protection to all DTC Participants against the inability of one or more Participants to settle net settlement obligations.
Settlement progress payments (SPP)	An intraday funds transfer sent via Fedwire to your a Participant's DTC Participant account.
Settlement User Interface	Any system or combination of systems that allows for input/inquiry into the DTC Settlement System.
short covers	Deliveries to NSCC's Omnibus Account 888 as a result of CNS.
syndicate	A group of broker-dealers that agree to purchase a new issue of securities from the issuer for resale to the investment public.
<u>Unknown Rate</u>	<u>For variable rate MMI Securities, the interest rate that the IPA will pay for the income portion of a presentment.</u>
unvalued additions	Unvalued additions to your a Participant's security account that do not carry a related payment obligation with the receipt of securities. They include: <ul style="list-style-type: none"> • Deposits • Free release of pledged securities • Receipt of a free DO • Releases of segregated securities

End-of-Day Settlement Process

Establishing Your Limitation of Participant Net Debit Caps by Settling Banks

A Settling Bank can limit the net debit cap assigned to each Participant it represents. However, the maximum amount set by a Settling Bank cannot exceed ~~your~~ the Participant's system-calculated net debit cap established by DTC.

To establish or change the net debit cap for a Participant for which it settles, the Settling Bank must submit a letter of instruction to DTC requesting the amount of the net debit cap for the Participant. This letter should be sent via e-mail to DTCProductRisk@dtcc.com using the Settling Bank's e-mail domain, or via mail or overnight delivery addressed to:

The Depository Trust Company
~~Vice President~~ **Executive Director, Enterprise Risk Management**
55 Water Street
New York, NY 10041

Settlement Processing Schedule

The following table describes the DTC Settlement processing schedule. All times are eastern time **(ET)**.

Cutoff Time ET	This Occurs

2:00 p.m.	Cutoff for: <ul style="list-style-type: none"> Valued MMI issuances.
<u>2:30 p.m.</u>	Cutoff for: <ul style="list-style-type: none"> <u>An Issuing and Paying Agent (IPA) to replace the Unknown Rate with a final rate for distribution - the IPA must successfully transmit the final rate to DTC before 2:30 PM ET.</u>
2:45 p.m.	Cutoff for: <ul style="list-style-type: none"> RAD approval of MMI valued issuance deliver order transactions.
2:55 p.m.	<u>Cutoff for:</u> <ul style="list-style-type: none"> <u>Cutoff for entering Entering</u> release requests designating position as eligible for CNS. <u>Processing Valued MMI transactions for issuances, MMI DOs and maturity presentments in the MMI Optimization process.</u>
3:00 p.m.	Cutoff for: <ul style="list-style-type: none"> An Issuer's Paying Agent notifying DTC of the default that would require the reversal of transactions in DTC's system. DTC's receipt of an IPA's MMI Funding Acknowledgement or refusal to pay notification. <u>An IPA to notify DTC of a Temporary Acronym Payment Failure (as defined below).</u>
<u>3:00 p.m.</u>	<ul style="list-style-type: none"> Forced Receiver Authorized Delivery (RAD) period begins. <i>Note--You A Participant can continue to enter valued and free transactions. However, all valued transactions are forced into RAD and require the receiving Participant's approval.</i>

Cutoff Time ET	This Occurs
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3:05 p.m.	Largest Provisional Net Credit (LPNC) control ends. DTC begins using your actual collateral monitor and net settlement balances (instead of simulated collateral monitors and net settlement balances) in determining whether Risk Management Control recycles can complete.
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3:10 p.m.	<u>Cutoff for:</u> <ul style="list-style-type: none">• pledgees to approve pledge release requests designating position as CNS-eligible.• Valued recycle cutoff. All <u>non-MMI</u> valued, <u>and</u> CNS transactions <u>and fully paid for and secondary MMI deliveries or maturity presentments</u> that cannot be completed because of insufficient position, collateral, or net debit cap are dropped from the system.• <i>Note</i>—All valued transactions input or approved by Participants after this time will not recycle; they will either complete or drop.
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Money Market Instrument (MMI) Processing

MMIs are subject to, and are processed in accordance with, Rule 9(A), Rule 9(B), Rule 9(C) of DTC and the Procedures set forth in this Settlement Service Guide.

MMI Funding Acknowledgment by the IPA

Subject to DTC risk controls, DTC processes maturing Presentments for delivery versus payment to the applicable IPA with respect to an Acronym in the Rules and these Procedures only after an acknowledgment (“MMI Funding Acknowledgment”) is made by the IPA to DTC whereby either: (i) the value of issuances approved by receivers via Receiver Authorized Delivery (RAD) alone¹ or a combination of receiver-approved issuances plus an amount the IPA(s) has been funded by the issuer exceed the Acronym’s Presentments, or (ii) the IPA acknowledges it will fund the entire amount for the gross value of an Acronym, regardless of issuances.² An IPA must make an MMI Funding Acknowledgment using the Decision Making Application (DMA). When an MMI Funding Acknowledgement has occurred, it constitutes the IPA’s instruction to DTC to attempt to process transactions in the Acronym.

Testing for Position and Risk Management Controls

After an IPA has acknowledged that it will fully fund the Acronym, then the transactions are sent to the processing system and attempted against position and Risk Management Controls. If the IPA provides an MMI Funding Acknowledgement for only partial funding of the entire amount of

¹ **An affirmative MMI Funding Acknowledgement by the IPA is not required in the case that the aggregate amount of RAD approved Issuances of an Acronym exceeds the aggregate amount of Presentments. In this instance, the IPA is deemed to provide a standing instruction to process transactions in the Acronym, subject to Risk Management Controls. Any such instruction or deemed instruction by the IPA is irrevocable once given.**

² **In the case where an affirmative MMI Funding Acknowledgment by the IPA is required for Presentments to be processed, the MMI Funding Acknowledgement must be a notification provided by an IPA to DTC with respect to an Acronym, that the IPA acknowledges and affirms its funding obligation for a maturing Acronym either (i) in the entire amount of the Acronym or (ii) for an amount at least equal to the difference between the value of Issuances and the value of the Presentments. In the case of (ii) above, the IPA may (later that day) increase the funding amount it acknowledges, but in no event may the IPA reduce the amount of its obligation previously acknowledged that day.**

Presentments for an Acronym, DTC tests Risk Management Controls of deliverers and receivers with respect to that Acronym to determine whether Risk Management Controls would be satisfied by all deliverers and receivers of the Acronym and all parties maintain adequate position to complete the applicable transactions, i.e., "MMI Optimization". In the case that the aggregate amount of RAD approved Issuances of an Acronym exceeds the aggregate amount of Presentments, Risk Management Controls for all deliverers and receivers are tested using MMI Optimization as well.

As indicated above, when partial funding from the IPA is necessary, transactions are routed to MMI Optimization. In MMI Optimization, it is generally required that all deliverers and receivers of the Acronym must satisfy risk management controls and delivering Participants hold sufficient position, in order for the transactions in that Acronym be processed. However, as long as the Issuances that can satisfy Deliverer and Receiver risk controls for that Acronym are equal to or greater than the Maturing Presentments of that Acronym, the applicable transactions (i.e., those that pass risk controls) are processed.

Note: If there are multiple IPAs for an Acronym, DTC determines funding based on the satisfaction of conditions for all deliverers and receivers with respect to all Presentments, Issuances and applicable DOs in the Acronym and MMI Funding Acknowledgements for all IPAs with Issuances and Presentments in the Acronym. No instruction of an IPA to DTC to process the subject MMI transactions shall be effective until MMI Optimization is satisfied with respect to all transactions in the Acronym.

Money Market Instrument (MMI) Issuer Failure Acronym Payment Failure Processing

About the Product

The Money Market Instrument (MMI) Issuer Acronym Payment Failure processing is designed to protect DTC and its notify Participants from incurring financial losses when an if there is no timely MMI issue defaults Funding Acknowledgment from the IPA(s) for an Acronym for which presentments are due on that day and/or DTC is aware that the issuer of an Acronym is insolvent and therefore payments due to Participants relating to presentments for that Acronym will not be funded by IPA(s) through DTC settlement ("Acronym Payment Failure"). Using the MMRP function, issuing paying agents Using the IPA Decision Making Application or automated messaging, (IPAs) can notify DTC that they refuse to pay maturity or periodic interest payment proceeds, or both, for Presentments for an MMI issue Acronym. An IPA must inform DTC of its refusal to pay by 3:00 p.m. eastern time in accordance with the timeframe set forth in the Settlement Processing Schedule above. After DTC verifies the default it begins MMI Issuer Failure procedures.

In the event that an IPA does not fund, then the rights of the IPA as a Participant and all Participants that are party to the subject MMI transactions shall be resolved outside of DTC.

How the Product Process Works

Upon notification of a default, If there is an Acronym Payment Failure, DTC will initiate the following process, pursuant to which DTC:

- Freezes the issue preventing Prevents further issuance and maturity activity at DTC for that Acronym.
- Globally locks all CUSIP numbers associated with the failed issue to prevent any activity All CUSIPs under the failed Acronym are blocked so that no Participant may instruct any delivery of such Acronym on that Business Day. The block will be lifted the following Business Day.

- Devalues all of the Issuer's MMIs for ~~Same-Day Funds Settlement (SDFS) collateralization collateral monitor calculations.~~
- ~~Reverses all of the Issuer's issuances, maturities, and income presentments processed that day~~
- Notifies Participants of the ~~default event via the FFSP function~~
- ~~Reverses all deliveries of newly issued paper.~~

Notwithstanding the occurrence of an Acronym Payment Failure, the IPA shall remain liable for funding pursuant to any MMI Funding Acknowledgment.

Notifying DTC of Temporary Refusal to Pay Acronym Payment Failure Process

~~A Temporary Refusal to Pay "Temporary Acronym Payment Failure" with respect to~~ Income Presentments occurs when an ~~paying agent IPA indicates notifies DTC of~~ an issuer's ~~temporary inability to fund income Income presentments Presentments (IPs) and therefore the IPA refuses to pay Income Presentments for the Acronym.~~ This is ~~considered a temporary~~ situation that ~~will DTC expects the issuer and/or IPA to be resolved resolve by~~ the next ~~business-day Business Day.~~ ~~Using the IPA Decision Making Application (IPA DMA) or automated messaging, IPAs can notify DTC that they refuse to pay Income Presentments for an MMI acronym for which there is a Temporary Acronym Payment Failure. Paying agents enter these notifications via the MMRP function.~~ When DTC receives such a notification, it:

- Temporarily devalues to zero all of the Issuer's MMIs for ~~collateralization Collateral Monitor purposes.~~ (The value will be reinstated the following ~~business-day Business Day if the funding is paid.~~)
- ~~Temporarily reverses all of the issuer's issuances and income presentments processed that day. These transactions will be automatically Automatically submits these transactions for processing processed~~ the next ~~business-day Business Day.~~
- Notifies Participants of the ~~temporary default delayed payment.~~
- Blocks from DTC's systems all further issuances and maturities by that Issuer for the rest of the ~~business-day Business Day.~~

Note: An IPA cannot notify DTC of a Temporary Acronym Payment Failure for the same Acronym on consecutive days. If a Funding Acknowledgment of the Acronym is not made by the IPA on the Business Day following the day of a Temporary Acronym Failure, then DTC will follow the Acronym Payment Failure process with respect to the Acronym as described above.

~~Note- You An IPA may can use Temporary Refusal to Pay notify DTC of a Temporary Payment Failure for~~ Income Presentments only if the issuer's only obligations that day are IPs.

Notifying DTC of Issuer Failure

~~Because Refusal to Pay and Temporary Refusal to Pay notifications are critical, paying agents should call DTC's Settlement Hotline at 212-855-5800 to confirm that DTC received the notification.~~

MMI Issuer Failure Acronym Payment Failure Contact Number

For more information **about MMI Issuer Failure on DTC Acronym Payment Failure processing**, call DTC's Settlement Operations Hotline at (212) 855-5800.

MMI IPA MP Pend

Overview

The MMI IPA MP Pend function or "MP Pend" will allow an issuing/paying agent (IPA) bank the ability to control its exposure to high risk issuers that have known or anticipated funding or credit issues.

By enhancing money market instrument (MMI) processing, the MP Pend function will assist in mitigating the collective risk for DTCC and its Participants.

Benefits

- Gives IPAs the ability to anticipate and react to potential funding and credit issues associated with maturity presentments.**
- Expected to reduce the number of late day reversals.**

Background

Maturity payment procedures were designed to limit credit, liquidity, and operational risk for DTC and Participants in the MMI program. Maximizing efficiency at the lowest level of risk is the primary goal. To expedite the process, early on the day the MMI matures approximately 2:00 a.m. eastern time (ET) DTC automatically sweeps maturing MMI positions from accounts of investors' custodians with positions in the maturing issues and initiates maturity presentments (MPs) to the accounts of the designated IPAs.

MPs are effectively provisional book entry deliveries versus payment submitted for inclusion in that day's settlement balance. DTC debits the IPA's account in the amount of the maturity proceeds for settlement that day and credits the same amount of the maturity proceeds to the investor's custodian account for payment that day to the investor.

Because MPs are processed automatically and randomly against the IPAs' DTC account, IPAs are provided the ability to refuse to pay for a specific issuer's MP in the event that the issuer defaults on its obligation to the IPA. These MPs are subject to reversal later in the day if an IPA refuses to pay (RTP) by 3:00 p.m. eastern time. The objective of the MP Pend function is to reduce the need for late day reversals.

Legal Disclaimer

In order to confirm that IPAs have the authority to pend MPs and understand the submission rules, they are required to review and accept a legal disclaimer each time they create or change an MP Pend profile.

Before submitting an MP Pend profile, the IPAs click to acknowledge that they have read and accept the terms and conditions.

Legal Disclaimer that the IPA Agrees To

The Issuing Paying Agent for issuer, hereby represents and warrants that it has the authority to submit the request appearing on the next screen(s) and that it will either release the items held in "pend" prior to 3:00 pm eastern time (ET) on the date of maturity or by such time

~~communicate to DTC that it will refuse to pay. The Issuing Paying Agent for issuer, acknowledges, understands and agrees that all MPs will be released for normal processing if it does not communicate its intention to DTC that it wishes to refuse to pay by 3:00 pm ET.~~

~~How MMI MP Pend Works~~

~~MP Pend allows IPAs to review and approve MPs prior to having them processed into their IPA settlement account. IPAs will be able to pend an MMI maturity presentment and release transactions daily prior to the 3:00 p.m. ET settlement cutoff.~~

~~The four pend levels that MP Pend provides give the IPA greater control over which portion of an MP should pend and which portion should be processed. Using MP Pend, the IPA can pend one of four levels. The highest or broadest level is the acronym level. The lowest or most specific level is the base CUSIP.~~

~~The pend levels below are listed from the highest (acronym) to the lowest (base number) level. If you set up a profile for a base CUSIP number, you must first select the Acronym, Product, and Program that contain the base CUSIP you wish to pend.~~

~~MMI MP Pend Levels~~

- ~~1. Acronym (highest level)~~
- ~~2. Product~~
- ~~3. Program~~
- ~~4. Base Number~~

~~Workflow in MMI MP Pend~~

~~The following is a typical workflow for IPAs in MMI MP Pend.~~

- ~~1. Set up an MP Pend profile for the designated issuer's MPs~~
- ~~2. View all the transactions that are pended or that have been released~~
- ~~3. Release all transactions for processing or submit a refusal to pay to DTC by 3:00 p.m. ET.~~
- ~~4. Leave the MP Pend profile active for subsequent days; deactivate the profile for re-use later; or delete the profile.~~

~~Business Rules~~

~~The following are cutoff times for MMI MP Pend and related functions. All actions are processed real time and take effect immediately.~~

Action	Cutoff Time	Action is Effective	Applies To . . .
Pend Maturity Presentments (MPs)	Night prior to the maturity presentment (MP) sweep or intraday for MPs with variable rate. If the IPA profile request is submitted after the MPs are processed, then they will not be pended but will be	Immediately. Note: the MP Pend profile remains in effect until you deactivate or delete it.	MPs that are Activity Code 28 or intraday MPs for the same issuer acronym. Note: Includes RPs (reorganization presentments.)

	processed as pending items the following business day.		
Release Maturity Presentment (MP) Transactions	All pending items must be released the same day that the MP matures by 3:00 p.m. eastern time. If the IPA takes no action by 3:00 p.m. eastern time, then these items will be released by DTC Operations for normal processing.	Immediately.	MPs that are Activity Code 28 or intraday MPs for the same acronym. Note: Includes RPs (reorganization presentments.)
Add Rate for MMIs with Unknown Rates	The IPA must add the rate in PAMM or PORS before pending MPs can be released.	Immediately.	MPs that are Activity Code 28 or intraday MPs of the same acronym.
Refusal to Pay (RTP) Maturity Presentments (MPs)	All refusals to pay must be submitted by 3:00 p.m. eastern time via the Money Market Refusal to Pay function (MMRP). If the IPA takes no action by 3:00 p.m. eastern time, then all pending items will be released by DTC Operations for normal processing.	Immediately.	All MPs that are Activity Code 28 or intraday MPs for the same acronym. Note: Includes RPs (reorganization presentments.)

Important Terms

MMI MP PEND Actions and Statuses

MP Pend gives the IPA the ability to set up their Pend profiles in order to indicate which issuer MPs will be pended and at what level. For example, as long as an MP Pend profile is active, all MPs that match that profile will be automatically pended. An MP Pend profile may be created, deactivated, reactivated, or deleted.

Create

Creates the IPA's MP Pend profile in an Active status. Any MPs that correspond to the profile are pended effective immediately.

Deactivate

~~Deactivates an MP Pend profile thereby disabling the profile without deleting it. If you deactivate the profile, it is in Inactive status. Deactivating turns off the profile, but you can reuse it by activating it.~~

~~Note: Deactivating a profile does not affect the transactions that are pending. The IPA still needs to release each MP that is pending. The deactivation would take effect for any MPs that are submitted after the profile is deactivated.~~

~~Activate~~

~~Reactivates an MP Pend profile that has previously been deactivated. If you activate the profile, it is in Active status, and MPs that correspond to this profile are pending immediately.~~

~~Delete~~

~~Deletes an MP Pend profile. Delete a profile if you no longer intend to use it; deactivate a profile that you wish to turn off now but may want to reuse.~~

~~Note: Deleting a profile does not affect the transactions that are pending. The IPA still needs to release each MP that is pending.~~

~~Maturity Presentment~~

~~In MMI MP Pend, maturity presentment is defined as the following:~~

- ~~• MPs and Reorganization Presentments (RPs) that are activity code 28 processed the night prior to the maturity date and/or intraday for MPs of the same acronym.~~
- ~~• For MMIs that pay interest and principal, the last interest and principal payment that is combined into a single maturity payment (activity code 28 0) to the holder on maturity date.~~
- ~~• For MMIs that make periodic principal payments (both fixed and variable rate, the last periodic principal payment (PPP) made for these MMIs, if made on maturity date. Note: For MMIs that make periodic principal payments on an accelerated basis prior to the scheduled maturity date, a reorganization presentment (RP) (activity code 28 1) is generated.~~

~~MMI MP Pend Levels~~

~~Users can create a Pend profile for an MP based on acronym, product, program, and base CUSIP number.~~

~~Acronym~~

~~The four character DTC identifier for the issuer of the MMI.~~

~~Product Type~~

~~The type of money market instruments (MMI). There are 14 different MMIs which include:~~

- ~~• Corporate Commercial Paper~~
- ~~• Municipal Commercial Paper Tax Exempt~~
- ~~• Municipal Commercial Paper Taxable~~
- ~~• Bankers' Acceptance~~
- ~~• Discount Note~~
- ~~• Bank Note Short Term~~

- ~~Medium Term Note~~
- ~~Bank Note Medium Term~~
- ~~Deposit Note Medium Term~~
- ~~Institutional Certificate of Deposit~~
- ~~Preferred Stock (in commercial paper like mode)~~
- ~~Corporate Variable Rate Demand Obligation (VRDO) for Commercial Paper (CP)~~
- ~~Municipal Commercial Paper Tax Exempt (VRDO/CP) and~~
- ~~Municipal Commercial Paper Taxable (VRDO/CP).~~

Program

~~The section of the Securities Act of 1933 for which an MMI is exempt. Examples include SEC 3(a) 2, 4(2), 144A, and Reg S. Unless selected the default is none.~~

Base Number

~~The first 6 digits of the CUSIP issuance also referred to as the issuer or CUSIP base number.~~

MMI MP Pend Menu

MMI MP Profile Maintenance page

~~Used to pend MPs by adding a Pend profile. You can later deactivate, re-activate or delete a profile.~~

MMI MP Profile Inquiry page

~~Used to see the MP Pend profiles you have added to MP Pend. You can see whether the Pend profile for a given MP is currently in effect (Active status) or not (Deactivated status).~~

MMI MP Transaction Inquiry page

~~Used to see the MP transactions processed within the last 21 business days. You can see statuses for MPs that are released, held, or failed. You can look up transactions at the various levels such as acronym, product, program, base CUSIP number.~~

MMI MP Transaction Releases page

~~Used to release the MP transactions that are pending.~~

MMI MP Pend Inquiry

~~IPAs can view their MP Pend transactions within the last 21 business days on the MMI MP Transaction Inquiry page of the Settlement User Interface. Transactions are archived and maintained by DTC for 7 years.~~

SETTLEMENT WEB RISK MANAGEMENT CONTROL INQUIRY FUNCTION

~~The Risk Management Controls screen displays additional details about a collateral group's current balances. The screen includes amounts for money market instrument (MMI) maturities that are "held" in a pending status in IMS by the issuing and paying agent (IPA).~~

PENDING ACTIVITY INQUIRY FUNCTION

~~Participants can view items on the Pending Activity Inquiry screen.~~

Recycle Processing

About the Product

When DTC receives instructions to effect a transaction, it may first be processed through one of several DTC systems before any DTC accounts are updated. For example, a transaction involving a delivery of securities may first be processed through one or more of the following:

- The IPO Tracking System
- The Receiver Authorized Delivery (RAD) system
- The Money Market Instrument (MMI) system.

After the transaction is processed, it is entered into DTC's Account Transaction Processor (ATP) system, where it is checked for various criteria (see Reasons for Recycling) before it is completed.

One critical function of ATP is Recycle Processing, also referred to as Pend Processing. DTC's recycle processor holds ~~your~~ **Participant** transactions that cannot immediately complete. All transaction types recycle if they cannot immediately complete, except:

- Minimum amount (MA) to net additions (NA) moves (using Collateral Moves functions)
- Releases of collateral
- Memo segregations (using the Memo Segregation functions)
- Segregations (using the Account Segregation Releases function)
- Transactions input with the "prevent pend" option (see below).

Note- These transactions will be dropped if they cannot complete when ATP performs its initial check.

Reasons for Recycling

Transactions can recycle because of Risk Management Controls or insufficient position. A transaction may recycle under any of the following circumstances:

1. The deliverer has insufficient position to complete the transaction.
2. Completing the transaction would make the deliverer's collateral monitor negative, that is, the total remaining collateral in ~~your~~ **the deliverer's** account is less than the resulting net settlement obligation. This could happen if the collateral value of the securities ~~you are delivering to be delivered~~ exceeds the settlement value that would be credited to ~~your~~ **the deliverer's** account, or if the delivery is free and ~~your~~ **the deliverer's** collateral monitor is not sufficient to absorb the decrease.
3. Completing the transaction would cause the total value in the receiver's account, including the securities involved in the transaction, to be less than the resulting net settlement obligation, that is, ~~your~~ **the receiver's** collateral monitor would be made negative. This could happen if the amount that would be charged against ~~your~~ **the receiver's** account exceeds the collateral value of the ~~applicable~~ securities ~~you are receiving~~ and ~~your~~ **the receiver's** collateral monitor is not sufficient to absorb the decrease.
4. Completing the transaction would cause the receiver's net settlement obligation to exceed its net debit cap.

~~5.—For MMI securities, the deliverer has insufficient other NA because the securities are deemed received versus payment position (RVP) NA and are being redelivered free or undervalued by more than 10 percent of the market value.~~

~~Note—This applies only to MMI transactions. MMI securities received versus payment are not allowed to be freely moved (free pledges, free deliver orders [DOs], withdrawals, segregations, etc.) until the LPNC control is released at approximately 3:00 p.m. eastern time.~~

Risk Management Controls

About the Product

Risk Management Controls protect **you DTC and its Participants** from the inability of one or more Participants to pay their settlement obligations. Risk Management Controls are based on guidelines established by the Federal Reserve Bank (FRB). DTC currently employs **four three** primary Risk Management Controls for processing securities:

- Collateralization (**Collateral Monitor**)
- Net Debit Caps
- ~~Largest Provisional Net Credit (LPNC) for Money Market Instruments (MMIs)~~
- Issuer/Participant Number (IPN) Collateral Control.

Net Debit Caps

Calculating Calculation of Your Participant Net Debit Caps

Net Debit Caps **for a Participant** are calculated daily as follows:

1. The system records **your the Participant's** collateral group's three highest intraday net debit peaks over a rolling 70-business-day period, using **simulated** net debit peaks **instead of actual net debit peaks**. If **you have the Participant has** elected to group **your its** accounts into separate families (see Grouping Accounts into Collateral Families) , the system first calculates the average **simulated** net debit peak of each family, and adds together the average net debit peaks of all **of the Participant's your** families to obtain **your the Participant's** overall average **simulated** net debit peak.
2. The system multiplies **your the Participant's** average **simulated** net debit peak by a factor to determine **your the Participant's** Net Debit Cap, which cannot exceed DTC's established maximum of \$1.8 billion. (Factors are based on a sliding scale, between 1 and 2, where smaller average peaks are multiplied by larger factors and larger average peaks are multiplied by smaller factors.)

Largest Provisional Net Credit Procedures

~~DTC established the largest provisional net credit (LPNC) as defined in the DTC Rules as an additional risk management control to protect against the occurrence, on the same business day, of an issuer insolvency or issuing and paying agent's Refusal to Pay and a Participant's failure to settle.~~

~~If, by 3:00 p.m. eastern time, DTC learns that an MMI issuing and paying agent refuses to pay for the maturity presentments and or periodic interest and principal payments of an MMI issuer, or that an MMI issuer is insolvent, it initiates the Issuer Failure process. This process reverses maturity presentments, valued issuances, and valued deliveries and pledges originating from new issuances of the affected issuer and periodic interest and principal payments on MMI securities issued by that issuer and held in Participant accounts at DTC. These reversals are allowed to override collateral monitor and net debit cap controls so additional protection is required. LPNC procedures instead withhold credits due to valued deliveries or pledges of the MMI securities of the affected issuer so that the reversed transactions do not cause the net debit cap balance of a Participant to exceed its net debit cap or the collateral monitor control.~~

~~DTC tracks MMI activity in each Participant's account intraday and, as MMI transactions (including but not limited to, P&I payments credited to the account, and deliveries to and maturity presentments from the account) satisfy positions and risk management controls (other than LPNC), the settlement account of the Participant reflects in real time the net debit balance or net credit balance for each Acronym, as defined in the DTC Rules. DTC continuously monitors the applicable MMI Acronyms in which each Participant has the two largest net credits to determine the LPNC in accordance with the DTC Rules.~~

~~By way of example only, on a business day, prior to settlement, if an account has an MMI maturity presentment for which a credit of \$50 million is due, but it is also purchasing an MMI issuance in the same Acronym for \$25 million, and both the maturity presentment and issuance deliveries have satisfied position controls, net debit cap and collateral monitor controls, the system will reflect, with respect to this Acronym, a net credit due to the settlement account of \$25 million. A similar calculation would be completed with respect to each Acronym for which a net credit to the settlement account is anticipated to determine the two largest pending net credits for any Acronym, the sum of which equals the LPNC at that time.~~

~~The amount of the LPNC will not be credited to the settlement account until after the time for reversals has passed, at which time the amount is credited to the settlement account, offsetting any net debit balance to reduce the settlement obligation, if any, of the Participant. (It may be that the credit of the amount of the LPNC to the settlement account of the Participant creates a net credit balance, so that the Participant has no settlement obligation and is due a net payment in settlement.)~~

~~LPNC will not apply to any MMI Acronym for which the value of issuances exceeds the value of maturity presentments for that business day, as further provided in Rule 9(C), Section 1 of the DTC Rules.~~

~~Note LPNC procedures remain in effect only until the later of 3:05 p.m. eastern time or any time to which the period for MMI reversals may be extended by DTC in accordance with the Rules and Procedures (including this Settlement Service Guide). To view the LPNC for an account, use the Risk Management Controls Inquiry function.~~

~~LPNC Procedures Applied to Net Debit Caps~~

~~To accommodate LPNC procedures, DTC established a simulated net balance, which is calculated by computing your actual net settlement balance and reducing it by your LPNC, if any. If the simulated balance results in a net debit, DTC will not allow the simulated net debit to exceed your net debit cap. This helps protect you and DTC so that even if DTC reverses transactions in the MMI Acronyms as to which the credits have been withheld, your net debit after the reversals will not exceed your net debit cap. If you incur only net debits in the MMI programs in which you have activity, your LPNC value will be zero. To determine your LPNC intraday, use the Risk Management Controls Inquiry function in the Settlement User Interface.~~

~~Note Intraday, until approximately 3:05 p.m. eastern time, your simulated net debit, not your actual net debit, is used for calculating net debit cap controls.~~

~~LPNC Procedures Applied to Collateralization~~

~~DTC established a simulated Collateral Monitor (CM) to show your excess collateral after LPNC procedures are applied to your account. DTC calculates your simulated CM by subtracting your~~

~~LPNC from your actual CM. Until approximately 3:05 p.m. eastern time, transactions that would make your simulated CM negative are not completed; they are held in your recycle queue until you receive sufficient collateral in your account to complete them.~~

~~LPNC procedures help protect you and DTC so that a failing Participant's net debit balance remains collateralized even if DTC reverses transactions in the MMI Acronyms as to which credits have been withheld.~~

Issuer/Participant Number Collateral Control (IPN)

Collateral in a Participant's account associated with the Participant (such as the Participant's own commercial paper) increases risk to DTC if that Participant failed to pay DTC and its obligation is supported partly or fully by the failing Participant's associated securities. To eliminate this risk, DTC's system monitors collateral received in a Participant's account related to that Participant.

IPN will link to a Participant's account securities related to it and withhold from the Participant any collateral value associated with the security. In effect, transactions processed to a Participant account will remain essentially the same, except that no increase will be applied to the Participant's collateral monitor for the collateral value of securities received that are associated with the Participant. IPN is based on a Participant's legal entity; therefore, this control will apply to every account of a Participant. For example:

When a Participant has an IPA account that issues MMI securities on its own behalf and has a custody account in the same or a separate collateral group, and the IPA account processes an MMI issuance delivery to its own custody account in its own MMI securities, the custody account will receive no collateral increase for the collateral value of that issuance.

IPN control will not affect a Participant's net debit ~~or its LPNC~~ calculations. Because IPN control affects the collateral value of an associated account, IPAs may wish to monitor their accounts more closely intraday for insufficient collateral, especially if ~~they have net maturity~~ presentments ~~versus exceed~~ issuances in ~~their own MMI securities~~ an Acronym for which they act as IPA on a particular day.

Risk Management Controls Contact Number

For more information on Risk Management Controls, call DTC's Customer Support Center at (888) 382-2721.

Extension Requests

DTC cannot grant ~~you a Participant~~ an extension of the foregoing deadlines unless a substantial volume of transactions is involved. Please notify DTC as early in the processing day as possible if ~~you think you may~~ there is a need to request an input extension. This will allow DTC to discuss alternative methods of input.

To request an extension call DTC's Settlement Hotline at 212-855-5800.

Associated Functions

The Short Position Inquiry function is used in association with the Settlement Processing Schedule and allows ~~you~~ Participants to view the detail of their respective short position penalty charges.

Distributions Service Guide

Allocations

Cash Distributions for MMI Issues

DTC distributes income payments for various MMIs, including Medium Term Notes (MTNs). ~~The allocation process differs from the non-MMI issues in the way in which payment is received from the paying agent. At start of day, all MMI distributions payable that day are credited to the applicable participant's account and offset by a debit to the issuer's issuing paying agent's (IPA's) account at DTC. You can view these credits via DTC's Settlement service. In the rare instance that an issuer defaults, these credits are reversed prior to DTC's final settlement process. MMI income payments (Income Presentments) are not attempted for processing until the issuer's issuing and paying agent (IPA) makes a funding decision in the form of an "MMI Funding Acknowledgment". Once a funding decision is made items will be processed subject to risk controls and the sufficient inventory of the relevant Participants. See the DTC Settlement Service Guide, available at <http://www.dtcc.com/~media/Files/Downloads/legal/service-guides/Settlement.pdf>, for the DTC Procedures relating to the MMI settlement processing.~~
