

Bold and underlined text indicates proposed new language.

~~Bold and strikethrough text~~ indicates proposed deleted language.

DTCC

SETTLEMENT

SERVICE GUIDE

Important Terms

The following terms are important to understanding the Settlement Service:

This term	Refers to
<u>Affiliated Family</u>	<u>An Affiliated Family means each Participant that controls or is controlled by another Participant and each Participant that is under the common control of any Person. For purposes of this definition, "control" means the direct or indirect ownership of more than 50 percent of the voting securities or other voting interests of any Person.</u>
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 a Participant from processing certain activities (for example, valued delivery chill will prevent the Participant from making valued deliveries from its account).
Collateral Monitor (CM)	DTC's <u>processcalculation</u> for measuring the sufficiency of the collateral in a Participant's account to cover its net settlement obligation.
collateral value	The market value of a security less the applicable DTC haircut.
***	***
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>Unaffiliated Participant</u>	<u>A Participant that is not included in an Affiliated Family.</u>
Unknown Rate	For variable rate MMI Securities, the interest rate that the IPA will pay for the income portion of a presentment.
unvalued additions	Unvalued additions to 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

Participants Fund and Preferred Stock Investment

Purpose

The Participants Fund and the Participants Preferred Stock Investment provided in DTC Rule 4 create liquidity and collateral resources to support the business of DTC and to cover losses and liabilities incident to that business. For this purpose, every Participant has a Required Participants Fund Deposit and a Required Preferred Stock Investment; the amount of each is based on the Participant's activity at DTC as further explained in this Service Guide. Additionally, a Participant may make a Voluntary Participants Fund Deposit, to further support its activities. The Required and Voluntary Participants Fund Deposits must be in cash, which, if a Participant fails to settle for any reason, are available to DTC as immediate liquidity to complete settlement and collateral to support any borrowing against DTC lines of credit.

Amounts

Each Participant must make a minimum deposit of \$7,500 to the Participants Fund. Many Participants are required to deposit additional amounts based upon a 60 business day rolling average of the Participant's six highest intraday net debit peaks. A Participant's portion of the Participants Fund is in direct relation to the liquidity requirements generated by the Participant and its Affiliated Family, if any, as more fully described below.

The aggregate Participants Fund includes ~~four two~~ component amounts, ~~as set forth below~~: the "Core Fund," ~~and~~ the "~~Base Fund,~~" the "~~Incremental Fund~~" and the "Liquidity Fund." The Core Fund is set by DTC at an aggregate amount of \$450 million and is comprised of the Base Fund and the Incremental Fund. The Base Fund is the sum of minimum deposits by all Participants, i.e., the amount that is \$7,500, times the number of Participants, at any time. The Incremental Fund is the balance of the Core Fund up to \$450 million; this is the amount that must be ratably allocated among Participants that are required to pay more than a minimum deposit.¹ The Liquidity Fund component (set at \$700 million) applies to certain Unaffiliated Participants ~~whose~~ and Affiliated Families ~~have Net Debit Caps that exceed \$2.15 billion as described in the Liquidity Fund subsection below.~~

How the Required Deposit to the Participants Fund and the Required Preferred Stock Investment are Calculated for a Participant

DTC monitors the levels of each Participant's net settlement debits during each Business Day and records the highest net debit. This measure of liquidity is referred to as the Participant's intraday net debit peak.

Liquidity Fund

The remaining \$700,000,000 aggregate amount of Required Participants Fund Deposits (i.e., the Liquidity Fund) is allocated proportionately among (i) Unaffiliated Participants that have Net Debit Caps that exceed \$2.15 billion and (ii) Participants whose Affiliated Families' have Aggregate Affiliated Family Net Debit Caps that exceed \$2.15 billion, in the following manner: the Affiliated Families whose aggregate Net Debit Caps exceed \$2.15 billion, up to a maximum Aggregate Affiliated Family Net Debit Cap of \$2.85 billion. The calculation to determine a Participant's portion of the Liquidity Fund is a two-step process, using algorithms described below, to: (i) calculate an Affiliated Family's portion of the Liquidity Fund, and (ii) determine each Participant's portion of their Affiliated Family's allocation.

Step One:

~~Algorithm used to~~ DTC will calculate the Unaffiliated Participant's or Affiliated Family's portion of the \$700,000,000:-

- ~~1. Only those Affiliated Families' whose Aggregate Affiliated Family Net Debit Cap exceeds \$2,150,000,000 will be allocated a portion of the Liquidity Fund.~~
 - a. ~~The greater the Aggregate Affiliated Family Net Debit Cap, the larger allocation the Affiliated Family will receive. The first step of the calculation is to~~ First, it will determine the Unaffiliated Participant's or the Affiliated Families' "Overage" amount, which is the amount by which the Net Debit Cap for an Unaffiliated Participant or the Aggregate Affiliated Family Net Debit Cap for an Affiliated Family exceeds

¹ Those Participants whose "PF Averages" (as defined below) exceed the total amount of the Base Fund are required to make a Deposit to the Incremental Fund.

~~\$2,150,000,000~~ **2.15 billion up to and including \$2.85 billion. This is called the "Overage".**

- b. ~~To~~ **Second, it will** calculate the allocation percentage for an **Unaffiliated Participant or Affiliated Family of Participants, the program will perform the following:**

$$\frac{\text{Overage of the } \underline{\text{Unaffiliated Participant or Affiliated Family}}}{\text{Sum of ALL } \underline{\text{Unaffiliated Participant and Affiliated Family Overages}}} = X\%$$

- c. **Third, it will multiply X% of by \$700,000,000 to determine is the amount of the Unaffiliated Participant's or Affiliated Family's allocation amount.**

The sum of ~~the~~ **all Unaffiliated Participant and Affiliated Family** allocations equals \$700,000,000.

Step Two:

~~An algorithm is used to determine the Participant's portion of its "Affiliated Family allocation"~~

- 2. ~~For Participants of Affiliated Families, DTC will determine each Participant's portion of the Affiliated Families allocation amount from Step One, above. Calculation will be based on the Participant's Net Debit Cap (NDC) in relation to its total Aggregated Affiliated Family NDC.~~

- a. **First, it will calculate the Participant's allocation percentage, which is based on the Participant's individual Net Debit Cap in relation to its Affiliated Family's Aggregate Affiliated Family Net Debit Cap.**

$$\frac{\text{Participant } \underline{\text{NDC}} \underline{\text{Net Debit Cap}}}{\underline{\text{Aggregated Affiliated Family } \underline{\text{NDC}} \underline{\text{Net Debit Cap}}}} = Y \%$$

- a.b. ~~Second, it will multiply Y% by of the Affiliated Family allocation amount to determine is the Participant's portion of the "Affiliated Family allocation".~~

- b.c. ~~Third, it will complete F~~ **this calculation will be done** for all Participants within each Affiliated Family that has an Overage.

The sum of all Participant portion amounts will equal the total allocation amount of the Participant's Affiliated Family.

Since an Unaffiliated Participant is not part of an Affiliated Family, it is not subject to this Step Two. Rather, its allocation portion is X% as calculated in Step One "b" above.

Net Debit Caps

Net Debit Caps help ensure that DTC can complete settlement, even if a Participant fails to settle. They are based on your net debit history at DTC and automatically rise or fall relative to the average of your highest intraday net debit peaks in accordance with the calculation described below (in "Calculating Your Net Debit Cap"). A Net Debit Cap, recalculated daily, is applied to your account to limit the settlement net debit you could incur at any point during a processing day.

Your Net Debit Cap is limited by DTC's established maximum Net Debit Cap, ~~the value of~~ which is **determined from time to time based on DTC's liquidity resources, related costs, and projected benefits to Participants, and is** always set lower than DTC's total available liquidity.² ~~Currently, the maximum Net Debit Cap you can have is \$2.15 billion. The Net Debit Cap of an Unaffiliated~~

² **Governance of DTC liquidity and liquidity resources are managed in accordance with the Clearing Agency Liquidity Risk Management Framework and related procedures.**

Participant or a Participant of an Affiliated Family may not exceed DTC's maximum Net Debit Cap, nor may the Aggregate Affiliated Family Net Debit Cap of an Affiliated Family exceed the maximum Net Debit Cap. The Aggregate Affiliated Family Net Debit Cap of an Affiliated Family will be shared among the Participants of the Affiliated Family according to either (i) the proportional liquidity usage of the Participants as calculated by DTC's system or (ii) as DTC is instructed, in writing, by the Affiliated Family.

Before completing a transaction in which you are the receiver, DTC calculates the resulting effect the transaction would have on your account, and determines whether your resulting Net Debit Balance would exceed your Net Debit Cap. Any transaction that would cause your net settlement debit to exceed your Net Debit Cap is placed on a pending (recycling) queue until another transaction creates credits in your account (see Recycle Processing for more information). Most credits are generated when you deliver securities versus payment; pledge securities for value; receive principal, dividend or interest allocations; or wire funds (SPPs) to DTC's account at the FRBNY.

Calculation of Participant Net Debit Caps

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

1. The system records the Participant's collateral group's three highest intraday net debit peaks over a rolling 70-business-day period, using net debit peaks. If the Participant has elected to group its accounts into separate families (see Grouping Accounts into Collateral Families), the system first calculates the average net debit peak of each family, and adds together the average net debit peaks of all of the Participant's families to obtain the Participant's overall average net debit peak.
2. The system multiplies the Participant's average net debit peak by a factor to determine the Participant's Net Debit Cap, which cannot exceed DTC's established maximum **Net Debit Cap of \$2.15 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.)

Note- Your Settling Bank can set your maximum Net Debit Cap. However, the maximum amount set by a Settling Bank cannot exceed the Net Debit Cap calculated by DTC's system. DTC may also limit your Net Debit Cap to any amount regardless of your intraday net debit peaks.

Although most transactions are subject to Risk Management Controls, the following activities override collateralization and Net Debit Cap controls:

- Mutual funds purchases through DTC's Fund/SERV system
- DTC-generated activity (such as monthly billing charges)
- Deposit or settlement adjustments
- Short position charges
- Principal and income charges
- Participants Fund charges.

To view your Net Debit Cap and net settlement balance, use the Risk Management Controls Inquiry function.

~~**As an added measure DTC has also established limits on the maximum settlement obligation that a financial family of affiliated DTC Participants can incur. An Affiliated Family means each Participant that controls or is controlled by another Participant and each Participant that is under the common control of any Person. For purposes of this definition, "control" means the direct or indirect ownership of more than 50% of the voting securities or other voting interests of any Person. The maximum "Aggregate Affiliated Family Net Debit Cap" for the Participants comprising an Affiliated Family is currently set at \$2.85 billion.**~~

~~So that DTC will be able to complete settlement each day in the event of a Participant's inability to settle, DTC currently maintains liquidity resources of \$3.05 billion, including \$1.15 billion cash in the Participants Fund and a committed line of credit in the amount of \$1.9 billion with a consortium of banks.~~

DTC will provide Participants with a minimum of 10 Business Days' notice via Important Notice of any decrease in DTC's maximum Net Debit Cap. If such decrease would result in a decrease to the Net Debit Cap of an Unaffiliated Participant or to the Aggregate Affiliated Family Net Debit Cap of an Affiliated Family, then DTC also will notify such affected Participants and Affiliated Families of such decrease.

RULES

BY-LAWS

ORGANIZATION CERTIFICATE

THE DEPOSITORY TRUST COMPANY

RULE 1

DEFINITIONS; GOVERNING LAW

Aggregate Affiliated Family Net Debit

The term “Aggregate Affiliated Family Net Debit” means the amount by which the algebraic sum of all money debits and charges to the Accounts of an Affiliated Family exceeds the sum of all money credits thereto.

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 will not be negative and the Family Net Debit for that Account Family will not exceed the Net Debit Cap for such Account Family;
and

(b) immediately after the transaction, the Aggregate Affiliated Family Net Debit, if any, of the Affiliated Family of the Instructor, which includes the Account from which the Securities subject of the instruction are Delivered, Pledged or Withdrawn, will not exceed the Aggregate Affiliated Family Net Debit Cap of such Affiliated Family;

(bc) 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 will not be negative and the Family Net Debit for that Account Family will not exceed the Net Debit Cap for such Account Family;

(d) immediately after the transaction, if the transaction subject of the instruction affects an Account of a Contra Party, as defined immediately above, the Aggregate Affiliated Family Net Debit, if any, of the Affiliated Family of the Contra Party will not exceed the Aggregate Affiliated Family Net Debit Cap of such Affiliated Family; and

(~~ee~~) 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.
