Inventory Management System

PBS USER GUIDE

DTCC
The Depository Trust & Clearing Corporation
The primary purpose of this product guide is to familiarize members with the **Inventory Management System** product offered by DTCC. This guide is not intended to serve as a legal document. No statement in this guide should be construed as a legally binding rule or regulation, or as creating an obligation on the part of DTCC or any person. In addition, any time schedules or time requirements set forth herein are subject to change without notice.

Copyright 2009®
# Contents

- What’s New in the Inventory Management System ................................................................. 3
  - Overview .................................................................................................................................. 3
  - Welcome to The Inventory Management System ................................................................. 3
  - Benefits .................................................................................................................................. 3
- About the Inventory Management System .............................................................................. 4
  - Introduction ............................................................................................................................. 4
- About The Logic of IMS ............................................................................................................ 5
  - IMS States ............................................................................................................................... 5
- About IMS Authorization .......................................................................................................... 6
- About Transaction Types .......................................................................................................... 7
- About Profiles – At A Glance ..................................................................................................... 9
- About Profiles - More Information ........................................................................................ 12
  - Authorization Profile ........................................................................................................... 13
    - Authorization Profile Pages ............................................................................................... 13
    - Transaction Authorization Pages ....................................................................................... 13
  - ID Net Drop Authorization Profile .................................................................................... 14
    - Bank 719 Deliveries (Institutional sells) ............................................................................ 14
    - Bank 919 Receives (Institutional buys) ............................................................................. 14
  - Notification Profile .............................................................................................................. 15
  - About Transaction Color Processing ................................................................................... 16
    - Overview ............................................................................................................................ 16
    - Transaction (Color) Processing Commands ...................................................................... 16
    - Transaction Color Examples .............................................................................................. 16
  - About Searching on Inquiry Pages ...................................................................................... 17
    - Flow of Inquiry Screens ..................................................................................................... 17
    - Seeing Transaction History ................................................................................................. 17
    - Seeing Transaction Details ................................................................................................. 17
  - About Institutional Deliveries – ID Net, Omgeo Realtime Link, and Late Affirmed Processing .................................................................................................................. 18
  - About ID Net .......................................................................................................................... 19
    - ID Net for Brokers and Banks ........................................................................................... 19
      - Brokers ........................................................................................................................... 19
      - Banks ............................................................................................................................. 19
  - Flow of an ID Net Trade ......................................................................................................... 20
  - Brokers/Banks – ID Net Business Rules ............................................................................. 21
  - Brokers/Banks – Where to Take Action in ID Net ................................................................. 23
  - ID Net Transaction Inquiry .................................................................................................... 25
What’s New in the Inventory Management System

Overview

Recent enhancements to the Inventory Management System include the following:

- ID Net is a service offering developed jointly by DTCC and Omgeo. The ID Net service will allow DTC-eligible affirmed institutional equity trades to flow into NSCC’s clearance and settlement systems for netting on behalf of broker-dealer clients. For more information, refer to About ID Net.

Welcome to the Inventory Management System

The Inventory Management System (IMS) allows you to inquire about, authorize, or exempt securities eligible for settlement during the 23 business days beginning with S-1 (the day before settlement), and ending with S+21 (21 days after settlement).

Benefits

- Greater control over night cycle deliveries through expanded authorization capabilities and choices
- Ability to re-introduce dropped transactions
- Ability to store future deliveries, reducing cost for storing deliveries
- Greater participant control over the order and timing of deliveries.

For more information, refer to About the Inventory Management System.
About the Inventory Management System

**INTRODUCTION**

The Inventory Management System provides you with the ability to manage when and in what order deliveries from your inventory should be attempted. IMS is a service offered to you as a deliverer. Inventory is the number of shares you have available to meet your deliveries.

IMS allows you to:

- Selectively authorize and exempt deliveries for Account Transfers (ACATs), Matched Institutional Trades (MITS), CNS shortcovers (CNSS), Balance Orders (BALOs), Night Delivery Orders (NDOS) and Participant Entered Transactions (PETS) for Corporate Bonds, Municipal Bonds, Equities, and Money Market Instruments.
- Set rules to automatically reintroduce dropped transactions.
- Set rules to indicate the order that night cycle transactions (Reintroduced Drops, CNS shortcovers, ACATs, ID Trades, Balance Orders and NDOS) should be submitted to ATP for settlement.
- Set rules to indicate the recycle order for deliver orders and pledges recycling for insufficient position.
- Warehouse deliveries with future settlement dates.
About The Logic of IMS

Among the most important elements in IMS are Profiles and Transaction Types. Profiles allow you to apply rules to transaction types, asset classes, activities, reason codes, and securities depending on the level of granularity desired. The interaction of Profile processing rules on different transaction types results in "states." A state is an IMS term for the current status.

**IMS STATES**

Transactions move through various states as profiles are applied, commands are entered, or processing events take place. While there are various states a transaction can move in and out of once in IMS, there are several common states that the majority of transactions go through. Transactions enter IMS in the **Unprocessed** state, most become **Authorized**, and, ultimately, are sent to ATP, where they are **Made** and are settled, or are **Dropped** due to insufficient shares or risk management controls.
About IMS Authorization

Through authorization, you can control which deliver orders are submitted to ATP for processing on Settlement date.

Through the use of the Authorization profile, you can define which transactions need to be authorized by you (an active profile) and which can be authorized automatically by IMS (a passive profile).

Authorization profiles can be defined by asset class and transaction type.

Once defined, transactions can be authorized in IMS throughout the course of the day.

There are two types of authorization modes—Passive and Active. Passive mode authorizes transactions automatically, and no user intervention is required. Transactions that are in Active mode require you to manually authorize transactions.

When a transaction has the Authorized profile applied in Active mode, the transaction will stay in an Unprocessed state until you authorize, exempt or cancel it. Transactions left in an unprocessed state are automatically changed to an exempt state after the Settlement date. IMS transactions remain in the exempt state in IMS for 21 days and can be authorized until the 21st day.
About Transaction Types

IMS handles a variety of processing flows for the different transactions that enter DTC’s settlement system. Transaction types are high-level categories of various types of deliver orders, i.e., institutional deliveries, account transfers, etc. as well as transaction types that are not deliver orders, such as segregations, pledges, etc. All transactions that are not deliver orders are given the "OTHR" transaction type in IMS.

Transaction types (except OTHR) can be selected in combination with other data elements like asset class, activity code, and security to make it possible to achieve more granular inventory control.

<table>
<thead>
<tr>
<th>Transaction Type</th>
<th>Transaction Type Code</th>
<th>Description</th>
<th>Related Profiles</th>
</tr>
</thead>
<tbody>
<tr>
<td>Account Transfers</td>
<td>ACAT</td>
<td>Account Transfer Deliveries.</td>
<td>▶ Authorization</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>▶ Submission Order</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>▶ Notification</td>
</tr>
<tr>
<td>Balance Orders</td>
<td>BALO</td>
<td>Securities that are not CNS-eligible.</td>
<td>▶ Authorization</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>▶ Submission Order</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>▶ Notification</td>
</tr>
<tr>
<td>Continuous Net Settlement</td>
<td>CNS</td>
<td>Transactions created by the Continuous Net Settlement (CNS) process.</td>
<td>▶ Authorization</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>▶ Submission Order</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>▶ Notification</td>
</tr>
<tr>
<td>Matched Institutional Deliveries</td>
<td>MITS</td>
<td>Institutional deliveries sent to IMS from Omgeo or another matching utility.</td>
<td>▶ Authorization</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>▶ Submission Order</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>▶ Notification</td>
</tr>
<tr>
<td>Late Matched Institutional Trades</td>
<td>LMIT</td>
<td>Institutional trades that are affirmed in the Omgeo TradeSuite system during</td>
<td>▶ Authorization</td>
</tr>
<tr>
<td></td>
<td></td>
<td>the 24-hour period between 12:00 p.m. on Settlement Date minus one (S-1) and</td>
<td>▶ Submission Order</td>
</tr>
<tr>
<td></td>
<td></td>
<td>12:00 p.m. on Settlement Date (S).</td>
<td>▶ Notification</td>
</tr>
<tr>
<td>Night Deliver Orders</td>
<td>NDOS</td>
<td>Deliver orders input prior to the Settlement Date that are processed during</td>
<td>▶ Authorization</td>
</tr>
<tr>
<td></td>
<td></td>
<td>the night cycle.</td>
<td>▶ Submission Order</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>▶ Notification</td>
</tr>
<tr>
<td>Other</td>
<td>OTHR</td>
<td>A category for non-IMS transactions.</td>
<td>Not applicable.</td>
</tr>
<tr>
<td>Participant Entered Transactions</td>
<td>PETS</td>
<td>Transactions submitted by</td>
<td>▶ Authorization</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>▶ Notification</td>
</tr>
<tr>
<td>Transaction Type</td>
<td>Transaction Type Code</td>
<td>Description</td>
<td>Related Profiles</td>
</tr>
<tr>
<td>------------------------</td>
<td>-----------------------</td>
<td>-------------</td>
<td>---------------------------</td>
</tr>
<tr>
<td></td>
<td></td>
<td>participants that require secondary authorization.</td>
<td>Authorization</td>
</tr>
<tr>
<td>Reintroduced Drops</td>
<td>RDRP</td>
<td>Dropped and unapproved RAD transactions for which a reintroduced drop profile is defined. (Does not apply to CNS transactions.)</td>
<td>Authorization, Submission Order, Notification</td>
</tr>
</tbody>
</table>
Profiles determine the way in which transactions are processed, particularly the timing and sequence.

There are four main types of profiles:

- Authorization
- Submission Order
- Recycle Order
- Drops

More advanced profiles involve:

- Color for asset class, activity code, and security profiles. For more information, refer to About Transaction Color Processing.
- Recycle Order for transactions pending due to insufficient shares.

The table below summarizes IMS profiles.

<table>
<thead>
<tr>
<th>Profile</th>
<th>Function</th>
<th>Description</th>
<th>Can Be Defined By</th>
<th>Example</th>
</tr>
</thead>
<tbody>
<tr>
<td>Authorization</td>
<td>Authorization</td>
<td>Select whether transactions are authorized in passive (automatic) or active mode (user authorizes in IMS).</td>
<td>Transaction types within an asset class</td>
<td>Require institutional equity transactions be actively authorized.</td>
</tr>
<tr>
<td>Authorization Mode Change</td>
<td>Authorization</td>
<td>Change the authorization mode for the current day only.</td>
<td>Transaction types within an asset class</td>
<td>Change an authorization profile from passive to active for today only.</td>
</tr>
<tr>
<td>(Today Only)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
| User Defined Authorization     | Authorization | Require a secondary authorization for participant - entered transactions (PETS) | ➢ Input source  
➢ Free/valued  
➢ Delivery or reclaim reason codes | Require secondary authorization for stock loan DOs.     |
| Submission                    | Delivery  | Define the order in which transaction types are submitted to ATP for processing during the DTC night cycle. | ➢ Authorization Transaction Types:  
➢ Reintroduced Drops  
➢ CNS  
➢ ACAT  
➢ Matched Institutional | Change the DTC default submission order in the night cycle, so that CNS is last. This allows you to build position from ID receives and complete fewer |
<table>
<thead>
<tr>
<th>Profile</th>
<th>Function</th>
<th>Description</th>
<th>Can Be Defined By</th>
<th>Example</th>
</tr>
</thead>
<tbody>
<tr>
<td>Drop</td>
<td>Reintroduction of drops</td>
<td>Identifies by reason code which dropped or unapproved Receiver Authorized Delivery (RAD) system transactions should be reintroduced to IMS.</td>
<td>Asset class, Reason code, Free/Valued</td>
<td>Require that dropped ID trades (reason code 77) are reintroduced for settlement.</td>
</tr>
<tr>
<td>ID Net Drop</td>
<td>Reintroduction of drops</td>
<td>Identifies whether broker ID Net reintroduced drops should be automatically (passive mode) or actively (active mode) authorized.</td>
<td>Matched institutional equity trades</td>
<td>Require that reintroduced ID Net drops be actively authorized.</td>
</tr>
<tr>
<td>Recycle Order</td>
<td>Ordering of pending transactions</td>
<td>Order in which transactions recycling in ATP for position will be retried.</td>
<td>Asset class, Activity code, Sort Orders, Delivery/Reclaim reason codes</td>
<td>Failed (reason code 71) Equity deliveries recycle in settlement date, settlement value, and share order before all other deliveries.</td>
</tr>
<tr>
<td>Asset Class</td>
<td>Delivery (color rules apply)</td>
<td>Allows you to assign a color to an asset class, thereby controlling the timing and restrictions for delivery.</td>
<td>Asset Class</td>
<td>Require that equities are Yellow so that if they pend for lack of shares, they must be resubmitted in the exact order specified.</td>
</tr>
<tr>
<td>Activity</td>
<td>Delivery</td>
<td>Allows you to assign an order, controlling the timing of delivery.</td>
<td>Activity</td>
<td>Require that CNS deliveries are Red so that they cannot be submitted to ATP until released.</td>
</tr>
<tr>
<td>Security</td>
<td>Delivery</td>
<td>Allows you to assign a color to a security, thereby controlling the timing of delivery.</td>
<td>Security</td>
<td>Require that equity CUSIP 123456789 is Red so that transactions for this CUSIP cannot be submitted to</td>
</tr>
<tr>
<td>Profile</td>
<td>Function</td>
<td>Description</td>
<td>Can Be Defined By</td>
<td>Example</td>
</tr>
<tr>
<td>-------------</td>
<td>----------------------------------------</td>
<td>-----------------------------------------------------------------------------</td>
<td>------------------------------------------------------</td>
<td>-------------------------------------------------------------------------</td>
</tr>
</tbody>
</table>
| Notification| Notification of IMS state changes       | Sends notifications of state changes for receives or deliveries. Can receive full length or short output messages. | ➢ Asset Class  
➢ Transaction Type  
➢ Activity Code  
➢ Deliverer and Receiver | Receive notifications of transactions that are pending for shares, pending for receiver's debit cap, made, etc. |
About Profiles - More Information

This section provides more in-depth information on certain profiles. To see an overview of all profiles, refer to About Profiles – At A Glance.
The IMS Authorization profile allows you to establish for your firm a Passive or Active authorization across various transaction types within asset classes, such as CNS corporate bonds or matched institutional equity trades. The IMS Authorization profile also allows you to switch from active to passive mode and back at certain times of the day. You can also switch modes for one day only if you want to make a time sensitive, one-time change.

Once authorized, the transaction will be passed on to the Receiver Authorized Delivery (RAD) system, if applicable, or to the Account Transaction Processor (ATP) for settlement.

**Authorization Profile**

**Tip:** Typically, the authorization profile would be set up one time for your firm by someone at a supervisory level. After that, the staff at your firm could authorize transactions being submitted to IMS on a daily basis. Transactions requiring authorization would be pre-determined through the authorization profile your firm set up. The Authorization profile is in Passive mode by default for all transaction types except Matched Institutional Trades (MITS) for which the default is active. Most participants leave their profiles set to the defaults.

Ultimately, authorization, either through passive or active means, is the first step towards transactions being processed in IMS. Transactions that are not authorized will not be processed to the receiver authorization system, if that is required, will not receive a color profile or recycle order, and will not be sent to ATP for settlement.

**Authorization Profile Pages**

- **Authorization Profile Updates page:** Allows you to change your authorization profile from active to passive, or vice versa, for each transaction type within an asset class. The new settings will be effective the next business day.

- **Authorization Profile Mode Change (Today Only) page:** Allows you to change the authorization mode for the current day.

**Transaction Authorization Pages**

- **Transaction Authorization Updates page:** Allows you to authorize, exempt or cancel trades on a trade-for-trade basis. You can also globally authorize, exempt or unauthorized trades.

- **CNS Partial/Full A/E Updates page:** Allows you to partially or fully authorize your IMS exempted (level 3) CNS transactions from approximately midnight on S-1 (Settlement Date minus 1) to 3:00 p.m. on S (Settlement Date).

- **CNS Pre-Authorization/Exemption page:** Allows you to pre-authorize or pre-exempt CNS transactions for the next Settlement Date prior to the receipt of the transactions from CNS. These pre-authorizations or pre-exemptions can be cancelled, if necessary, prior to the receipt of the delivery instructions.

**Note:** DTC processes authorizations and exemptions on a last-in basis. For example, if the last authorization or exemption received before cutoff is global, it overrides all prior input. Likewise, if the last authorization or exemption is trade-for-trade, it overrides any previous global authorizations or exemptions.
ID Net Drop Authorization Profile

The ID Net Drop Authorization profile identifies whether broker ID Net reintroduced drops should be reintroduced to IMS and automatically (passive mode) or actively (active mode) authorized.

Bank 719 Deliveries (Institutional sells)

Bank ID Net deliveries occurring through the NSCC omnibus 719 account that are still recycling at the ID Net Pend cutoff at 11:30 a.m. will automatically revert to trade-for-trade settlement.

Bank 919 Receives (Institutional buys)

Bank ID Net receives occurring through the NSCC omnibus 919 account that are still recycling at the ID Net Pend cutoff at 11:30 a.m. on Settlement Date will drop and the state changes to PndD.

These ID Net drops may then be reintroduced by brokers to IMS for processing as regular ID trades. IMS will either permanently drop the ID Net transaction or will resubmit it based on the broker’s ID Net Drop Authorization profile.
Notification Profile

You can receive notifications of state changes, for example, pending for shares, pending for receivers debit cap, made, etc. for both your deliveries or receives. An IMS notification profile must exist in order to receive notifications of state changes. By default, you receive no notification messages unless you set up profiles.

You can receive notifications of state changes in either full length or short length via 15022 MQ messages.
About Transaction Color Processing

The Inventory Management System contains functionality to manage transaction processing.

**Overview**

Users can create profiles to indicate the order in which their recycling deliveries should be attempted, for example, process my ID trades before my CNS deliveries. Once the order is determined, the user can give the profile a color of green, yellow or red. The color of the profile determines the timing and restrictions placed on the profile. In order to establish a recycle profile users need the “IMSP” eligibility bit. Below is a description of each color:

- Green transactions can be executed immediately (the default for most settlement related deliveries)
- Yellow transactions must be executed in the exact order specified
- Red transactions can only be executed with a release command

**Transaction (Color) Processing Commands**

Three new commands support transaction (color) processing.

- The release command releases transactions that are coded red or yellow to green for immediate processing. Releases can be processed individually or globally. For global releases, users can specify a time or one of two late-day events at approximately 1:30 p.m. and 2:30 p.m.
- The pause command allows users to stop their deliveries from being processed for a short time. This feature is useful when a user sends in a large number of deliveries that they want to “line up” in the profile order before being attempted for processing.
- Remove pause (un-pause) allows transactions to resume transaction delivery processing by removing an existing pause prior to its expiration.

**Transaction Color Examples**

The Inventory Management System permits users to assign a color or delivery scheme to their transactions by Asset Class (Municipal Bonds, Equities, MMI, or Corporate Bonds), Activity Code (activity code 26 for Deliver Orders, etc.) or specific security (CUSIP).

- The Asset Class profile allows a user to assign a color to a specific asset class, e.g., all equities are yellow.
- The Activity profile allows the user to assign a color to an activity type, e.g., CNS deliveries are red.
- The Security profile allows the user to assign a color to a specific security, e.g., CUSIP 123456789 is red.

More specific profiles override less specific profiles. For example, if the user has a profile for all Equities to be Green and also has an Activity profile such that all deliver orders are Yellow and a Security profile for equity CUSIP 123456789 to be Red, then a deliver order in CUSIP 123456789 would be Red overriding the Green Asset Class profile and the Yellow Activity profile.
About Searching on Inquiry Pages

You can view the status of transactions in IMS throughout the day, as well as see a history and details of a transaction. You can also see any current or future IMS profiles established by your firm, as well as the DTC default settings for a given profile.

To search for transactions or profiles on an inquiry page, complete the required fields and click **Search**. Required fields are designated with a red (*) asterisk next to them in PBS. To refine your search, fill in additional search criteria in fields that do not have a red asterisk.

**Tip:** If the current time is past noon, the **Date** switches to the next business day automatically in the "Transaction Authorization Inquiry" option. In order to view transactions for the current date, change the **Date** to the current date.

Flow of Inquiry Screens

From summary pages in PBS that give you totals, you are able to access more detailed information by clicking on underlined data within the search results. For example, from the Total Recap by Transaction Type page, you can click on an underlined Transaction Type in your search results to see a Recap by Asset Class. From this Recap by Asset Class page, you can click on an underlined State to see the Transaction Authorization page.

Seeing Transaction History

The Inventory Management System (IMS) allows you to inquire about, authorize, or exempt securities eligible for settlement during the 22 business days beginning with S-1 (the day before settlement), and ending with S+21 (21 days after settlement).

To see a history of the different “states” a transaction moves through in PBS, click on the State field within a column of search results. For example, you can see this history on the Transaction Authorization Inquiry, Transaction Authorization Update, ID Net Transaction Inquiry (For ID Net Brokers only), and the Possible Duplicate Deliveries Inquiry pages.

Seeing Transaction Details

To see details for a transaction, click on the IMS TID (Transaction Identification) field within a column of search results. For example, you can see details on the Transaction Authorization Inquiry, Transaction Authorization Update, ID Net Transaction Inquiry (For ID Net Brokers only), and the Possible Duplicate Deliveries Inquiry pages.
About Institutional Deliveries – ID Net, Omgeo Realtime Link, and Late Affirmed Processing

IMS includes a number of services that support the efficient processing of institutional deliveries. The ID Net Service is the most recent to be implemented in IMS.
About ID Net

ID Net is a service offering developed jointly by DTCC and Omgeo. The ID Net service will allow DTC-eligible affirmed institutional equity trades to flow into NSCC’s clearance and settlement systems for netting. The ID Net service offers netting efficiency and reduced security movements for ID Net subscribers who are NSCC members.

ID Net will offset the broker-dealer side of an affirmed institutional equity trade with the broker-dealer’s net CNS position. NSCC omnibus accounts act as settlement “agent” for brokers and settle with banks on a trade-for-trade basis.

Transaction type MITS (Matched Institutional Trades) can be processed as ID Net transactions. LMIT (Late Matched Institutional Trades) transactions are not eligible for ID Net.

**ID Net for Brokers and Banks**

**Brokers**

Brokers can do the following with ID Net transactions:

- See summary information, details, and history for ID Net transactions
- Exempt ID Net deliveries globally or cancel them individually
- Setup an ID Net Drop Authorization profile

**Banks**

Banks can do the following with ID Net transactions:

- See summary information, details, and history for ID Net transactions
- Set up an Authorization profile for transaction type MITS (Matched Institutional Trades)
- Authorize, exempt, and cancel ID Net deliveries for the night cycle

**Important:** For day deliveries, banks need to authorize previously exempted ID Net deliveries rather than submitting DOs. This is because if banks submitted a DO in the day, brokers might reclaim it.
Flow of an ID Net Trade

The following describes the typical flow of an ID Net trade from affirmation to settlement. All cutoff times are listed as eastern time (ET). For more information, refer to the Settlement Service Guide at:

http://www.dtcc.com/products/training/EDL_index.php

1. To be eligible for ID Net, trades must be affirmed in Omgeo’s TradeSuite before 9:00 p.m. on T+1. The NSCC omnibus accounts 919 and 719 act as settlement “agent” for brokers. Omgeo populates the affirmed confirm with 919 or 719 in a “Third Party” field based on the side of the trade:
   - ID Net Subscriber Receive Account #919 is used for bank receives (institutional buys)
   - ID Net Subscriber Deliver Account #719 is used for bank deliveries (institutional sells)

2. For a bank delivery, when IMS receives ID Net-eligible affirmed trades, up to 9 p.m. on T+1, DTC will automatically “flip” the original clearing firm from the Receiver field into the Third-Party field of the ID trade and will put the ID Net Subscriber Deliver Account (# 719) in the Receiver field.

For a bank receive, if a trade is flagged as ID Net-eligible, DTC will automatically “flip” the original clearing firm from the Deliverer field into the Third-Party field of the ID trade and will put the ID Net Subscriber Receive Account (# 919) in the Deliverer field.

3. At 9 p.m. on T+1, IMS submits ID Net transactions to CNS.

4. At the mid-day cutoff on T+2 (at approximately 1 p.m.), any 919 deliveries from brokers are automatically authorized by IMS. If banks have their Authorization profile for matched institutional trades set to active mode, then any 719 deliveries from banks will require that banks take action to authorize them; if set to passive, then the transactions are authorized automatically.

5. On the night before settlement, at approximately 6 p.m. on T+2, CNS nets ID Net transactions by participant and CUSIP for the broker side of the trade.

6. ID Net trades are submitted to ATP (when authorized) for settlement up until 11.30 a.m. on T+3.

**Note:** If at any point in this flow, the CUSIP for the ID Net trade becomes ineligible for CNS, the trade reverts to trade-for-trade settlement versus the original clearing firm. They will be exited from the ID Net process.

**Note:** Trades that are eligible for ID Net but are still in an Exempt or Unprocessed state or are pending for position or risk management controls at 11:30 a.m. on Settlement Date will automatically revert to trade-for-trade settlement versus the original clearing firm. They will be exited from the ID Net process.
Brokers/Banks – ID Net Business Rules

For more information, refer to the Settlement Service Guide at:

http://www.dtcc.com/products/training/EDL_index.php

<table>
<thead>
<tr>
<th>Action</th>
<th>ID Net Brokers</th>
<th>ID Net Banks</th>
</tr>
</thead>
<tbody>
<tr>
<td>Authorize</td>
<td>Brokers’ ID Net deliveries are automatically authorized by IMS.</td>
<td>Banks may authorize ID Net deliveries for the night cycle by setting up an Authorization profile for transaction type MITS (Matched Institutional Trades).</td>
</tr>
<tr>
<td></td>
<td></td>
<td>For more information, refer to About IMS Authorization and Authorization Profile.</td>
</tr>
<tr>
<td></td>
<td></td>
<td><strong>Note</strong>: For day deliveries, banks should authorize their individual ID Net deliveries rather than submitting DOs.</td>
</tr>
<tr>
<td>Cancel</td>
<td>Brokers may cancel their ID Net deliveries in the following states:</td>
<td>Banks may cancel ID Net deliveries before the night cycle.</td>
</tr>
<tr>
<td></td>
<td>Unprocessed</td>
<td>For more information, refer to Transaction Authorization Pages.</td>
</tr>
<tr>
<td></td>
<td>Exempt</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Authorized</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Submitted to ATP</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Recycling in ATP</td>
<td></td>
</tr>
<tr>
<td>Exempt</td>
<td>Brokers may globally exempt all ID Net Authorized and Unprocessed deliveries for a settlement or delivery date. Transactions still in the exempt state for more than 21 days after their scheduled Settlement Date have their state changed to Cancelled.</td>
<td>ID Net Banks may exempt ID Net deliveries before the night cycle.</td>
</tr>
<tr>
<td></td>
<td>Brokers can exempt an ID Net receive from a bank before the night of T+2. This receive exemption will only be permitted on a trade-for-trade basis.</td>
<td>For more information, refer to IMS – About Profiles – More Information – Transaction Authorization Pages.</td>
</tr>
<tr>
<td>“Pend-Hold”</td>
<td>Brokers are not permitted to place pend holds on their ID Net deliveries.</td>
<td>Banks are permitted to place pend holds on their ID Net deliveries.</td>
</tr>
<tr>
<td>“Pend-Cancel”</td>
<td></td>
<td>Banks may cancel their pending ID Net deliveries (referred to as pend cancels).</td>
</tr>
<tr>
<td>or</td>
<td></td>
<td>Bank ID Net deliveries that are pending for position or controls at 11:30 a.m. on Settlement Date will automatically revert to trade-for-trade settlement.</td>
</tr>
<tr>
<td>Re-introduce pends that dropped</td>
<td>Brokers may cancel their pending ID Net deliveries (referred to as pend cancels).</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Broker ID Net deliveries that are pending for position or controls by 11:30 a.m. on Settlement Date will be dropped, and the state changes to PndD. These transactions can be re-introduced to IMS for processing on a trade-for-trade basis.</td>
<td></td>
</tr>
<tr>
<td>Action</td>
<td>ID Net Brokers</td>
<td>ID Net Banks</td>
</tr>
<tr>
<td>--------</td>
<td>----------------</td>
<td>--------------</td>
</tr>
<tr>
<td></td>
<td>For more information, refer to ID Net Drop Authorization Profile; About IMS Authorization and Authorization Profile.</td>
<td>For more information, refer to About Profiles – At A Glance - Drop.</td>
</tr>
<tr>
<td>Reclaim</td>
<td>Brokers are not permitted to reclaim a bank’s delivery to the # 719 ID Net Subscriber Deliver Account.</td>
<td>Banks may reclaim broker ID Net deliveries. These reclaims will be directed to the original clearing firm rather than to the ID Net Subscriber Receive Account #919.</td>
</tr>
</tbody>
</table>
Brokers/Banks – Where to Take Action in ID Net

For more information, refer to the Settlement Service Guide at:

http://www.dtcc.com/products/training/EDL_index.php

Unless otherwise noted, all actions are performed within IMS.

<table>
<thead>
<tr>
<th>Action</th>
<th>Brokers</th>
<th>Banks</th>
</tr>
</thead>
<tbody>
<tr>
<td>Authorize</td>
<td>Brokers’ ID Net deliveries are automatically authorized by IMS.</td>
<td>Banks use the following pages:</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Authorization Profile Update</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Transaction Authorization Update</td>
</tr>
<tr>
<td></td>
<td></td>
<td>For more information, refer to About IMS Authorization and Authorization Profile.</td>
</tr>
<tr>
<td>Cancel</td>
<td>Brokers use the following page:</td>
<td>Banks use the following page:</td>
</tr>
<tr>
<td></td>
<td>ID Net Transaction Update</td>
<td>Transaction Authorization Update</td>
</tr>
<tr>
<td></td>
<td></td>
<td>For more information, refer to Transaction Authorization Pages.</td>
</tr>
<tr>
<td>Exempt</td>
<td>Brokers use the following page:</td>
<td>Banks use the following page:</td>
</tr>
<tr>
<td></td>
<td>ID Net Transaction Update</td>
<td>Transaction Authorization Update</td>
</tr>
<tr>
<td></td>
<td></td>
<td>For more information, refer to Transaction Authorization Pages.</td>
</tr>
<tr>
<td>“Pend-Hold” “Pend-Cancel”</td>
<td>Brokers use the following pages:</td>
<td>Banks use the following pages:</td>
</tr>
<tr>
<td>or Reintroduce pends that dropped</td>
<td>ID Net Transaction Update to cancel transactions that are pending for position or risk controls</td>
<td>Transaction Authorization Update to cancel transactions that are pending for position</td>
</tr>
<tr>
<td></td>
<td>To identify whether broker ID Net reintroduced drops should be automatically (passive mode) or actively (active mode) authorized:</td>
<td>Pending Activity – Pending Activity page to pend-hold or pend-cancel transactions that are pending for risk controls</td>
</tr>
<tr>
<td></td>
<td>ID Net Drop Authorization Profile Update</td>
<td>Banks use Drop Profile Updates to reintroduce pends that dropped.</td>
</tr>
<tr>
<td></td>
<td>To set up a profile and authorize re-</td>
<td></td>
</tr>
<tr>
<td>Action</td>
<td>Brokers</td>
<td>Banks</td>
</tr>
<tr>
<td>--------</td>
<td>-------------------------------------------------------------------------</td>
<td>----------------------------------------------------------------------</td>
</tr>
<tr>
<td></td>
<td>introduced ID Net drops which will be re-introduced as regular ID trades (transaction type MITS).</td>
<td>For more information, refer to About Profiles – At A Glance - Drop.</td>
</tr>
<tr>
<td></td>
<td><strong>Authorization Profile Update</strong></td>
<td></td>
</tr>
<tr>
<td></td>
<td><strong>Transaction Authorization Update</strong></td>
<td></td>
</tr>
<tr>
<td></td>
<td>For more information, refer to ID Net Drop Authorization Profile; Authorization Profile.</td>
<td></td>
</tr>
<tr>
<td></td>
<td><strong>Reclaim</strong></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Brokers are not permitted to reclaim a bank’s delivery to the # 719 ID Net Subscriber Deliver Account.</td>
<td>Banks use the following page:</td>
</tr>
<tr>
<td></td>
<td></td>
<td><strong>Activity Research Tool – Ordered by Activity Code or Collateral Group</strong></td>
</tr>
</tbody>
</table>
ID Net Transaction Inquiry

- Brokers can see ID Net trade summaries, transaction details, and transaction state histories on the ID Net Transaction Inquiry page.
- Banks can see their ID Net transactions on the Transaction Authorization Inquiry page.

Tip: To see details, from within the list of search results click an underlined Control number. To see a state history, click an underlined state.

ID Net Subscriber Accounts and the Third Party Field

Two new securities accounts are used by NSCC at DTC on behalf of all ID Net firms (primarily brokers) that have elected to use the ID Net Service:

- ID Net Subscriber Deliver Account #719 for bank deliveries (institutional sells)
- ID Net Subscriber Receive Account #919 for bank receives (institutional buys)

For a bank delivery, when IMS receives the ID Net-eligible affirmed trades, up to 9 p.m. on T+1, DTC will automatically “flip” the original clearing firm from the Receiver field into the Third-Party field of the ID trade and will put the ID Net Subscriber Deliver Account (# 719) into the Receiver field.

Likewise, if the trade is exited from ID Net, DTC will “flip” the original clearing firm from the Third-Party field back into the Receiver field and the ID Net Subscriber Deliver Account (#719) into the Third Party field.

For a bank receive, if a trade is flagged as ID Net-eligible, DTC will automatically “flip” the original clearing firm from the Deliverer field into the Third-Party field of the ID trade and will put the ID Net Subscriber Receive Account (# 919) in the Deliverer field.

Likewise, if the trade is exited from ID Net, DTC will “flip” the original clearing firm from the Third-Party field back into the Deliverer field and the ID Net Subscriber Receive Account (#919) into the Third Party field.
ID Net Inquiries for Pending Transactions

**Brokers**

Brokers can see their ID Net transactions pending for position or risk controls on the Error! Reference source not found. page. To see only pending transactions, click the **Pend** check box. To check the reason why a transaction is pending and see a transaction history, click the State field within a column of search results.

**Views in Pending Activity**

ID Net brokers will be able to view their ID Net deliveries in the Pending Activity option that the ID Net Subscriber Receive Account #919 is making on their behalf, if the deliveries are recycling because the ID Net Firm has insufficient collateral. If the deliveries are recycling because the bank has insufficient collateral or debit cap or there is insufficient position in the ID Net Subscriber Receive Account #919, the ID Net broker will not see the delivery in the PEND function.

ID Net brokers will only be able to view their ID Net receives in PEND that are being sent to the ID Net Subscriber Deliver Account #719 if the receives are recycling because the ID Net broker has insufficient collateral. If the receives are recycling because the bank has insufficient position or collateral, the ID Net broker will not see the receives in the PEND function.

**Banks**

Banks can see their transactions pending for position or risk controls in the **Pending Activity** option (pending deliveries) and the **Activity Research Tool – Activity Ordered by Activity Code** (pending receives).

For more information, refer to the Settlement Service Guide at:

http://www.dtcc.com/products/training/EDL_index.php
ID Net Reports

IMS reports are available via Machine Readable Output or from PBS SMART/Search.

The following ID Net report is available via SMART/Search:

- ID Net Eligible Participant List – Shows a list of ID Net broker/dealers and bank subscribers.

ID Net transactions will be included in the following CNS reports:

- CNS Projection report – Shows a broker’s projected CNS position by security.
- CNS Miscellaneous Activity Report – Shows miscellaneous activity by participant and security.

**Note:** Code 17 identifies ID Net transactions offsetting CNS positions on the night of T + 2. Code 18 identifies transactions being exited from ID Net.
ID Net Drop Authorization Profile

The ID Net Drop Authorization profile identifies whether broker ID Net reintroduced drops should be reintroduced to IMS and automatically (passive mode) or actively (active mode) authorized.

To learn more, refer to:

About the Omgeo Realtime Link

Omgeo sends eligible affirmed trades (non CNS) to DTC’s Inventory Management System (IMS) in “real time,” – in other words, as the trades are affirmed.

**Additional Processing Details**

**Authorizing Trades**

Participants are able to authorize trades as they are received into IMS through the existing options (globally or on a trade-for-trade basis). IMS applies a participant’s authorization profile for Matched Institutional Trades (MITS) after the midday cut-off on Settlement Date minus 1 (at approximately 1 p.m.).

**Change of Eligibility**

Omgeo notifies IMS, as well as DTC participants directly, on the status of any change of eligibility (COE) for trades. For example, DTC-eligible to ineligible related messages are passed to IMS by Omgeo TradeSuite up until midnight of Settlement Date minus 2.

IMS processes COE related messages on a real-time basis (for both authorized and yet to be authorized trades). IMS reauthorizes a previously authorized DTC-eligible trade in the event the trade becomes DTC-eligible again. In addition, an audit trail is provided by IMS in the Transaction Authorization Inquiry page.
**About “Late Affirmed” Trade Processing**

IMS receives “late affirmed” trades in real time (that is, as they are affirmed) from the Omgeo TradeSuite system. Late affirmed trades are defined as trades that are affirmed in the Omgeo TradeSuite system during the 24 hour period between 12:00 p.m. on Settlement Date minus one (S-1) and 12:00 p.m. on Settlement Date (SD). IMS processes these trades as a separate transaction type of Late Matched Institutional Trades, or LMIT.

This process allows the broker/dealer or custodian to avoid the more costly and less efficient process of settling trades by submitting Deliver Orders (DO). Delivery Orders experience a higher reclaim rate than affirmed trades eligible for automated settlement via IMS/DTC.

**LMIT Authorization in IMS**

For late affirmed transactions, IMS defaults to the active authorization mode (that is, deliveries are not be processed unless they are authorized). Unauthorized late affirmed trades remain in IMS until Settlement Date + 21 (the current IMS trade retention time frame). Delivering participants can either authorize the late affirmed trades in IMS or continue to process their late affirmed ID trades as they do today.

For LMIT items, IMS applies a participant's authorization profile as the items are received from Omgeo.

**LMIT Transaction Type**

The LMIT transaction type has been added to IMS pages/screens and is also available for automated status notification or authorization/exemption via ISO 15022 messages. LMIT items are co-mingled with existing MITS transactions for participants that elect to use the optional IMS Submission Order Profile.

**Receiver Authorized Delivery Processing**

Late affirmed trades bypass DTC's Receiver Authorized Delivery (RAD) processing as do all Omgeo deliveries.

**Machine-Readable Authorization/Exemption Instructions**

Machine-Readable authorization/exemption instructions submitted via WebSphere MQ, FTP (File Transfer Protocol), or Connect:Direct/NDM are applied to current TradeSuite/ID deliveries (transaction type MITS) and not to the LMIT transaction type.