<u>Underlined</u>, <u>boldface Text</u> indicates additional language

Struck-through, boldface text indicates deleted language

DTC Dividends Distributions Service Guide

Copyright

IMPORTANT LEGAL INFORMATION

The contents of all Service Guides constitute "Procedures" of The Depository Trust Company ("DTC") as defined in the Rules of DTC. If Participants or other authorized users of DTC's services fail to follow these Procedures precisely, DTC shall bear no responsibility for any losses associated with such failures.

In connection with their use of the Corporation's services, Participants and Pledgees must comply with all applicable laws, including all applicable laws relating to securities, taxation, and money laundering, as well as sanctions administered and enforced by the Office of Foreign Assets Control ("OFAC"). As part of their compliance with OFAC sanctions regulations, all Participants and Pledgees must agree not to conduct any transaction or activity through DTC that violates sanctions administered and enforced by OFAC.

From time to time, DTC receives from outside sources notices and other documents, including corporate action information, and communications concerning financial assets. Although DTC may make certain of such documents and communications, or extracts therefrom, ("Information") available to Participants and other authorized users, it shall be under no obligation to do so nor, having once or more done so, shall DTC have a continuing obligation to make available Information of a certain type. Information is not independently verified by DTC and is not intended to be a substitute for obtaining advice from an appropriate professional advisor. Therefore, Participants and other authorized users are advised to obtain and monitor Information independently. In addition, nothing contained in Information made available to Participants and other authorized users shall relieve them of their responsibility under DTC's Rules and Procedures or other applicable contractual obligations to check the accuracy, where applicable, of Participant Daily Activity Statements and all other statements and reports received from DTC and to notify DTC of any discrepancies. DTC DOES NOT REPRESENT THE ACCURACY, ADEQUACY, TIMELINESS, COMPLETENESS, OR FITNESS FOR ANY PARTICULAR PURPOSE OF ANY INFORMATION (AS DEFINED ABOVE) PROVIDED TO PARTICIPANTS AND OTHER AUTHORIZED USERS, WHICH IS PROVIDED AS-IS. DTC SHALL NOT BE LIABLE FOR ANY LOSS RELATED TO SUCH INFORMATION (OR THE ACT OR PROCESS OF PROVIDING SUCH INFORMATION) RESULTING DIRECTLY OR INDIRECTLY FROM MISTAKES, ERRORS, OR OMISSIONS, OTHER THAN THOSE CAUSED DIRECTLY BY GROSS NEGLIGENCE OR WILLFUL MISCONDUCT ON THE PART OF DTC. Further, such Information is subject to change. Participants and other authorized users should obtain, monitor, and review independently any available documentation relating to their activities and should verify independently information received from DTC.

DTC SHALL NOT BE LIABLE FOR: (1) ANY LOSS RESULTING DIRECTLY OR INDIRECTLY FROM INTERRUPTIONS, DELAYS, OR DEFECTS ARISING FROM OR RELATED TO ITS SERVICES; AND (2) ANY SPECIAL, CONSEQUENTIAL, EXEMPLARY, INCIDENTAL, OR PUNITIVE DAMAGES.

The services provided by DTC to its Participants and other authorized users are provided only pursuant to the terms and conditions of the Participants Agreement, which references the Rules and Procedures of DTC, and/or other contractual documents (collectively, the "Contractual Documents"). DTC's obligations to Participants and other authorized users are therefore contractual in nature and are limited solely to those obligations expressly set forth in the Contractual Documents. Participants and other authorized users are obligated to, among other things, follow precisely the procedures outlined in the Contractual Documents and provide DTC with complete and accurate information. In accepting financial assets from Participants and/or providing services to other authorized users, DTC relies, among other things, upon the duty of Participants and other authorized users to exercise diligence in all aspects of each transaction processed through DTC.

Participants and other authorized users expressly acknowledge that the services provided by DTC are ministerial in nature. Moreover, as further reflected by DTC's fee structure (which typically bears no relationship to the dollar value of any given transaction), DTC does not accept any risk of loss to Participants, other authorized users and possible third party beneficiaries with respect to transactions being processed by DTC.

WHILE THIS SERVICE GUIDE DISCUSSES CERTAIN TAX CONSEQUENCES OF THE VARIOUS CORPORATE ACTIONS DESCRIBED HEREIN, DTC DOES NOT PROVIDE TAX ADVICE. FURTHERMORE, THIS SERVICE GUIDE DOES NOT DISCUSS ALL THE RELEVANT TAX CONSIDERATIONS THAT MAY BE APPLICABLE TO PARTICIPANTS AND OTHER AUTHORIZED USERS. IN ADDITION, THE SUBJECT TAX LAWS AND REGULATIONS MAY BE SUBJECT TO DIFFERING INTERPRETATIONS AND MAY BE CHANGED, PERHAPS RETROACTIVELY. PARTICIPANTS AND OTHER AUTHORIZED USERS ARE URGED TO CONSULT THEIR OWN TAX ADVISORS REGARDING ALL THE RELEVANT TAX CONSEQUENCES OF ANY PARTICULAR CORPORATE ACTION OR OTHER TAXABLE EVENT.

Copyright © 1999 - 20134 by The Depository Trust Company ("DTC"). All rights reserved. This work (including, without limitation, all text, images, logos, compilation and design) is copyrighted, is proprietary, and is intended for the exclusive use of DTC's Participants and other authorized users of DTC's services. If this work is received in any electronic medium, authorized users of this work are permitted the limited right to make reproductions and transmissions necessary for downloading and storage of this work on the users' computers. Such users are also permitted to print one or more paper copies from the electronic version for their own use. Other than to this limited extent, no part of this work (including any paper copies thereof or print versions thereof) may be altered, reproduced or distributed (including by transmission) in any form or by any means, or stored in any information storage and retrieval system, without DTC's prior written permission.

REDISTRIBUTION BY PARTICIPANTS OF CERTAIN DATA FILES AND THE INFORMATION PROVIDED BY DTC IS STRICTLY PROHIBITED. FOR PURPOSES OF THIS PROCEDURE, "DATA FILES" SHALL MEAN THE BULK CORPORATE ACTIONS DATA FILES PROVIDED BY DTC TO PARTICIPANTS. EACH DATA FILE PROVIDED BY DTC TO A PARTICIPANT IS AND SHALL CONTINUE TO BE THE PROPERTY OF DTC AND NOT OF ANY PARTICIPANT IN RECEIPT THEREOF; THIS PROCEDURE DOES NOT CONSTITUTE THE GRANT OF ANY LICENSE IN, TO OR FOR THE USE OF, ANY DATA FILE OR INFORMATION DISTRIBUTED HEREUNDER OTHER THAN TO DISTRIBUTE TO ITS ACCOUNT HOLDERS INFORMATION CONTAINED IN ANY DATA FILE IT RECEIVES TO THE EXTENT SUCH INFORMATION IS RELEVANT TO THE SECURITY HOLDINGS OF SUCH ACCOUNT HOLDERS, OR IS OTHERWISE REQUIRED BY APPLICABLE LAW.

Participants shall not use, distribute, transmit or otherwise make available any Data File or Information, with or without any service charge or fee, as the basis for or as part of a data product or service offered for commercial gain to any other person. DTC's affiliate DTCC Solutions LLC ("DTCC Solutions") has the right to license usage of the Data Files for purposes other than those permitted in the first paragraph of this Procedure, and any Participant which wishes to use or distribute Data Files other than as contemplated hereby must contract directly with DTCC Solutions prior to any such distribution. This restriction includes, but is not limited to, service bureaus and other third parties, whether or not affiliated with a Participant, regardless of whether such person as previously itself received and/or used any Data Files in the past; such entities may obtain the Data Files only upon execution of a license agreement with DTCC Solutions.

DTC shall have the right, but not the obligation, to audit the use and distribution of Information and Data Files by any Participant. Unauthorized use or distribution by Participant, any of its Affiliates or any of its account holders may result in a fine or other reasonable penalty determined by DTC in accordance with its rules in light of the facts and circumstances of such unauthorized use or distribution. By its acceptance of Information or any Data File, each Participant agrees that, in addition to all other remedies that may be available, DTC and its affiliate DTCC Solutions shall be entitled to seek specific performance and injunctive and other equitable relief as a remedy for any breach of this Procedure by such Participant, its officers, employees, advisors or agents. Neither DTC nor DTCC Solutions shall be liable for any loss, cost or expense arising out of the use of any Data File or the Information contained therein, or the gross negligence or willful misconduct of any Participant with respect to any Data File or the Information contained therein, provided hereunder, the failure of any Participant to comply with these Rules and Procedures or applicable law, or for any consequential, special or punitive damages related thereto.

The contents of the Service Guides are updated in different formats on a periodic basis. Participants and other authorized users of the Service Guides will find the most current version of the Service Guides, as well as DTC Important Notices which address the contents of the Service Guides, on DTC's internet site, at http://dtcc.com. You can access the Important Notices at http://dtcc.com/legal/important-notices.aspx.http://www.dtcc.com/products/documentation/learning/learning_edl.php.DTC shall bear no responsibility for any losses associated with the failure of Participants or other authorized users to follow DTC's most current Service Guides and/or Important Notices. Participants or other authorized users may direct inquiries about the Service Guides, as well as requests for additional copies, to DTCC Learning, The Depository Trust Company, 55 Water Street, New York, NY 10041, USA; fax number: (212) 855-4203; e-mail address: training_administrator@dtcc.com.

® DTCC

About Dividends:

Introduction

Overview

This section describes DTC's income processing products. Each subsection includes a description of the product, how it works, and a list of associated PTS functions you can use to access the product.

Warning! Although DTC makes every effort to provide you with timely information regarding income payments, you are primarily responsible for obtaining such information without reliance on DTC. We recommend that you reconcile your records with DTC's in advance of dividend or interest payable dates.

About Dividend Services

DTC's Dividend services include announcing, collecting, allocating and reporting dividend, interest and certain principal payments on behalf of its participants with securities in DTC custody. This centralized processing spares you the burden of dealing with thousands of paying agents.

The Dividend service also includes several additional products, such as Dividend Reinvestment, Foreign Currency Payments, Domestic Tax Reporting (DTAX), DTC TaxInfoSM, DTC TaxReliefSM, U.S. Tax Withholding, and Optional Dividends.

Preparing to Use the Products

In order to use the products associated with this service, you must have access to one of the following:

- The Participant Terminal System (PTS)
- Participant Browser Services (PBS)
- Computer to Computer Facility (CCF or CCF II) or Mainframe Dual Host (MDH).

Contact your Relationship Manager for more information.

Note- DTC also provides various hard copy reports.

Approval Process

The Elective Dividend Service (EDS) offers an automated election instruction approval process accessible through the Participant Browser Services (PBS). The Approval Process may be used for the following EDS services:

- Cash-in Lieu/Round Up
- Dividend Reinvestment Program
- Foreign Currency Payments
- Optional Dividend Distribution
- ◆ DTC TaxReliefSM

The EDS Approval Process is an optional service in PBS that provides participant firms with a streamlined, electronic means of internally reviewing and approving election instructions.

The process is not available in PTS and participants that have the EDS Approval Process enabled for a given service will not be able submit instructions/elections through PTS unless the process is first disabled for that service.

Participants that choose to use the EDS Approval Process assign an administrator in their firm to enable or disable the process at the firm (participant number level).

The EDS Approval Process has three basic entitlements to allow for the creation and approval of instructions:

- (i) creator, which allows the user to only create instructions, which will remain pending until approved:
- (ii) approver, which allows the user to approve pending instructions created by others; and
 - (iii) creator/approver, which allows the user to create its own instructions that are automatically approved.

A user may have more than one entitlement. For example, a user with approver and creator/approver entitlement would be able to have their instructions automatically approved as well as to approve the instructions of others.

Once a pending instruction is created, it will appear with a status of "Pending" for the approver to approve or reject. The election will not be processed and appear in the election window as a made election until it is approved. Once approved, the instruction becomes an approved election that will appear in the election window and will be processed in the same way that elections are currently processed today.

Elections for events where either (1) a pending election is rejected, or (2) a pending election is not approved by cutoff time, will revert to the last approved election for that event, and if one does not exist, to the default election for that event.

For more information about the EDS Approval Process, call DTC's Customer Help Center at (888) 382 2721 or access DTC's Web site at http://www.dtcc.com. For entitlements, please contact your DTC Coordinator or Relationship Manager.

Understanding Relevant Dates

The following table describes critical dates relevant to income processing and distribution:

Date Term	Definition	
Declaration date	The date on which the issuer declares the income distribution, the record date, and the payable date.	
Record date	The date on which the holder of a security must be registered on the books of the issuer in order to receive the income distribution on the payable date.	
Payable date	The date on which the income is paid to security holders.	
Trade date	The date the trade was executed.	

Date Term	Definition
Settlement date	The date on which the trade settles, usually three business days after the trade date.
Entitlement date	The last date on which trades for a specific security settle with the income distribution. This is also known as the settlement date.
Ex-distribution	The first date on which a security trades without the income distribution. Also known as the ex dividend or the ex date

Service Topics:

Allocations

About the Product

DTC's Allocations product allocates cash and stock distributions to participants. This includes both credits and debits. In addition, the Allocations product:

- Calculates cash or stock distributions for each Announcement once rate or price information becomes available
- Distributes information on upcoming distributions such as payable dates and amount or quantity in electronic and hard copy formats
- Reports on allocated items in electronic or hard copy formats during intra-day processing and at end-of-day
- Generates refunds to you for funds that were allocated after DTC received payment.

Allocations can be divided into two groups: cash distributions and stock distributions.

Cash Distributions

DTC allocates 100 percent of the funds it receives from agents/issuers by 3:00 p.m. eastern time with the appropriate CUSIP-level identification on the payable date. Funds received on the payable date but after cutoff are allocated the following morning. Funds received after the payable date are allocated upon receipt.

Funds from agents received with corresponding CUSIP level identification information are allocated upon receipt, beginning at 8:20 a.m. eastern time and continuing every 20 minutes until the 3:00 p.m. eastern time cutoff.

Stock Distributions

Stock distributions such as stock dividends, splits, and spinoffs are allocated on the settlement date | 1 or the payable date, whichever comes later. Your DTC position is increased in shares of the security for which the distribution was declared, or in shares of another issue resulting from a spinoff. Typically, cash is paid in lieu of fractional shares.

Cash Distributions for Non-MMI Issues

For cash distributions for issues that are not Money Market Instruments (MMIs), the allocation process is two-tiered:

- Those payments for which funds and identifying CUSIP detail are received by the
 established cutoff time are allocated upon receipt, starting at 9:00 a.m. eastern time and
 continuing until the 3:00 p.m. cutoff on the payable date.
- Funds from agents without corresponding CUSIP level identification information that are received by 3:00 p.m. eastern time are allocated at 3:15 p.m. eastern time, using an algorithm driven formula that allocates each agent's unidentified funds.

Dividend/Reorganization Cash Settlement List

The Dividend/Reorganization Cash Settlement List notifies you of cash dividend, periodic principal, and interest payments. The List is created daily at approximately 4:30 p.m. eastern time.

The Dividend/Reorganization Cash Settlement List contains the following categories:

- Cash dividends
- Units
- Pass-through payments (CMO/ABS)
- Corporate bonds
- Municipal bonds
- Stock distributions
- Miscellaneous payments and charges
- Claims and reversals
- Reorganization
- Securities not allocated that day.

Cash Distributions for MMI Issues

DTC distributes income payments for various MMIs, including Medium Term Notes (MTNs). The allocation process differs from 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 paying agent's (IPA) account at DTC. You can view these credits via DTC's Settlement Service. In the rare instances that an issuer defaults, these credits are reversed prior to DTC's final settlement process.

You can also see details of the distributions on the MMI Settlement Statements.

Stock Distributions

The allocation of stock distributions depends on the type of distribution being allocated. The following table describes stock distributions:

For this type of distribution	Allocation occurs	
Stock dividends, regular trading	On the morning of the payable date.	
Stock dividends with a late ex- date	On the payable date or ex-date 3, whichever comes later.	

For this type of distribution	Allocation occurs
Stock splits, with ex distribution beginning on the business day following the payable date	For the split shares on ex-date 3.
Stock spinoffs to a DTC eligible security	On the payable date, or ex-date 3, whichever comes later.
Stock spinoffs to an ineligible security*	When the security becomes DTC- eligible, or else exited upon receipt.
Rights	As soon as possible after the record date to allow for adequate execution time frames. See Rights Distribution.
Dividend reinvestment shares	On the first business day after the price is received from the agent.

* DTC allocates the appropriate share entitlement to the spinoff security's assigned CUSIP or to a contra-CUSIP (when there is no available CUSIP for the distribution shares). These shares are initially chilled for all DTC activity (for example, deposits, WTs, DOs, CODs) until DTC exits the ineligible security to you. On the exit date, the chill is lifted for CODs, position is taken away from your account, and you are responsible for picking up the ineligible securities at the Central Delivery Department, 55 Water Street.

If you are outside of New York City, you do not need to pick up securities from the delivery dock. DTC's Interface department will arrange for the delivery of the securities to you.

Fractions of Stock Distributions

Fractions resulting from stock distributions are either dropped, rounded up, or paid as cash (cash in lieu). DTC makes every effort to obtain rounded shares or cash in lieu to the beneficial owner level. When successful, you must enter, via the PTS function EDS or via Participant Browser Services, the number of round up shares required for round up situations, or the number of shares to be liquidated for cash in lieu situations.

Note Cash in lieu and round up shares are distributed in the following ways:

- Cash in lieu at the participant level: upon receipt of the cash-in-lieu price but no earlier than the payable date + 1
- Cash in lieu at the beneficial owner (the participant's customer) level: upon DTC's receipt of the funds from the paying agent but no earlier than payable date ⊢ 1
- Round up shares at the participant level: upon allocation date
- Round up shares at the beneficial owner (the participant's customer) level: upon DTC's receipt of the additional round up shares from the paying agent but no earlier than the allocation date.

Refunds

If DTC receives funds from a paying agent, but is unable to distribute those funds on that day, DTC will refund the investment income it has earned to those participants who received the associated allocation. These credits will be seen as part of your monthly bill from DTC.

DTC claims interest compensation from those agents who pay DTC after the payable date.
Collected compensation is passed on to participants that had position in the late paying issue.
These credits will also be seen as part of your monthly bill from DTC.

Undistributed Long-Term Capital Gains

Undistributed long term capital gains are part of the Allocations product. They are another type of distribution due shareholders. Under the Internal Revenue Service (IRS) regulations, such gains generally must be reported on the individual shareholder's income tax return for the year in which the gains are realized. A corporation which realized long term capital gains that it elects not to distribute must inform DTC of the amount of the gain allocated to the securities registered in DTC's nominee name.

After determining your position as of the corporation's taxable year end and computing both the undistributed gains attributable to you and the tax paid by the corporation with respect to those gains, DTC prepares the IRS Notice to Shareholders of Undistributed Long Term Capital Gains, (#IRS Form 2439). Copies of the completed form are forwarded to the IRS and you.

Associated PTS Functions

The following PTS functions are used in association with Allocations:

For this type of allocation	Use
Intra day cash dividend/interest	SDAR FFSP ART
Cash dividend/interest	SDAR DPAL ART FFSP
Stock dividend	SDAR DPAL ART
Stock split	SDAR DIVA ART
Spinoff DTC eligible	SDAR DPAL ART
Spinoff DTC ineligible	SDAR DPAL ART
Cash In Lieu (CIL)	DIVA SDAR
Dividend reinvestment shares	SDAR DIVA ART
MMI payment	SDAR DIVA FFSP ART
Rights	SDAR DIVA ART

For this type of allocation	Use
Fail tracking	SDAR DIVA ADJI
Stock loan income tracking	SDAR DIVA ADJI
Coupon Collection Service (CCS)	DIVA SDAR ADJI
Share adjustments	DIVA ADJI
Cash adjustments	DIVA ADJI
Your portion of cost of funds borrowed to cover allocation	BILL
Your portion of interest compensation collected from late paying agents	BILL
Your portion of monthly refund from investment income	BILL
Undistributed long term capital gains (2439)	DIVA LENP

Allocations Contact Number

For more information about Allocations (such as cash allocations and stock distributions), call DTC's Customer Help Center at (888) 382-2721.

Announcements

About the Product

The Announcements product captures and monitors all dividend, interest, and amortized principal payment information and distributes this information to you via:

- Participant Terminal System (PTS) functions
- Participant Browser Services (PBS)
- Computer to Computer Facilities (CCF) file transmissions
- The Dividend Record Date Participant Statement
- Important Notices, as necessary (available on our Web site at http://www.dtcc.com/legal/imp_notices/)

How the Product Works

As part of the Announcements product, DTC:

 Retrieves information on dividend and interest payments from various sources (see Information Sources)

- Distributes information both electronically and in hard copy formats in advance of the dividend or interest payable date. This helps you reconcile your records with DTC before the payable date. Issue information includes:
 - CUSIP number
 - Record date
 - Payable date
 - Settlement date
 - Stock rate
 - Cash rate.
- Provides, on request, a "Books Closing for Record Date" report two days prior to the record date. This report includes all DTC eligible securities, except for municipal bonds, for which the issuer's books will be closed for record date purposes on the indicated date.

The table below lists the PTS functions you can use to access information relating to announcements.

For this type of security	Use
Corporate bonds	BOOK GWIZ DUEB
Collateralized Mortgage Obligations (CMOs)	BOOK CTAS LENP
Asset Backed Securities (ABS)	BOOK CTAS LENP
Unit Investment Trusts (UITs)	BOOK
Municipal Variable Rate Demand Obligations (VRDOs)	DAWN
Municipal bonds	GWIZ
American Depositary Receipts (ADRs)	воок
Money Market Instruments (MMIs)	воок
Equity issues	BOOK DUEB

Note- You can also use the following PTS functions to view information about all security types:

- ADJI
- DAWN
- DIVA
- SDAR.

Viewable Information

The information you can view includes:

- Issue types
- Function codes

- Record dates
- Payable dates
- Distribution rates
- Interim status/activity
- Distribution status.

Information Sources

DTC receives Announcement information, both electronically and in hard copy format, from the following:

- Trustees
- Industry vendors
- Internal sources
- Regulatory agencies
- Paying or remarketing agents
- Sponsors
- Corporations
- Municipalities
- Participants.

DTC generates Municipal Bond announcements from an internal database, which produces announcements six weeks before scheduled payable dates.

Dividend Record Date Participant Statement

The Dividend Record Date Participant Statement provides your closing position in record date securities as well as any revisions to Announcements and positions. The statement also provides details about stock dividend, split, spinoff, and rights allocations. This statement is distributed every day in hard copy format and via CCF.

The Dividend Record Date Participant Statement includes the following categories:

- Cash dividends
- Units
- Pass-throughs (CMO/ABS)
- Corporate bonds
- Municipal bonds
- Stock dividends
- Options
- Foreign issues
- Dividend reinvestments
- Tax-exempt dividend service issues
- Special distributions
- Recapitalizations
- Liquidations
- Sale of assets
- Redemption of rights.

Each category includes:

- Your position captured on the record date or New York City record date
- The rate per share or the interest rate

- The calculated dollar amount or share amount for each record
- Adjustments to previously announced record date positions, including interim deliver order (DO) activity
- A section for Stock Loan Record Date Notices and a section for REPO Record Date Notices
- Adjustments to previously announced Stock Loan Record Date Notices and REPO Record
 Date Notices
- Fail tracking adjustments to previously announced record date positions
- Revisions to record date notices.

Note Principal factors are reported for each pass-through payment when the principal rate is reported.

For stock distributions, the report also includes:

- Stock distributions applied to your account today
- Other stock distributions applied to your account yesterday.

Municipal Bond System Announcement Report

The Municipal Bond System Announcement Report is available on request approximately six weeks prior to the bond's payable date. This report details the issues in which you have position, and indicates first time long and short payments for all issues, whether or not you have position.

This report is distributed every week in hard copy and machine readable format and via CCF, CCF II, and MDH.

Warning! It is your responsibility, under DTC's Rules and Procedures, to verify the accuracy of these reports. Any discrepancy between your records and these reports must be reported to DTC as soon as possible after you receive them.

Announcements Contact Number

For more information about Announcements, call DTC's Customer Help Center at (888) 382-2721 or access DTC's Web site at http://www.dtcc.com/.

Cash-in-Lieu (CIL)/Roundup

About the Product

The CIL/Roundup product allows you to elect to receive all or part of your whole share stock allocation entitlement in cash or to receive additional shares depending upon the instruction type of the distribution. Use Participant Browser Services (PBS) or the EDS function of the Participant Terminal System (PTS) to make cash in lieu or roundup elections.

For example, you have 100 shares of XYZ security, and a stock distribution takes place. The distribution rate is 18.2 percent. Your stock entitlement would be 18.2 shares. You will receive 18 whole shares and a cash in lieu amount for the 2/10 share. You can elect to have a portion or all of the 18 shares liquidated for cash in lieu based on the aggregate fractional entitlements for all your beneficial owners. Your full share entitlement will be reduced for the number of whole shares you elect to liquidate on the beneficial owners' behalf.

Note The type of election you can make is determined by the instruction type. The instruction types can be:

- Cash-in-lieu to the beneficial owner
- All fractional shares rounded up (. 01 and above)
- Fractional shares rounded up (. 50 and above).

Benefits of Using CIL/Roundup

The benefits of using the CIL/Roundup service are:

- Trade processing and time associated savings by having the agent sell shares on your behalf
- The ability to obtain additional shares to accommodate your beneficial owner entitlement if the beneficial owners are entitled to fractional amounts on the roundup service feature
- Reduced market exposure when the published cash in lieu price is above the current market price.

EDS Approval Process

The CIL/Roundup product is eligible for the EDS Approval Process. Please refer to the Approval Process section in the Introduction section of this document for more information.

Associated PTS Functions

The following PTS functions are used in association with CIL/Roundup:

Use this function	To
EDS	View and process CIL and roundup election disbursement instructions.
ADJI	View cash and stock adjustments related to DTC security distribution activities.
DIVA DPAL	View allocations and announcement information related to Dividend Reinvestment activities.
POS	View your positions at DTC for security distributions.
SDAR	View today's allocations and anticipated allocations at DTC for security distributions.

Cash-in-Lieu/roundup Contact Number

You can contact DTC's Dividend department by:

- Calling the Customer Help Center at (888) 382-2721
- Accessing DTC's Web site at http://www.dtcc.com/.

Charge-Backs and Adjustments

Overview

Charge backs and Adjustments are an important part of Allocations. It is necessary for you to understand how DTC processes charge backs and adjustments to your DTC account(s).

About Charge-Backs and Adjustments

After crediting you with a dividend or interest payment, DTC occasionally determines that this credit was improper due to an issuer's default on the payment, an error on the part of DTC, or some other reason. In this event, DTC may, in accordance with established procedures, charge your account for the amount of the improper credit.

Also, from time to time DTC may determine that a payment received by you or your customer directly from the paying agent was rightfully due DTC. In this event, DTC may, in accordance with established procedures, charge your account for the amount of the improper payment.

In addition, from time to time DTC may determine that you have received insufficient payment.

In this event, DTC may, in accordance with established procedures, credit your account.

These adjustments will appear on your Participant Statement and can be viewed using PBS or the PTS functions ADJI and DPAL.

Reasons for Charge-Backs and Adjustments

The following are conditions under which DTC processes charge backs:

Return of Funds to Paying Agents

- 1. If DTC has received the funding from an issuer's agent and has allocated the payment to you, and the agent, within one business day of the funding, requests a return of funds, due to default or bankruptcy of the issuer, your account will charged back and collected funds will be returned to the paying agent no later than one business day following the request.
 - You will receive one day advance notification before the adjustment is processed to your account.
 - If such a request is received more than one business day after the funding date, DTC will cooperate with both the payor and you to resolve the matter by contacting the affected parties to ascertain your ability to accept a charge for funds that may have been distributed to your customers. Funds collected from you will be promptly remitted to the paying agent. In cases where you are unwilling or unable to immediately comply with the request, DTC will provide the agent with participant names and contacts to assist in the collection process.
- 2.—If DTC has allocated the payment to you, requests for return of funds, not due to default or bankruptcy of the issuer, made within ten business days of the payable date, will be charged to you and collected funds will be returned to the agent no later than one business day following the request. You will receive one day advance notification before the adjustment is processed to your account.

For such requests received after ten business days, DTC will cooperate with both the payor and you to resolve the matter by contacting the affected parties to ascertain your ability to accept a charge for funds that may have been distributed to customers, as referenced in point number 1.

Participant Deposits Missing Transfer

When participant deposits of registered securities are submitted by DTC to the transfer agent (TA) on or before record date for transfer into DTC's nominee name Cede &Co., and are not transferred in time to meet the record date deadline, DTC will send the registered holder or first guarantor a Cash Dividend/Interest Claim (form#6047) with copies of the deposited securities attached as notification of a pending adjustment or charge back.

DTC proactively monitors deposits made before the record date, which remain untransferred by the record date, so it can determine if adjustments to your record date position are required, and attempts to do so on or prior to the payable date. For transactions not identified in time, the following timetable applies to adjustments:

- Where the missed transfer is identified within 30 days of the original allocation: the claim
 is sent to Participants three days before DTC processes a charge to the participant's
 account.
- Where the missed transfer is identified beyond 30 days of the original allocation: the claim is sent to participants five days before DTC processes a charge to the participant's account.

Participant Withdrawal-by-Transfer (WT) Missing Transfer

When your withdrawal by transfer (WT) instructions are submitted by DTC to the TA on or before the record date for transfer into your name or your customer's name, and are not transferred in time to meet the record date deadline, DTC will credit your DTC account with the appropriate dividend/interest payment.

Just as with deposit activities, DTC monitors WT requests that remain untransferred by the record date, and attempts to adjust your record date position, as necessary, on or prior to the payable date. For transactions not identified in time, DTC will provide you with three days advance notification before processing a credit to your account.

Adjustments Resulting from Changes to Rates, Record Dates, or Payable Dates

Occasionally, there is a need to process post-allocation adjustments to correct a rate, record date, or a payable date.

- Where the adjustment is identified within 30 days of the original allocation: DTC will
 provide participants with one day advance notification before processing the adjustment
 to participants' accounts.
- Where the adjustment is identified beyond 30 days of the original allocation: DTC will
 provide participants with three days advance notification before processing the
 adjustment to participants' accounts.

Claims

About the Product

Occasionally, certificates withdrawn from DTC, registered in DTC's nominee name Cede &Co., remain outstanding over the record date for a distribution. On the payable date, the issuer's paying agent remits the dividend or interest payments directly to DTC, since Cede &Co. is the registered holder on their books as of the record date. If you are holding these certificates over the record date, you can submit a claim directly to DTC's Dividend department.

Required Forms

You must use DTC's Dividend/Interest Claim form#5204 to claim dividend or interest on certificates that you held over a record date. Submit this form directly to DTC's Dividend department via fax to (212) 855-4737.

Note You can order form #5204 via PBS or the PTS function FORM.

Validation

DTC maintains a database of all Cede &Co. certificates withdrawn by DTC participants. All claims are entered into a claim system where the certificate numbers on which your claims are based are checked against the database. If the certificate numbers are in the database and are shown to have left DTC on or before the record date, the claims are validated and you receive credit in your settlement account.

Invalid Claims

After paying a claim, if DTC finds that the claim is invalid, the claim is reversed through the claims function; you receive a hard copy cash adjustment to notify you and you are assessed a \$35.00 fee.

Abandoned Property

Pursuant to the Abandoned Property Law, Section 303 of the State of New York, dividend or interest payments made to DTC on securities registered in the name of the depository's nominee, Cede &Co., are escheated to the state if they remain unclaimed for three years after the payable date.

If you send Dividend/Interest Claim form#5204 for any dividend or interest on securities DTC has surrendered to the state, DTC will send you a sworn affidavit stating that the dividend or interest being claimed has been paid to the state, and authorizing payment to you by the State of New York.

Associated PTS Functions

The following PTS functions are used in association with Claims:

Use this function	To
BILL	View charges for claims and reversals.
ADJI	Inquire about the reasons for claims and reversals.
DIVA	Look up the record date, payable date and rate to prepare a claim.
SDAR	View claim payments and reversals.

Claims Contact Number

For more information about the Claims process, call DTC's Customer Help Center at (888) 382-2721.

Collateralized Mortgage Obligation (CMO) Trade Adjustments System (CTAS)

About the Product

DTC's CMO Trade Adjustments System (CTAS) automates principal and interest adjustments for certain CMO and other asset backed securities (ABS) that settle at DTC between the accrual end date (beneficiary date) and the corresponding payable date.

Relevant Terms

The following important terms are relevant to CTAS processing:

Glossary Term	Definition
Actual coupon rate	The coupon rate applicable to that trade's blackout period for variable rate issues.
Actual factor or trade factor	The factor applicable to a trade's blackout period.
Amortized	A loan in the process of liquidation via installment payments.
Blackout period or delay period	The period where cash flow from one accrual period is not available or passed through until the next period.
Estimated factor	A value substituted for the true factor when the true factor is not yet public. This is usually the last known factor, and is needed to determine the dollar value of a trade that takes place during the delay period.
Latest coupon rate	The last known coupon rate received after the first adjustment for variable rate issues.
Trade coupon	The coupon rate used to consummate the trade for variable rate issues.
True factor or principal factor	The actual amount of principal remaining on the mortgages underlying the CMO/ABS. This is used to compute the amortized value.

About CMOs

Since CMOs are mortgage backed securities, the outstanding principal amount of a CMO is reduced by the amount of the underlying mortgage obligation paid and passed through as part of each periodic payment. The true factor represents the actual amount of principal remaining on the mortgages underlying the CMO.

For issues that have a delay period, the standard practice is to substitute an estimated factor (usually the last known factor) for determining the dollar value of the trade.

Note Since the true factor is usually lower than the estimated factor, and the amortized value of the bond received is less than the value used to compute the trade, the buyer will be overpaying for the delivery. When the true factor becomes known, trades that settled based on the estimated factor must be cancelled and corrected. This results in adjusted settlements and exchanges of money.

How the Product Works

When DTC receives a true factor, we identify all applicable CMO and ABS DOs. We then generate cash adjustments for all trades with incorrect factors that settled during the blackout period. We then send tickets to the printers of both the delivering and receiving Participants, notifying you of the pending adjustments.

Note—If you are the receiving participant, you have until the end of the day before the post date to delete any adjustment you feel is not due. In order to do this, however, you must have an authorized PTS/PBS user ID and password to allow you to perform CTAS updates. Contact your Relationship Manager for more information on your user ID and password.

What CTAS Doesn't Do

CTAS debit and credit adjustments are not processed for settlement when underlying DOs are paired. Pairing occurs when two DOs contain the same CUSIP, quantity (original face value), trade settlement date, and settlement dollar value, and the delivering and contra-participants are reversed. The effect of the pairing is to eliminate superfluous debit and credit adjustments that net to zero.

Note Although paired transactions are not passed to settlement, you can view them via PBS or the PTS function CTAS. Paired adjustments are identified by a P to the left of the Contra-Participant field on the Detail Display screen.

CTAS also does not process debit and credit adjustments for:

- Accreting, zero delay, or variable rate issues
- REPO DOs
- Stock loan DOs
- ACAT DOs
- Free deliveries.

Adjustments to Variable Rate Issues

Since the applicable coupon rate may not be known for several weeks after a trade, coupon adjustments to variable rate issues will be made upon receipt of the latest factor but at the last known coupon rate. At times, trades may require two coupon adjustments. Consequently, DTC will make incremental adjustments to trades as it receives revised coupon information. For example, an accrued interest adjustment may have been made for \$100 but based upon a rate revision should have been \$110. CTAS will process a second trade adjustment for \$10.00. CTAS will also allow the seller to adjust the factor and/or coupon rate at which the first CTAS adjustment was calculated by allowing the seller to type over the selected fields in PTS or PBS (variable rate issues only). This will allow for the correction of adjustments in instances where participants' traded factors and coupon rates differ from those that DTC believed them to be at the time of the trade.

Viewing Adjustments

Adjustments are posted to your settlement account on the income payable date, or the business day following DTC's receipt of the actual factor, whichever is later. You can view each day's CMO re-factoring settlement debits and credits via:

- The CMO Trade Adjustment System Settlement Report for both the delivering and receiving participants
- The CTAS function.

You can also view the original DO on the ATP History Details screen of the ART function. You can only view the adjustments where you are either the delivering or receiving party.

The following PTS functions are used in association with CTAS:

Use this function	To
ART	View activity associated with a CTAS credit or debit, for the current day and for up to 60 previous business days.
CTAS	View detailed information about CTAS adjustments.
DIVA	View details of the principal payment associated with a CTAS adjustment.
POS	View the principal factor as of any day within the previous two years for any amortizing security for which you had position.

CTAS Contact Number

For more information about CTAS, call DTC's Customer Help Center at (888) 382-2721.

Coupon Collection Service (CCS)

About the Product

DTC's Coupon Collection Service (CCS) provides you with one central location for submitting coupons and one central source of payments. This saves you from having to deal with thousands of municipalities and paying agents for the collection of bearer municipal interest. Interest is paid directly to you from DTC in a timely manner.

Collection Outside New York City

DTC handles collections outside of New York City in one of two ways:

- For coupons deposited at least eight business days prior to the payable date, DTC credits
 you with the interest on the payable date.
- For coupons deposited less than eight business days prior to the payable date, DTC credits you with the interest ten business days after the date of deposit.

Collection Within New York City

DTC handles collections within New York City in one of two ways:

- For coupons deposited at least five business days prior to the payable date, DTC credits
 you with the interest on the payable date.
- For coupons deposited less than five business days prior to the payable date, DTC credits
 you with the interest ten business days after the date of deposit.

Past Due Coupons

DTC handles collections for past due coupons in one of two ways:

- For collection outside New York City, DTC credits you with the interest ten business days after the date of deposit.
- For collection within New York City, DTC credits you with the interest seven business days after the date of deposit.

The following PTS functions are used in association with CCS:

- ADJI
- DIVA
- SDAR

CCS Contact Number

For more information about CCS, call DTC's Customer Help Center at (888) 382-2721.

Dividend Reinvestment

About the Product

On certain securities, DTC offers you the option to purchase stock with your cash dividends instead of receiving the cash payments. You are notified via Important Notice of issues that are added to, or deleted from, the program. Important Notices are available on our Web site at http://www.dtcc.com/. You can make these elections via the PTS function EDS or via PBS.

The Dividend Reinvestment program features a Standing Instructions Database (SID) that allows you to create and update standing instruction positions via CCF or EDS. You are responsible for maintaining your Standing Instruction positions.

Note Stock allocation activities such as splits and reinvested dividends do not automatically cause adjustments to your current Standing Instruction positions.

As a DTC participant, you can:

- Submit your instructions to DTC through PBS or the PTS function EDS
- Reinvest the net of appropriate taxes for eligible foreign issues
- View information regarding newly added or deleted issues via Important Notices
 (available on our Web site at http://www.dtcc.com/)
- View a complete listing of the issues eligible under DTC's Dividend Reinvestment Program
 (DRP) in the DTC monthly Reference Directory, or via the RSI (Reinvestment Standing
 Instructions) section of the EDS function.

Benefits of using Dividend Reinvestment

You can maintain Dividend Reinvestment-eligible issues on deposit at DTC without losing the benefits of issuers' plans.

EDS Approval Process

The Dividend Reinvestment service is eligible for the EDS Approval Process. Please refer to the Approval Process section in the Introduction section of this document for more information.

The following PTS functions are used in association with Dividend Reinvestment:

Use this function	To
EDS	View and process dividend and interest election disbursement instructions.
ADJI	View cash and stock adjustments related to DTC Dividend Reinvestment activities.
DIVADPAL	View allocations and announcement information related to Dividend Reinvestment activities.
POS	View your positions on Dividend Reinvestment related securities.
SDAR	View today's allocations and anticipated allocations on Dividend Reinvestment related items.

Dividend Reinvestment Contact Number

For more information about Dividend reinvestments:

- Call DTC's Customer Help Center at (888) 382-2721
- Access DTC's Web site at http://www.dtcc.com/.

DTC Domestic Tax Withholding

About the Product

When domestic securities pay dividends or interest, that income payment is classified for tax purposes as a particular type of income. Often such income is reclassified at the end of the year as a type of income different than originally designated. Such reclassified income often carries a different taxability characteristic than the original income announcement. When such a reclassification occurs, participants need to be aware of it so they can properly prepare the IRS Forms 1099 they are required to provide to their customers. Note that DTax generally covers only domestic U.S. securities. In 2005, DTax was exited as a product offering of DTC and is now a product offering of DTCC Solutions LLC. DTCC Solutions is a wholly owned subsidiary of DTCC. While being offered through DTCC Solutions, DTax is still accessible through DTC's communications vehicles via inquiry functions on PTS and PBS.

The Domestic Tax Reporting Service (DTax) is a database of securities that reclassify income after year end. That is, an income announcement during the year declaring that an issue has paid a dividend may be reclassified after the end of the year into other types of income, e.g. capital gains, return of capital, etc. that attract different rates of tax than the original dividend would attract.

Most of the securities in the DTax database are not DTC-eligible and include such security types as open and closed end mutual funds, Real Estate Investment Trusts (REITs) and other securities that may reclassify income.

The data in DTax comes indirectly from agents and issuers in standard format that is updated annually by the industry in response to changes in domestic tax law.

Using DTax

You can use DTax to view the following:

- Securities with tax information, by CUSIP, security type, ticker symbol or description
- Details of tax classification
- Change history for a specific security
- Audit trail of changes for a specific security
- Revisions to payment information for a specific security

Associated Products

DTax may be used in conjunction with the Announcements product to obtain information on domestic (i.e. U.S.) securities that reclassify income at year end. DTax is the only DTCC Solutions source of post-event announcement data for U.S. securities. Such information may be carried in the "Comments" section of the Announcements product but is not available on an automated file. Remember that primarily domestic U.S. securities are included in the DTax product.

Associated PTS/PBS Functions

The table below lists the PTS/PBS function you can use to access information related to Domestic Tax Reporting:

Use this function	To
DTAX	View domestic tax information.

DTC TaxInfoSM

About the Product

Understanding and determining tax relief entitlements for various investor types can be difficult as the rules and regulations are often quite complicated and hard to decipher. DTC's TaxInfo state was developed to help participants by presenting pertinent information in a format that is easy to understand.

Offered in conjunction with DTC TaxReliefSM, TaxInfoSM is a repository of information designed to assist participants in making appropriate elections on behalf of their customers for withholding tax relief on income payments from foreign securities.

This information is compiled from various sources including international taxing authorities, issuers, paying agents, international accounting and law firms and other external sources.

How it Works

The information is presented in a PDF document which can be launched via the PBS platform from the TaxInfo function. PTS users can scroll through the document screen by screen via the TAXI function. For easy reference, TaxInfo is accessible from the TaxRelief function EDS on PTS or via PBS.

TaxInfo provides:

- Beneficial owner definitions under various tax treaties
- Tax withholding rates for different investor types applicable to various countries
- Legal conditions regarding the use of DTC TaxReliefSM
- Documentation requirements for tax relief processing

- Audit information related to DTC TaxReliefSM
- URLs for related websites

Use TaxInfoSM-when you are receiving dividends or interest involving foreign securities eligible for tax relief. It allows you to view important foreign tax withholding information before making decisions regarding elections for withholding tax relief. For example, a cash dividend is announced for a Swiss ADR. You can use TaxInfoSM to determine the proper amount of taxes to be withheld on your customer's ("beneficial owner's") dividend distribution. (A beneficial owner is the person or entity that owns and is entitled to all distributions and underlying rights in relation to a security.)

TaxInfoSM is available 24 hours on business days.

Benefits of Using DTC TaxInfoSM

- Provides a useful source of foreign tax withholding and relief information on DTC eligible securities for specific jurisdictions
- Offers timely information compiled from various sources including international taxing authorities, issuers, paying agents, international accounting and law firms and other external sources
- Reduces response time to customer inquiries by providing a centralized source of withholding tax information participants can use for their own research purposes

Legal Considerations

Please be advised that DTC is not providing tax advice and that TaxInfoSM is not meant to be a substitute for sound advice from qualified tax and legal advisors. Participants should consult their own tax advisors in utilizing the information in TaxInfoSM.

Associated PTS Functions

The table below lists the PTS functions you can use to access information related to DTC TaxInfo

Use this function	To
TAXI	View information on international withholding taxes.
EDS	Make elections to receive income payments net of favorable, unfavorable or exempt rate(s) of withholding tax.

DTC TaxInfoSM Contact Number

For more information contact DTC's Customer Help Center at (888) 382-2721.

You can also access DTC's Web site at http://www.dtcc.com.

DTC TaxReliefSM

About the Product

When dividends and interest are paid on foreign securities, foreign tax is generally withheld from the payment by the paying agent and paid to the foreign taxing authority. Generally, the paying agent withholds an amount of tax determined by statute (statutory rate) in the local jurisdiction where the security is issued. Often, investors are resident for tax purposes in a jurisdiction that has a tax treaty with the country of issuance of a security. For qualifying types of investors, these treaties often allow for a withholding rate less than the statutory rate.

DTC TaxReliefsm (TaxRelief) makes it possible for qualifying beneficial owners to obtain tax relief "at source" or via an accelerated refund on certain foreign issues as a result of tax relief arrangements established with issuers, agents or the tax authorities of various countries. Obtaining benefits at source means investors receive the income payment with the most favorable rate of tax for which they qualify deducted at the same time. The alternative to "at source" relief would be to be taxed at the highest rate and to have to file a tax reclaim to receive the amount overpaid by the beneficial owner. TaxRelief offers an efficient alternative to manually filing error-prone hardcopy reclaim forms.

TaxRelief supports all international DTC eligible security types including American Depositary Receipts ("ADRs"), global shares, equities, and fixed income securities for which arrangements have been established with either the respective countries' tax authorities, agents or issuers.

How It Works

When DTC is informed by the issuer or its agent that a tax relief opportunity exists on an upcoming income payment, DTC sends out a communication to participants via dividend announcements, announcements of active and forecast elections and in some cases a DTC Important Notice. Each communication states the issue's CUSIP number, the tax relief country, the record and payable dates and the various tax relief entitlements for different investor types.

Elections for tax relief are submitted electronically to DTC via the Participant Browser Services (PBS) TaxRelief function or via the PTS function EDS, to receive income payments exempt from foreign tax (exempt rate), at a reduced rate of withholding (favorable rate) or at the statutory tax rate (unfavorable rate) for DTC eligible securities for which TaxRelief is available. In making an election, a DTC participant makes certain certifications on behalf of the beneficial owner of the security in order to effect any "at source" relief or receive an accelerated refund. In particular, the participant certifies that it has documentation supporting the election, if so required in the subject jurisdiction. See also Legal Considerations below.

DTC opens its system to accept certifications on the day after record date and undertakes to keep the window open for a minimum of five business days, if feasible. Sometimes the period is shorter due to circumstances beyond DTC's control such as requirements of the issuer and/or agent or specific characteristics of the issue. TaxRelief allows participants to view, enter, modify or delete certifications up to the security's instruction cutoff date.

For relief at source payments, participants and their customers receive in one transaction simultaneous payment of the income and the associated tax relief. For accelerated refunds, participants receive their customer's tax relief entitlement subsequent to the initial dividend payment through DTC's cash settlement system.

DTC also provides DTC TaxInfosm (TaxInfo) as a source for international tax withholding and relief entitlement information. Participants can easily access DTC TaxInfosm (the TAXI function on PTS) directly from within the TaxRelief function.

Note: The use of DTC TaxRelief^{5m}-may be limited by the type of security related to a particular jurisdiction (such as ADRs or bonds for example) or may be available on an issue by issue basis. DTC continues to work with other foreign tax authorities as well as issuers and agents to arrange for at source relief (or if such relief is prohibited by applicable statutory provisions or the like, quick conditional refunds) under income tax treaties and/or the domestic law of the issuers' country.

DTC TaxReliefsm is a sub-function of the Elective Dividend Service/EDS.

Benefits of Using DTC TaxReliefsm

- Receive income payments net of the most favorable rates of tax your customers are
 entitled to, based on arrangements set up with various countries' tax authorities, or
 issuers or agents, as the case may be, enabling you to obtain monies that might
 otherwise be forfeited due to the complexity and cost of filing tax reclaims.
- Improves return on investment.
- Increases speed and accuracy in securing tax relief and eliminates the need for paperbased reclaims.
- Reduces or eliminates foreign exchange risk by removing the lag time between income payment and receipt of tax reclaim proceeds.
- Creates a secure electronic record of tax relief elections.
- Reduces or eliminates the possibility of a single income entitlement occurring via two
 separate payments made in two different tax years which can cause home country tax
 reporting and payment problems for the beneficial owner and its custodian (e.g. where
 the income payment precedes the return of overwithheld tax).
- Saves money by eliminating the need to finance delayed reclaim proceeds.
- Enables better, more informed investment decisions, as investors and investment advisors can calculate returns based on treaty and reduced domestic law withholding tax rates.

Legal Considerations

Participants should be aware that use of DTC TaxReliefsm typically requires that participants be able to provide supporting documentation in the event of an audit for any certifications that they make to DTC via TaxRelief. Additionally, among other things, by making the EDS certification, participants agree that DTC has the right to reverse the tax relief obtained pursuant to such certification (and related costs) if requested by the applicable taxing authority or paying agent. Note that participants may be required by the ADR Depositary, custodian banks, issuer, or applicable tax authority to submit beneficiary lists in support of their DTC TaxReliefsm certifications. Please refer to DTC TaxInfosm and event specific DTC Important Notices for details regarding required documentation.

EDS Approval Process

DTC TaxReliefsm is eligible for the EDS Approval Process. Please refer to the Approval Process section in the Introduction section of this document for more information.

Associated PTS Functions

The following PTS functions are used in association with DTC TaxReliefSM:

Use this function	To
EDS	Make elections to receive income payments net of favorable, unfavorable or exempt rate(s) of withholding tax.
DIVA	View allocations and announcement information.
SDAR	View today's allocations and anticipated allocations.

DTC TaxReliefsm Contact Number

For more information contact DTC's Customer Help Center at (888) 382-2721.

You can access DTC's Web site at http://www.dtcc.com/.

Due Bill Fail Tracking System

About the Product

The Due Bill Fail Tracking system relieves you of the time consuming process of issuing and redeeming due bills by facilitating the settlement of due bills on failed deliver orders (DOs).

A failed DO is one which was originally scheduled to settle on or before the record date, but instead settled after the record date. Fails sometimes result in buyers not receiving a dividend or interest payment to which they are entitled. Previously such deliveries were made with a due bill attached, usually in the form of a post dated check or IOU. A due bill is an agreement that the seller will pay the dividend or interest to the bearer (the buyer) upon presentation.

How the Product Works

Due Bill Fail Tracking:

- Monitors all DO activity, comparing the trade settlement date of the DO with the actual settlement date
- For failed DOs, reviews DTC's Dividend Announcement database
- Automatically generates cash and stock dividend adjustments for any failed DO requiring a due bill except for REPO, stock loan, Continuous Net Settlement (CNS), Free and Interdepository deliveries.

On the payable date, or on the day following the settlement of the trade at DTC (whichever is later), the seller receives a debit for the income due and the buyer receives a credit.

Important Notes

The following notes apply to DTC's Due Bill Fail Tracking process:

- If you are a delivering participant, you can elect to remove a delivery from Due Bill Fail Tracking by entering an N in the Due Bill field on the DO.
- Due Bill Fail Tracking does not monitor stock splits, rights offerings, or optional dividend payments.
- Receiving participants have the ability to delete a pending adjustment, or change the post date of a pending adjustment, until 1:00 p.m. eastern time on the post date.

Monitoring Period

The monitoring period for failed transactions is:

- 18 months from the payable date for corporate and municipal debt issues
- 30 days from the payable date for equity issues.

Fail monitoring begins on:

- The day following the record date for all announcements that are not subject to interim
 accounting
- The day following the end of the interim period for announcements with interim accounting.

About Paired Transactions

Pairing occurs when two DOs contain the same CUSIP, quantity (original face value), trade settlement date, and settlement dollar value, and the delivering and contra-participants are reversed. DTC does not process debit and credit adjustments for settlement when underlying DOs are paired. This eliminates superfluous debit and credit adjustments that net to zero.

Note Although paired transactions are not passed to settlement, you can view these items via PBS or the PTS function ADJI. Paired adjustments are identified with a P to the left of the CUSIP field on the applicable Detail screen.

Using PTS to Track Fails

The PTS function ADJI provides due bill information in both summarized and detailed forms for 180 days starting:

- From the payable date for equity issues.
- From the post date for debt issues.

You can use ADJI to inquire about due bills both pending and past, and you can use ART to view the underlying DO details for sixty business days from the DO date.

Adjustments Processing Schedule

You will receive adjustments on the payable date or on the day following the failed delivery, whichever is later. Cash in lieu (CIL) of stock dividends is adjusted on the day following the receipt of the rate, or on the day following the failed delivery, whichever is later. You can view settled fail adjustments via the DPAL and ADJI functions, and via the Dividend Reorg Cash Settlement Statement under the heading "Miscellaneous Payments/Charges."

If an issue is subject to foreign tax (withheld at the source), and DTC has established both a favorable (U. S. treaty) rate and an unfavorable rate for the issue, the adjustment is made at the favorable rate.

Associated PTS Functions

The following PTS functions are used in association with Due Bill Fail Tracking:

Use this function	To
ART	View deliver orders with a Due Bill Fail Tracking debit or credit.
ADJI	View Due Bill Fail Tracking cash and stock debit and credit adjustments.
DIVA	View net fail positions for a particular cash or stock distribution.
SDAR	View pending Due Bill Fail Tracking adjustments for five business days in the future, settled adjustments for the previous five business days, and pending or settled adjustments for the current day.

Due Bill Fail Tracking Contact Number

For more information about Due Bill Fail Tracking, call DTC's Customer Help Center at (888) 382-2721.

Foreign Currency Payments (FCP)

About the Product

Foreign Currency Payments (FCP) allows you to elect to receive periodic interest payments on all or part of your record date position for certain foreign currency denominated debt issues through DTC in U. S. dollars, or directly from the paying agent in the currency in which the issue is denominated. DTC informs you of newly added issues to the FCP service via Important Notices, which are available on our web site at http://www.dtcc.com/legal/imp_notices/.

Benefits of using the Foreign Currency Payment Product

By using FCP, you avoid certain foreign currency fluctuations by receiving the payment in the desired currency.

Legal Considerations

The following legal considerations apply to foreign currency payment options. Each time you submit FCP instructions via PTS, you have agreed to the following:

- 1.—You certify that the security described in your instructions was in your DTC record date position; and
- 2.—You authorize DTC to decrease your record date position by the quantity of that security specified in the instructions and to instruct the paying agent to pay the interest payment due on the quantity specified in the instructions in the currency in which the security is denominated.

EDS Approval Process

FCP is eligible for the EDS Approval Process. Please refer to the Approval Process section in the Introduction section of this document for more information.

Associated PTS Functions

The following PTS functions are used in association with FCP:

Use this function	To
EDS	View and process dividend and interest election disbursement instructions.
ADJI	View cash and stock adjustments related to DTC activities.
DIVA DPAL	View allocations and announcement information.
POS	View your positions on foreign currency securities.
SDAR	View today's allocations and anticipated allocations on

Use this function	To
	foreign currency related items.

Foreign Currency Payment Service Contact Numbers

For more information about the Foreign Currency Payment Service:

- Call DTC's Customer Help Center at (888) 382-2721
- Access DTC's Web site at http://www.dtcc.com.

Inquiries

About the Product

DTC's Inquiries product provides you with numerous avenues for solving the day to day questions and/or problems associated with income processing, including the use of several PTS functions. Inquiries are either announcement related inquiries or general dividend inquiries.

Announcement-Related Inquiries

Announcement-related inquiries include requests for information on or questions about the accuracy of:

- Record dates
- Payable dates
- Ex-dates
- Rates
- Pool factors
- Calculation methods
- Payment frequency or mode of payment.

General Dividend Inquiries

General dividend related inquiries include questions about the accuracy of:

- Claims
- Adjustments
- Amount of dividend or interest paid.

You can also order photocopies of record date notices, cash settlement lists, and so forth.

The following table describes some common general inquiries:

For	Inquire about	
Invalid claims	Debits processed against your account for claims where the certificates held by DTC were in either your name, your customer's name, or your nominee name.	

For	Inquire about	
Cash adjustments	Cash adjustments other than announcement related problems.	
Coupons	Interest.	
Fails	Fail tracking dividend and interest activity.	
Foreign tax	Non-resident withholding tax.	
Positions	Dividend or interest differences due to the amount of shares or bonds you are, or were, being paid on.	
REPOs	Dividend and interest activities regarding Repurchase Agreements (REPOs).	
Stock loans	Stock loan dividend and interest activities.	
Stock dividend products	Dividends, splits, spinoffs, payments in kind, cash in lieu (CIL), script, reinvestments, baby bonds, optional dividends, and so forth.	
WT Dividend and Interest	Dividend or interest payments relating to WT activities.	

The following PTS functions are used in association with Inquiries:

Use this function	To:
ART	Verify share position movements, view ATP Transaction Tickets, stock dividend payments and MMI payments.
ADJI	View reasons for cash and stock adjustments.
DIVA	View announcement information such as the record date, payable date, and rate; view additional information such as the allocation date.
DPAL	View payment information.
FFSP	See if DTC has gone to final settlement, view final figures, and view MMI CUSIPs being allocated that day.
PART	View position and daily journal history to help you research your position. You can also access ART through this function.
PINS	Submit inquiries about bond interest, dividend, and MMI payments on stock loan payments.
POS	View your stock loan and REPO positions for the past two years.
SDAR	View all allocations and adjustments for today, five days past, and five days in the future.

Inquiries Contact Number

For more information about Inquiries, call DTC's Customer Help Center at (888) 382-2721.

Interim Accounting

Overview

Interim Accounting is not a Dividend product in itself, but is an important part of the Allocations product. It is necessary for you to understand how DTC processes dividends during the interim period (the time during which a trade includes the current distribution).

Important Terms

The following are terms that will enable you to better understand DTC's Interim Accounting process:

Glossary Term	Abbreviation	Definition
Receiver		The party that receives the security (also known as the buyer).
Deliverer		The party that delivers the security (also known as the seller).
Registered holder		The party that is on the books of the issuer as owning the security.
Ex-dividend		A trade settling without the distribution.
Ex date		The first date on which a security trades without the income distribution. Normally, the ex-date is two business days before the record date.
Due bill		A check equivalent to the distribution amount or an IOU entitling the receiver to the distribution.
Due bill period		The period of time during which a trade includes the current distribution, usually from the record date 1 up to the ex date 2.
Interim period		DTC's term for the due bill period.
Expiration date		The date that rights expire (become worthless).
Accrual period		The period of time that asset backed security trades settle with distribution.
Stock split		A stock distribution usually of 25 percent or more of what the shareholder owns. It usually has an ex date of the first business day after the payable date.
Optional dividend		A dividend for which the shareholder has several options regarding how it will receive distribution (such as cash, additional shares, or a combination).

Reasons for Interim Accounting

Normally, the registered holder of a security on the close of business on the record date is entitled to the distribution. There are times, however, when that is not the case. There are two common reasons why this could occur:

- 1.—The registered holder of an equity issue that does not go ex dividend in the normal way (for example, if the ex date is after the record date) sells the security prior to the ex date "with distribution." In this case, the buyer is entitled to the distribution.
- 2.—For most bonds, the buyer (receiver) of the security is entitled to the interest payment on trades settling up to and including the day before the payable date, even though the buyer is not the registered holder.

Without DTC's Interim Accounting

Normally, due bill processing involves the following activities:

- Trades that settle after the record date "with distribution" (those that entitle the receiver
 to the distribution) would have a due bill attached to them. This would be in the form of a
 post dated check equal to the amount of the distribution, or an IOU stating that the
 receiver will receive the distribution.
- The receiver must present the due bill on the payable date to the deliverer to receive the distribution.

The period of time in which due bills are used is called the due bill period, which extends from the record date + 1 up to the ex-date + 2.

With DTC's Interim Accounting

During the due bill period, DTC:

- Tracks all activity, such as trades, where the receiver is entitled to the announced distribution (cash/stock dividend or interest payment).
- Adjusts participants' record date positions, crediting the receiver and debiting the deliverer.

This ensures accurate payment on the payable date and eliminates time consuming, costly paper processing.

Note During this due bill period, all DTC activities involving the physical movement of securities are excluded from the dividend allocation. These include your deposits, withdrawals by transfer (WTs) and Certificates on Demand (CODs).

Interim Accounting Usage

Activation of DTC's Interim Accounting process depends on the type of distribution. The following table describes the conditions under which Interim Accounting takes place:

Ear	Interim Accounting is used
TOT	interim Accounting is used

For	Interim Accounting is used
Cash dividends	When the ex-date is not normal, and DTC is aware of the ex-date prior to the payable date.
	In this case, the Interim period runs from record date 1 through close of business on ex date 2.
Stock distributions	For:
	All stock splits or
	 A stock distribution of less than 25 percent with an ex-date that is not normal.
	In this case, the Interim period runs from record date + 1 through close of business on ex date + 2.
	Note Stock splits are allocated to your general free and pledged accounts in the please of the day follows and please of the day follows are the please of t
	close of the due bill period. Shares allocated to the pledged account automatically become additional collateral for the loan.
Rights	When the ex-date is not normal, and there is adequate time for you to submit your rights instructions to DTC for presentation to the paying agent prior to the expiration date.
	In this case, the Interim period runs from record date + 1 through close of business on ex date + 2.
	Note—If there is not adequate time for you to submit your rights instructions to DTC for presentation to the paying agent prior to the expiration date, DTC will credit your account based on your record date position.
	You must settle due bills outside DTC.
Corporate bonds, CDs, and government bond	Because the majority of these settle with interest up to the business day before the payable date.
interest	In this case, the Interim period runs from record date + 1 through payable date -1.
Asset-Backed Securities (ABS)	As dictated by the issuer's accrual period. For example, if the accrual period ends after the record date and
	before the payable date, the Interim period runs from record date 1 through the end of the accrual period.
	Note If the accrual period ends prior to the record date, DTC will not run interim or run "reverse" interim (reverse due bill).

For	Interim Accounting is used
Supplemental due bills	For special large cash dividends, when the ex-date is the day after the announced payable date. In this case:
	The Interim period runs from record date + 1 through payable date - 1 Allocation is made on payable date, and
	Interim Accounting starts again on the payable date and continues on a daily basis through exdate 2. Allocation is made on the business day following the day of delivery by crediting the money settlement account of the receiver and debiting the money settlement account of the deliverer.

New York City Record Date Mini-Interim

The Industry standard for dividend cutoff days is a maximum of two business days prior to the out-of-town record date. (DTC refers to this as the New York equivalent record date.)

Mini-interim accounting was developed to allow DTC to meet the record date deadlines when the transfer agent (TA) is located outside of New York City. Mini-interim is set up at the start of business on the first business day after the New York equivalent record date and closes at the end of business on the actual record date.

Deposits and WTs processed during the mini-interim period do not affect your position for dividend allocations. If you make a rush withdrawal by transfer (RWT) during the mini-interim period, your position for dividend or interest allocation is reduced. You must submit a formal claim for any dividend or interest involving certificates withdrawn as RWTs during this mini-interim period. See Claims.

Dividend allocation is made to your position based on the New York equivalent record date position, updated to include any DO movements that were made up to and including the actual record date:

Optional Dividends

About the Product

On selected distributions, the issuer gives the holder several distribution options (such as receiving the distribution in cash, stock, or a combination). DTC receives written correspondence from agents detailing the available options and deadlines for submitting instructions. All relevant information is passed on to you via Important Notices available on our Web site at http://www.dtcc.com/legal/imp_notices/ and scheduled PTS/PBS broadcasts.

As a DTC participant, you can make your elections via the PTS function EDS or via PBS.

Benefits of using the Optional Dividend Service

The Optional Dividend Service allows you to avoid receiving the mandatory option the issuer has announced.

EDS Approval Process

The Optional Dividend Service is eligible for the EDS Approval Process. Please refer to the Approval Process section in the Introduction section of this document.

Associated PTS Functions

The following PTS functions are used in association with the Optional Dividend Service:

Use this function	To
EDS	View and process dividend and interest election disbursement instructions.
ADJI	View cash and stock adjustments related to optional dividend activities.
DIVA DPAL	View allocations and announcement information related to optional dividend activities.
POS	View your positions on optional dividend-related securities.
SDAR	View today's allocations and anticipated allocations on DTC TaxRelief SM -related items.

Optional Dividends Contact Numbers

For more information about the Optional Dividend Service:

- Call DTC's Customer Help Center at (888) 382-2721
- Access DTC's Web site at http://www.dtcc.com.

Repurchase Agreement (REPO) Tracking System (RTS)

About the Product

A repurchase agreement (REPO) is an agreement between two parties that allows the seller of securities to later repurchase them at an agreed-upon price. The seller usually retains the right to periodic income distributions. However, since the securities won't reside in the seller's account on record date, the seller would not be credited the periodic principal and income distributions paid on the securities. To recover these entitlements, the seller has to claim the REPO buyer. DTC's REPO Tracking System (RTS) automates claims of these entitlements by tracking the REPO transactions (deliveries) and adjusting the entitlement payments accordingly on payable date.

How the Product Works

RTS tracks deliver orders (DOs) with REPO reason codes (codes 220-228 and 230-238) and creates memo positions for the REPO amount. The deliverer (seller) of a REPO receives a long REPO position, and the receiver (buyer) receives a short REPO position.

If you hold a long REPO net position, you will receive a credit adjustment on the payable date for any periodic principal and income distributions. If you have a short REPO net position, you will receive a debit adjustment on the payable date.

Tax Treatment

DTC performs appropriate U.S. tax withholding and information reporting for credit adjustments that are settled with non-US Participants. See the U.S. Tax Withholding section on page 61 for more information on U.S. Tax Withholding.

Viewing REPO Activity and Positions

You can view pending and past adjustments for a period of five business days before through five business days after the payable date via the PTS function SDAR or via PBS. You can also view scheduled adjustments for the current payable date via the PIAR function, and cancel (as the REPO buyer) adjustments to be credited to the REPO seller before 2:00 p.m. eastern time if you are authorized for the PIAC sub-function. You can also view positions and adjustments via the DPAL function, and adjustments via the ADJI function.

To view REPO positions, access the PTS function POS and select the Extended Inquiry option. To view the contra-participant, enter an S in the Stock Loan/REPO field.

Note You can also receive Daily Activity, Composite Balances, and Detail Balances for your REPO positions via DTC's Computer to Computer Facility (CCF) or via PBS.

Correcting REPO Positions

If a participant acting as a REPO seller fails to use the designated REPO reason codes, the quantity being tracked in RTS will be incorrect. You should use SLRM to correct REPOs that were entered without the REPO reason codes, and increase or decrease the REPO positions in a given security. Such entries must be affirmed by the contra-participant. See SLRM for detailed instructions and reference material.

Note To enter, approve, or cancel REPO positions, you must have an authorized user ID and password. Contact your Relationship Manager for more information regarding your user ID and password.

A situation could arise where a REPO buyer (a participant with a short REPO position) may need to unilaterally instruct DTC to eliminate a REPO position, and thus cancel its future RTS principal and interest obligations for a specific security and contra-participant. To do this, submit a Letter of Instruction signed by an authorized representative of your participant organization to the Vice President of the Dividend Department at DTC. You must deliver the letter personally or send it by verified facsimile transmission to (212) 855-4809. You must also send a copy to the contraparticipant.

Once it receives the letter, DTC will increase your REPO position and decrease the REPO position of the contra-participant for the specified CUSIP.

An effective date for reversal of the obligation must be specified in the letter. The effective date shall be no sooner than two days after the Vice President of Dividends receives the letter in good form. Should the payment date be less than two days after such receipt, DTC will use its best efforts to reverse the obligation before the next payment date.

You will be notified of newly entered, approved, or cancelled adjustments via REPO adjustment tickets that print on the designated PTS printer in your area.

Correcting REPO Payments

If you have an authorized user ID and password, you can also adjust the amount of a pending or past ("historical") adjustment. This option can be accessed by placing an A next to the contra-

participant on the Dividend Position Ledger Detail screen in the DPAL function. These adjustments will be processed on the post date you enter. This date must be at least equal to the payable date, and cannot be less than the following business day.

You can view these adjustments via the DPAL and ADJI functions. If the payable date falls within the next five days, or is in the past, you can also view these adjustments via the SDAR function.

A REPO buyer (a participant with a short REPO position) may need to unilaterally submit an instruction to DTC to prevent a single periodic principal and income distribution from being tracked through RTS, without affecting the tracking of any other future distributions on the security. This need usually arises when an upcoming distribution includes a principal component large enough to significantly affect the value of the collateral security of the repurchase agreement.

To do this, you must have access to the PIAR function and the specific sub-function that allows you to make cancellations/reactivations of principal and income adjustments scheduled to be credited to the REPO seller on the payable date. See PIAR for detailed instructions and reference material.

Warning! Both parties to the REPO transaction are responsible for settling the payment outside of RTS. For payments that are settled outside of RTS, it is the parties to the REPO transaction that are responsible for performing the appropriate U.S. tax withholding and information reporting. DTC is not responsible for processing further entries on that specific distribution nor is DTC responsible for performing the appropriate U.S. tax withholding or information reporting with respect to that transaction settled outside of RTS.

Associated PTS Functions

The following PTS functions are used in association with RTS:

Use this function	To
ART	View activity associated with your REPO positions for the current day and for up to 60 previous business days.
ADJI	View REPO tracking cash debits and credits.
DPAL	View REPO positions and cash adjustments for a particular cash or stock distribution.
PIAR	View (and cancel, if you are the buyer) REPO tracking adjustments scheduled to be credited to the seller on the payable date.
POS	View net REPO positions for the previous two years.
SDAR	View pending REPO tracking adjustments for five business days in the future, settled adjustments for the previous five business days, and pending or settled adjustments for the current day.
SLRM	Increase or decrease a REPO position without a DO and approve or cancel a pending adjustment initiated by a contraparticipant.

REPO Tracking Contact Number

For more information about RTS, call DTC's Customer Help Center at (888) 382-2721.

Rights Distribution

About the Product

DTC's Rights Distribution product notifies participants of upcoming rights distributions and allocates those rights to participants.

About Rights

Rights are securities that give a corporation's shareholders the right to purchase additional shares at a given price for a specific period of time. They are usually distributed when a corporation decides to have a secondary offering, releasing more shares to the public. This allows current shareholders to maintain the same percentage of stock as they currently hold.

Warning! You can exercise a majority of the rights you receive via PBS or the PTS function PSOP. However, DTC does not assume responsibility for exercising your rights. You must exercise the rights to which you are entitled by other means whenever the information is not available via DTC.

Rights Notifications

DTC receives notification of rights offerings from various sources, such as:

- Rights agents
- Information agents
- Stock Exchange Notices.

DTC then notifies you of the terms of the rights offering via:

- PTS/PBS broadcasts
- The Internet
- Important Notices marked "Warning! Time Critical Transactions," available on our Web site at http://www.dtcc.com/legal/imp_notices/

The information in the notices includes:

- Rate of distribution
- Exercise period
- Price.

Additional Round-Ups

Based on the terms of the rights offering, you may be entitled to additional rights based on round up provisions. If so, you can instruct DTC as to the additional number of round up rights you require on behalf of your beneficial holders. To do this, submit the form attached to the Important Notice (called "Certification and Request for Additional Round up Rights") to DTC's Stock Dividend department by the date specified in the Important Notice or PTS/PBS broadcast.

Rights Allocation

DTC allocates the rights to your accounts as soon as possible after the record date. DTC credits you with the additional rights, issued pursuant to round up requests, within one business day after DTC receives your round up instruction.

You can view your rights allocations:

- On your daily Participant Statement
- On the Dividend/Reorganization Participant Statement
- Via the DPAL function.

Rights Exited by DTC

If DTC's Reorganization department cannot handle the subscription of rights on your behalf, DTC will exit the rights to you. DTC will notify you via a PTS/PBS broadcast and an Important Notice as to the date and time the rights will be available for pick up. Important Notices are available on our Web site at http://www.dtcc.com/legal/imp_notices/

Warning! You must notify DTC, prior to the expiration date, if you have not received your rights.

Canadian Rights

In most cases, Canadian rights offerings cannot be subscribed for by U. S. entities. Instead, the rights agent will attempt to sell the rights, on a best effort basis, and remit any cash proceeds to DTC. If physical rights are mailed to DTC, see Rights Exited by DTC. Rights not issued to shareholders whose recorded address is in the U. S. are held by the rights agent.

Rights Release Requests

If permitted by the rights agent, your rights entitlements will be released to you in Canada. DTC will issue an Important Notice (available on our Web site at

http://www.dtcc.com/legal/imp_notices/) and a PTS/PBS broadcast instructing you to advise us of the number of rights you want released. When we receive your instructions, we will make the appropriate adjustments to your accounts to reflect the number of rights released to you in Ganada.

For release of Canadian rights, DTC must receive your instructions by the date specified in the Important Notice and PTS/PBS broadcast. All rights release requests must be submitted on your company's letterhead. You can fax the release request to DTC's Stock Dividend processing staff at (212) 855-4544.

After transmitting the fax, you must contact DTC's Customer Help Center at (888) 382-2721 to verify that we have received your release request.

Include the following information in your release request:

- Your participant number
- Security name
- · Quantity of rights you are requesting for release
- CUSIP number
- Record date
- Who the rights should be released to
- Authorizing name and signature
- Contact name and phone number.

Note DTC will forward the request to the rights agent. However, you must contact the rights agent to make arrangements for delivery of the rights.

Once we receive your request, DTC will authorize the rights agent to sell all unreleased rights.

Any proceeds will be distributed to you as a redemption of rights (function code 47). You must

check the Dividend/Reorganization Cash Settlement List, or use the DPAL function, to verify that the activity was properly processed and recorded.

Special Circumstances

Occasionally, rights are mailed directly to you by the issuing company or its information or subscription agent. This happens when the issuer decides to ensure that all rights material is forwarded directly to you.

In these cases, the issuer or trustee requests one of the following:

- A Security Position listing from DTC's Reorganization Proxy department
- An RDP Name and Address Nominal list from DTC's Stock Dividend department.

DTC issues an Important Notice, notifying you that the rights will not be handled by DTC and will be mailed directly to you by the issuer. Important Notices are available on our Web site at http://www.dtcc.com/legal/imp_notices/.

Note—It is important that you notify DTC of any name or address changes that could affect the accurate delivery of the rights.

Associated PTS Functions

The following PTS functions are used in association with Rights Distribution:

Use this function	To
RIPS	View rights subscription terms (such as expiration date) and appropriate reorganization contact.
PSOP	Exercise rights.
DIVA	View announcement information related to a rights offering.
ART	View your positions and activity adjustments.

Rights Distribution Contact Number

For more information on the announcement of rights distributions and allocations or on participant rights subscriptions, call DTC's Customer Help Center at (888) 382-2721.

Stock Loan Income Tracking System

About the Product

In a stock loan agreement, the lender of the security is entitled to recover from the borrower any income distributions paid on the loaned security. The Stock Loan Income Tracking System allows DTC to track the lender's (deliverer's) position on these securities.

How the Product Works

The Stock Loan Income Tracking System tracks deliver orders (DOs) with certain reason codes (codes 10-29) and adjusts your position accordingly. When a stock loan DO is created, the lender

receives a stock loan long position and the borrower receives a stock loan short position on the security. If you hold a long stock loan net position, you receive credit adjustments on the payable date for periodic income distributions. If you have a short stock loan net position, you receive debit adjustments on the payable date.

Payments that are Not Tracked

The Stock Loan Income Tracking System tracks cash dividend and interest payments. The following are not tracked:

- Stock dividends
- Rights distributions
- Optional dividends
- Spin-offs.

If a stock split is allocated, all of your stock loan positions are increased for the split, but there are no payments. Similarly, your positions are adjusted for mandatory reorganization activities.

Note—If you are the lending participant, you don't have the shares in your free account, therefore you cannot perform elections on stock loan positions, or participate in voluntary reorganization or proxy activities.

Tax Treatment

DTC performs the appropriate U.S. tax withholding and information reporting for credit adjustments that are settled with non- US participants. See the U.S. Tax Withholding section on page 61 for more information on U.S. Tax withholding. Canadian dividend and interest payments are settled at the exempt rate (100 percent). Other foreign distributions are settled at the most favorable rate available to DTC. If you have stock loan agreements that call for a rate that differs from those described here, you and the contra-participant must settle the difference outside DTC. The adjustment mechanism described in Correcting P &I Payments on Stock Loan Positions can be used for this purpose.

Viewing Stock Loan Activity and Positions

You can view pending and past adjustments for a period of five days before to five days after the payable date via PBS or the PTS function SDAR. You can also view positions and adjustments via the DPAL function, and adjustments via the ADJI function.

Note You can view your stock loan positions and the contra-participant via the POS function.

Correcting Stock Loan Positions

You can increase or decrease your stock loan positions via the SLRM function. The change you enter is then subject to confirmation by the contra participant. Use SLRM to correct stock loan DOs that were entered with reason codes other than 10 through 29.

Note To enter, approve, or cancel stock loan adjustments, you must have an authorized user ID and password. Contact your Relationship Manager for more information regarding your user ID and password.

If you have short stock loan positions and don't have access to the SLRM function, you can instruct DTC to cancel future stock loan debit adjustments for a specific CUSIP and contraparticipant. To do this, submit a Letter of Instruction signed by an authorized representative of your participant company to the Vice President of the Dividend department at DTC. You must

deliver the letter personally or send it by verified facsimile transmission to (212) 855-4809. You must also send a copy to the contra-participant.

Once it receives the letter, DTC will increase your stock loan position and decrease the stock loan position of the contra-participant for the specified CUSIP.

You will be notified of newly entered, approved, or cancelled adjustments via stock loan adjustment tickets that print on the designated PTS printer in your area.

Correcting P & I Payments on Stock Loan Positions

If you have an authorized user ID and password, you can create cash adjustments to a pending or past ("historical") stock loan adjustment. This option can be accessed by entering an A next to the contra participant on the Dividend Position Ledger Detail screen (via the DPAL function).

You can credit or debit yourself against the same contra-participant, or a different one. These adjustments will be processed on the post date you enter. This date must be the payable date or later, and cannot be less than the following business day.

These adjustments will appear on your Participant Statement and can be viewed via the DPAL function, and via the ADJI function. If the payable date falls within the next five business days, or is in the past, you can also view these adjustments using the SDAR function.

If you have a short stock loan position, you can instruct DTC to exclude a specific distribution from tracking without affecting the tracking of future distributions. To do this, submit a Letter of Instruction signed by an authorized representative of your Participant company to the Vice President of the Dividend department at DTC. You must deliver the letter personally or send it by verified facsimile transmission to (212) 855-4809. You must also send a copy to the contraparticipant.

DTC accepts Letters of Instruction from two days before the distribution date until 11:30 a.m. eastern time on the distribution payable date. Upon receipt, DTC processes a cash adjustment on the distribution payable date that offsets the original stock loan tracking entry.

Warning! Both parties to the stock loan transaction are responsible for settling the payment outside of DTC's Stock Loan Income Tracking System. For payments that are settled outside of DTC's Stock Loan Income Tracking System, it is the parties to the stock loan transaction that are responsible for performing the appropriate U.S. tax withholding and information reporting. DTC is not responsible for processing further entries on that specific distribution nor is DTC responsible for performing the appropriate U.S. tax withholding or information reporting with respect to those stock loan transactions that are settled outside of DTC's Stock Loan Income Tracking System.

Associated PTS Functions

The following PTS functions are used in association with the Stock Loan Income Tracking System:

Use this function	To
ART	View activity associated with your stock loan positions, for the current day and for up to 60 previous business days.
ADJI	View stock loan tracking cash debits and credits.
DPAL	View stock loan positions and cash adjustments for a particular cash or stock distribution.

Use this function	To
POS	View net stock loan positions for the previous two years.
SDAR	View pending stock loan tracking adjustments for five business days in the future, settled adjustments for the previous five business days, and pending or settled adjustments for the current day.
SLRM	Increase or decrease a stock loan position without a DO, approve or cancel a pending adjustment initiated by a contraparticipant.

Stock Loan Tracking Contact Number

For more information about the Stock Loan Income Tracking System, call DTC's Customer Help Center at (888) 382-2721.

U.S. Tax Withholding

About the Product

The U.S. Tax Withholding Service (UTW) is available to non-U.S. Participants, including subaccounts of U.S. participants.

UTW allows non-withholding qualified intermediaries to make elections on U.S. source income payments at all favorable withholding rates available to countries that have tax treaties with the U.S. (treaty rate) as well as at the maximum statutory withholding rate (30%), and the exempt rate (0%). A qualified intermediary (QI) is any non-US intermediary (or non-US branch of a U.S. intermediary) that has entered into a qualified intermediary withholding agreement with the IRS. Non-qualified intermediaries (NQIs) cannot make elections to secure reductions in applicable maximum statutory withholding rates. All U.S. source payments made to NQI users will be withheld at the maximum statutory rate. U.S. source payments to non-US Participants that have provided a Form W 8BEN may be paid at a reduced rate of withholding depending on the certifications associated with the Form W8 BEN.

How it Works

As a U.S. tax withholding agent, DTC:

- Provides certain users of the service with access to the US Tax Withholding menu item on the EDS function
- Notifies non-US Participants of taxable events
- Informs non-withholding QI users of the "election window" during which they must send
 withholding rate instructions to the depository; the election window generally extends
 from one day after the record date ("record date +1") to one day before the payable date
 ("payable date -1")
- Pays U.S. source dividends or interest to non-US Participants on the payable date, net of appropriate withholding tax
- Prepares settlement statements that will reflect the gross dividend amount, tax amounts withheld at each designated rate and net dividends paid
- Remits tax funds to the IRS on a weekly schedule
- Prepares and sends the appropriate year-end 1042-S tax forms to non-US Participants

U.S. Tax Withholding is a subfunction of the Elective Dividend Service (EDS).

Benefits of Using U.S. Tax Withholding

Users of the UTW receive U.S. source payments net of the applicable taxes on payable date. DTC remits the taxes to the IRS and provides appropriate yearend reporting on Form 1042 S (Foreign Person's U.S. Source Income Subject to Withholding) prior to March 15 following the end of the calendar year. It is not necessary for users to segregate positions into separate subaccounts by tax rate pool. All positions may be maintained in one account. Prior to payable date, a non-withholding QI user instructs DTC to withhold at various tax rates by moving shares to the appropriate tax rates in the tax matrix on the UTW function.

Legal Considerations

Users must submit to DTC a valid W-8 form as follows:

- W-8 BEN, Certificate of Foreign Status of Beneficial Owner for United States Tax
 Withholding to be submitted by any non-U.S. person or corporation who is the beneficial owner of the income.
- W 8 ECI, Certificate of Foreign Person's Claim for Exemption From Withholding on Income
 Effectively Connected With the Conduct of a Trade or Business in the United States to be
 submitted by any non U.S. person or corporation who is the beneficial owner of the
 income and claims that the income is effectively connected with conduct of a trade or
 business within the United States.
- Form W 8 EXP, Certificate of Foreign Government or Other Foreign Organization for United States Tax Withholding to be submitted by any foreign government, foreign central bank of issue, foreign tax exempt organization, foreign private foundation, or government of a U.S. possession if such entity is claiming exemption from withholding under section 115(2), 501(c), 892, or 895, or claiming a reduced rate of withholding under section 1443(b).
- Form W 8 IMY, Certificate of Foreign Intermediary, Foreign Flow Through Entity, or Certain U.S. Branches for United States Tax Withholding to be submitted by any entity that is an intermediary, whether QI or NQI, a withholding foreign partnership, a withholding foreign trust, or a flow-through entity.

These forms are available on the IRS website at http://www.irs.gov/formspubs/index.html?portlet+3

Users must also execute a letter appointing DTC as their withholding agent and enter into a Withholding Agent agreement.

Every non-U.S. entity seeking membership in the depository must complete a valid W-8 form whether or not DTC acts as a withholding agent on their behalf. The form must be (1) valid for the type of entity; (2) filled out completely; and (3) signed by an authorized signatory of the entity. Forms may expire after 3 years at which time DTC will solicit a new form. Each entity having a deposit in the DTC Participants Fund must submit a W-8 BEN. U.S. branches of foreign banks must also submit the appropriate W-8 form.

Associated PTS Functions

The table below lists the PTS functions you can use to access information related to U.S. Tax Withholding:

Use this	To
function	

Use this function	To
EDS	View and process dividend and interest election disbursement instructions.
DIVA	View allocations and announcement information related to U.S. Tax Withholding (UTW) activities.
SDAR	View today's allocations and anticipated allocations on UTW income payments with details on the amount of tax withheld at each tax rate.

Associated Record Layouts

You may access record layouts at:

http://www.dtcc.com/products/documentation/asset/ccf.php

U.S. Tax Withholding Contact Number

For more information contact DTC's Customer Help Center at (888) 382-2721.

•

About Distribution Services

Introduction

Overview

This guide describes DTC's income processing services which collectively fall under the Distributions event group in the Corporate Actions product. Each section includes a description of the service and how it works. All Distribution services concerning income processing can be accessed on the Corporate Actions Web browser referred to as "CA Web".

Note: Although DTC makes every effort to provide you with timely information regarding income payments, you are primarily responsible for obtaining such information without reliance on DTC. We recommend that you reconcile your records with DTC's in advance of dividend or interest payable dates.

About the Distribution Service

DTC's Distribution service includes announcing, collecting, allocating and reporting dividend, interest and certain principal payments on behalf of its participants holding DTC-eligible securities serviced by the depository. This centralized processing spares participants the burden of dealing with thousands of paying agents.

DTC accepts instructions on Distribution events when applicable. Participants may submit instructions via ISO 20022 messaging or via the CA Web.

The Distribution service also includes several optional features, such as Dividend Reinvestment, Foreign Currency Payments, Domestic Tax Reporting (DTAX), DTC TaxInfoSM, DTC TaxReliefSM and U.S. Tax Withholding.

DTC employs a harmonized, single-event data model. It includes event/sub event type combinations which differ from the function code model used in the PTS/PBS platforms. As part of the data model, DTC manages a distribution events lifecycle through one holistic corporate action event identifier (CA ID).

Preparing to Use the Service

In order to use the Distribution services, you must have access to one of the following:

- The Participant Terminal System (PTS)
- The Corporate Actions Web (CA Web)
- Participant Browser Service (PBS)
- ISO 20022 Messages via MQ, NDM/FTP or SWIFT
- <u>CCF (Computer-to-Computer Facility) format files</u>

<u>DTC offers a comprehensive overview of distribution activity comprised of Announcements, Instructions, Allocations, Adjustments and applicable alerts via CA Web's Distributions dashboard which "pushes" data to users.</u>

<u>Understanding the Distributions lifecycle and data model are important prerequisites for successful use of the Distributions service. DTC offers robust training resources available at its Asset Services Learning Center — https://dtcclearning.com/learning/assetservices/Contact your Relationship Manager for more information.</u>

Note: DTC also provides various reports on SMART/Search and the ability to export data from CA Web to spreadsheets, for manipulation and analysis.

Announcements

How Announcements Work

- <u>DTC retrieves information on dividend and interest payments from various sources (see Information Sources)</u>
- <u>DTC</u> distributes information electronically in advance of the dividend or interest payable date. This helps you reconcile your records with DTC before the payable date. Event information includes but is not limited to:
 - o Corporate Action Event ID (CA ID)
 - o CUSIP number
 - o Record date
 - o Ex date
 - o Payable date
 - o Due bill redemption date
 - o DTC position capture date
 - Security rate
 - Cash rate
- Under the CA ID you will see event level information. Every event has at least one option. Options indicate what is available as an entitlement to eligible holders. Examples of option types include cash, securities or a mix of both. For events offering multiple options, elections can be made. In the case of Distribution events where elections can be made, there will be both a default option and one or more choice options. Within every option there will be at least one payout. A payout should be considered the actual entitlement. Entitlements can include:
 - <u>Cash</u>
 - <u>Interest</u>
 - Securities
 - Dividend reinvestment
 - Long and short term capital gains
- DTC provides its participants with information pertaining to their event recorddate positions through the following delivery mechanisms:
 - o Corporate Actions Web
 - o Participant Terminal System (PTS) functions
 - Participant Browser Services (PBS)
 - o Computer to Computer Facilities (CCF) file transmissions

- o ISO 20022 Messaging
- o **SMART/Search**
- Important Notices, as necessary (available on our Web site at http://www.dtcc.com/legal/important-notices.aspx

Security Types

<u>DTC</u> announces corporate action events for security types including but not limited to the following:

- American depositary receipts (ADRs)
- Asset-backed securities (ABS)/Mortgage-backed securities (MBS)
- Collateralized mortgage obligations (CMOs)
- Corporate bonds
- Equity issues
- Equity derivatives
- Exchange-traded funds (ETFs)
- Money market instruments (MMIs)
- Municipal bonds
- Municipal variable-rate demand obligations (VRDOs)
- Private placements
- REITS/Partnerships
- Sovereign debt
- Unit investment trusts (UITs)

The following distribution events are covered in the functionality described below:

- <u>Cash dividends (including foreign tax relief, tax reclaim, special dividends, voluntary dividend reinvestment including opt out and increase on shares)</u>
- Interest (corporate, municipal and sovereign debt including tax relief)
- Principal
- Capital gains (short term, long term)
- Sale of rights on ADR securities
- Return of capital
- Dividend with option

- Stock splits
- Stock dividends
- Automatic dividend reinvestments
- Spinoffs
- Rights distributions
- Pay in kind
- Liquidation based on record date holdings

Information Sources

<u>DTC receives Announcement information, both electronically and in hard-copy format, from the following:</u>

- <u>Issuers</u>
- Exchanges
- Paying, transfer or remarketing agents
- <u>Internal sources</u>
- Trustees
- Depositary banks
- Participants
- Industry vendors
- Municipal Market Data

Instructions

Services

The DTC Corporate Actions service allows participants to submit instructions on Distribution events that qualify for various elective dividend services. Participants are able to submit instructions on the following:

- DTC TaxReliefSM
- <u>Dividend Reinvestment (DRIP) including Opt Out</u>
- Foreign Currency Payments
- Standing Instructions
- Optional Dividends
- US Tax Withholding
- Cash in Lieu/Roundup
- Direct Payment Service

For DTC eligible distribution events participants have the ability to submit ISO 20022 instruction messages in place of doing so via the CA Web. Participants can submit ISO 20022 instructions on applicable tax relief, foreign currency payments, dividend reinvestment including opt out and optional dividend events. Submitting ISO 20022 instructions requires specific information that can be found on the ISO 20022 Announcement message (CANO). On a given event, if an instruction is made via CA Web, any subsequent instructions on that specific event must be made via CA Web —you can no longer submit an instruction for that specific event via ISO 20022. Important Note: Participants who submit an ISO 20022 instruction message are responsible for monitoring a positive acknowledgement of receipt of that instruction by DTCC. There are two layers of acknowledgement; the first comes from the network and second from the application itself. The absence of a positive acknowledgement of receipt of that instruction by both the network and application indicates that the instruction may not have been processed by DTC. Participants should consult the CA Web to determine whether or not the instruction was processed. If CA Web does not reflect that the instruction was processed, the Participant must re-submit it via CA Web. Participants should elect using the option number and option type as is it supplied by DTC in the specified option blocks on the CA Web and in the ISO 20022 message, not as it appears in an issuer circular or source document. The option blocks are fielded data elements supplied specifically by DTC; they are not issuer text that can be found as a comment or a narrative in a source document.

DTC TaxRelief(SM)

When dividends and interest are paid on foreign securities, foreign tax is generally withheld from the payment by the paying agent and paid to the foreign taxing authority. Generally, the paying agent withholds an amount of tax determined by statute (statutory rate) in the local jurisdiction where the security is issued. Often, investors are resident for tax purposes in a jurisdiction that has a tax treaty with the country of issuance of a security. For qualifying types of investors, these treaties often allow for a withholding rate less than the statutory rate.

DTC TaxReliefSM (TaxReliefSM) makes it possible for qualifying beneficial owners to obtain tax relief "at-source" or via an accelerated refund on certain foreign issues as a result of tax relief arrangements established with issuers, agents or the tax authorities of various countries. Obtaining relief at-source means investors receive the income payment with the most favorable rate of tax for which they qualify deducted at the same time. The alternative to "at-source" relief would be to be taxed at the highest rate on the income payment date and file a tax reclaim to receive the amount overpaid by the beneficial owner. In some markets, DTC may offer a post payable tax election service.

TaxReliefSM supports all international DTC-eligible security types including American depositary receipts ("ADRs"), global shares, equities, and fixed income securities for which arrangements have been established with either the respective countries' tax authorities, agents or issuers.

How It Works

When DTC is informed by an issuer or its agent that an opportunity exists to elect at a more favorable rate, DTC sends out a communication to participants via dividend announcements, announcements of active and forecast elections and in some cases a DTC Important Notice. Each communication states the issue's CUSIP number, the tax relief country, the election cutoff date, the record and payable dates and the various tax-relief entitlements for different investor types.

Instructions for TaxReliefSM are submitted electronically to DTC via ISO 20022 messaging or CA Web to receive income payments exempt from foreign tax (exempt rate), at a reduced rate of withholding (favorable rate) or at the statutory tax rate (unfavorable rate) for DTC-eligible securities for which TaxReliefSM is available. In submitting an instruction, a DTC participant makes certain certifications on behalf of the beneficial owner of the security in order to effect any "at-source" relief or receive an accelerated refund. In particular, the participant certifies that it has documentation supporting the instruction, if so required in the subject jurisdiction. See also Legal Considerations below. DTC opens its system to accept certifications on the day after record date and undertakes to accept instructions for a minimum of five business days, if feasible. Sometimes the period is shorter due to circumstances beyond DTC's control such as requirements of the issuer and/or agent or specific characteristics of the issue. TaxRelief SM allows participants to view, enter, modify or delete certifications up to the security's instruction cutoff date. For relief-at-source payments, participants and their beneficial customers receive in one transaction simultaneous payment of the income and the associated tax relief. For accelerated refunds, participants receive their customer's tax relief entitlement through DTC's cash settlement system subsequent to the initial dividend payment.

DTC also provides DTC TaxInfo^S (TaxInfo) as a source for international tax withholding and relief entitlement information. Participants can easily access DTC TaxInfoSM via CA Web.

Note: The use of DTC TaxReliefSM may be limited by the type of security related to a particular jurisdiction (such as ADRs or bonds for example) or may be available on an issue- by-issue basis. DTC continues to work with other foreign tax authorities as well as issuers and agents to arrange for at-source relief (or if such relief is prohibited by applicable statutory provisions or the like, quick conditional refunds) under income tax treaties and/or the domestic law of the issuers' country.

Benefits of Using DTC TaxRelief(SM)

- Receive income payments net of the most favorable rates of tax your customers are entitled to, based on arrangements set up with various countries' tax authorities, or issuers or agents, as the case may be, enabling you to obtain monies that might otherwise be forfeited due to the complexity and cost of filing tax reclaims
- <u>Improves return on investment</u>
- <u>Increases speed and accuracy in securing tax relief and eliminates the need for</u> paper-based reclaims
- Reduces or eliminates foreign exchange risk by removing the lag time between income payment and receipt of tax reclaim proceeds
- Creates a secure electronic record of tax relief elections
- Reduces or eliminates the possibility of a single income entitlement occurring via two separate payments made in two different tax years which can cause home country tax reporting and payment problems for the beneficial owner and its custodian (e.g. where the income payment precedes the return of over withheld tax)
- Saves money by eliminating the need to finance delayed reclaim proceeds
- Enables better, more informed investment decisions, as investors and investment advisors can calculate returns based on treaty and reduced domestic law withholding tax rates

Legal Considerations

Participants should be aware that use of DTC TaxReliefSM typically requires that participants be able to provide supporting documentation in the event of an audit for any certifications that they make to DTC via TaxReliefSM. Additionally, among other things, by submitting the instruction, participants agree that DTC has the right to reverse the tax relief obtained pursuant to such instruction (and related costs) if requested by the

applicable taxing authority or paying agent. Note that participants may be required by the ADR Depositary, custodian banks, issuer, or applicable tax authority to submit beneficiary lists in support of their DTC TaxRelief instructions. Please refer to DTC TaxInfo and event-specific DTC Important Notices for details regarding required documentation.

DTC TaxInfo(SM)

Understanding and determining tax-relief entitlements for various investor types can be difficult as the rules and regulations are often quite complicated and hard to decipher.

DTC's TaxInfoSM was developed to help participants by presenting pertinent information in a format that is easy to understand.

Offered in conjunction with DTC TaxReliefSM, TaxInfoSM is a repository of information designed to assist participants in submitting appropriate instructions on behalf of their customers for withholding tax relief on income payments from foreign securities. TaxInfoSM should be utilized in conjunction with the applicable event specific Important Notice when making TaxReliefSM elections.

This information is compiled from various sources including international taxing authorities, issuers, paying agents, international accounting and law firms and other external sources.

How it Works

The information is presented in a PDF document which can be launched via the CA Web. TaxInfoSM provides:

- Beneficial owner definitions under various tax treaties
- Tax withholding rates for different investor types applicable to various countries
- Legal conditions regarding the use of DTC TaxReliefSM
- Documentation requirements for tax relief processing
- Audit information related to DTC TaxReliefSM
- URLs for related Web sites

Use TaxInfoSM and applicable Important Notices when you are receiving dividends or interest involving foreign securities eligible for tax relief. It allows you to view important foreign tax withholding information before making decisions regarding instructions for withholding tax relief. For example, a cash dividend is announced for a Swiss ADR. You can use TaxInfoSM to determine the proper amount of taxes to be withheld on your customer's dividend distribution.

Legal Considerations

As stated above, be advised that DTC is not providing tax advice and that TaxInfoSM is not meant to be a substitute for sound advice from qualified tax and legal advisors.

Participants should consult their own tax advisors in utilizing the information in TaxInfoSM.

Dividend Reinvestment Including Opt Outs

On certain securities, DTC offers the ability to purchase additional securities with the proceeds of your cash dividend. In addition, certain securities, for example, closed-end funds, automatically default to dividend reinvestment and participants have the ability via ISO 20022 and CA Web to opt out of reinvesting in additional securities in order to receive cash instead on the day after record date.

Benefits of Using Dividend Reinvestment

You can maintain dividend reinvestment-eligible issues on deposit at DTC without losing the benefits of issuers' plans.

Standing Instructions - Dividend Reinvestment

An additional feature of the Dividend Reinvestment Program allows participants to create and update standing instructions at the individual CUSIP level only. The standing instructions feature will also apply to dividend reinvestments where an Opt-out is offered. Opt-out standing instructions can be applied either at the CUSIP level or the participant-account level (a.k.a. global level).

How It Works

Dividend reinvestment including Opt-out standing instructions can be applied and updated in CA Web. Standing instructions in place prior to a dividend reinvestment event's record date will be automatically applied the day after record date. It is important to note that other activity such as fails, stock loans and repos will remain under the default option and will not be included in your standing instruction moves.

Foreign Currency Payment (FCP)

Foreign Currency Payment (FCP) allows you to submit instructions to receive periodic interest payments on all or part of your record date position for certain foreign-currency denominated debt issues through DTC in U. S. dollars, or directly from the paying agent, in the currency in which the issue is denominated.

How It Works

Participants can choose to instruct to receive a specific foreign currency when offered, via ISO 20022 or CA Web. In order to receive payment outside of DTC, participants will need to know the proper wire instructions of the financial institution in the local market where the specific currency is issued.

Benefits of Using Foreign Currency Payment

In the event you desire the payment in foreign currency, using FCP eliminates the need to convert the payment from U.S. dollars to the foreign currency, thereby avoiding foreign-currency exchange risk.

Legal Considerations

The following legal considerations apply to foreign currency payment options. Each time you submit FCP instructions via CA Web, you have agreed to the following:

- 1. You certify that the security described in your instructions was in your DTC record date position; and
- 2. You authorize DTC to decrease your record date position by the quantity of that security specified in the instructions and to instruct the paying agent to pay the distribution due on the quantity specified in the instructions in the currency in which the security is denominated.

<u>Standing Instructions - Foreign Currency Payment</u>

For securities eligible for foreign currency payment, an additional feature of the foreign currency payment service allows participants to create and update standing instructions to receive foreign currency at either the individual CUSIP level or the participant-account level (a.k.a. global level).

How It Works

Foreign currency payment standing instructions with applicable wire instructions can be applied and updated in CA Web. Standing instructions in place prior to a cash distribution event's record date will be automatically applied the day after record date. It is important to note that other activity such as fails, stock loans, and repos will remain in the USD option and will not be included in your standing instruction moves. Standing instructions for foreign currency payment have no bearing on TaxRelief instructions; hence, TaxRelief instructions are still required even if standing instructions for foreign currency payment are in place.

Optional Dividends

On selected Distribution events, the issuer gives the holder several distribution options such as receiving the distribution in the form of cash, stock, or a combination of both. DTC receives event information from agents detailing the available options and deadlines for submitting instructions. Absent an instruction, the participant will receive the event's default. All relevant information is passed on to you via Important Notices available on our Web site at http://www.dtcc.com/legal/important-notices.aspx and via CA Web and ISO 20022 messaging.

Distribution of Rights

Canadian Rights

In most cases, Canadian rights offerings cannot be subscribed for by U.S. entities. Instead, the rights agent will attempt to sell the rights, on a best effort basis, and remit any cash proceeds to DTC. If physical rights are mailed to DTC, see Rights Exited by DTC. Rights not issued to shareholders whose recorded address is in the U.S. are held by the rights agent.

Canadian Rights Release Requests

If permitted by the rights agent, a portion or all of your rights entitlements will be released to you or your designated party in Canada. DTC will issue an Important Notice (available on our Web site at http://www.dtcc.com/legal/important-notices.aspx) instructing you to advise us of the number of rights you request to be released in Canada. When we receive your instructions, we will forward them on to the respective agent. Once the agent provides their acceptance of your release request, DTC will make the appropriate adjustment to your account to reflect the number of rights released to you or your designated party in Canada.

For release of Canadian rights, DTC must receive your instructions by the date specified in the Important Notice. All rights release-requests must be submitted on your company's letterhead which, among other things, must include your firm's brick and mortar address. You can fax the release request to DTC's Stock Dividend Processing staff at the fax number noted in the Important Notice. As an alternative to fax, participants can email their release instructions to DTC's Stock Dividends Processing mailbox at stockdividendprocessing@dtcc.com. After transmitting the fax or emailing your release instructions, you must contact DTC's Stock Dividends Processing department at the telephone numbers indicated in the Important Notice to verify that we have received your release request.

The following information must be included in your release request:

- Your participant number
- Security name
- Quantity of rights you are requesting for release
- CUSIP number
- Record date
- Who the rights should be released to
- The mailing address to where the rights should be mailed
- Authorizing name and signature
- Contact name and phone number

- Signature guaranty (medallion stamp)
- Indemnity

Note: DTC will forward the request to the rights agent. However, it is your responsibility to contact the rights agent to make arrangements for delivery of the rights.

Proceeds From Sale of Unreleased Rights

If the agent indicates to DTC that all unreleased rights will be sold on a best effort basis, DTC will authorize the rights agent to sell all unreleased rights. If the agent remits proceeds to DTC from the sale of the unexercised rights, DTC allocates the proceeds to your account as a Redemption of Rights event type. You must check the Dividend/Reorganization Cash Settlement list SMART/Search report, or use the Entitlement function of the CA Web, to verify that the activity was properly processed and recorded.

Rights Exited by DTC

If DTC's Reorganization department cannot handle the subscription of rights on your behalf, DTC will exit the rights to you. DTC will notify you via a PTS/PBS broadcast and an Important Notice as to the date and time the rights will be available for pick-up.

Important Notices are available on the DTC website at http://www.dtcc.com/legal/important-notices.aspx.

Warning! You must notify DTC prior to the expiration date if you have not received you

Warning! You must notify DTC, prior to the expiration date, if you have not received your rights.

Special Circumstances

Occasionally, rights are mailed directly to you by the issuing company or its information or subscription agent. This happens when the issuer decides to ensure that all rights material is forwarded directly to you.

In these cases, the issuer or trustee requests one of the following:

- A Security Position listing from DTC's Reorganization Proxy department
- An RDP Name and Address Nominal list from DTC's Stock Dividend department

DTC issues an Important Notice, notifying you that the rights will not be handled by DTC and will be mailed directly to you by the issuer. Important Notices are available on our Web site at http://www.dtcc.com/legal/important-notices.aspx.

Note: It is important that you notify DTC of any name or address changes that could affect the accurate delivery of the rights.

Associated Rights Functions

The following functions are used in association with Rights Distribution:

Use this function	<u>To</u>
<u>RIPS</u>	View rights subscription terms (such as expiration date) and appropriate reorganization contact.
<u>PSOP</u>	Exercise rights.
<u>CA Web</u> (DIVA)	View Announcement information related to a rights offering.
ART (Settlement Web)	View your positions and activity adjustments.

Cash-in-Lieu (CIL)/Roundup

The CIL/Roundup service allows you to elect to receive all or part of your whole security allocation entitlement in cash *or* receive additional securities. Use CA Web to make cashin-lieu or roundup elections.

For example, you have 100 shares of XYZ security, and a stock distribution takes place. The distribution rate is 18.2 percent. Your stock entitlement would be 18.2 shares. You will receive 18 whole shares and a cash-in-lieu amount for the 2/10 share. You can elect to have a portion or all of the 18 shares liquidated for cash-in-lieu based on the aggregate fractional entitlements for all your beneficial owners. Your full share entitlement will be reduced for the number of whole shares you elect to liquidate on the beneficial owners' behalf.

Note: The issuer and/or the transfer or paying agent determines how fractional entitlements will be handled. Examples of different types of fractional payouts are as follows:

- Cash-in-lieu to the beneficial owner
- All fractional shares rounded up (.01 and above)
- Fractional shares rounded up (.50 and above)

Benefits of Using CIL/Roundup

The benefits of using the CIL/Roundup service are:

- Trade processing and time-associated savings by having the agent sell shares on vour behalf
- The ability to obtain additional shares to accommodate your beneficial owner entitlement if the beneficial owners are entitled to fractional amounts on the roundup service feature
- Reduced market exposure when the published cash-in-lieu price is above the current market price

U.S. Tax Withholding

The U.S. Tax Withholding service (UTW) is available to non-U.S. participants, including subaccounts of U.S. participants.

To the extent allowable under U.S. federal income tax laws, UTW allows non-withholding qualified intermediaries to submit withholding instructions to DTC on U.S. source income payments.

A qualified intermediary (QI) is any non-U.S. intermediary (or non-US branch of a U.S. intermediary) that has entered into a qualified intermediary withholding agreement with the IRS. Non-qualified intermediaries (NQIs) cannot make elections to secure reductions in applicable maximum statutory withholding rates. All U.S. source payments made to NQI participants will be withheld at the maximum statutory rate. A non-U.S. participant with a

direct account at DTC that has provided a Form W-8BEN-E may be paid at a reduced rate of withholding depending on the certifications associated with the tax form.

Foreign Account Tax Compliant Act ("FATCA") Requirements

DTC's rules generally require that all DTC Participants (and applicants to become such) that are treated as Foreign Financial Institutions ("FFIs") under FATCA, be FATCA compliant such that they would not cause DTC to have a gross proceeds withholding obligation.

How it Works

As a U.S. tax withholding agent, DTC:

- Provides certain users of the service with access to the U.S. Tax Withholding menu item on the EDS function on PTS/PBS
- Notifies non-U.S. participants of taxable events
- Informs non-withholding QI users of the "instruction window" during which they must send withholding rate instructions to the depository; the instruction window generally extends from one day after the record date ("record date +1") to one day before the payable date ("payable date -1")
- Pays U.S. source income to non-U.S. participants on the payable date, net of appropriate withholding tax
- <u>Issues settlement statements that will reflect the gross dividend amount, tax amounts withheld at each designated rate and net dividends paid</u>
- Remits tax funds to the IRS on a quarter-monthly schedule
- Prepares and sends the appropriate year-end 1042-S tax forms to non-U.S. participants

Legal Considerations

<u>Users must submit to DTC the applicable IRS tax forms. These tax forms are available on the IRS website at http://www.irs.gov/</u>

To the extent the IRS modifies or substitutes such forms, Users may be required to submit such modified or substitute forms to replace the forms already provided to DTCC. The decision to impose a requirement to replace forms will be at the sole discretions of DTCC subject to the relevant tax laws.

Users must enter into a Withholding Agent Agreement.

Every non-U.S. entity seeking membership in the depository must complete a valid W-8 form. The form must be (1) valid for the type of entity; (2) filled out completely; and (3) signed by an authorized signatory of the entity. Forms may expire after 3 years at which

time DTC will solicit a new form. Each entity having a deposit in the DTC Participants Fund must submit a W-8BEN-E. U.S. branches of foreign banks must also submit the appropriate W-8 form.

Direct Payment Service

DTC offers non-U.S. participants organized and resident in the same foreign jurisdiction as the issuer of securities the option of receiving dividend, interest, and principal payments in their home currency, outside of DTC. This service is applicable to issues for which a foreign currency option was not established at initial issuance.

How It Works

In order for an issue to be eligible for the direct payment service, DTC, DTC's participant, the issuer and transfer agent must agree to the arrangement and the issuer must certify that the income generated by the security is not US-source income, in order to assure U.S. withholding tax requirements do not apply.

Participants may elect to receive foreign currency directly from the issuer via CA Web.

The election will include the payment instructions to the issuer and transfer agent to enable them to make payment directly to the non-U.S. DTC participant, outside of DTC.

Benefits of Using the Direct Payment Service

The Direct Payment Service eliminates the inefficiencies, cost and risk associated with the physical movement of securities that would be necessary to accomplish payment in the currency of the foreign jurisdiction in which the issuer and payee both reside.

Entitlements/Allocations

About Entitlements/Allocations

<u>DTC</u> allocates cash and stock distributions to participants. This includes both credits and debits. In addition, <u>DTC</u>:

- <u>Calculates cash or stock entitlements for each Announcement once rate and/or price information becomes available</u>
- <u>Distributes information on upcoming distribution events online and in electronic form such as payable dates and amount or quantity</u>
- Reports on allocated items online and in electronic format during the processing day and at end-of-day
- Generates refunds to you for funds that were allocated after DTC received payment

Distribution Events Entitled Positions

Participants can obtain their closing securities position and subsequent tracking and entitlements for distributions events via the following: CCF file formats, CA Web, SMART/Search and ISO20022. The record date position information is delivered on a nightly basis via ISO 20022 and CCF file formats. Online views of this information are available on CA Web and SMART/Search. The following information is available on all of the aforementioned delivery mechanisms:

- Your position captured on the record date or New York City record date
- The rate per share or the interest rate
- The calculated dollar amount or share amount for each record
- Adjustments to previously announced record date positions, including interim deliver order (DO) activity
- Stock Loan and REPO position activity
- Fail tracking adjustments to previously announced record date positions
- Event revisions and updates
- Principal factors are available and reported when the factor has been updated

Note: It is the participant's responsibility, under DTC's Rules and Procedures, to verify the accuracy of this Announcement information. Any discrepancy between your records and this information must be reported to DTC as soon as possible.

Interim Accounting

Overview

Interim Accounting is an important part of the Entitlements and Allocations process. The interim period is defined as the time period during which a trade settling still has due bills attached to it. The period of time in which due bills are used is called the due bill period, which extends from the record date +1 up to the ex-date +2.

Reasons for Interim Accounting

Normally, the registered holder of a security on the close of business on the record date is entitled to the distribution. There are times, however, when that is not the case. There are two common reasons why this could occur:

- 1. The buyer is entitled to the distribution when the registered holder of an equity issue where ex-date is not two business days prior to record date (for example, if the ex-date is after the record date) sells the security prior to the ex-date with the distribution.
- 2. For most bonds, the buyer (receiver) of the security is entitled to the interest payment on trades settling up to and including the day before the payable date, even though the buyer is not the registered holder.

Without DTC's Interim Accounting

Normally, due bill processing involves the following activities:

- Trades that would settle after the record date "with distribution" (those that entitle the receiver to the distribution) would have a due bill attached to them. The distribution entitlement would then need to be handled between the seller and the buyer of the security outside of DTC's Distribution processing service potentially in the form of a special payment order, wire or postdated check equal to the amount of the distribution.
- The receiver must present the due bill on the payable date to the deliverer to receive the distribution.

With DTC's Interim Accounting

During the due bill period, DTC:

• Tracks all activity, such as trades, where the receiver is entitled to the announced distribution (cash/stock dividend or interest payment).

• Adjusts participants' record date positions, crediting the receiver and debiting the deliverer

This ensures accurate payment on the payable date and eliminates time-consuming, costly paper processing.

Note: During this due bill period, all DTC activities involving the physical movement of securities are excluded from the dividend allocation. These include your deposits, withdrawals-by-transfer (WTs) and certificates-on-demand (CODs).

Interim Accounting Usage

<u>Activation of DTC's Interim Accounting process depends on the type of distribution. The</u> following table describes the conditions under which interim accounting occurs:

following table describes the conditions under which interim accounting occurs:	
<u>For</u>	Interim accounting is used
<u>Cash dividends</u>	When the ex-date is not equal to record date -2 business days, and DTC is aware of the ex-date prior to the payable date.
	In this case, the interim period runs from record date +1 through close of business on ex-date +2.
Stock distributions	For: All stock splits or A stock distribution with an ex-date that is not equal to record date -2. In this case, the interim period runs from record date +1 through close of business on ex-date +2. Note: Stock splits are allocated to your general free and pledged accounts on the business day following the close of the due bill period. Shares allocated to the pledged account automatically become additional collateral for the loan.
<u>Rights</u>	When the ex-date is not equal to record date -2, and there is adequate time for you to submit your rights instructions to DTC for presentation to the paying agent prior to the expiration date. In this case, the interim period runs from record date +1 through close of business on ex-date +2. Note: If there is not adequate time for you to submit your rights instructions to DTC for presentation to the paying agent prior to the expiration date, DTC will credit your account based on your record date position. You must settle due bills outside DTC's Distribution event processing service.
<u>Corporate</u> <u>bonds, CDs,</u> <u>and</u>	Because the majority of these settle with interest up to the business day before the payable date. In this case, the interim period runs from record date +1 through

government bond interest	payable date −1.
Asset-backed securities (ABS)	As dictated by the issuer's accrual period. For example, if the accrual period ends after the record date and before the payable date, the interim period runs from record date +1 through the end of the accrual period. Note: If the accrual period ends prior to the record date, DTC will not run interim or run "reverse" interim (reverse due bill).
Supplemental due bills	For special large cash dividends, when the ex-date is the day after the announced payable date. In this case: The interim period runs from record date +1 through payable date -1 Allocation is made on payable date, and Interim accounting starts again on the payable date and continues on a daily basis through ex-date +2. Allocation is made on the business day following the day of delivery by crediting the money settlement account of the receiver and debiting the money settlement account of the deliverer.

New York City Record Date Mini-Interim

The Industry standard for dividend cutoff days is a maximum of two business days prior to the out-of-town record date. (DTC refers to this as the New York equivalent record date.)

Mini-interim accounting was developed to allow DTC to meet the record date deadlines when the transfer agent (TA) is located outside of New York City. Mini-interim is set up at the start of business on the first business day after the New York equivalent record date and closes at the end of business on the actual record date.

Deposits and WTs processed during the mini-interim period do not affect your position for dividend allocations. If you make a rush withdrawal-by-transfer (RWT) during the mini-interim period, your position for dividend or interest allocation is reduced. You must submit a formal claim for any dividend or interest involving certificates withdrawn as RWTs during this mini-interim period. See Claims.

<u>Dividend allocation is made to your position based on the New York equivalent record date</u> position, updated to include any deliver orders movements that were made up to and including the actual record date.

Participant Deposits Missing Transfer

When participant deposits of registered securities are submitted by DTC to the transfer agent (TA) on or before record date for transfer into DTC's nominee name Cede & Co., and are not transferred in time to meet the record date deadline, upon request, DTC will send the registered holder or first guarantor copies of the affected certificates in a secured pdf file via email as notification of a pending adjustment or charge-back.

DTC proactively monitors deposits made before the record date, which remain untransferred by the record date, so it can determine if adjustments to your record date position are required, and attempts to do so on or prior to the payable date. For transactions not identified in time, the following timetable applies to adjustments:

- Where the missed-transfer is identified within 30 days of the original allocation: the claim is sent to participants three days before DTC processes a charge to the participant's account.
- Where the missed-transfer is identified beyond 30 days of the original allocation: the claim is sent to participants five days before DTC processes a charge to the participant's account.

Participant Withdrawal-by-Transfer (WT) Missing Transfer

When your withdrawal-by-transfer (WT) instructions are submitted by DTC to the TA on or before the record date for transfer into your name or your customer's name, and are not transferred in time to meet the record date deadline, DTC will credit your DTC account with the appropriate dividend/interest payment.

Just as with deposit activities, DTC monitors WT requests that remain un-transferred by the record date, and attempts to adjust your record date position, as necessary, on or prior to the payable date. For transactions not identified in time, DTC will provide you with advance notification before processing a credit to your account.

Allocations

Allocations can be divided into two groups: cash distributions and stock distributions.

Cash Distributions

Funds from agents/issuers received by 3:00 p.m. with corresponding CUSIP-level identification information are generally allocated upon receipt, beginning at 8:20 a.m. Eastern Time and continuing every 20 minutes. Funds received after cutoff are allocated the following morning.

Also, from time to time DTC may determine that a payment received by you or your customer directly from the paying agent was rightfully due DTC. In this case, DTC may, in accordance with established procedures, charge your account for the amount of the improper payment.

Cash Distributions for MMI Issues

DTC distributes income payments for various MMIs, including Medium Term Notes (MTNs). The allocation process differs from 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.

Dividend Cash Settlement Reporting

The Dividend Cash Settlement Reporting feature notifies you of cash dividend, periodic principal, and interest payments. Reporting is available in various forms. ISO 20022, CCF file format and SMART/Search reports are created daily throughout the day and at end of day. The ISO 20022 transmission is also available in real time throughout the day via SMART MQ, SWIFT Interact Store and Forward or in end of day slices via NDM, FTP or FileAct for SWIFT. The Dividend/Cash Settlement Reporting contains the following categories:

- Cash dividends
- Units
- Pass-through payments (CMO/ABS)
- Corporate bonds
- Municipal bonds
- Stock distributions
- Miscellaneous payments and charges
- Claims and reversals
- Securities not allocated that day

Stock Distributions

Stock Distribution events such as stock dividends, splits, and spinoffs are allocated on the ex-date +3 or the payable date, whichever comes later once DTC receives the securities. Your DTC position is increased in the security for which the distribution was declared, or in securities of another issue resulting from a spinoff or rights distribution event. Typically, cash is paid in lieu of fractional shares.

The allocation of stock distributions depends on the type of distribution being allocated. The following table describes stock distributions:

For this type of distribution	Allocation normally occurs
Stock dividends, regular trading	On the morning of the payable date.
Stock dividends with a late ex-date	On the payable date or ex-date +3, whichever comes later.

Stock splits, with exdistribution beginning on the business day following the payable date	For the split shares on ex-date +3.
Stock spinoffs to a DTC- eligible security	On the payable date, or ex-date +3, whichever comes later.
Stock spinoffs to an ineligible security*	When the security becomes DTC-eligible, or else exited upon receipt.
<u>Rights</u>	As soon as possible after the record date to allow for adequate execution time frames.
<u>Dividend reinvestment</u> <u>securities</u>	On the first business day after the price is received from the agent.

*DTC allocates the appropriate share entitlement to the spinoff security's assigned CUSIP or to a contra-CUSIP (when there is no available CUSIP for the distribution shares or the distribution shares are not eligible for DTC services). These shares are initially chilled for all DTC activity (for example, deposits, WTs, DOs, CODs) until DTC exits the ineligible security to you. On the exit date, the chill is lifted for CODs, position is taken away from your account, and you are responsible for picking up the ineligible securities at the Central Delivery Department, 570 Washington Street, Jersey City NJ.

<u>If you are outside of the New York City metropolitan region, you need not pick up</u> <u>securities from the delivery window; DTC will arrange for the delivery of the securities to you.</u>

Fractions of Stock Distributions

Fractions resulting from stock distributions are either dropped, rounded up, or paid as cash (cash-in-lieu). DTC makes every effort to obtain rounded shares or cash-in-lieu to the beneficial owner level. In instances where the agent or issuer agrees to round fractional shares or cash in lieu at the beneficial owner level, participants have the ability via CA Web to enter the number of round-up shares required for round-up situations, or the number of shares to be liquidated for cash-in-lieu situations.

Note: Cash-in-lieu and round up shares are distributed in the following ways:

- <u>Cash-in-lieu at the DTC participant level: upon receipt of the cash-in-lieu price</u> <u>but no earlier than the payable date +1</u>
- <u>Cash-in-lieu</u> at the beneficial owner (the DTC participant's customer) level: <u>upon DTC's receipt of the funds from the paying agent but no earlier than</u> payable date +1
- Round up shares at the DTC participant level: upon allocation date

• Round up shares at the beneficial owner (the DTC participant's customer) level: upon DTC's receipt of the additional round up shares from the paying agent but no earlier than the allocation date

Adjustments

Overview

Adjustments are all entitlement/allocation activity that is outside the traditional pay date allocations. This includes all post allocation rate adjustments, and any activity tracking for stock loans, repos and due bill fail tracking.

About Charge-Backs and Adjustments

DTC has a standing practice to only allocate monies upon receipt from the paying agent, trustee and/or issuer. On occasion, after crediting participants with a dividend or interest payment, DTC may have to create a post allocation rate change which may result in either additional credit or a debit to your account. Reasons to this include but are not limited to, an error on the part of DTC, the paying agent, trustee or issuer or a change in the principal factor or rate on a CMO/ABS security.

DTC accommodates paying agent requests to process these types of post-payable adjustments where the adjustments are within 120 calendar days from the initial payment date. These adjustments will appear on your Participant Statement and can be viewed using PBS or the PTS functions ADJI and DPAL, via CA Web, ISO 20022 messages and CCF file formats.

Note: Effective January 1, 2015, DTC will no longer process post-payable adjustment requests beyond 90 calendar days after the initial payment date.

Reasons for Charge-Backs and Adjustments

The following are conditions under which DTC processes charge-backs:

Return of Funds to Paying Agents

In the event of a rate change that results in the participant being over allocated, DTC will charge back the participant's account and return the collected funds to the paying agent.

Adjustments Resulting from Changes to Rates, Record Dates, or Payable Dates

Occasionally, there is a need to process post-allocation adjustments to correct a rate, record date, or a payable date.

- Where the adjustment is identified within 30 days of the original allocation:

 DTC will provide participants with one day advance notification before processing the adjustment to participants' accounts.
- Where the adjustment is identified beyond 30 days of the original allocation:

 DTC will provide participants with three days advance notification before processing the adjustment to participants' accounts.

Due Bill Fail Tracking System

About Due Bill Fail Tracking

The Due Bill Fail Tracking system relieves you of the time-consuming process of issuing and redeeming due bills by facilitating the settlement of due bills on failed deliver orders (DOs).

A failed DO is one which was originally scheduled to settle on or before the record date, but instead settled after the record date. Fails sometimes result in buyers not receiving a dividend or interest payment to which they are entitled. Previously such deliveries were made with a due bill attached, and handled outside of DTC between the delivering and contra parties. A due bill is an agreement that the seller will pay the dividend or interest to the bearer (the buyer) upon the actual settlement of the transaction.

How Due Bill Fail Tracking Works

Due Bill Fail Tracking:

- Monitors all DO activity, comparing the trade settlement date of the DO with the actual settlement date of the DO
- For failed DO activities, the security is compared versus active DTC Distribution events
- Automatically generates cash and stock dividend adjustments for any failed DO requiring a due bill except for REPO, stock loan, Continuous Net Settlement (CNS), free and inter-depository deliveries

On the payable date, or on the day following the settlement of the trade at DTC (whichever is later), the seller receives a debit for the income due and the buyer receives a credit.

Important Notes

The following notes apply to DTC's Due Bill Fail Tracking process:

- If you are a delivering participant, you can elect to remove a delivery from Due Bill Fail Tracking by entering an "N" in the Due Bill field on the DO
- <u>Due Bill Fail Tracking does not monitor stock splits</u>, or optional dividend payments

Monitoring Period

The monitoring period for failed transactions is:

- <u>18 months from the payable date for corporate and municipal debt issues</u>
- 30 days from the payable date for equity issues

Fail monitoring begins on:

- The day following the record date for all Announcements that are not subject to interim accounting
- The day following the end of the interim period for Announcements with interim accounting

About Paired Transactions

Pairing occurs when two DOs contain the same CUSIP, quantity (original face value), trade settlement date, and settlement dollar value, and the delivering and contra-participants are reversed. DTC does not process debit and credit adjustments for settlement when underlying DOs are paired. This eliminates redundant debit and credit adjustments that net to zero.

Note: Although paired transactions are not passed to settlement, you can view these items on CA Web and PTS/PBS for historical items. Paired adjustments are identified as such within the adjustment details of the relevant event record.

Adjustments Processing

You will receive adjustments on the payable date or on the day following the failed delivery, whichever is later. You can view settled fail adjustments via CA Web, PTS/PBS for historical purposes, CCF file formats, using ISO 20022 and SMART/Search ("Miscellaneous Payments/Charges"). Both credit and debit adjustments that are attributable to non-US sourced distributions may be processed at a rate other than the gross distribution rate.

Tax Treatment

DTC performs the appropriate U.S. tax withholding and information reporting for credit adjustments that are settled with non-US participants. See the U.S. Tax Withholding section for more information on U.S. Tax withholding.

Stock Loan Income Tracking System

About Stock Loan Income Tracking

In a stock loan agreement, the lender of the security is entitled to recover from the borrower any income distributions paid on the loaned security. The Stock Loan Income Tracking System allows DTC to track the lender's (deliverer's) position on these securities.

How Stock Loan Income Tracking Works

The Stock Loan Income Tracking System tracks deliver orders (DOs) with certain reason codes (codes 10–29) and adjusts your position accordingly. When a stock loan DO is created, the lender receives a stock loan long position and the borrower receives a stock loan short position on the security. If you hold a long stock loan net position, you receive credit adjustments on the payable date for periodic income distributions. If you have a short stock loan net position, you receive debit adjustments on the payable date.

Both credit and debit adjustments that are attributable to non-US sourced periodic income distributions may be processed at a rate other than the gross distribution rate. If you have stock loan agreements that provide for a different amount, you and the contra-participant must settle the difference outside DTC or as described below under "Correcting P&I Payments on Stock Loan Positions").

Note: DTC is not acting as an agent or on behalf of, either the borrower or lender. The Stock Loan Income Tracking System is intended to be a system that allows borrower and lenders that have entered into stock loans to efficiently adjust their relevant positions and cause the necessary credit and debit adjustments

Payments That Are Not Tracked

The Stock Loan Income Tracking System tracks cash dividend and interest payments. The following are not tracked:

- Stock dividends
- Rights distributions
- Optional dividends
- Spinoffs

Note: Lending participants who do not have shares in their free account cannot perform elections on stock loan positions on Distribution events.

Viewing Stock Loan Activity and Positions

You can view pending and past adjustments for a period of seven business days before through seven business days after the payable date via the CA Web Allocations and Adjustments functionalities as well as ISO 20022 messaging. You can also view scheduled adjustments for the current payable date via the Adjustments and Entitlements functionalities of CA Web. You can view positions including contra-party details and adjustments via CA Web's Entitlements and Adjustments functionalities, respectively.

Correcting P & I Payments on Stock Loan Positions

When modification to a tracked adjustment is necessary, parties to stock loan have the ability to create an adjustment payment order or APO. There are two sides to an APO, the originator of the APO and the contra party to the APO. Usually, the parties involved in the stock loan transaction will agree to the APO beforehand, but once submitted, the contra party has the ability to reject it. APOs for can be made on past and future transactions. Warning! For payments that are settled outside of DTC's Stock Loan Income Tracking System, both parties to the stock loan transaction are responsible for settling the payment outside of DTC's Stock Loan Income Tracking System. The parties to the stock loan transaction are responsible for performing the appropriate U.S. tax withholding and information reporting. DTC is not responsible for performing the appropriate U.S. tax withholding or information reporting with respect to those stock loan transactions that are settled outside of DTC's Stock Loan Income Tracking System.

Tax Treatment

DTC performs only U.S. tax withholding and information reporting for credit adjustments that are settled with non-U.S. participants. See the U.S. Tax Withholding section for more information on U.S. Tax Withholding. As stated above, DTC is not acting as an agent or on behalf of, either the borrower or lender. Accordingly, any non-U.S. tax withholding, remittance, or information reporting obligations in respect of payments that are tracked through the Stock Loan Income Tracking service or any subsequent adjustments are the responsibility of the DTC participants that are privy to the terms of the stock loan agreements.

Repurchase Agreement (REPO) Tracking System

About the Product

A repurchase agreement (REPO) is an agreement between two parties that allows the seller of securities to later repurchase them at an agreed-upon price. The seller usually retains the right to periodic income distributions. However, since the securities won't reside in the seller's account on record date, the seller would not be credited the periodic principal and income distributions paid on the securities. To recover these entitlements, the seller has to claim the REPO buyer. DTC's REPO Tracking System (RTS) automates claims of these entitlements by tracking the REPO transactions (deliveries) and adjusting the entitlement payments accordingly on payable date.

How the Product Works

Deliver orders (DOs) are tracked with REPO reason codes (codes 220–228 and 230–238) and create memo positions for the REPO amount. The deliverer (seller) of a REPO receives a long REPO position, and the receiver (buyer) receives a short REPO position.

If you hold a long REPO net position, you will receive a credit adjustment on the payable date for any periodic principal and income distributions. If you have a short REPO net position, you will receive a debit adjustment on the payable date.

Both credit and debit adjustments that are attributable to non-US sourced periodic income distributions may be processed at a rate other than the gross distribution rate. If you have REPO agreements that provide for a different amount, you and the contra-participant must settle the difference outside DTC or for more information refer to "Correcting REPO Positions" below.

Note: DTC is not acting as an agent or on behalf of, either the buyer or the seller. The Repo Tracking System is intended to be a system that allows buyers and sellers that have entered into REPO transactions to efficiently adjust their relevant positions and cause the necessary credit and debit adjustments

Viewing REPO Activity and Positions

You can view pending and past adjustments for a period of seven business days before through seven business days after the payable date via the CA Web Allocations and Adjustments functionalities, as well as ISO 20022 messaging. You can also view scheduled adjustments for the current payable date via the Adjustments and Entitlements functionalities of CA Web, and cancel (as the REPO buyer) adjustments to be credited to the REPO seller before 2:00 p.m. Eastern Time if you are authorized for the PIAC subfunction. You can also view positions including contra-party details and adjustments via the CA Web's Entitlements and Adjustments functionalities, respectively.

Correcting REPO Positions

When modification to a tracked adjustment is necessary, parties to the REPO have the ability to create an adjustment payment order or APO. There are two sides to an APO, the originator of the APO and the contra party to the APO. Usually, the parties involved in the repo transaction will agree to the APO beforehand, but once submitted, the contra party has the ability to reject it.

APOs can be made on past and future transactions, however, for REPO activity on a principal or interest event, the REPO income tracking adjustment can only be cancelled on the same day that the event is scheduled to be posted.

Tax Treatment

DTC performs only U.S. tax withholding and information reporting for credit adjustments that are settled with non-U.S. participants. As stated above, DTC is not acting as an agent or on behalf of, either the buyer or the seller. Accordingly, any non-U.S. tax withholding, remittance, or information reporting obligations in respect of payments that are tracked through the REPO Tracking System are the responsibility of the DTC participants that are privy to the terms of the REPO agreements.

Other Services

Coupon Collection Service (CCS)

<u>DTC's Coupon Collection Service (CCS) provides you with one central location for submitting coupons and one central source of payments. This saves you from having to deal with thousands of municipalities and paying agents for the collection of bearer municipal interest. Interest is paid directly to you from DTC in a timely manner.</u>

Collection Outside of New York Metropolitan Area

DTC handles collections outside of the New York metropolitan area in one of two ways:

- For coupons deposited at least eight business days prior to the payable date,

 DTC credits you with the interest on the payable date
- For coupons deposited less than eight business days prior to the payable date,

 DTC credits you with the interest ten business days after the date of deposit

Collection Within the New York Metropolitan Area

DTC handles collections within the New York metropolitan area in one of two ways:

- For coupons deposited at least five business days prior to the payable date, DTC credits you with the interest on the payable date
- For coupons deposited less than five business days prior to the payable date, DTC credits you with the interest ten business days after the date of deposit

Past Due Coupons

DTC handles collections for past due coupons in one of two ways:

- For collection outside New York City, DTC credits you with the interest ten business days after the date of deposit
- For collection within New York City, DTC credits you with the interest seven business days after the date of deposit

<u>Information regarding credits to your account resulting from coupon collections can be</u> obtained via CA Web, ISO 20022 messaging, PTS/PBS and CCF file formats.

CMO Trade Adjustments System (CTAS)

About Collateralized Mortgage Obligation (CMO) Trade Adjustments

<u>DTC's CMO Trade Adjustments System (CTAS) automates principal and interest adjustments for certain CMO and other asset-backed securities (ABS) that settle at DTC between the accrual end date (beneficiary date) and the corresponding payable date.</u>

Relevant Terms

The following important terms are relevant to CTAS processing:

<u>Glossary</u> <u>Term</u>	<u>Definition</u>
Actual coupon rate	The coupon rate applicable to that trade's blackout period for variable rate issues.
Actual factor or trade factor	The factor applicable to a trade's blackout period.
<u>Amortized</u>	A loan in the process of liquidation via installment payments.
Blackout period or delay period	The period where cash flow from one accrual period is not available or passed through until the next period.
Estimated factor	A value substituted for the true factor when the true factor is not yet public. This is usually the last known factor, and is needed to determine the dollar value of a trade that takes place during the delay period.
<u>Latest</u> coupon rate	The last known coupon rate received after the first adjustment for variable rate issues.
<u>Trade</u> <u>coupon</u>	The coupon rate used to consummate the trade for variable rate issues.
<u>True factor</u> <u>or principal</u> <u>factor</u>	The actual amount of principal remaining on the mortgages underlying the CMO/ABS. This is used to compute the amortized value.

About CMOs

Since CMOs are mortgage-backed securities, the outstanding principal amount of a CMO is reduced by the amount of the underlying mortgage obligation paid and passed through as part of each periodic payment. The true factor represents the actual amount of principal remaining on the mortgages underlying the CMO.

For issues that have a delay period, the standard practice is to substitute an estimated factor (usually the last known factor) for determining the dollar value of the trade.

Note: Since the true factor is usually lower than the estimated factor, and the amortized value of the bond received is less than the value used to compute the trade, the buyer will be overpaying for the delivery. When the true factor becomes known, trades that settled based on the estimated factor must be cancelled and corrected. This results in adjusted settlements and exchanges of money.

How CTAS Works

When DTC receives a true factor, we identify all applicable CMO and ABS DOs. We then generate cash adjustments for all trades with incorrect factors that settled during the blackout period. Participants can review pending adjustments via PTS/PBS.

Note: If you are the receiving participant, you have until the end of the day before the post date to delete any adjustment you feel is not due. In order to do this, however, you must have an authorized PTS/PBS user ID and password to allow you to perform CTAS updates. Contact your Relationship Manager for more information on your user ID and password.

What CTAS Doesn't Do

CTAS debit and credit adjustments are not processed for settlement when underlying DOs are paired. Pairing occurs when two DOs contain the same CUSIP, quantity (original face value), trade settlement date, and settlement dollar value, and the delivering and contraparticipants are reversed. The effect of the pairing is to eliminate superfluous debit and credit adjustments that net to zero.

Note: Although paired transactions are not passed to settlement, you can view them via PBS or on CTAS on PTS. Paired adjustments are identified by a "P" to the left of the Contra-Participant field on the Detail Display screen.

CTAS also does not process debit and credit adjustments for:

- Accreting, zero delay, or variable rate issues
- REPO DOs
- Stock loan DOs
- ACAT DOs
- Free deliveries

Adjustments to Variable Rate Issues

Since the applicable coupon rate may not be known for several weeks after a trade, coupon adjustments to variable rate issues will be made upon receipt of the latest factor but at the last known coupon rate. At times, trades may require two coupon adjustments.

Consequently, DTC will make incremental adjustments to trades as it receives revised coupon information. For example, an accrued interest adjustment may have been made for

\$100 but based upon a rate revision should have been \$110. CTAS will process a second trade adjustment for \$10.00. CTAS will also allow the seller to adjust the factor and/or coupon rate at which the first CTAS adjustment was calculated by allowing the seller to type over the selected fields in PTS or PBS (variable rate issues only). This will allow for the correction of adjustments in instances where participants' traded factors and coupon rates differ from those that DTC believed them to be at the time of the trade.

Viewing CTAS Adjustments

Adjustments are posted to your settlement account on the income payable date, or the business day following DTC's receipt of the actual factor, whichever is later. You can view each day's CMO re-factoring settlement debits and credits via:

- The CMO Trade Adjustment System Settlement Report for both the delivering and receiving participants
- The CTAS function

You can also view the original DO on the ATP History Details screen of the ART function. You can only view the adjustments where you are either the delivering or receiving party.

Associated Functionality

The following PTS functions and CA Web functionalities are used in association with CTAS:

<u>Function</u>	Function Definition
<u>ART</u>	View activity associated with a CTAS credit or debit, for the current day and for up to 60 previous business days.
<u>CTAS</u>	View detailed information about CTAS adjustments.
<u>CA Web</u>	View details of the principal payment associated with a CTAS adjustment.
<u>POS</u>	View the principal factor as of any day within the previous two years for any amortizing security for which you had position.

Refunds

If DTC receives funds from a paying agent, but is unable to distribute those funds on that day, DTC will pass through the investment income it has earned to those participants who received the associated allocation. These credits will be seen as part of your monthly bill from DTC.

DTC claims interest compensation from those agents who pay DTC after the payable date. Collected compensation is passed on to participants that had position in the late-paying

issue. These credits will also be seen as part of your monthly bill from DTC and statements are available on SMART/Search.

<u>Undistributed Long-Term Capital Gains</u>

Under the Internal Revenue Service (IRS) regulations, total undistributed long-term capital gains from regulated investment companies (RICs) or real estate investment trusts (REITs) are required to be reported on IRS Form 2439, "Notice to Shareholder of Undistributed Long-Term Capital Gains" for each IRS Form 2439 that DTC receives from a RIC or REIT.

DTC prepares an IRS Form 2439 with a copy filed with the IRS and copies provided to its participants.

Claims

Description

Occasionally, certificates withdrawn from DTC, registered in DTC's nominee name Cede & Co., remain outstanding over the record date for a distribution. On the payable date, the issuer's paying agent remits the dividend or interest payments directly to DTC, since Cede & Co. is the registered holder on their books as of the record date. If you are holding these certificates over the record date, you can submit a claim directly to DTC's Dividend department. Claims requests can be submitted to DTC via an email to claims@dtcc.com. You must state the certificate numbers of the Cede & Co. certificates in your possession for which you are making a claim.

Validation

DTC maintains a database of all Cede & Co. certificates withdrawn by DTC participants. All claims are entered into a claim system where the certificate numbers on which your claims are based are checked against the database. If the certificate numbers are in the database and are shown to have left DTC on or before the record date, the claims are validated and you receive credit in your settlement account.

Invalid Claims

After paying a claim, if DTC finds that the claim is invalid, the claim is reversed through the claims function; you receive a hard copy cash adjustment to notify you, and you are assessed a fee.

Abandoned Property

Pursuant to the Abandoned Property Law, Section 303 of the State of New York, dividend or interest payments made to DTC on securities registered in the name of the depository's nominee, Cede & Co., are escheated to the state if they remain unclaimed for three years after the payable date.

If you submit DTC Dividend/Interest Claim form #5204 for any dividend or interest on securities DTC has surrendered to the state, DTC will send you a sworn affidavit stating

that the dividend or interest being claimed has been paid to the state, and authorizing payment to you by the State of New York.

The Domestic Tax Reporting Service ("DTax")

About DTax

The Domestic Tax Reporting Service ("DTax") is a product offering of DTCC Solutions LLC, and while being offered through DTCC Solutions, DTax is accessible through DTC's communications vehicles via inquiry functions on PTS and PBS.

When securities pay income, that income payment is classified for tax purposes as a particular type of income. Such income may be reclassified at the end of the year as a type of income different than originally designated. Such reclassified income can carry a different taxability characteristic than the original income announcement. When such a reclassification occurs, participants need to be aware of it so they can perform the appropriate year end information reporting DTax.

DTax provides information on securities that reclassify income after year-end. That is, an income announcement during the year may be reclassified after the end of the year into other types of income, e.g. capital gains, return of capital, etc. that attract different rates of tax than the original dividend would attract.

Many of the securities in DTax are not DTC-eligible and include such security types as open—and closed—end mutual funds, real estate investment trusts (REITs) and other securities that may reclassify income.

Using DTax

You can use DTax to view the following:

- Securities with tax information, by CUSIP, security type, ticker symbol or description
- Details of tax classification
- Change history for a specific security
- Audit trail of changes for a specific security
- Revisions to payment information for a specific security

Associated PTS/PBS Functions

The table below lists the PTS/PBS function you can use to access information related to Domestic Tax Reporting:

<u>Use this function</u>	<u>To</u>
<u>DTAX</u>	View domestic tax information.

Distributions Contact Number

For more information about Distributions and any of the material covered in this guide, call DTC's Customer Help Center at (888) 382-2721 or access DTC's Web site at http://www.dtcc.com

Support for Distributions Inquiries

DTC provides you with resources for solving the day-to-day questions and/or problems associated with Distributions event processing. Common inquiries via CA Web or WINS include but are not limited to the categories listed below. Note that you can submit an event-specific automated inquiry to DTC directly from CA Web.

Information on or questions about the accuracy of:

- Record dates
- Payable dates
- Ex dates
- Rates
- Pool factors
- Calculation methods
- Payment frequency or mode of payment
- Claims
- Adjustments
- Amount of dividend or interest paid

<u>Participants can submit automated inquiries concerning specific Distribution events</u> directly from CA Web or via the PTS/PBS Web Inquiry Notification System (WINS).

Support for ISO 20022 Messaging and CA Web

DTCC's website - http://dtcc.com/

• The website includes extensive technical documentation such as data dictionaries and ISO 20022 specifications.

MyStandards - https://www2.swift.com/swift/login/login_mystandards.html

• The MyStandards website houses ISO 20022 schemas and usage guidelines.

Corporate Actions Web application

• Embedded within CA Web is a variety of context sensitive help modules which participants can access when needing assistance using the application's functionality. Help is offered in both text and narrated animated formats.

Appendix PTS/PBS CA Web Functionality Equivalents

PTS Function	PBS Application	CA Web
<u>ADJI</u>	Adjustment Inquiries—Cash Adjustments	<u>Adjustments</u>
<u>ADJI</u>	Adjustment Inquiries—Stock Adjustments	<u>Adjustments</u>
<u>ADJI</u>	Fail Adjustments	<u>Adjustments</u>
<u>воок</u>	Transfer Book Closing	<u>Dashboard</u>
DAWN/1	<u>Dividend and Income—Added &</u> <u>Deleted Announcements</u>	<u>Announcements</u>
DAWN/2	Dividend and Income—Rate Changes	<u>Announcements</u>
DAWN/3	Dividend and Income—Change Comments	<u>Announcements</u>
DIVA	<u>Dividend and Income—Dividend</u> <u>Announcement Inquiry</u>	<u>Announcements</u>
<u>DPAL</u>	<u>Dividend Position Allocation Ledger</u>	<u>Entitlements</u>
<u>DUEB</u>	<u>Due Bill Inquiry</u>	<u>Dashboard</u>
EDS/1	Elective Dividends—Foreign Currency Payment	<u>Instructions</u>
<u>EDS/2</u>	Elective Dividends—TaxRelief	<u>Instructions</u>
EDS/3	Elective Dividends—Optional Dividends	<u>Instructions</u>
EDS/4	Elective Dividends—Dividend Reinvestment	<u>Instructions</u>
EDS/5	Elective Dividends—Cash-in- lieu/Round-up	<u>Instructions</u>
<u>EDS/6</u>	Elective Dividends—U.S. Tax Withholding	<u>Instructions</u>
EDS/7	Elective Dividends—Multi-Currency (N/A)	(N/A)
<u>EDS/8</u>	Elective Dividends—Direct Payment	<u>Instructions</u>

<u>PIAR</u>	Principal and Interest Adjustments	<u>Adjustments</u>
<u>SDAR</u>	Reorg/Redemption/Dividend Allocations	<u>Allocations</u>
<u>TAXI</u>	<u>TaxInfo</u>	Tax Info/ Instructions

The following are common Distribution event acronyms:

Acronym	Meaning
<u>ADR</u>	American Depository Receipts
<u>ABS</u>	Asset-Backed Securities
<u>DTC</u>	Depository Trust Company
<u>CA ID</u>	Corporate Action Identifier
<u>CA Web</u>	Corporate Actions Web browser
<u>CCF</u>	Computer-to-computer Facility
<u>CIL</u>	Cash in Lieu
<u>CMO</u>	Collateralized Mortgage Obligation
<u>COD</u>	Certificate On Demand
<u>DO</u>	<u>Deliver Order</u>
<u>DRIP</u>	Dividend Reinvestment Program
<u>ETF</u>	Exchange-Traded Fund
<u>IPA</u>	Issuing Paying Agent
<u>ISO</u>	International Standards Organization
<u>MBS</u>	Mortgage-Backed Securities
<u>MMI</u>	Money Market Instrument
<u>MTN</u>	Medium Term Note
MQ	<u>MQSeries</u>

NDM/FTP	Network Data Mover/File Transfer Protocol
<u>NQI</u>	Non-Qualified Intermediaries
<u>PIK</u>	Pay In Kind
<u>PTS</u>	Participant Terminal System
<u>UIT</u>	Unit Investment Trust
<u>PBS</u>	Participant Browser Services
QI	Qualified Intermediary
<u>REIT</u>	Real Estate Investment Trust
<u>REPO</u>	Repo Repurchase Agreement
<u>RWT</u>	Rush Withdrawal-by-Transfer
<u>SWIFT</u>	Society for Worldwide Interbank Financial Telecommunication
<u>TA</u>	Transfer Agent
<u>VRDO</u>	Municipal Variable-Rate Demand Obligation
<u>WT</u>	Withdrawal-by-Transfer