DTC CORPORATE ACTIONS

USER GUIDE: ISO 20022 MESSAGING FOR REDEMPTIONS

VERSION 7.1
MARCH 8, 2021

© 2021 DTCC. All rights reserved. DTCC, DTCC (Stylized), ADVANCING FINANCIAL MARKETS. TOGETHER, and the Interlocker graphic are registered and unregistered trademarks of The Depository Trust & Clearing Corporation.

The services described herein are provided under the "DTCC" brand name by certain affiliates of The Depository Trust & Clearing Corporation ("DTCC"). DTCC itself does not provide such services. Each of these affiliates is a separate legal entity, subject to the laws and regulations of the particular country or countries in which such entity operates. Please see www.dtcc.com for more information on DTCC, its affiliates and the services they offer.

Disclaimer

The primary purpose of this user guide is to familiarize clients with ISO 20022 Messaging for Corporate Action Reorganizations. This guide is not intended to serve as a legal document. No statement in this guide should be construed as a legally binding rule or regulation, or as creating an obligation on the part of DTCC or any of its subsidiaries. In addition, any time schedules or time requirements set forth herein are subject to change without notice.

This guide is meant as an educational tool to assist in your understanding of ISO 20022 messaging as it relates to corporate action processing at DTCC. It should not be used as a basis for systems applications coding. For coding purposes, please refer to specific schemas and message implementation guides that can be found at http://www.dtcc.com/settlement-and-asset-services/corporate-actions-processing/iso-20022-messaging-specifications.

Doc Info: March 8, 2021
Publication Code: CA219
Service: DTC Corporate Actions
Title: User Guide: ISO 20022 Messaging for Redemptions Entitlements and Allocations

TABLE OF CONTENTS

An Introduction to ISO 20022 Messaging 8

What is ISO 20022 Messaging? 8

Benefits of Using ISO 20022 Messaging for Corporate Actions 8

Benefits of Using ISO 20022 for Redemptions Processing 8

How Can I Learn More? 9

Introduction to Messaging for Redemptions 11

Corporate Actions Messages in the Redemptions Lifecycle 11

How to Read an MX Identifier 12

Supplementary Data and Message Extensions 12

Data Dictionaries, Scenarios, Message Usage Guidelines, and Event Templates 14

Redemptions Data Dictionaries 14

Announcements Data Dictionary 14

Entitlements and Allocations Data Dictionary 18

Using the Data Dictionary to Map from CCF to ISO 20022 20

Redemptions Message Usage Guidelines 21

Redemptions Scenarios 22

Redemption Event Templates 22

Introduction 22

Viewing Message Data Elements via MyStandards 23

PBS – ISO 20022 System Mapping for Redemptions 31

Redemption Event Messaging 32

Redemptions Messaging Terminology 32

Redemption Messaging Events 35

Event Descriptions 35

In-Scope 38

Out-of-Scope 38

Lottery Events 40

Account Balances and Lottery Events 40
Messages for Lottery Events 43
Basic Message Flow for Lottery Events 44
Sample Scenarios for Partial Calls 44
Sample Scenarios for Partial Defeasance and Partial Pre-Refunding 53
Non-Lottery Events 58
Basic Message Flow for Non-Lottery Events 58
Sample Scenarios for Non-Standard, Non-Lottery Events 59
Message Subscriptions and Timing 62
Subscription Options: Lottery Events 62
Subscription Options: Non-Lottery Events and Maturities 64
Weekly Messaging Times 65
Holiday Processing Schedule 66
Corporate Action Notification Message 67
What is a CANO Message? 67
When Are CANO Messages Generated? 68
Weekly Messaging Times 69
Holiday Processing Schedule 69
Redemption Event Types 69
Redemption Event Information Contained on the CANO Message 70
Corporate Action Notification with Eligible Balance Message 74
What is a CANO-E Message? 74
When Are CANO-E Messages Generated? 75
CANO-E Messages and Pending Trades 76
CANO-E Message Subscriptions and Timing 76
Weekly Messaging Times 76
Holiday Processing Schedule 77
Information Contained on the CANO-E Message 77
Corporate Action Movement Preliminary Advice Message 79

What is a CAPA Message? 79
CAPA Messages for Lottery vs. Non-Lottery Events 80
Lottery Events 80
Non-Lottery Events 81
When Are CAPA Messages Generated? 81
Lottery Events 81
Non-Lottery Events 82
CAPA Message Subscriptions and Timing 82
Weekly Messaging Times 83
Holiday Processing Schedule 83
Information Contained on the CAPA Message 83
Lottery Events 84
Non-Lottery Events 86
Corporate Action Movement Preliminary Advice Cancellation Message 87
What is a CAPC Message? 87
When Are CAPC Messages Generated? 88
Lottery Events 88
Non-Lottery Events 88
CAPC Message Subscriptions and Timing 89
Weekly Messaging Times 89
Holiday Processing Schedule 89
Information Contained on the CAPC Message 90
Corporate Action Movement Confirmation Message 91
What is a CACO Message? 91
When Are CACO Messages Generated? 92
CACO Message Subscriptions and Timing 92
Weekly Messaging Times 93
Holiday Processing Schedule 93
Information Contained on the CACO Message 94

Corporate Action Event Processing Status Advice Message..... 97
What is a CAPS Message? 97
When Are CAPS Messages Generated? 98
CAPS Message Subscriptions and Timing 98
Weekly Messaging Times 98
Holiday Processing Schedule 99
Information Contained on the CAPS Message 99
Appendix A: Message Scenarios..... 102
Messaging Scenarios for Lottery Events 102
Scenario 1: Partial Call (Basic) 102
Scenario 2: Cancellation of a Partial Call (Pre-Lottery) 104
Scenario 3: Cancellation of a Partial Call (Pre-Allocation) 105
Scenario 4: Cancellation of a Partial Call (Same-Day / Post-Allocation) 106
Scenario 5: Cancellation and Re-Run of a Partial Call (Pre-Lottery) 108
Scenario 6: Cancellation and Re-Run of a Partial Call (Post-Lottery, Pre-Allocation) 110
Scenario 7: Cancellation and Re-Run of a Partial Call (Post-Allocation) 112
Messaging Scenarios for Supplemental Lotteries 115
Scenario 8: Supplemental Lottery 115
Scenario 9: Supplemental Lottery Post-Allocation 117
Scenario 10: Reversal / Re-Run of Original and Supplemental Lotteries 119
Scenario 11: Cancellation of Original and Supplemental Lotteries (Pre-Allocation) 122
Scenario 12: Cancellation of Original and Supplemental Lotteries (Same Day / Post-Allocation) 124
Scenario 13: Partial Call with Variable Rate 127
Messaging Scenarios for PDEF Events 129
Scenario 14: Partial Pre-Refunding 129
Scenario 15: Partial Pre-Refunding – Supplemental (Post-Lottery) 131
Scenario 16: Cancellation of a Partial Pre-Refunding (Pre-Lottery) 133
Scenario 17: Cancellation of a Partial Pre-Refunding (Post-Lottery) 134
Scenario 18: Partial Defeasance 135

Scenario 19: Partial Defeasance Supplemental Lottery (Pre-Lottery) 137
Scenario 20: Partial Defeasance Supplemental Lottery (Post-Lottery) 138
Scenario 21: Cancellation of a Partial Defeasance (Pre-Lottery) 140
Scenario 22: Cancellation of a Partial Defeasance (Post-Lottery) 141
Scenario 23: Concurrent Late Partial Calls 142
Scenario 24: Concurrent Partial Calls (No Contra-CUSIP) 144
Messaging Scenarios for Non-Lottery Events 146
Scenario 25: Full Call 146
Scenario 26: Cancellation of a Full Call (Pre-Allocation) 147
Scenario 27: Cancellation of a Full Call (Post-Allocation) 148
Scenario 28: Cancellation and Re-Run of a Full Call (Pre-Allocation) 150
Scenario 29: Cancellation and Re-Run of a Full Call (Post-Allocation) 152
Scenario 30: Maturity 154
Scenario 31: UIT Termination 155
Scenario 32: Full Pre-Refunding 156

AN INTRODUCTION TO ISO 20022 MESSAGING

What is ISO 20022 Messaging?

ISO 20022 is an international messaging standard that is designed to simplify global business communication by creating a common language for communicating financial information that is unrestricted by national borders or regional conventions.

Even though the Depository has maintained its own proprietary formats for many years, DTCC recognized that it needed to respond to an evolving business environment and to accommodate an increasingly global investment business. DTCC's clients and customers had expanded their businesses throughout the world and wanted to streamline, as much as possible, the standards and formats used to communicate. ISO 20022 meets those needs and offers a host of benefits.

DTCC is therefore moving all of its corporate actions announcements and processing files from proprietary formats to this external, international format.

Benefits of Using ISO 20022 Messaging for Corporate Actions

One of the greatest benefits of ISO 20022 is its consistency and universality across the industry and around the globe. It provides a common language with its own ever-growing dictionary, enabling businesses in the financial industry to communicate corporate action information quickly, easily, and precisely.

On a more local scale, the automation of previously manual processes via ISO 20022 messaging provides a significant cost savings to clients and a tremendous reduction in risk to the industry. With the advent of real-time messaging via ISO 20022, clients receive their data in a much more timely fashion, which allows them to manage their risk and streamline their processes.

The Corporate Actions Transformation Learning Center provides a more comprehensive list of benefits.

Benefits of Using ISO 20022 for Redemptions Processing

ISO 20022 messaging facilitates logical, streamlined handling via straight-through processing of both lottery and non-lottery events.

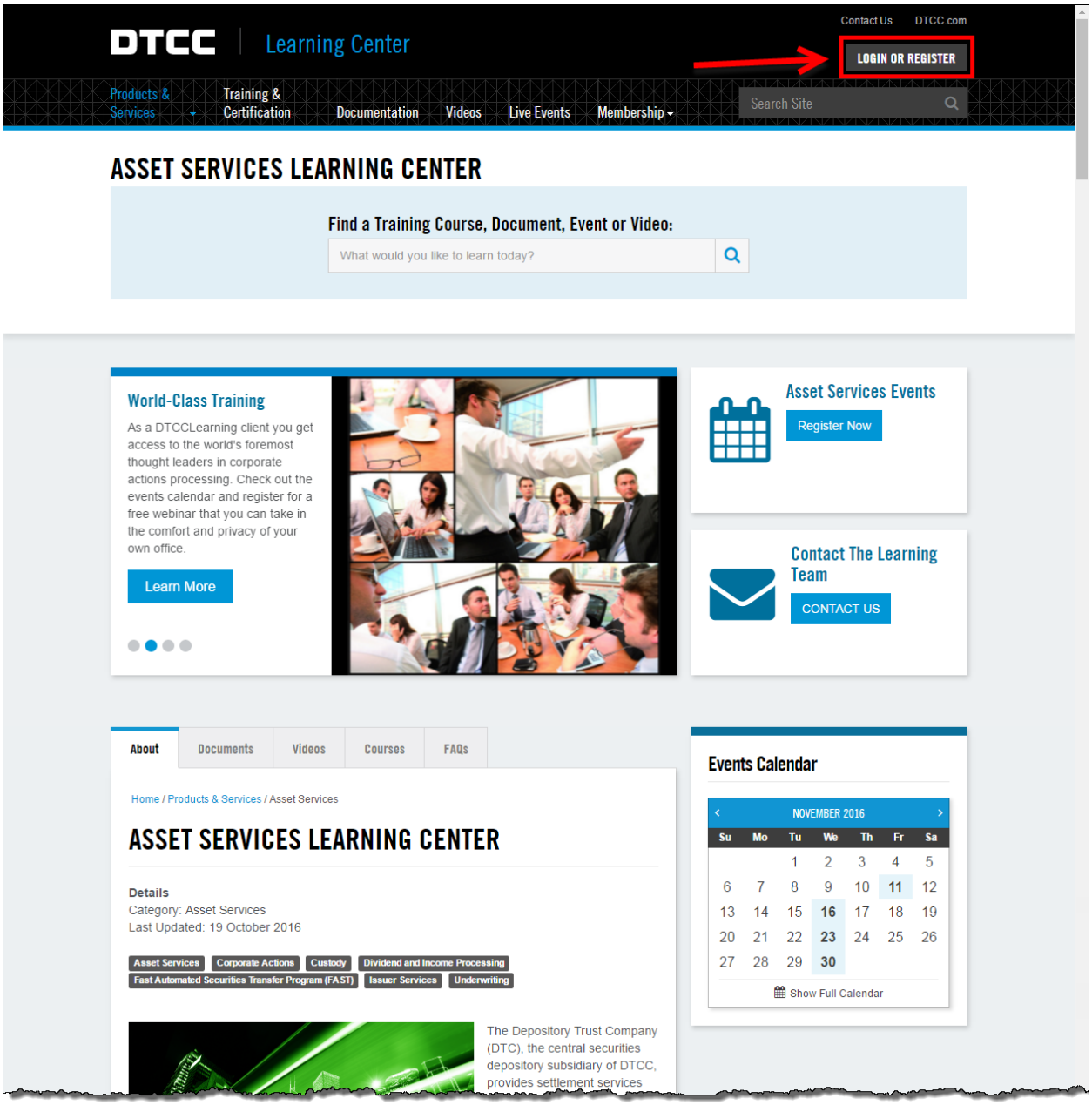
The assignment of a single Event ID enables you to follow the results of that event from its announcement, through lottery results, to the allocation of cash, securities, or cash and securities.

Through the realignment of ISO messaging functions to redemption event processing, DTC is also able to communicate non-standard processes such as reversals or recissions. Messages can now explain where you are in the process flow of an event.

Non-lottery events are also handled simply and easily. A single Event ID follows the event from announcement, through projection, to allocation.

How Can I Learn More?

Visit the Corporate Actions area of the Asset Services Learning Center at https://dtcclearning.com/products-and-services/asset-services.html to view a wealth of business and technical information about the initiative, including the Benefits page and video, a Getting Started section, and a Readiness Checklist that provides you with a convenient method for determining your organization's ability to begin processing ISO 20022 messages.



The Learning Center also contains introductory videos, extensive documentation, a link to FAQs, and further information regarding ISO 20022 messages and message scenarios.

Note that you need to log in to see the full range of information available to you. First-time users should click **Register Now** in order to create an account. You need to be registered in order to view the Learning Center.

Introduction to Messaging for Redemptions

Corporate Actions Messages in the Redemptions Lifecycle

There are eight types of messages in the ISO 20022 group that pertain to redemption events:

MX Identifier	ISO 20022 Message Names	Extension (SD)	Short Name	Equivalent ISO 15022	Equivalent DTCC Processes
seev.031.002.xx	CA Notification	supl.001.001.xx	CANO	MT 564	Announcements
seev.039.002.xx	CA Cancellation Advice	supl.006.001.xx	CACN	MT 564	Announcement Cancellations
seev.031.002.xx	CA Notification with Eligible Balance	supl.007.001.xx	CANO-E	MT 564	Record Date Entitlements
seev.035.002.xx	CA Movement Preliminary Advice	supl.009.001.xx	CAPA	MT 564	Projected Payments
seev.044.002.xx	CA Movement Preliminary Advice Cancellation Advice	supl.034.001.xx	CAPC	MT 564	NEW
seev.036.002.xx	CA Movement Confirmation	supl.011.001.xx	CACO	MT 566	Allocations / Payments
seev.037.002.xx	CA Movement Reversal Advice	supl.025.001.xx	CARE	MT 566	NEW
seev.032.002.xx	CA Event Processing Status Advice	supl.010.001.xx	CAPS	MT 567	Unallocated Positions
seev.033.002.xx	CA Instruction	supl.008.001.xx	CAIN	MT 565	Instructions / Elections
seev.034.002.xx	CA Instruction Status Advice	supl.030.001.xx	CAIS	MT 567	Instruction Reply
seev.040.002.xx	CA Instruction Cancellation Request	supl.032.001.xx	CAIC	MT 565	Instruction Withdrawal
seev.041.002.xx	CA Instruction Cancellation Request Status Advice	supl.033.001.xx	CACS	MT 567	Withdrawal Reply
seev.042.002.xx	Corporate Actions Instruction Statement Report	supl.031.001.xx	CAST	n/a	NEW
seev.001.001.xx	Meeting Notification	n/a	MTNO	MT 564*	Announcements (AC 80)
seev.002.001.xx	Meeting Cancellation	n/a	MTCN	MT 564*	Announcements (AC 80) Cancellations
*Limited. Not backwards compatible					

- Corporate Action Notification (CANO)
- Corporate Action Cancellation Advice (CACN)
- Corporate Action Notification with Eligible Balance (CANO-E) *Lottery events only*
- Corporate Action Movement Preliminary Advice (CAPA)
- Corporate Action Movement Preliminary Advice Cancellation Advice (CAPC)
- Corporate Action Movement Confirmation (CACO)
- Corporate Action Movement Reversal Advice (CARE)[1]
- Corporate Action Event Processing Status Advice (CAPS)

The messages illustrate the corporate action event information, record date position capture (for lottery events), lottery results, projected allocations, canceled projections, allocations, post-allocation adjustments, unallocated positions, and same-day payable date reversals.

Note that these messages work differently for Redemptions, especially for lottery events.

- The CANO-E (sent on publication date -1) provides a pre-lottery balance before a lottery has been run.

[1] CARE messages will be accommodated in ISO 20022 messaging for Redemptions at a later date.

- The CAPA message provides information for lottery results, showing what position was affected ("called") and unaffected ("remaining") by the lottery. It explains the lottery results and, based on affected position, projects the security or cash movements that you will receive.

For example, if a CANO-E informs you that you have a pre-lottery eligible balance of 1000 units, the CAPA might inform you that, based on the original eligible balance, you were called on 100 units (affected balance). 900 units are remaining (unaffected balance). You can expect to receive a payout based on your affected position of 100 units.

All of the messages involved in this process are contingent upon the client having an eligible balance in the event. Unless you have an eligible balance, you will only see the announcement message for the event. Please note that all participants eligible for a lottery-based event will receive a CAPA lottery results message regardless of whether they were affected by the lottery.

How to Read an MX Identifier

The MX Identifier identifies the business area, message ID, and version of an ISO Message.

As an example, for the identifier **seev.036.002.06**:

- The first four alphabetic characters ("seev") identify the business area. In this case, it is "Securities Events." You can see the full list of business areas on the ISO 20022 Web site at http://www.iso20022.org/documents/general/ISO20022_BusinessAreas.pdf.
- The next three characters (036) are the message identifier. The message in this example is a CACO message.
- The next three characters (002) are the "variant" identifier. Since "001" is always the main ISO message, "002" would be the second variant (and the one that is compatible with ISO 15022). DTCC is using the second variant in order to comply with the industry's requirement that the ISO 20022 messages we generate be backward compatible with ISO 20022.
- The last two characters (06) are the "version." In this example, this is the sixth version of this message, representing SR 2015. Please note that the final two digits have the potential to change with each release.

  For your coding purposes, be sure to consult the latest documentation for the most current version number.

Supplementary Data and Message Extensions

The DTCC implementation of ISO 20022 will make use of an ISO 20022 concept of supplementary data, also called "extensions."

Certain DTCC corporate actions elements are not covered by the standard ISO messages. These elements are implemented using the supplementary data components. The data fields within the supplementary data have been modeled using the ISO 20022 principles and will reside in the ISO 20022 data dictionary.

In terms of Redemptions messaging, the supplementary data is provided in message extensions. These extensions allow DTCC to provide an agreed-upon and machine-readable structure within the messages for those data elements that have not been globally agreed to form part of the main message. Note that the structure of the extension must be validated by the ISO community and registered within ISO 20022, and this process includes the addition of the elements to the ISO 20022 data dictionary. This allows for improved interoperability while avoiding an impact on the messages themselves which may have been implemented in other communities.

Data Dictionaries, Scenarios, Message Usage Guidelines, and Event Templates

Scenarios and data dictionaries can be found on DTCC's Web site at http://www.dtcc.com/settlement-and-asset-services/corporate-actions-processing/scenarios.
Message Usage Guidelines can be found with their associated message specifications at http://www.dtcc.com/settlement-and-asset-services/corporate-actions-processing/iso-20022-messaging-specifications.

Redemptions Data Dictionaries

The Corporate Actions Data Dictionary is central to the new ISO standard. It is one of the main components of the new data model that provides clients with increased operability within their own systems and with other external processes.

The data dictionary provides an overview of each event type in the ISO 20022 model and its relationship to existing DTC event types (function codes). It also provides a list of data elements, their level, and a cross reference from existing DTC elements to the new ISO 20022 element. This allows clients to map elements from DTC's legacy function code-based data model to the new ISO 20022 messages. An indication is also provided as to the level of compliance with global and U.S. industry norms.

The data dictionaries are presented in a series of Excel spreadsheets. Each spreadsheet describes the data model as it relates to announcements, the corporate actions lifecycle, and instructions; each one describes the new data model, its relation to the existing DTCC legacy model, and ISO standards.

Each spreadsheet contains a number of tabs. DTCC recommends that clients familiarize themselves with the tabs in each applicable data dictionary, and the type of information contained on each. Note that updates, adds and deletes to any item in the dictionary are noted in the dictionary itself.

The spreadsheets that apply specifically to Redemptions include the Announcements and the Entitlements and Allocations data dictionaries.

Announcements Data Dictionary

The Announcements Data Dictionary includes the following tabs. It is recommended that users start with the Legend tab as it provides a description of the information provided in the spreadsheet's remaining tabs, which offer specific data element detail.

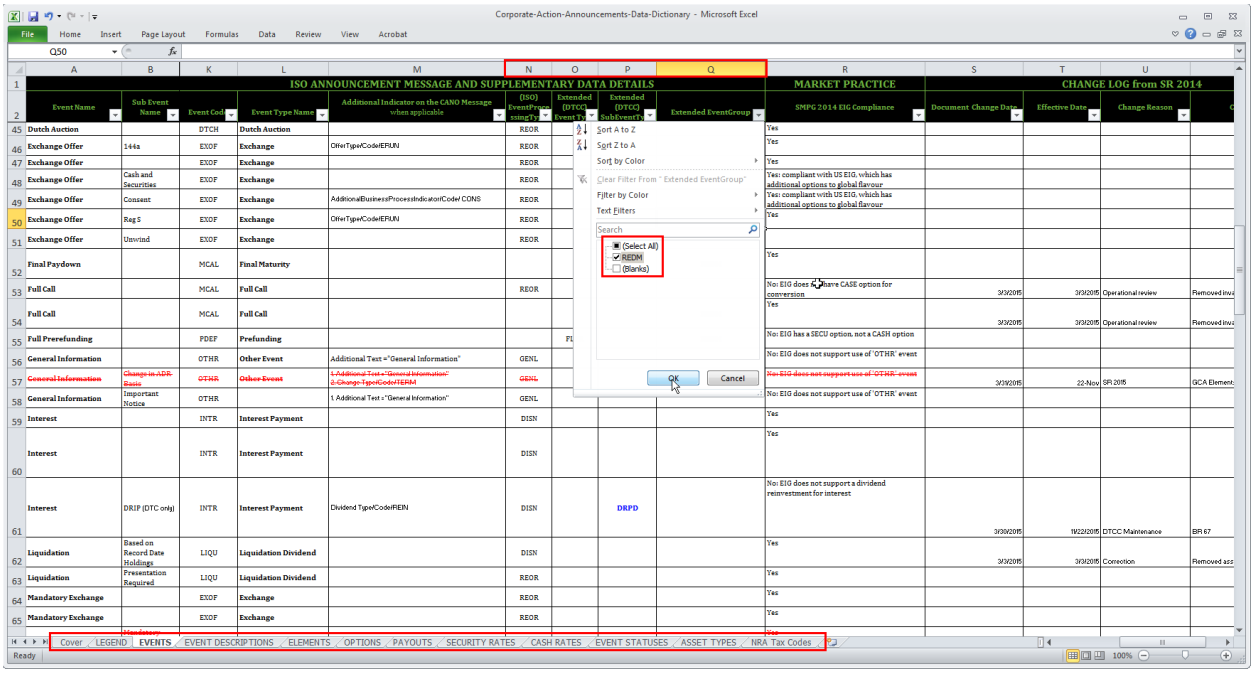
- **Legend**. Start here to learn about the column names used throughout the data dictionary.
- **Events**. View a complete list of DTCC-defined event types, sub-event types, and their corresponding ISO codes. This is a good way to see the relationship between the DTCC event structure and the equivalent ISO information.
- **Event Descriptions**. These definitions explain all of the events covered in the previous tab.
- **Elements**. A list of data elements contained in the new model.

- **Options**. A list of option types and descriptions.
- **Payouts**. A list of payout types, payout descriptions, and associated ISO tags.
- **Security Rates**. A list of payout indicators for securities that define products, processing, valid amounts, and event/payout security classes.
- **Cash Rates**. A list of payout indicators for cash that define rules and event groups.
- **Event Statuses**. A list of status codes for each event.
- **Asset Types**. A list of sub issue type codes and descriptions.
- **NRA Tax Codes**. A list of NRA tax codes and descriptions, mapped to ISO Income Type codes. Note that this sheet is not applicable to Redemptions.

The tabs that you will find the most helpful are the Events tab and the Elements tab. You can sort the columns on these sheets to display information that is relevant to redemption events.

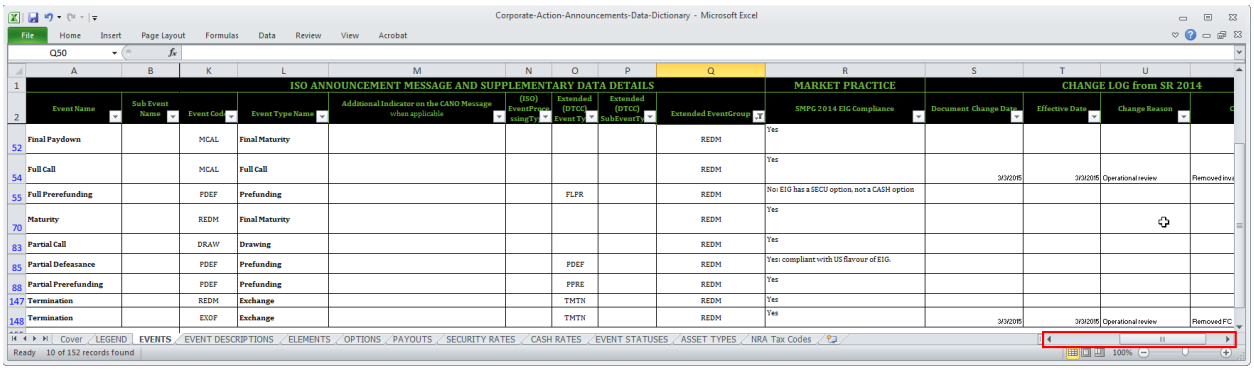
Using the Events Tab

Sorting columns N through Q is the easiest way to limit the information for Redemptions. In particular, column Q allows you to display redemption events only.



1. Click the arrow in the Q column, **Extended Event Group**.
2. Uncheck “Blank” so that only “REDM” is selected.
3. Click **OK**.

   The sheet is then limited to redemption events only. Column A lists all of these events.



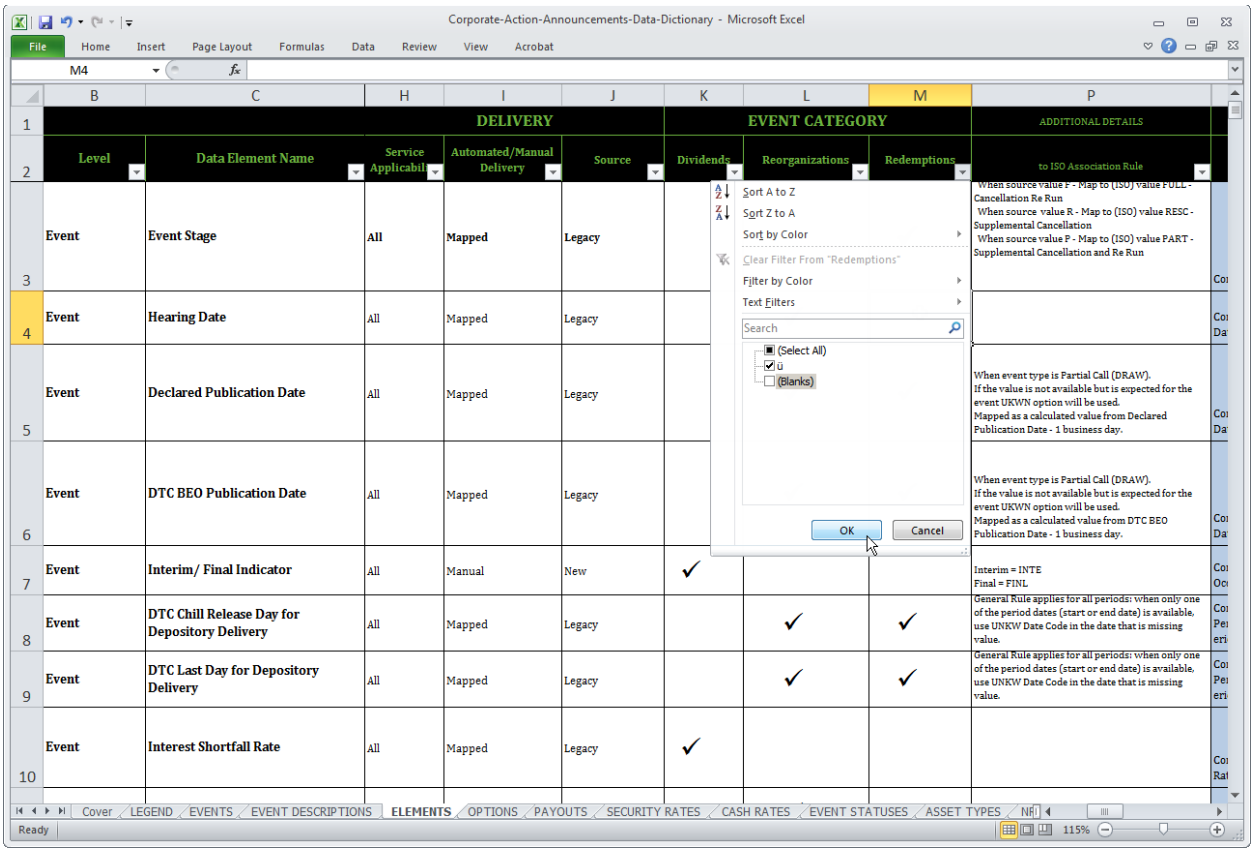
4. Use the scrollbar at the bottom right of the Excel window to view all of the columns on the sheet.

Column O denotes the extended event types that differentiate partial defeasance, partial pre-refunding, and full defeasance for PDEF events:

- **FLPR**. Full Pre-Refunding.
- **PDEF**. Partial Defeasance.
- **PPRE**. Partial Pre-Refunding.
- **TMTN**. Termination.

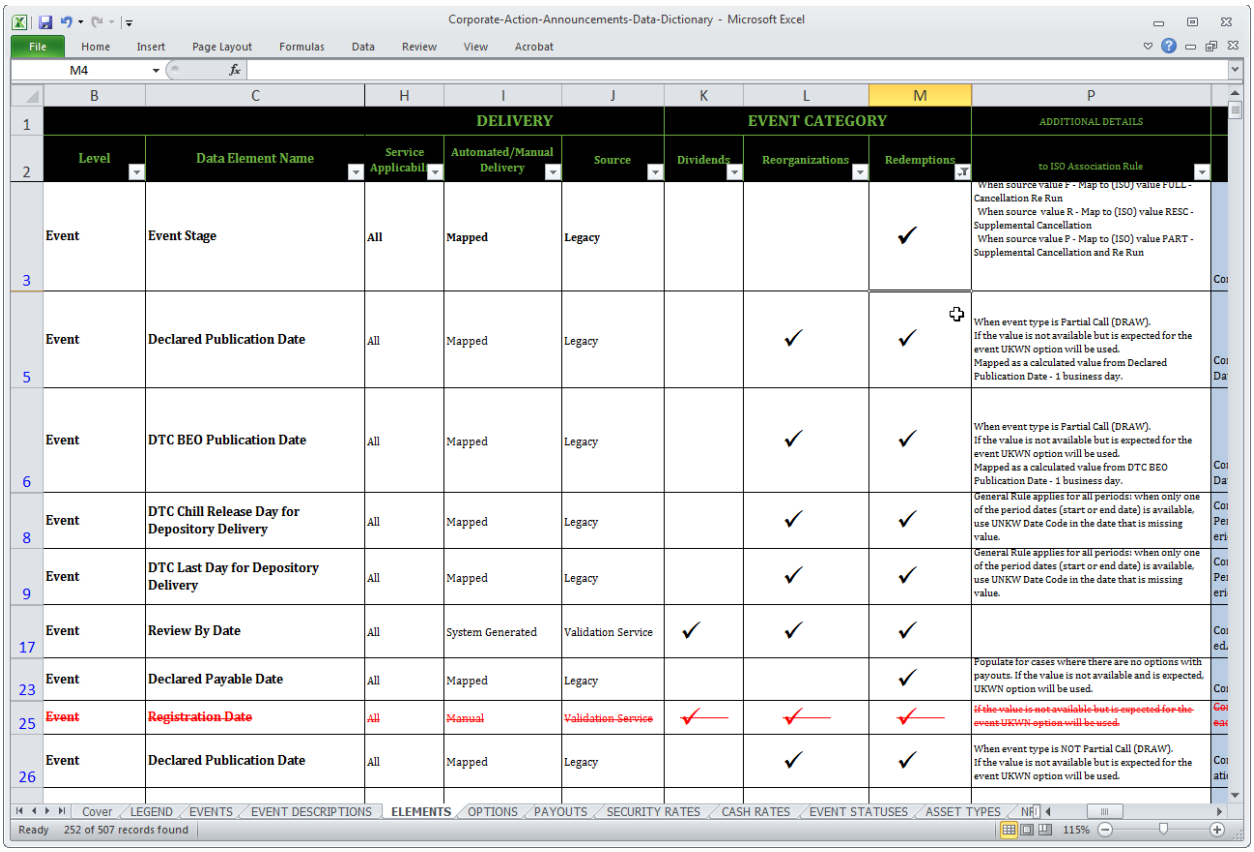
The Elements tab is also useful for understanding the contents of Announcements messages for redemption events.

Column M denotes the elements that specifically refer to Redemptions. By removing the rows that do not have a check in this column, you can view only those message elements that apply to Redemptions announcements.



1. Click the arrow in the M column, **Redemptions**.
2. Uncheck “Blank” so that only the check symbol is selected.
3. Click **OK**.

   The sheet is then limited to elements that apply to redemption events. Column C, **Data Element Name**, lists all of these elements.



4. Use the scroll bar to see all of the columns on this sheet.

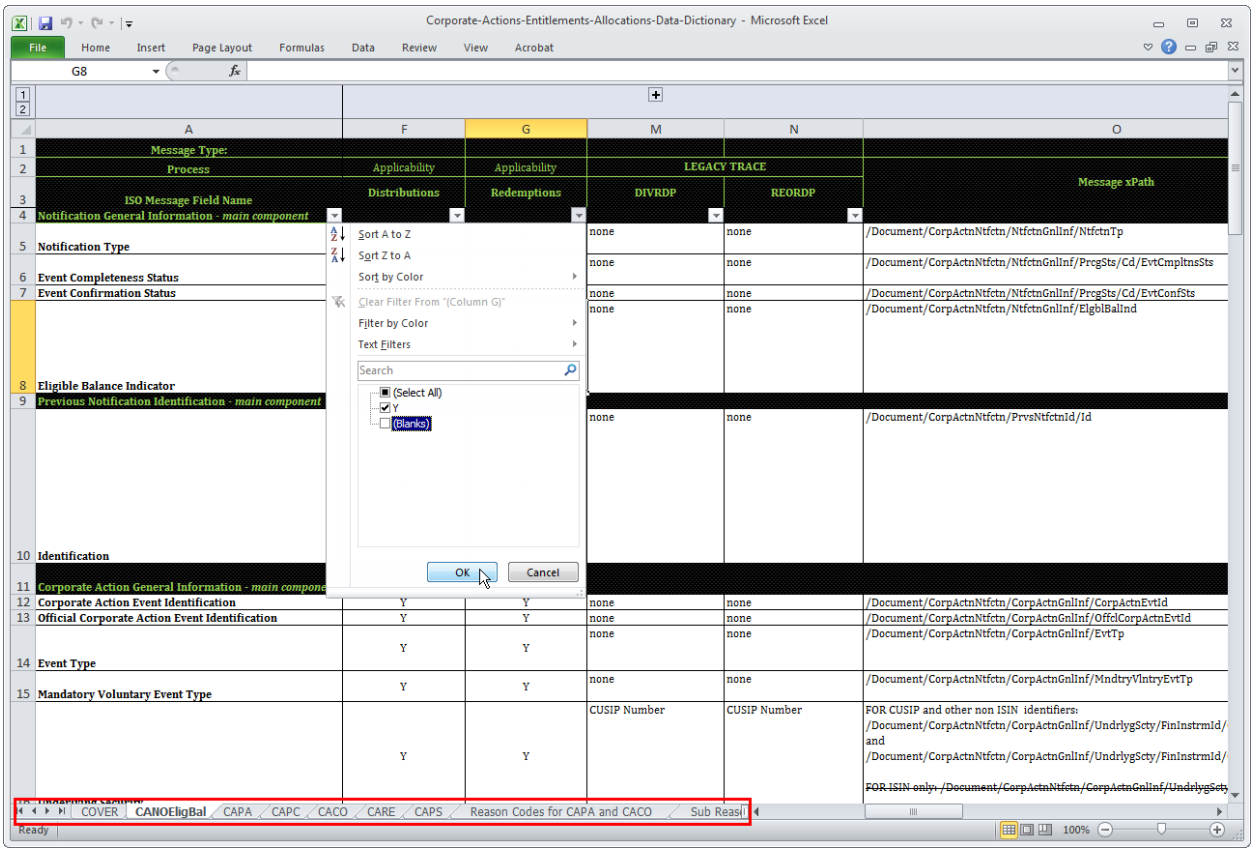
Entitlements and Allocations Data Dictionary

The Entitlements and Allocations Data Dictionary includes tabs for each ISO lifecycle message type. The tab contains a spreadsheet of data elements contained in that message type.

Each row presents an element as well as its associated information: an explanation of what it is, which event group (Distributions, Redemptions, Reorganizations) it is applicable to, and the name of the legacy CCF file this information can be traced back to. Notes are included for both Distributions and Redemptions where applicable.

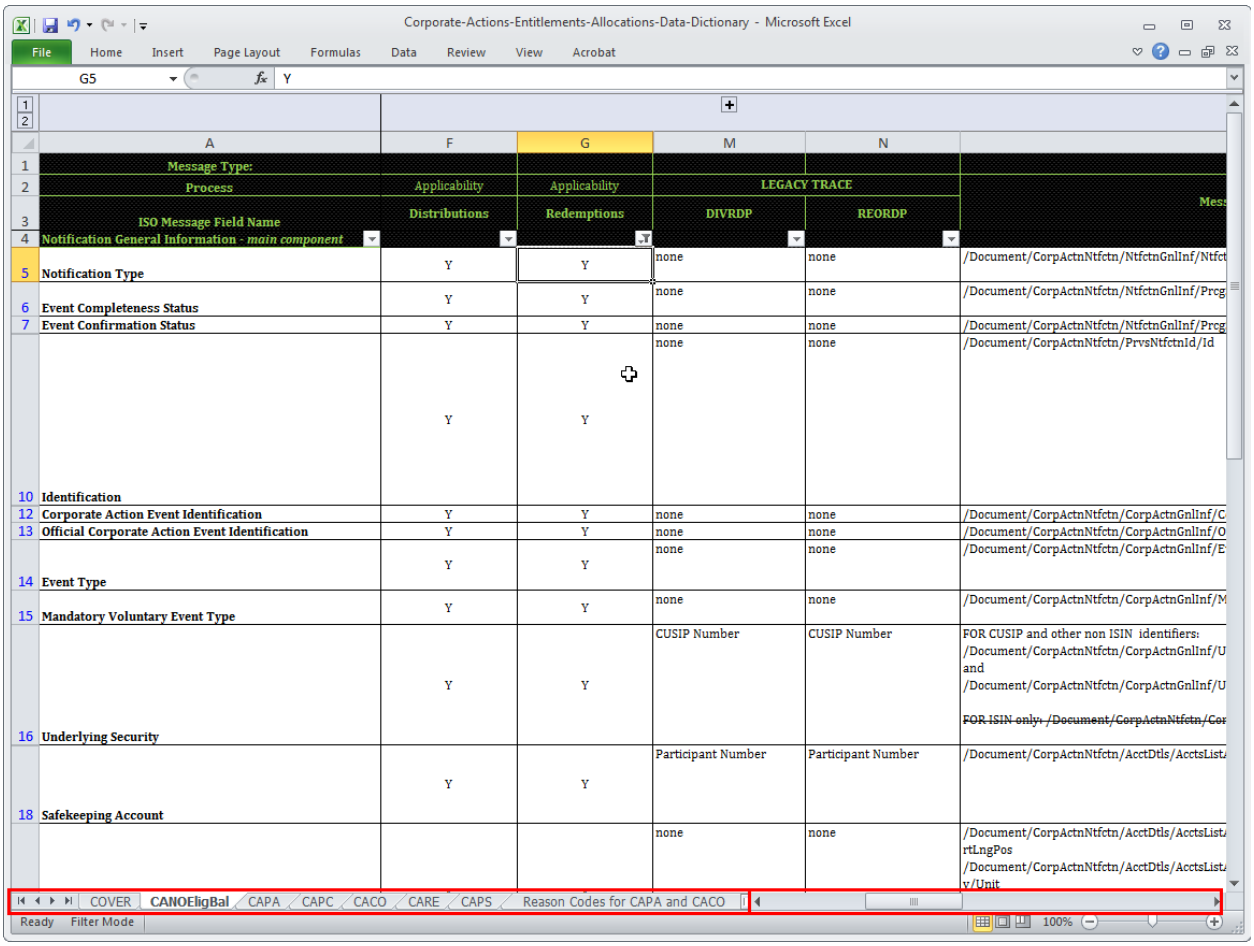
In addition to specific message information, separate sheets list the reason codes for CAPA, CACO, and CAPS messages, as well as sub reason codes for CAPA and CACO messages.

You can limit each message type to display elements that apply only to redemption events.



1. Click the arrow in the G column, **Redemptions**.
2. Uncheck “Blank” so that only “Y” is selected.
3. Click **OK**.

   The sheet is then limited to message elements that apply to redemption events. Column A, **ISO Message Field Name**, lists all of these elements.



4. Use the scroll bar to see all of the columns on this sheet.

   Click another tab on the bottom to see information for a different message type. You can limit all message sheets using Column G.

For additional details, see the User Guide: ISO 20022 Messaging for Distributions Entitlements and Allocations, DTCC Corporate Actions.

Using the Data Dictionary to Map from CCF to ISO 20022

To determine the mapping of a legacy file field to the corresponding ISO message type, field, and tag, use the value from the Legacy Mapping Spreadsheet (**CA Data Element Names**) and cross-reference this value with the same data element name in the **Corporate Actions Data Dictionary**.

The Corporate Actions Data Dictionary provides the corresponding ISO message type, field, and tag in the **Corporate Actions ISO Message Specifications**, which represents the ISO message standards used to communicate with DTCC.

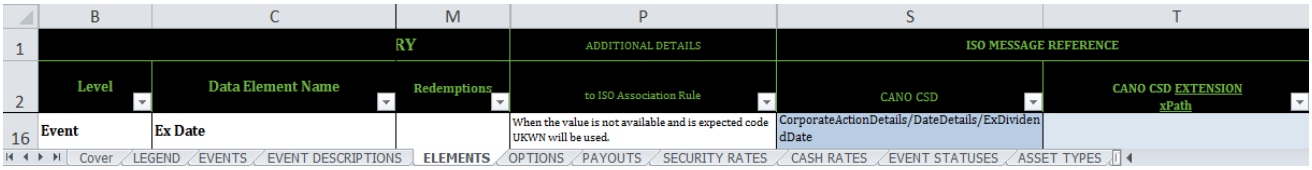
For example, to find the corresponding ISO 20022 message path, extension, field, or XML tag for the data field “Ex-Dividend Date” in the legacy CCF file DIVANN, you would:

1. Open a Legacy mapping spreadsheet (here, “Divann”).

2. Go to the Legacy mapping tab (“Divann”) and look under the column heading **CA Data Element Name (2010)**. Here, we can see that the value is “Ex Date.”

Field Name	Field Description	CA Data Element Name (Original)	CA Data Element Name (2007)	CA Data Element Name (2010)	Status
Ex Dividend Date	Date for buy/sell without dividend ccyymmdd	Ex Date	Ex Date	Ex Date	Active

3. To look up the ISO 20022 path and extension, look in the Announcements Data Dictionary’s **Elements** tab. Find the value of “Ex Date” in the **Data Element Name** column.
4. Scroll to the right to see all information associated with “Ex Date.”
   The path value, for example, is detailed in the **Path** column, and the value is “CorporateActionDetails/DateDetails/ExDividendDate.”



5. The extension value, when applicable, is detailed in the **Extension** columns.
   In this instance, it is blank because this data element is not a DTC-specific data element.

Redemptions Message Usage Guidelines

Message Usage Guidelines (MUGs) define the guidelines for DTCC’s restrictions of the base standard message for each ISO 20022 message. They provide the ability to show all required and optional fields utilized in the message. In addition to usage rules, comments and synoyms help describe each data element and its context in relation to the DTC data model or legacy CCF file.

The MUGs are saved as PDF documents that can be found in the separate Zip files containing the ISO 20022 message specifications for both Announcements and Entitlements and Allocations. Each MUG refers to a specific message (CANO-E, CAPA, etc.) or message extension.

The MUG can be used to cross-reference an ISO 20022 component with its DTCC name. Each DTCC element’s name, definition, and usage rules listed in the dictionary are noted with the corresponding ISO element in this document.

Redemptions Scenarios

The Redemptions scenarios spreadsheet contains an array of event type tabs. The spreadsheet on each tab presents at least one scenario for each event type. The scenario contains the major data elements for the event type and the values you can expect to see for each.

Redemption Event Templates

Introduction

In addition to providing message usage guidelines for announcements, you can now see a subset of the announcements data that applies to redemption events only.

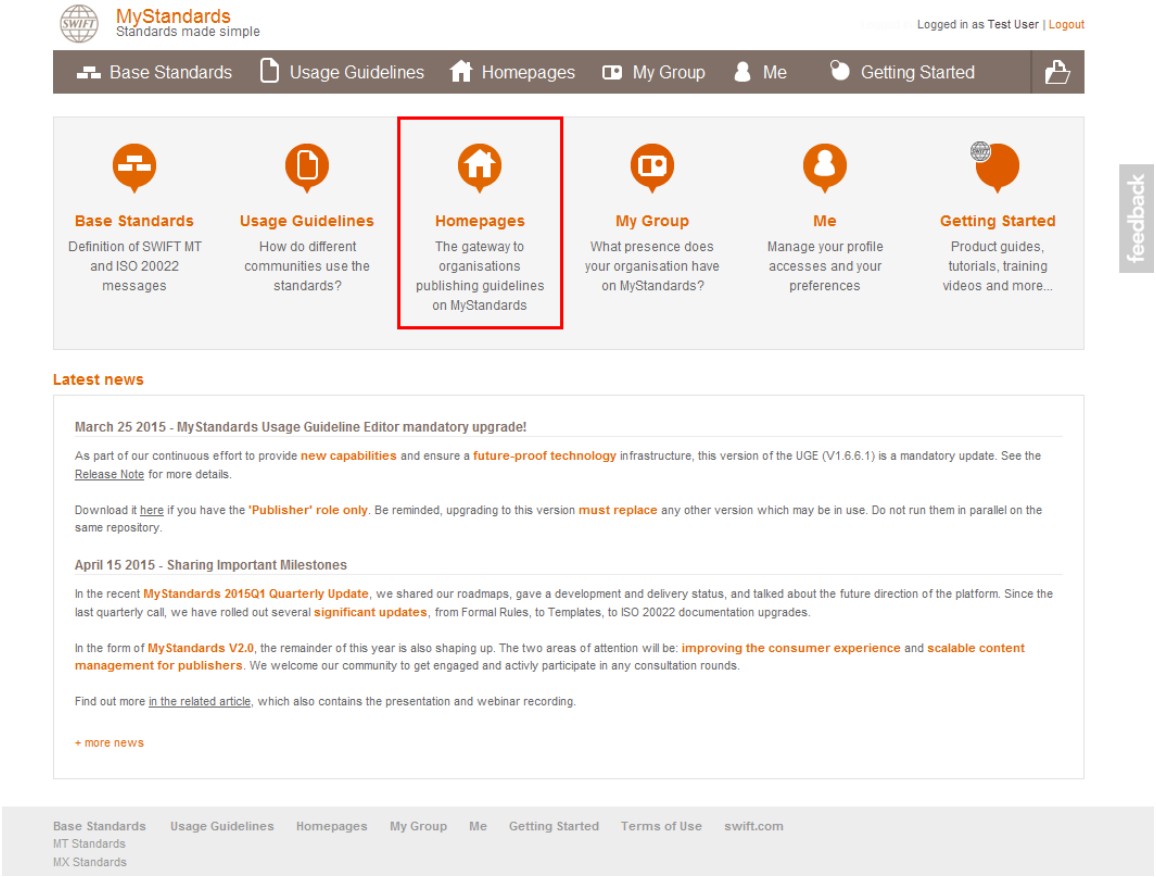
These redemption event templates restrict the announcements information at the redemption event level (such as partial call, full call, etc.) at both the core message and extension message levels.

This allows you greater insight into the contexts of redemption events. You can see relevant metadata about these elements: rules and comments that are specific to each element's usage during a specific event, as well as annotations and synonyms that explain where each data element came from and the legacy data attribute name for each.

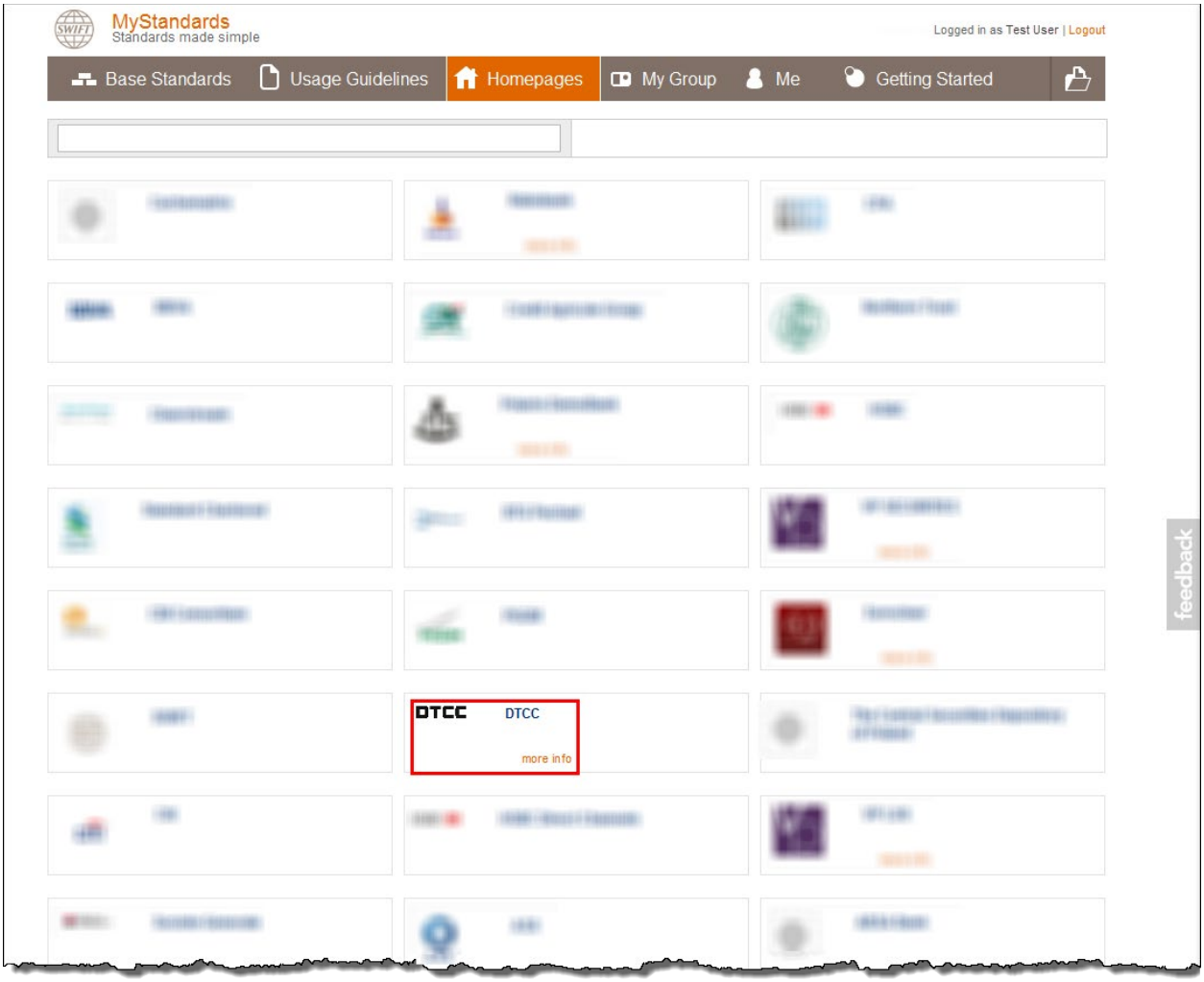
To view these event templates, please visit Swift's **My Standards** Web site at https://www2.swift.com/mystandards/.

Viewing Message Data Elements via MyStandards

Click **Homepages** to reach the list of organization standards.

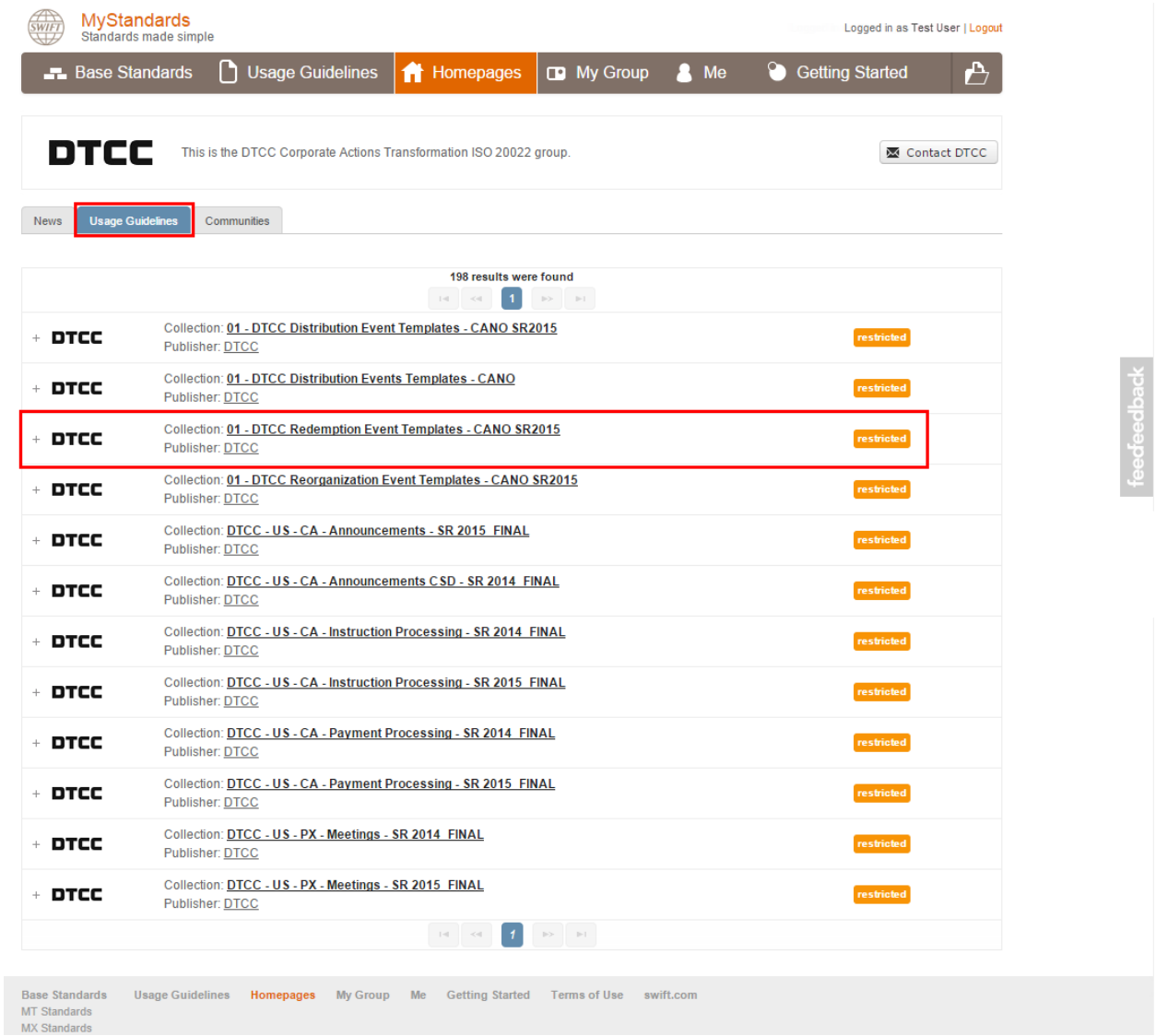


Click **DTCC** to reach DTCC's set of standards.



Click **Usage Guidelines** to reach the list of available standards and click the link for the message collection you want to view.

Note that you can view message groups for different event types. For example, you can view CANO guidelines for Distributions and Reorganization events as well as Redemptions.

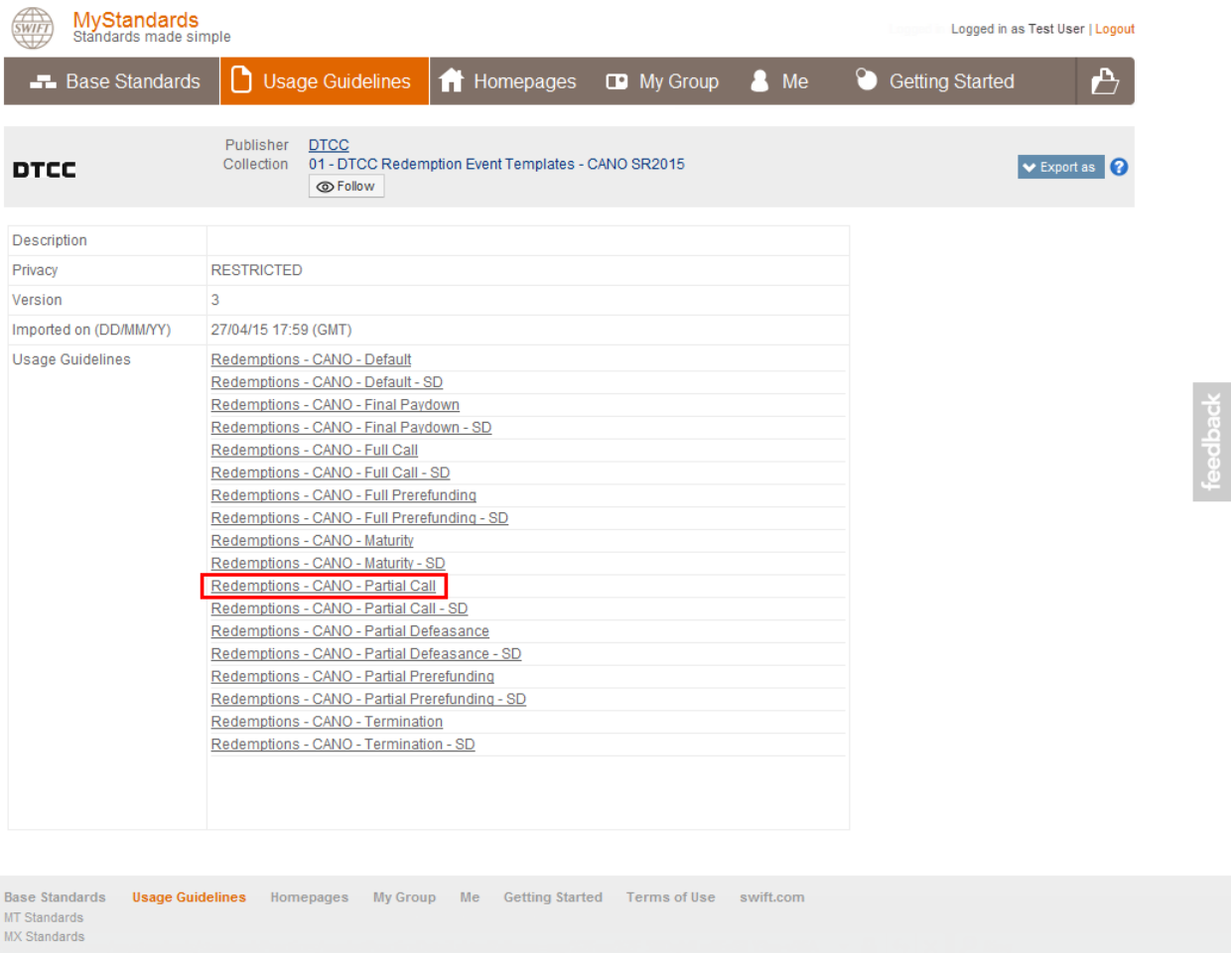


The collection contains a list of event types for this particular message. Each listed event type contains a subset of the data elements from the general message.

Here, we see a list of the restricted subsets of the general CANO message that apply to particular redemption event types.

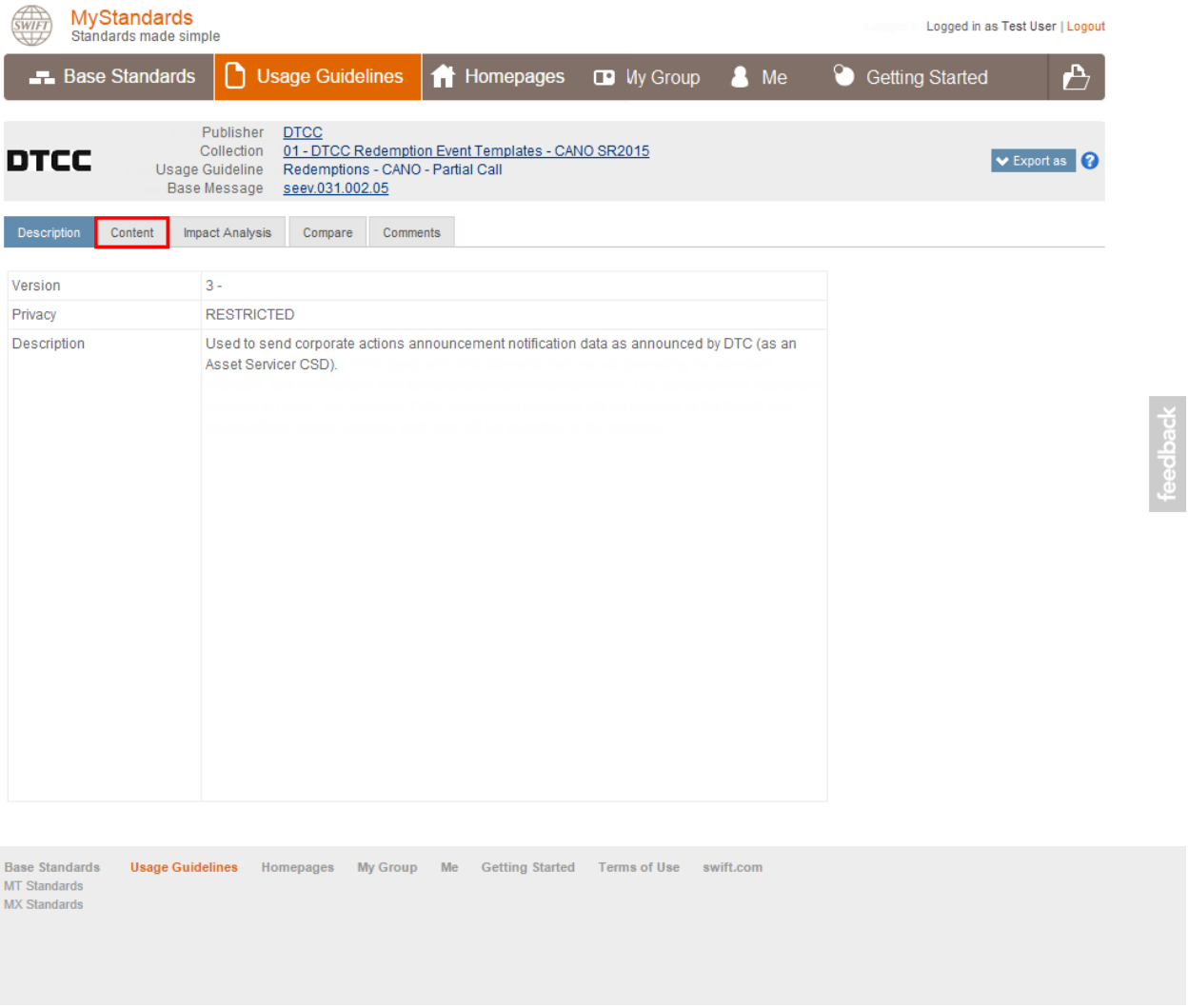
Note that each message type is followed with an “SD” entry for each type.

- The initial listing is for the core message.
- The “SD” listing that follows refers to the message extension. It contains the supplemental data for each message type.



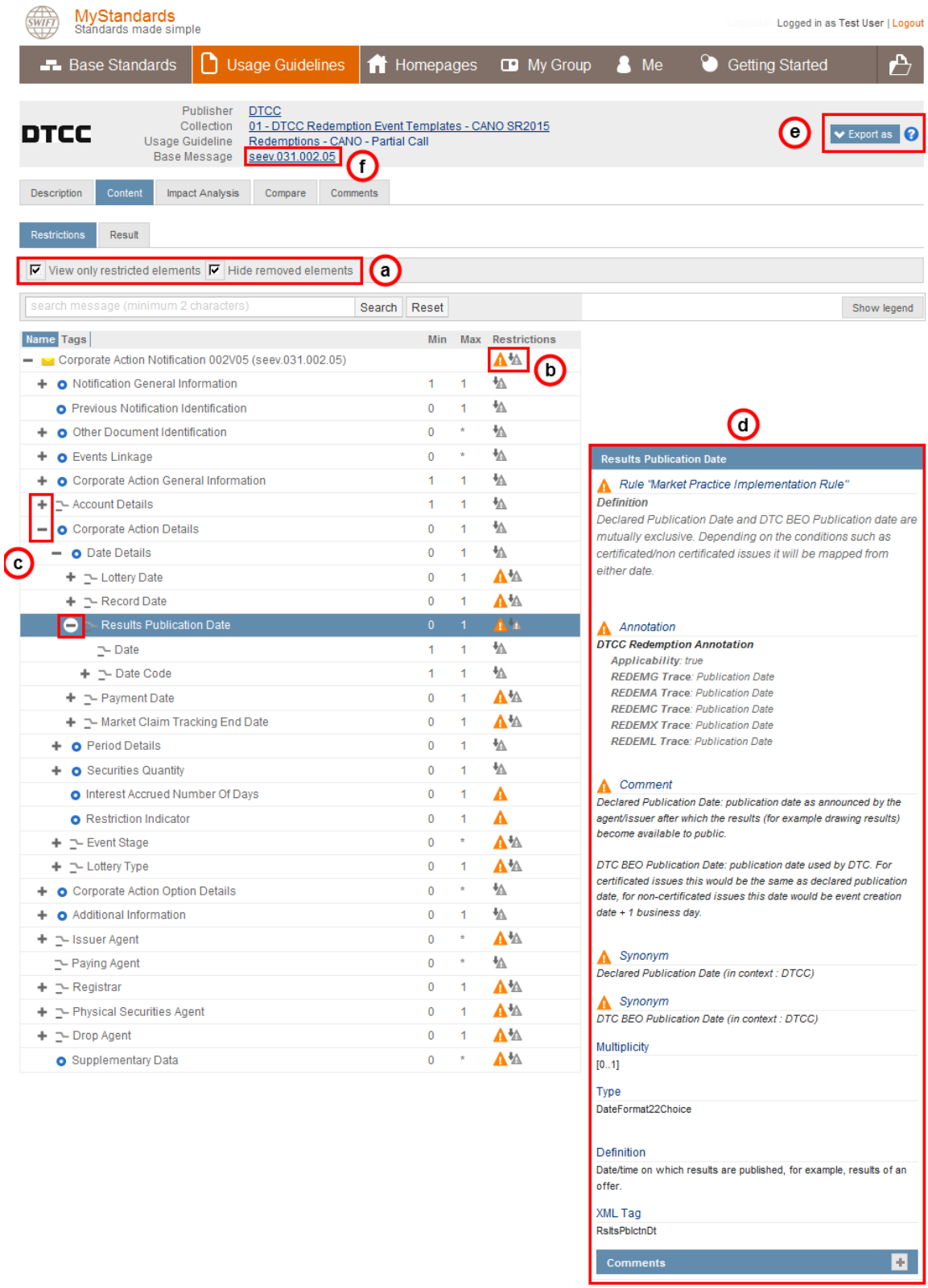
Click the link for the event template that you want to view.

You are brought to the **Description** tab for that template. Here, you can read a summary of the type of information covered in this event template.



Click the **Content** tab to view the template data.

The Content page contains the data elements as they pertain to this message for this event type.


MyStandards
Standards made simple
Logged in as Test User | Logout
Base Standards
Usage Guidelines
Homepages
My Group
Me
Getting Started
DTCC
Publisher DTCC
Collection 01 - DTCC Redemption Event Templates - CANO SR2015
Usage Guideline Redemptions - CANO - Partial Call
Base Message seev.031.002.05
Export as
Description
Content
Impact Analysis
Compare
Comments
Restrictions
Result
View only restricted elements
Hide removed elements
search message (minimum 2 characters)
Search
Reset
Show legend
Name Tags
Min
Max
Restrictions
Corporate Action Notification 002V05 (seev.031.002.05)
Notification General Information 1 1
Previous Notification Identification 0 1
Other Document Identification 0 *
Events Linkage 0 *
Corporate Action General Information 1 1
Account Details 1 1
Corporate Action Details 0 1
Date Details 0 1
Lottery Date 0 1
Record Date 0 1
Results Publication Date 0 1
Date 1 1
Date Code 1 1
Payment Date 0 1
Market Claim Tracking End Date 0 1
Period Details 0 1
Securities Quantity 0 1
Interest Accrued Number Of Days 0 1
Restriction Indicator 0 1
Event Stage 0 *
Lottery Type 0 1
Corporate Action Option Details 0 *
Additional Information 0 1
Issuer Agent 0 *
Paying Agent 0 *
Registrar 0 1
Physical Securities Agent 0 1
Drop Agent 0 1
Supplementary Data 0 *
a
b
c
d
e
f
Results Publication Date
Rule "Market Practice Implementation Rule"
Definition
Declared Publication Date and DTC BEO Publication date are mutually exclusive. Depending on the conditions such as certificated/non certificated issues it will be mapped from either date.
Annotation
DTCC Redemption Annotation
Applicability: true
REDEMG Trace: Publication Date
REDEMA Trace: Publication Date
REDEMC Trace: Publication Date
REDEMX Trace: Publication Date
REDEML Trace: Publication Date
Comment
Declared Publication Date: publication date as announced by the agent/issuer after which the results (for example drawing results) become available to public.
DTC BEO Publication Date: publication date used by DTC. For certificated issues this would be the same as declared publication date, for non-certificated issues this date would be event creation date + 1 business day.
Synonym
Declared Publication Date (in context : DTCC)
Synonym
DTC BEO Publication Date (in context : DTCC)
Multiplicity
[0..1]
Type
DateFormat22Choice
Definition
Date/time on which results are published, for example, results of an offer.
XML Tag
RsltsPblctnDt
Comments
feedback
Base Standards
Usage Guidelines
Homepages
My Group
Me
Getting Started
Terms of Use
swift.com
MT Standards
MX Standards

a) Click the **View only restricted elements** and **Hide removed elements** check boxes to limit your view to only those elements that actively pertain to this event type.

b) Orange triangles indicate that there is metadata available for this element. Click the element to view this additional information.
Gray triangles indicate that a change has been made to this element.

c) Click the **+** and **–** signs to drill down into data elements.

d) When you click on an element name, its metadata appears to the right of the element list.

- The top blue line states the full name of the element.
- Any **Rules** that apply to this element are listed out and clearly defined.
- An **Annotation** specifies the CCF origin for the element. In this example, you can see that the “Results Publication Date” has been used for Redemptions in five “REDEM” CCF files.
- A **Comment** presents any useful details about this element that are not covered by a rule or a definition.
- A **Synonym** tells you what this element was named when it was used in another context at DTCC. In this example, you can see that this same element was previously referred to by two other names.
- **Multiplicity** tells you the number of times that an element can be used. This indicator defines the minimum and maximum number of times that the element may be used in a message.
    - The initial number is the “Min” value. This defines whether the element is optional or required in the message. A value of “0” means that the element is optional; “1” means that the element is mandatory.
    - The second number (or “Max” value) refers to repeatability. A value of “0” means that the element can appear only once in the message. An asterisk (*) in this position means that the element may repeat any number of times.
- The **Type** specifies the format for this element.
- The **Definition** provides a glossary-level explanation for this element. See the Comments list (above) for further hints about specific usage.
- The **XML Tag** tells you what the element is named in the XML message. As opposed to the real name (provided at the top of this list), the tag delineates this element in the code for this message.
- When enabled, the **Comments** area allows users with the appropriate access level to comment on this data element.

e) Click **Export As** to export this message template in XML, Excel, or PDF format.

f) Click the **Base Message** link to access the original, unrestricted message. In this example, the link will bring you to the Description page for the general CANO message. It will not be limited by event type or usage.

PBS – ISO 20022 System Mapping for Redemptions

These PBS functions will be handled by the following ISO 20022 messages at the indicated points in the Redemptions life cycle.

Process	Announcement Process		Lottery Process		Projections		Allocation		Redemption Deposits/ Custody Processing
Message Type	**CCF**	**ISO**	**CCF**	**ISO**	**CCF**	**ISO**	**CCF**	**ISO**	**CCF only**
Publication Date	REDEM G, X, A	CANO CACN	*n/a*	CANO-E CAPA (NEWM) CAPC	*n/a*	*n/a*	*n/a*	*n/a*	RDCERT
Mainline (Lottery) Date	*n/a*	CANO CACN (Announce-ment updates)	REDEM L Reds sends message to ATP for security movement for segregation to 26/28 account		*n/a*	*n/a*	*n/a*	*n/a*	*n/a*
Payment Date – 5 (CCF) or PD – 7 (ISO) through Payment Date – 1	*n/a*	CANO CACN (Announce-ment Updates)	*n/a*	*n/a*	CASHPRJ CASHRPJ	CAPA (REPL) CAPC (REPL)	*n/a*	*n/a*	*n/a*
Payment Date	*n/a*	*n/a*	*n/a*	*n/a*	*n/a*	*n/a*	CASHSET CSHTA-G CSHRAL	CACO	CSHRAL
Post-Payment Date	*n/a*	*n/a*	*n/a*	*n/a*	*n/a*	*n/a*	CSHUNL, CSHEU-1 CSHDUN	CACO CAPA (REPL) for post-payment reversals CAPS (Unallocated redemption proceeds night of Payment Date CACO (Redemption Deposits)	

Redemption Event Messaging

In the initial phase of the project, only mandatory redemption events will be handled. Redemption events involving a choice of options will be addressed during the reorganization processing phase of the Corporate Actions Transformation initiative (please see the Out of Scope items for reference).

The ISO 20022 messages for Redemptions are the same that are used in the Entitlements and Allocations process for Distribution events, however:

- The messages have content specific to redemption events.
- Some of the messages are used for a different purpose. For example, the CAPA message is used in Redemptions for communicating lottery results. In Distributions, however, it is used for communicating projected balances, payments, and allocations.

Redemptions Messaging Terminology

Term	Definition
Affected Balance	The account-level called quantity of a lottery event. The portion of the account eligible balance that has been affected (“called”) by a lottery.
Corporate Action Event Type Code (CAEV)	The event type of the corporate action. The CAEV codes used for redemptions messaging are located here. For PDEF events, the event type code plus the extended DTCC extended event type code must be used together. For example, if the event type is PDEF, and the extended DTCC event type is PPRE, this signifies a partial pre-refunding. For redemptions-based messaging, the CAEV code identifies the SWIFT event type.
Corporate Action Event ID (CA ID)	The unique Corporate Action Event ID for each event with the exception of a supplemental lottery. A supplemental lottery will carry the same CA ID as the original lottery.
Concurrent Call	The situation in which two partial calls are announced with the same Redemption and/or Publication dates, but with different rates. A contra CUSIP is required in this scenario (previously, a contra CUSIP was only required for late announcements. Otherwise, the second redemption will be processed once the first redemption is mainlined).
Contra CUSIP	Some partial calls (e.g., concurrent calls, among others) do not segregate the called portion into a “Call with Interest” or “Call without Interest” account. The called portion is instead

Term	Definition
	segregated into the free account under the contra CUSIP that is assigned to the issue at the time of the lottery.
Defeased / Non-Defeased Indicator	This is an indicator type that appears under the New Security Issuance Indicator field. It accounts for two of the possible four values for a new security issue. It is used for partial defeasement event types, in which new securities are issued for the portion defeased. It indicates which CUSIPS will be defeased (the new CUSIP) and which CUSIPs will be non-defeased (the original CUSIP).
Event Stage	This is a code that defines a non-standard lottery process. It is used in conjunction with the Lottery Type field. "FULL" is the only value for this field that applies to Redemptions processing. It refers to the cancellation and re-run of an original lottery or an original and supplemental lottery. A subsequent lottery will be performed under a new event.
Final Paydown	The final distribution of principal due on a security, typically CMOs.
Lottery Swing Date	"Lottery Date" (originally "Mainline Date"). This describes the date on which called positions are moved into a segregated account or a contra CUSIP.
Lottery Type	Defines the type of lottery being run. Values are: **ORIG** The "Original Lottery" that has been announced for a specific amount and date. **SUPP** "Supplemental Lottery." The supplemental or additional called quantity on a previously announced original lottery.

<table>
<tr><th>Term</th><th>Definition</th></tr>
<tr><td>New Security Issuance Indicator</td><td>For partial defeasance or partial pre-refunding events, this field is used to indicate the type of CUSIP being issued. There are four possible values for this indicator:
<table>
<tr><td>Defeased</td><td>“DEFE.” A new security issued whereby funds have been placed in escrow by a trustee or agent on a portion of the outstanding balance of the original security on maturity date.</td></tr>
<tr><td>Non-defeased</td><td>“NDEF.” A new security issued that has not been defeased and the maturity date of the underlying security is unchanged.</td></tr>
<tr><td>Refunded</td><td>“REFU.” A new security has been issued and refunded to an earlier maturity date.</td></tr>
<tr><td>Non-refunded</td><td>“NREF.” A new security that has not been refunded and the maturity date of the of the original underlying security is unchanged.</td></tr>
</table>
All four indicators are applicable only in the frame of a partial defeasance (“PDEF”) corporate action event.</td></tr>
<tr><td>Obligated Balance</td><td>For partial call lottery (DRAW) events, that balance which has been called (“affected”) by lottery (based on the record date eligible balance) but is not available for redemption. This balance must be returned to DTCC.
For instance, if you have been called for 400 units but only have 300 available on hand, you have an obligated balance of 100 units.</td></tr>
<tr><td>Redemption Processing System (REDS)</td><td>DTC’s internal PTS function that was used to create all Redemption-related events (with the exception of maturities).</td></tr>
<tr><td>Refunded / Non-refunded Indicator</td><td>This is an indicator type that appears under the New Security Issuance Indicator field. It is used for partial prerefunded event types and indicates which CUSIPS will be refunded (CUSIPs bearing an earlier maturity date) and which CUSIPs will be non-refunded (CUSIPs bearing the same maturity date as the original event CUSIP).</td></tr>
</table>

Term	Definition
Reorg Inquiry for Participants (RIPS)	DTC's function on the Participant Terminal System (PTS) that communicates all redemption announcement and allocation information.
Unaffected Balance	The portion of the account eligible balance that has not been affected ("called") by a lottery.

Redemption Messaging Events

This phase of the Corporate Actions Transformation effort will cover the majority of redemption event types. Some redemption events will be out of scope until the reorganization processing phase.

Event Descriptions

Event Name	Event Description	Sub Event Name	Sub Event Description
Default (Interim / Final)	A notice of failure by the issuer to honor commitments made within the terms of the issued security. It usually relates to making timely payments of interest and principal as they come due. A payment may be made in lieu of reinstituting the original payments.		
		Interim Payment	Identifies an event that includes notification of an interim payment in lieu of the original commitment.
		Final Payment	Identifies an event that includes notification of a final payment in lieu of the original commitment.

Event Name	Event Description	Sub Event Name	Sub Event Description
Final Paydown (CMO)	The final distribution of principal due on a security, typically CMOs.		
Full Call	The security is redeemed for cash in its entirety on a date that is prior to the maturity date. The holders receive the principal amount of the security.		
Full Pre-Refunding	The exercise of a privilege by the issuer to repay, in full, any debt security prior to maturity when the issuer deposits assets in trust. This irrevocably restricts their use to satisfaction of the debt.		
Maturity	The final repayment, usually in cash, by an issuer for the entire issue or for remaining outstanding securities of a specific security on a specified date.		
		-	Non-specific maturity event.
		Securities	Identifies an event where the payment will be made in the form of securities.
Partial Call	Securities are redeemed by the issuer for cash, in part, before their scheduled maturity date. The outstanding amount of securities will be proportionally reduced		

Event Name	Event Description	Sub Event Name	Sub Event Description
	based on a specific percentage of holding. A lottery may be run where pooled securities are held.		
Partial Defeasance	The issuer sets aside cash in escrow to pay off a portion of the issue before the maturity date. New securities are issued for the portion defeased.		
Partial Pre-Refunding	Similar to a full pre-refunding, a partial pre-refunding is the exercise of a privilege by the issuer to repay, in part, any debt security prior to maturity when the issuer deposits assets in trust. This irrevocably restricts their use to satisfaction of the debt. New securities are issued for the portion prerefunded.		
Termination (UIT)	A security, usually a form of a derivative (e.g., ADR or UIT), for which the agent or issuer has decided to terminate the derivative based on a change to the underlying security/securities or a change in strategy.		
		-	Non-specific termination event.

Event Name	Event Description	Sub Event Name	Sub Event Description
		ADR	Identifies when the event security is an ADR.
		GDR	Identifies when the event security is a GDR.

In-Scope

Event Name	Function Code	SWIFT Event Type	DTC Extended Event Type	MAN / VOL / CHOS
Partial Call	74 (Corporate) 76 (Muni)	DRAW		MAN
Full Call	75 (Corporate) 77 (Muni)	MCAL		MAN
Full Pre-Refunding	77P, 77L (Late)	PDEF	FLRP	MAN
Final Paydown (CMO)	89	MCAL		MAN
Maturity	70 (CD) 75M (Corporate) 77M (Muni)	REDM		MAN
Default (Interim / Final)	86P (Interim) 86F (Final)	DFLT		MAN
Partial Defeasance	76D	PDEF	PDEF	MAN
Partial Pre-Refunding	76P	PDEF	PPRE	MAN
Termination (UIT) Term	87F	REDM	TMTN	MAN

Out-of-Scope

Event Name	Function Code	SWIFT Event Type	DTC Extended Event Type	MAN / VOL / CHOS
Maturity for Securities	93	REDM		MAN

Event Name	Function Code	SWIFT Event Type	DTC Extended Event Type	MAN / VOL / CHOS
Convertible Full Call Redemption	69	MCAL		CHOS
Convertible Maturity	69	REDM		CHOS
Partial Call Conversion	69P (Convertible Partial Call) 74 (Corporate Partial Call) 54 (Conversion)	MCAL		CHOS
Partial Mandatory Put with Option to Retain	65 (Partial Mandatory Put No Retainment) 65R (Put Retainment) 74 (Corporate Partial Call) 76 (MUNI Partial Call)	BPUT		CHOS

Lottery Events

ISO messaging for lottery events conforms to global market practice. Lottery events are announced in real time, and recissions and reversals are incorporated into the ISO workflow.

Lottery events include:

- Partial call,
- Partial defeasance, and
- Partial pre-refunding.

Partial calls result in cash paid for securities that are redeemed in part.

Partial defeasances and partial pre-refundings both result in the creation of new securities. Redemptions for these two lottery types are made into these new securities rather than in cash.

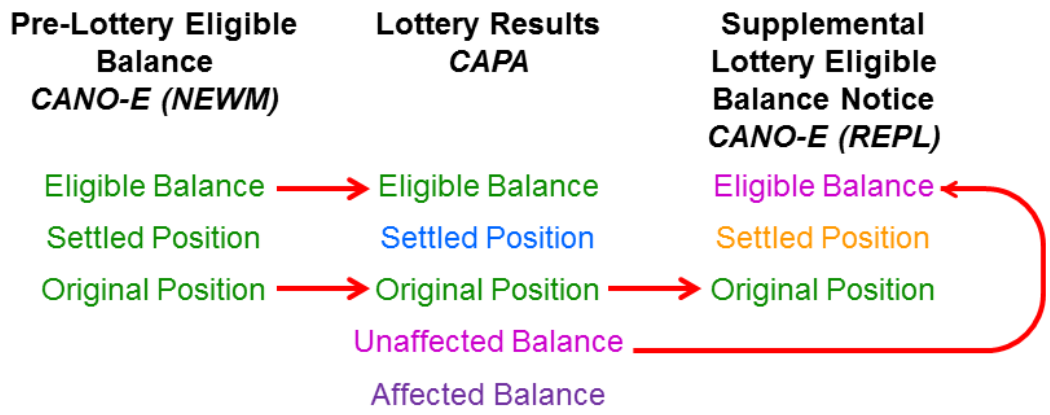
Account Balances and Lottery Events

The ISO 20022 messages contain several balance types to explain your position as it is affected by a corporate actions event.

Term	Definition
Eligible Balance	On the CANO-E, this is the amount eligible to be called based on the client's record date position. For supplemental lotteries, the eligible balance will be based on the unaffected position of the original lottery.
Settlement Position	The settlement position will normally equal your eligible position. As the balance maintained within your general position, settlement position may not equal eligible position if position has moved subsequent to record date capture. For lottery-based CAPA messages, this will be your remaining unaffected position. For situations in which an obligated position occurs due to going short, the settlement position will be indicated by a short (SHOR) distinction.
Original Position	Original position is generally equal to your eligible position. It will remain constant for the life of the event. On a supplemental call, the original position will indicate what your original balance was before the original call took place.
Unaffected Balance	This is the portion of the eligible position that is *not* called by the lottery. For partial pre-refundings, this is the non-refunded

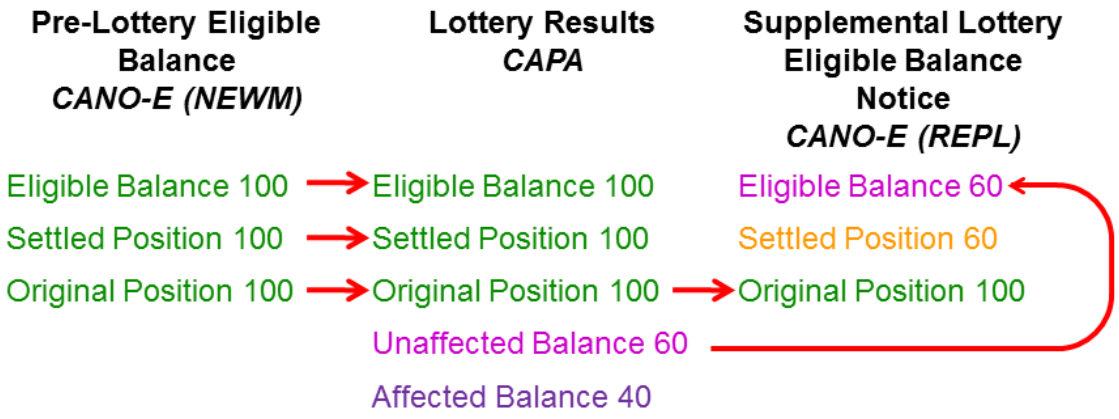
Term	Definition
	balance; for partial defeasements, this is the non-defeased balance.
Affected Balance	This is the portion of the eligible position that *is* called by the lottery. For partial pre-refundings, this is the refunded balance; for partial defeasements, this is the defeased balance.
Obligated Position	Obligated position occurs when the affected balance is greater than the settled position. This can happen when a call notice is received late and the prior record date position is greater than what is currently settled.

The balances appear in the Redemptions messages as follows:



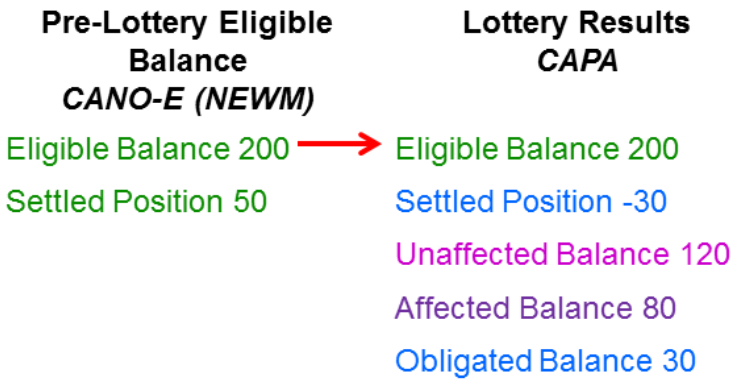
- The eligible balance is consistent through the CANO-E and CAPA.
- The unaffected balance from the CAPA becomes the eligible balance in a supplemental lottery.
- The affected and unaffected balances are reported on the CAPA. The original position is the same through the event's life cycle.
- The supplemental call is processed under the same event ID as the original call.

For example, Client A has an original eligible balance of 100. A standard lottery is run, followed by a supplemental lottery:



The eligible balance, settled position, and original position as stated on the CANO-E are all 100. After the lottery is run, 40 of the original 100 shares are affected by the lottery; 60 of the 100 shares are unaffected. After the first lottery settles, the unaffected balance of 60 becomes the new eligible balance for the supplemental lottery.

In the next example, a late call was announced with a prior publication date.



The client has an original eligible balance of 200 shares, based on the prior publication date. However, the client only has 50 shares on hand in settled position. As a result of the lottery, the client was called for 80 shares (affected balance) out of the original 200. This leaves the client with a settled position of -30, and therefore an obligated balance of 30 (the absolute value of the settled position).

Messages for Lottery Events

CANO-E Messages

CANO-E messages in their Redemptions usage only apply to lottery events: this pre-lottery balance notification is new to redemptions event handling. CANO-E messages specify your eligibility in an event before the lottery is run.

View the CANO-E section for further information.

CAPA Messages for Lottery Events

CAPA messages for lottery events inform you whether your position has been called or not.

- If your position has been called, the CAPA outlines your affected and unaffected position, the payment you can expect, and when you can expect it.
- If your position was not called in the lottery, you will still receive a CAPA lottery results message stating zero affected balance.
- If a supplemental call is announced, it will be processed under the same Corporate Action Event ID (COAF) but with a supplemental lottery type.

CAPA lottery result messages are sent five times per day.

View the CAPA section for further information.

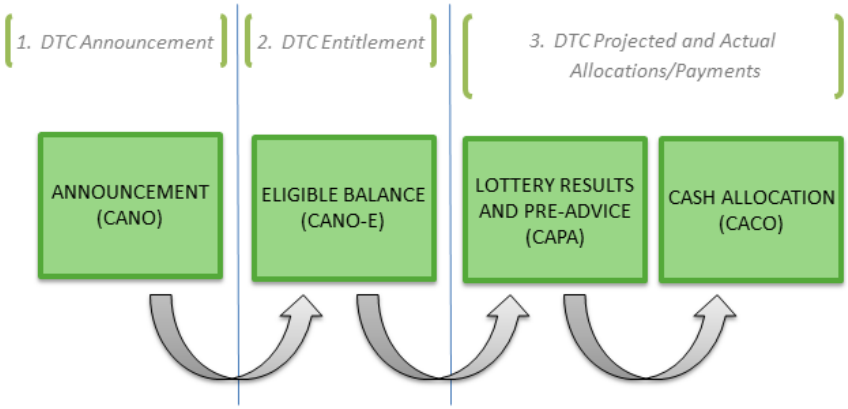
CAPC, CACO, CARE, and CAPS Messages for Lottery Events

The CAPC, CACO, CARE, and CAPS messages function the same as for non-lottery events: they surround the payment flow and serve the same function as in Distributions, but with the addition of specific fields to customize them for Redemptions usage.

These flows do not include exceptions such as event cancellations, lottery event reversals, supplemental calls, allocation reversals, unallocated funds, etc. They are meant to give the user a high-level overview of the message and business flows as a starting point for understanding ISO 20022 messaging.

Basic Message Flow for Lottery Events

At its simplest, the message flow for lottery events can be summed up as follows:



1. DTCC sends a **CANO** to the client that announces the corporate action lottery event.
2. On Publication Date, DTCC sends a **CANO-E** to inform the client of their position prior to the lottery being run on lottery date.
3. DTCC sends a **CAPA** message to the client containing the lottery results, affected and unaffected positions, and projected allocation based on the lottery results.
4. DTCC sends the client a **CACO** message to confirm movement of payment/allocation proceeds.

Often, particular situations deviate from this simplified flow: exceptions such as event cancellations, lottery event reversals, supplemental calls, allocation reversals, unallocated funds, etc. The following scenarios (as well as the scenario appendix) explain these situations in greater detail.

For specific message information, see this guide's chapter for that message type.

Sample Scenarios for Partial Calls

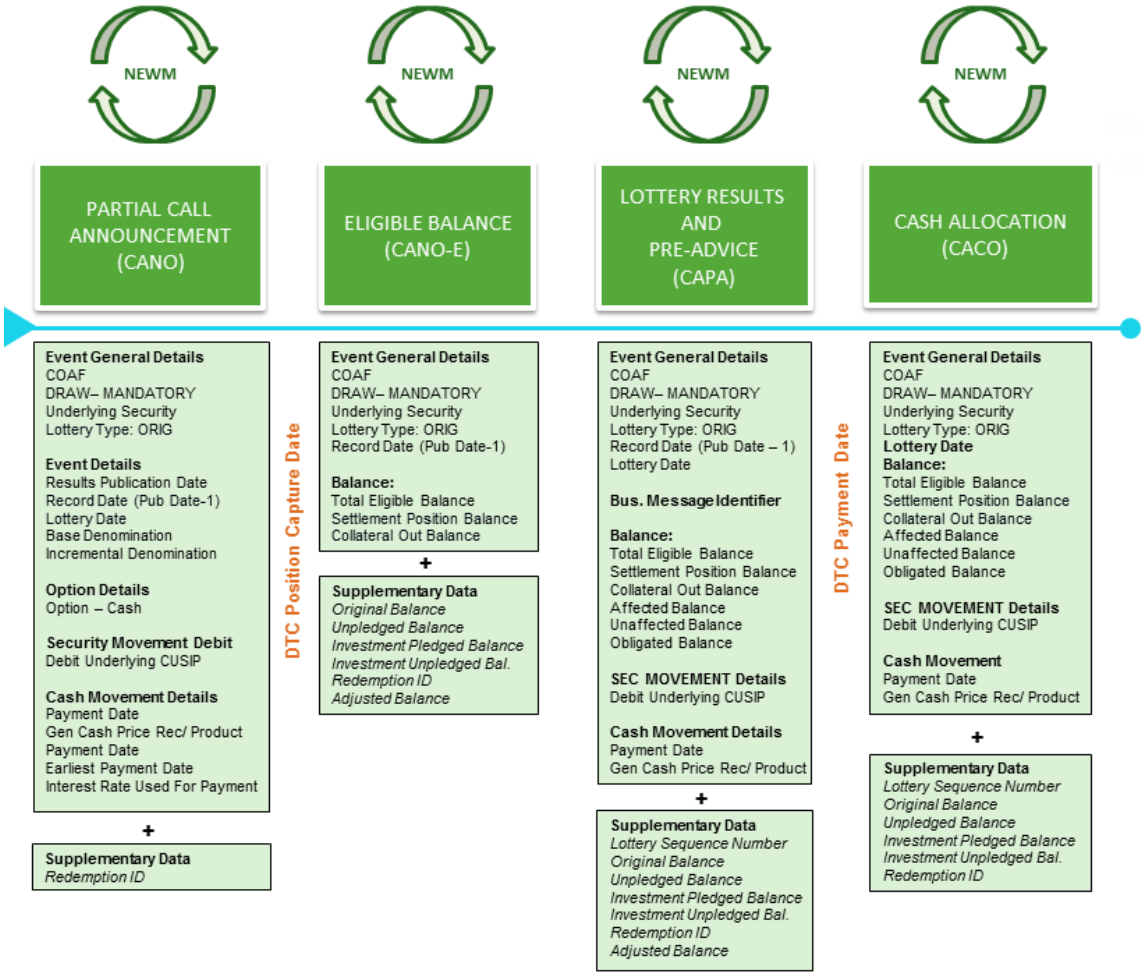
This section details several of the most common process flows for redemption event messaging for partial calls. While these are the simplest and most likely scenarios, there are many more that might occur.

For additional, more complex scenarios, please see Appendix A: Additional Scenarios. Note that, for consistency, scenarios are numbered based on their appearance in the Appendix.

For a complete list of data elements for each message, their origins, and their usage, please utilize the Message Usage Guidelines available at dtcc.com, the Learning Center, or My Standards at https://www2.swift.com/mystandards/.

Scenario 1: Partial Call (Basic)

This scenario illustrates the flow of messages that you can expect to receive for a partial call event. An announcement is made, your eligible balances are determined, the lottery is run, your affected balances and associated entitlements are determined, and your allocations are made and documented.



Scenario 1: Partial Call

The process starts with the Partial Call Announcement message (**CANO**). This message presents you with details about the event, including record date, CUSIP, and lottery date. The Redemption ID is given in the message extension.

The CANO is followed by the Eligible Balance message (**CANO-E**). This message provides information about your eligible balance prior to the lottery being run. Your total eligible balance is contained in the main body of the message, while additional balances describing the position you may have can be found in both the core message and the message extension (when applicable). You are informed of your eligible position based on the details of the partial call.

The **CAPA** message is sent after the lottery has been run. This message has two purposes.

- First, it informs you of the DTC lottery results.
- Based on these results, this message also explains what portion of your eligible balance was affected (“called”) by the lottery, and what you can therefore expect to see in cash as a result of this event.
  The CAPA message also specifies the payment date and payment rate (if available) in the credit cash movement. The message shows a debit projection of the underlying CUSIP.

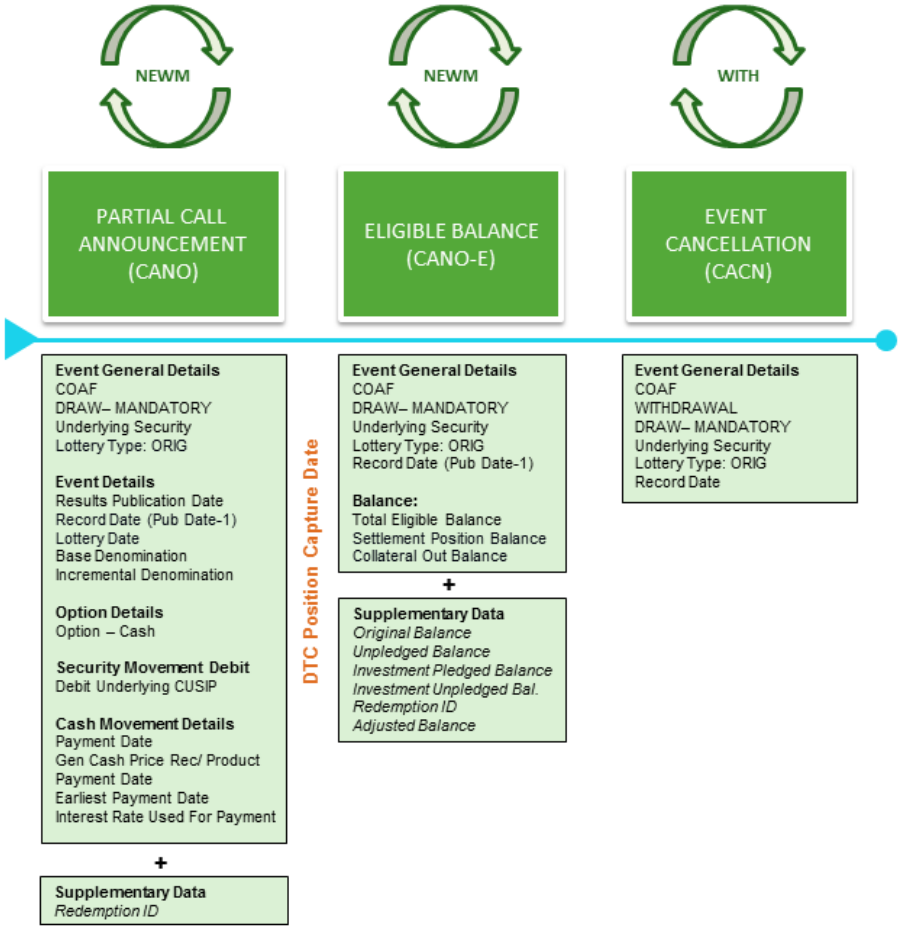
The first CAPA sent is always a CAPA NEWM, or “new message.” CAPA REPL (“replacement”) messages are sent if any information on the CAPA NEWM has changed, such as the rate.

Finally, the CACO message serves as a payment confirmation for the event. On payment date, your underlying CUSIP is debited and cash is moved to your account. The CACO message details the payment information regarding the partial call as well as lottery detail.

Scenario 2: Cancellation of a Partial Call (Pre-Lottery)

This scenario demonstrates the message flow for a situation in which an announcement was made for an event, but the event was canceled *before* the lottery was run.

In this case, you are informed of your eligibility, but the event is canceled before any determination has been made regarding your affected position.

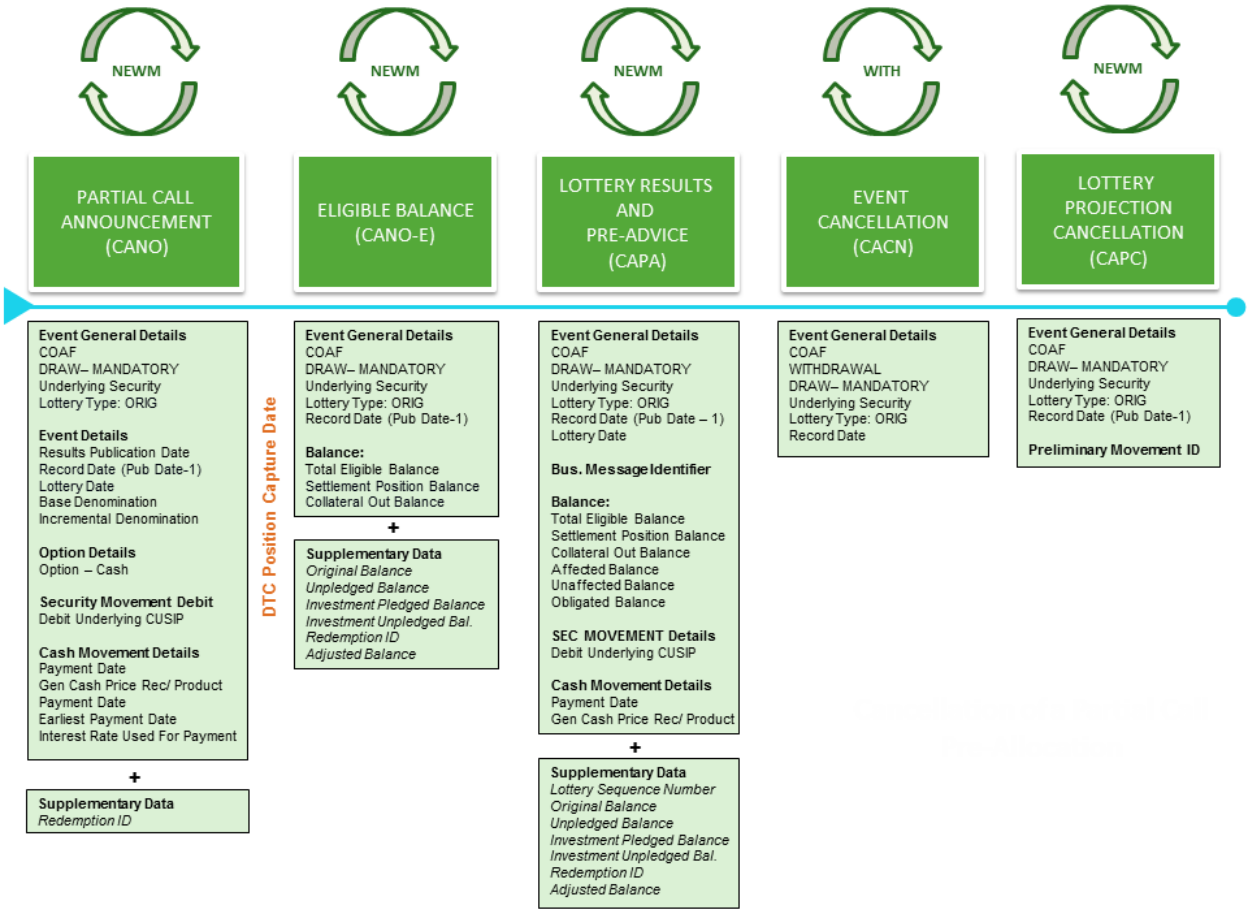


Scenario 2: Cancellation of a Partial Call (Pre-Lottery)

The **CANO** and **CANO-E** messages are sent out as for a basic partial call. However, before the **CAPA** gets sent, a **CACN** message informs you that the event will not take place.

Scenario 3: Cancellation of a Partial Call (Pre-Allocation)

As in Scenario 2, this scenario deals with the cancellation of a partial call event. In this case, however, the cancellation occurs *after* the lottery has been run but *before* the cash has been allocated.



Scenario 3: Cancellation of a Partial Call (Pre-Allocation)

The **CANO**, **CANO-E**, and **CAPA** messages are sent out as for a basic partial call: you are not only informed of the event and your eligible balance, but the lottery has been run and you are informed of your affected balance, the rate (if known), the projected debit to your underlying CUSIP, your projected allocation, and the payment date.

This time, the event is canceled between the pre-advice and the allocation. Since the lottery has already been run and the allocation has already been projected, there are two types of cancellation messages that are sent.

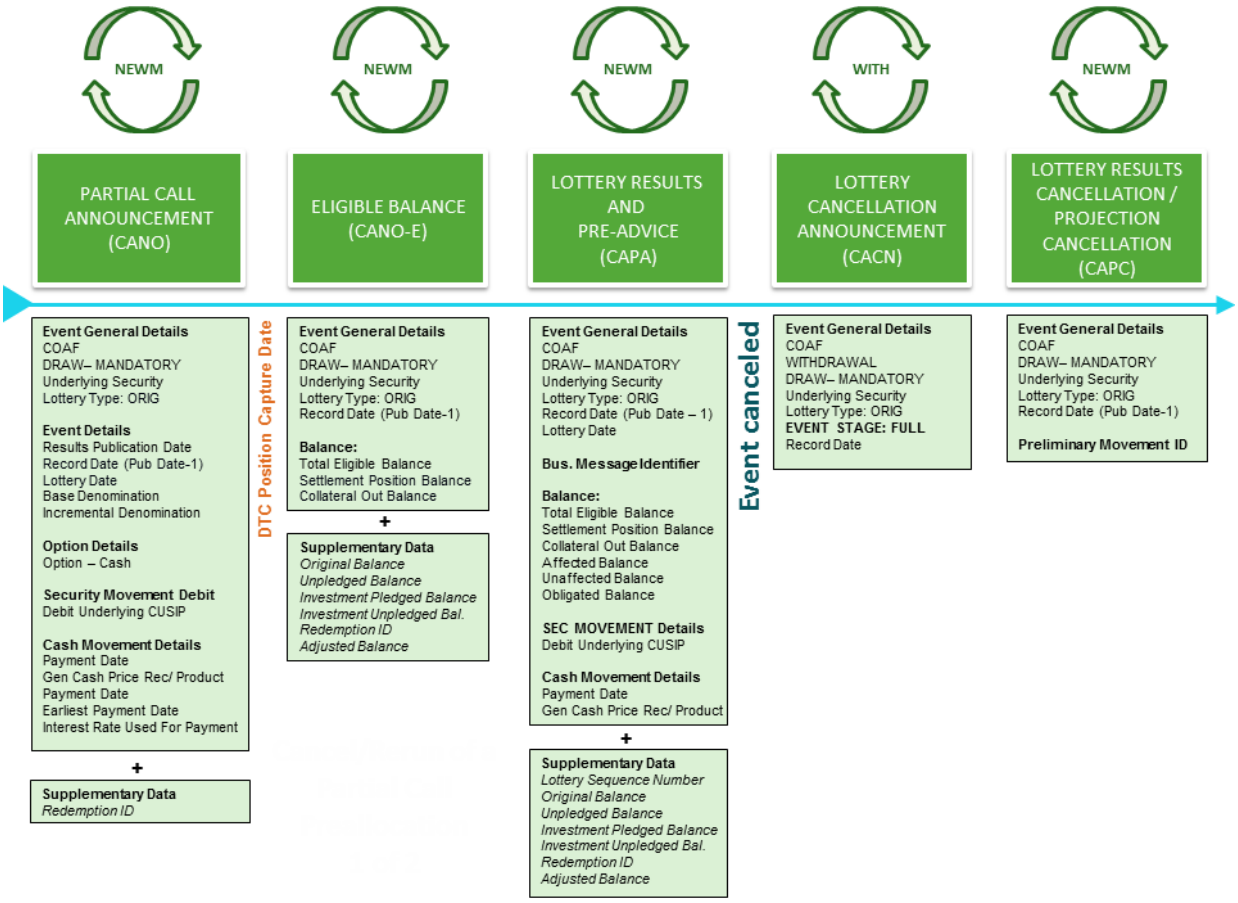
The Event Cancellation (**CACN**) message cancels the CANO message: it is sent to inform you that the event itself has been canceled. This refers only to the event, not to the lottery.

The projection itself – that is, the lottery results and how they affect your position – must be canceled as well. The Lottery Projection Cancellation (**CAPC**) message retracts the CAPA: it informs you that the lottery results have been canceled.

Scenario 6: Cancellation and Rerun of a Partial Call [2]

As in Scenario 3, the event is canceled post-lottery and pre-allocation. As before, the event is withdrawn and must be reversed.

Here, however, a new event will take the place of the initial event.



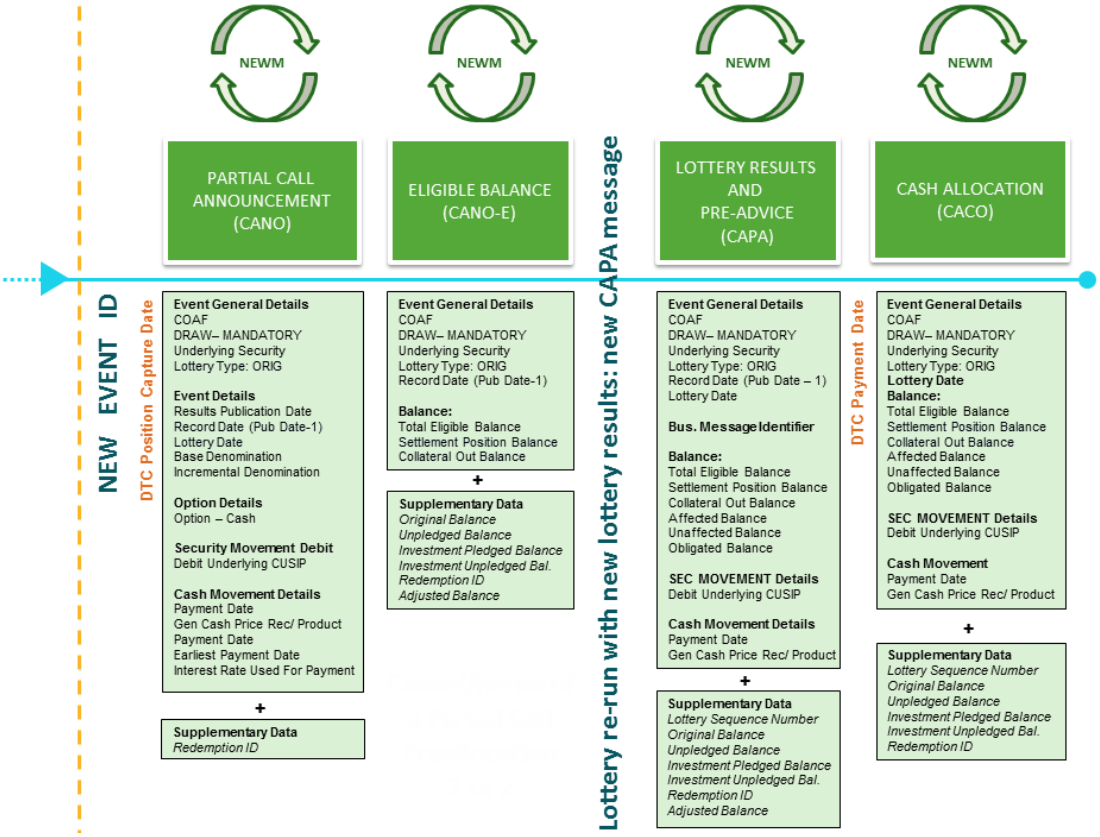
Scenario 6a: Cancellation and Rerun of a Partial Call: 1 of 2

The first portion of this cancellation happens as in Scenario 3: a **CANO** message announces the event, a **CANO-E** message informs you of your eligibility, a **CAPA** message informs you of the lottery results and your affected balance, and a **CACN** message cancels the initial event.

The CACN, however, contains an event stage indicator that informs you that this is a non-standard lottery process. It is used in conjunction with the Lottery Type. The value "FULL" refers to the cancellation and re-run of an original lottery or an original and supplemental lottery. A subsequent lottery will be performed under a new event.

[2] Please note that all scenario numbers are consistent with the scenarios in Appendix A.

After the cancellation, a new event is announced via a CANO message, as was indicated by the event stage within the CACN message. This CANO contains the details for the replacement event.



Scenario 6b: Cancellation and Rerun of a Partial Call: 2 of 2

The process continues from this point as for a regular Partial Call.

The lottery is re-run and a new CAPA is sent, informing you of the lottery results and the effect the lottery will have on your position and balances.

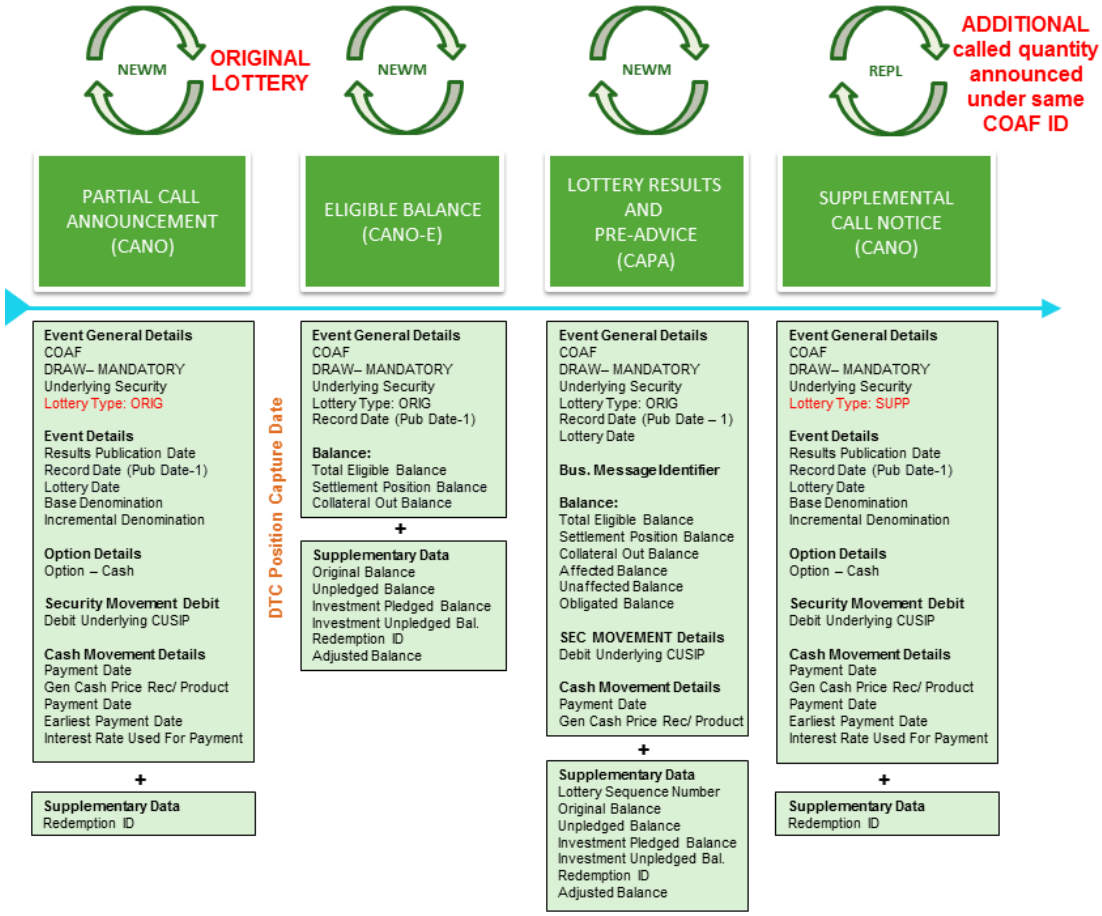
On the new Payment Date, all allocations are made and a **CACO** message is sent as a payment confirmation for the event. On payment date, your underlying CUSIP is debited and cash is moved to your account.

Scenario 8: Supplemental Lottery [3]

Supplemental lotteries are additional lotteries run on an individual event when the issuer needs to call more of the security. They are processed under the same Event ID as the original lottery. In the event messages, they can be distinguished by a value of "SUPP" for the Lottery Type element.

The eligible balance is based on the unaffected balance of the original lottery. Please see the Account Balances section for more information on balance flows.

The example that follows is of a supplemental lottery that has been run *after* an original lottery has been run but *before* the cash has been allocated.



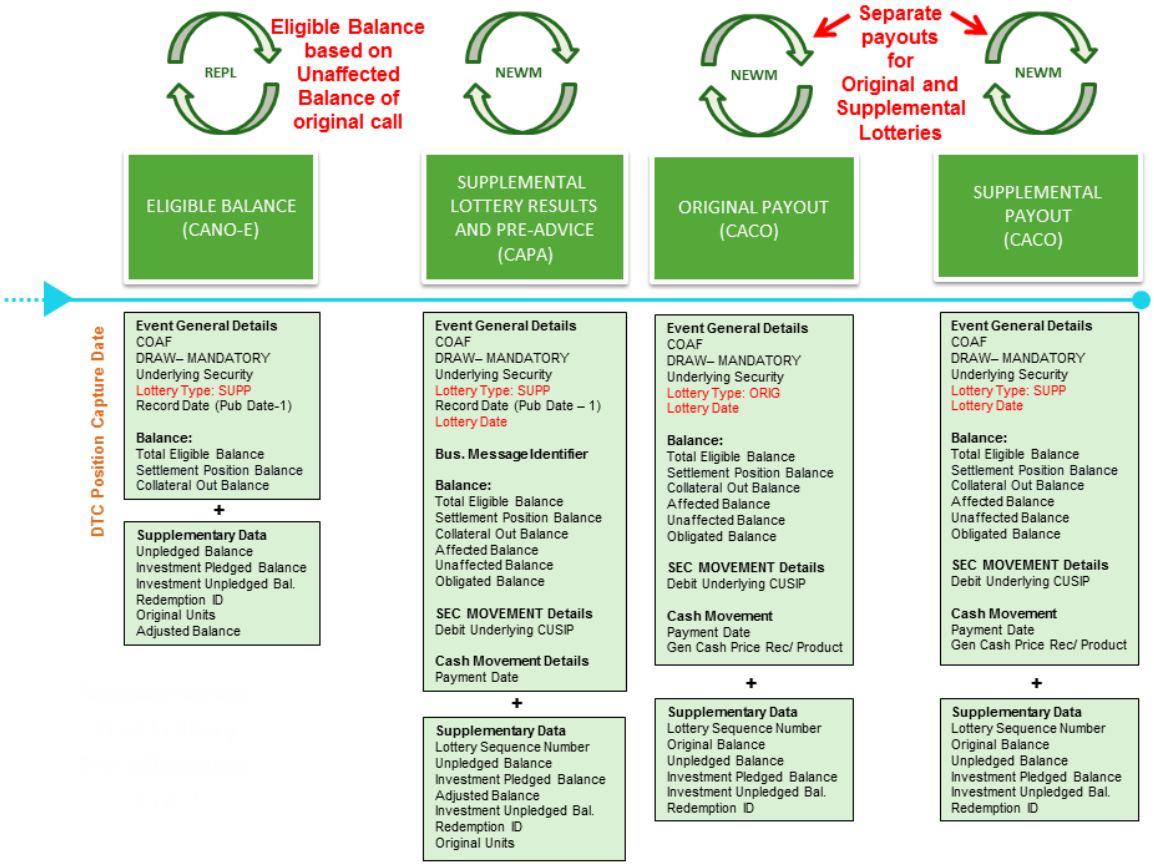
Scenario 8a: Supplemental Lottery (Post-Lottery, Pre-Allocation): 1 of 2

A partial call occurs as usual: the **CANO**, **CANO-E**, and **CAPA** messages are sent out. You are informed of the event and your eligible balance, the lottery is run, and you are informed of your affected balance, the rate (if known), the projected debit to your underlying CUSIP, your projected allocation, and the payment date.

[3] Please note that all scenario numbers are consistent with the scenarios in Appendix A.

After you receive the CAPA with the lottery results, you receive an announcement message for a supplemental lottery on the same event. This second CANO-E specifies the supplemental lottery with the Lottery Type "SUPP."

This scenario continues with the following diagram (8b).



Scenario 8b: Supplemental Lottery (Post-Lottery, Pre-Allocation): 2 of 2

A second CANO-E (REPL) is sent; this one applies to the supplemental lottery. It specifies your eligibility based on the *original* lottery. Your unaffected balance in the original lottery becomes your eligible balance for the supplemental.

After the supplemental lottery is run, a CAPA message is sent that details the lottery results. It does not replace the CAPA that was sent on the original lottery; the results detailed here are for the supplemental lottery only. The CAPA message will contain the original Event ID.

Two CACO messages (also containing the original Event ID) are then sent after pay date: one to confirm payment for the original lottery, and one to confirm payment for the supplemental. The Lottery Type element specifies which lottery the message applies to: "ORIG" for the original lottery and "SUPP" for the supplemental.

Sample Scenarios for Partial Defeasance and Partial Pre-Refunding

This section details several of the most common process flows for redemption event messaging for partial defeasances and partial pre-refundings.

These events involve lottery processing but do not result in cash allocations. Instead, an issuer defeases a portion of its outstanding debt into two securities: one for the defeased security and one for the non-defeased security. For a partial pre-refunding, the issuer partially refunds a portion of its outstanding balance to an earlier maturity date, resulting in two new securities: one for the refunded maturity and one for the non-refunded maturity.

- The “refunded” or “defeased” security represents the portion that was called into early maturity (or that is guaranteed payment for that portion of the security at the time of maturity).
- The “non-refunded” or “non-defeased” security represents the portion that retains the original maturity date.

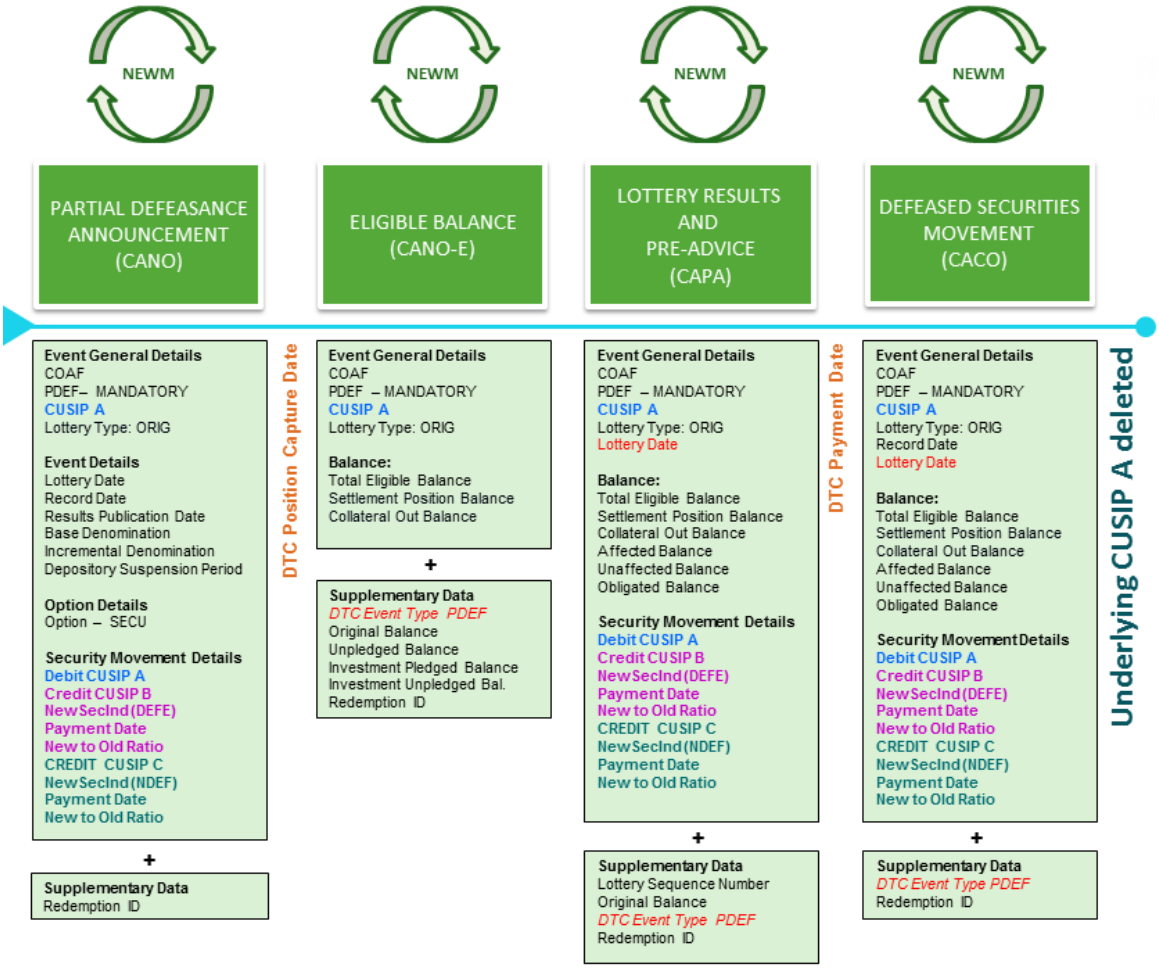
While these are the simplest and most likely scenarios, there are many more that might occur.

For additional, more complex scenarios, please see Appendix A: Additional Scenarios. Note that, for consistency, scenarios are numbered based on their appearance in the Appendix.

For a complete list of data elements for each message, their origins, and their usage, please utilize the Message Usage Guidelines available at dtcc.com, the Learning Center, or My Standards at https://www2.swift.com/mystandards/.

Scenario 18: Partial Defeasance[4]

In the case of a partial defeasance, the issuer sets aside cash in escrow to pay off a portion of the issue. The original CUSIP is surrendered and new securities are issued for the portion defeased.



Scenario 18: Partial Defeasance

The **CANO** message identifies the CUSIP that is being defeased (here, CUSIP A). In the Security Movement Details, you can see that CUSIP A is being debited and that two new CUSIPS are being created.

- CUSIP B is identified as a new security for the defeased portion. You can see the earlier payment date for CUSIP B as well as the new-to-old ratio.
- CUSIP C is identified as a new security for the non-defeased portion. It retains the original payment date. You can see the new-to-old ratio here as well.

A **CANO-E** message informs you of your eligibility. The only CUSIP relevant here is CUSIP A, the original security.

[4] Please note that all scenario numbers are consistent with the scenarios in Appendix A.

Next, the lottery is run and a **CAPA** message is sent to inform you of the lottery results. Since the original CUSIP is being replaced by two new CUSIPS – defeased and non-defeased – you will have two new balances, one in each CUSIP.

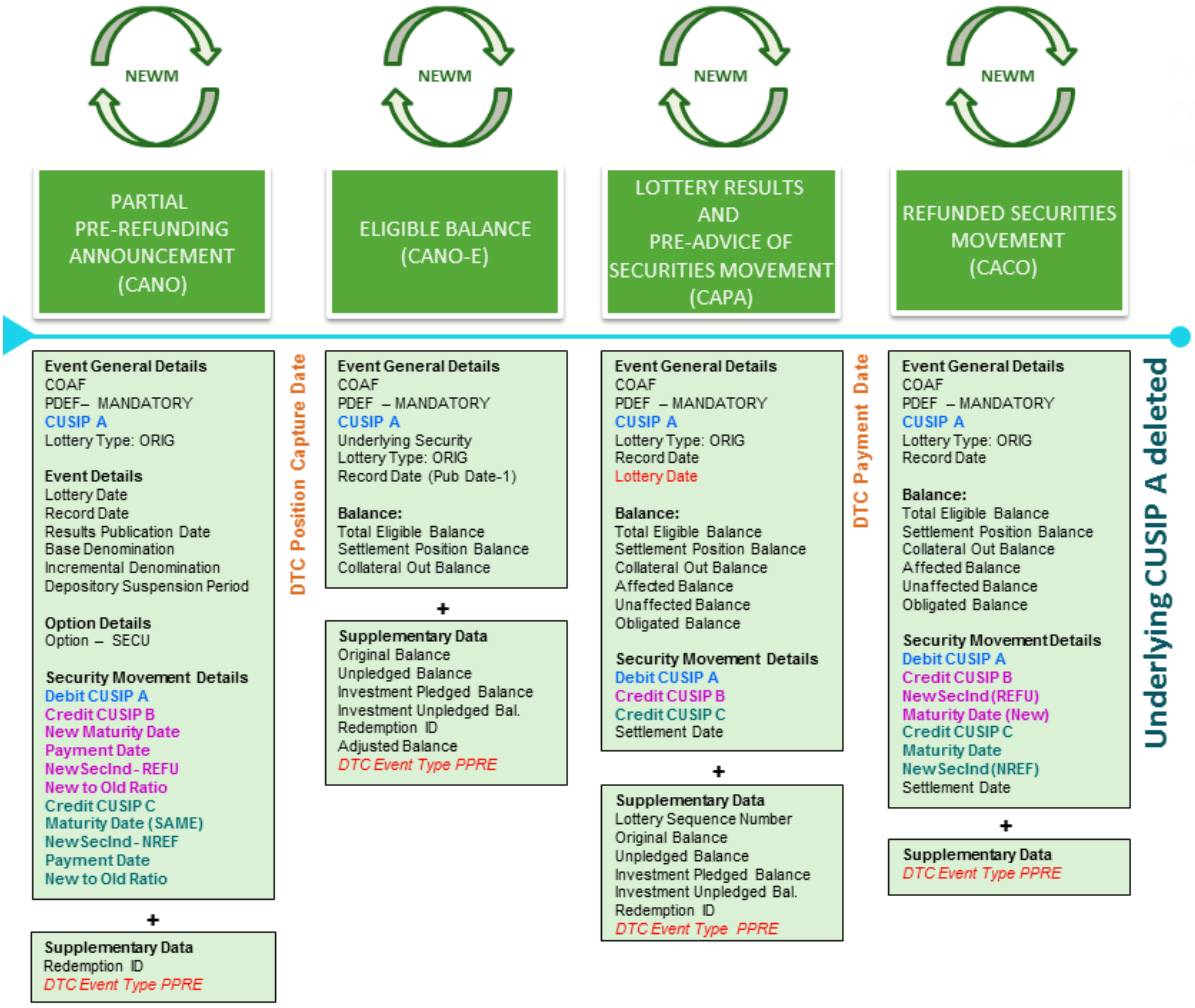
- Your affected balance becomes your balance in CUSIP B, the defeased CUSIP.
- Your unaffected balance becomes your balance in CUSIP C, the non-defeased CUSIP.
- Your entire balance in CUSIP A is debited.

Additionally, if your balance in the original security decreased between the record date and the lottery date (for instance, if you delivered out shares after record date), your obligated balance is noted on the CAPA.

After all shares have been moved, a **CACO** message confirms the movement of all shares into the new defeased and non-defeased securities.

Scenario 14: Partial Pre-Refunding[5]

In the case of a partial pre-refunding, the issuer has exercised its privilege to repay part of the debt security prior to maturity. The lottery determines how much of your balance in the original security will be affected. Functionally, it is very similar to a partial defeasance. The original CUSIP is surrendered, and new securities are issued for the portion refunded and the portion non-refunded.



Scenario 14: Partial Pre-Refunding

The **CANO** message identifies the CUSIP that is being partially refunded (here, CUSIP A). In the Security Movement Details, you can see that CUSIP A is being debited and that two new CUSIPS are being created.

- CUSIP B is identified as a new security for the refunded portion. You can see the earlier payment date for CUSIP B as well as the new-to-old ratio.
- CUSIP C is identified as a new security for the non-refunded portion. It retains the original payment date. You can see the new-to-old ratio here as well.

[5] Please note that all scenario numbers are consistent with the scenarios in Appendix A.

A **CANO-E** message informs you of your eligibility. The only CUSIP relevant here is CUSIP A, the original security.

Next, the lottery is run and a **CAPA** message is sent to inform you of the lottery results. Since the original CUSIP is being replaced by two new CUSIPS – refunded and non-refunded – you will have two new balances, one in each CUSIP.

- Your affected balance becomes your balance in CUSIP B, the refunded CUSIP.
- Your unaffected balance becomes your balance in CUSIP C, the non-refunded CUSIP.
- Your entire balance in CUSIP A is debited.

Additionally, if your balance in the original security decreased between the record date and the lottery date (for instance, if you delivered out shares after record date), your obligated balance is noted on the CAPA.

After all shares have been moved, a **CACO** message confirms the movement of all shares into the new refunded and non-refunded securities.

Non-Lottery Events

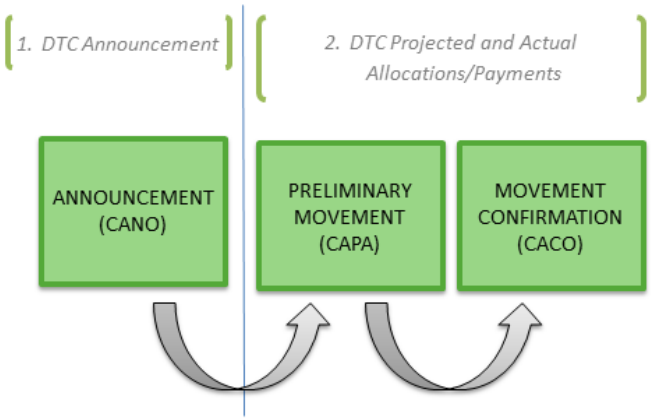
As with all corporate action events, a **CANO** message announces the event that is taking place. No CANO-E message is sent for non-lottery redemption events. The **CAPA** message (sent on Payment Date – 7) informs you of the amount you will be paid on payment date.

The **CAPC**, **CACO**, **CARE**, and **CAPS** messages surround the payment flow. They function much the same as they do for Distributions, but with additional fields that make the messages specific to the Redemptions flow.

Non-lottery events include:

- Full Call,
- Final Paydown,
- Termination, and
- Default.

Basic Message Flow for Non-Lottery Events



Generally, non-lottery events have a simpler message flow than lottery events. Barring cancellations and reruns, events such as full calls, maturities, UIT terminations, and partial pre-refundings all follow this flow:

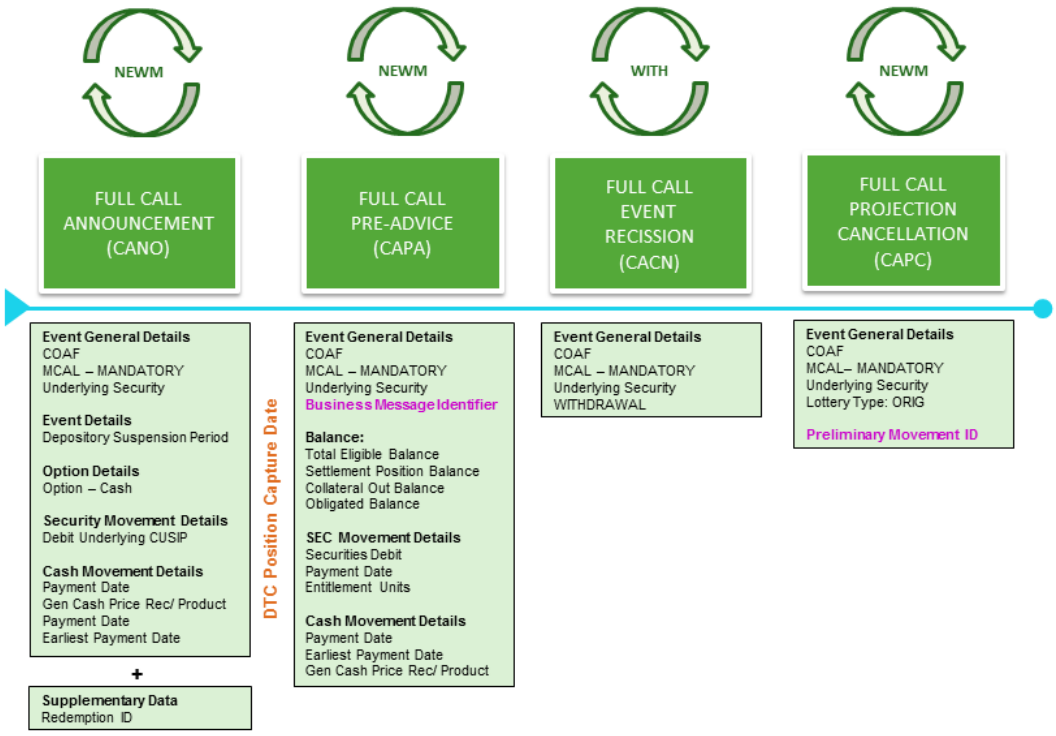
1. DTCC sends a **CANO** to the client that announces the corporate action event.
2. DTCC sends a **CAPA** message to the client projecting the associated payment/allocation, including balance and movement details.
3. DTCC sends the client a **CACO** message to confirm movement of payment/allocation proceeds.

The following subsections detail some common exceptions to this flow. For more exceptions and alternate process flows, please see Appendix A.

Sample Scenarios for Non-Standard, Non-Lottery Events

Scenario 26: Full Call Cancellation (Pre-Allocation)[6]

The security issuer announces a full call: all shares of a security are called back for redemption by the issuer. Before the redemption occurs, however, the event is rescinded.



Scenario 26: Full Call Cancellation (Pre-Allocation)

The **CANO** and **CAPA** messages are sent out as for a basic full call: you are informed of the event, the projected debit to your underlying CUSIP, your projected allocation, and the payment date.

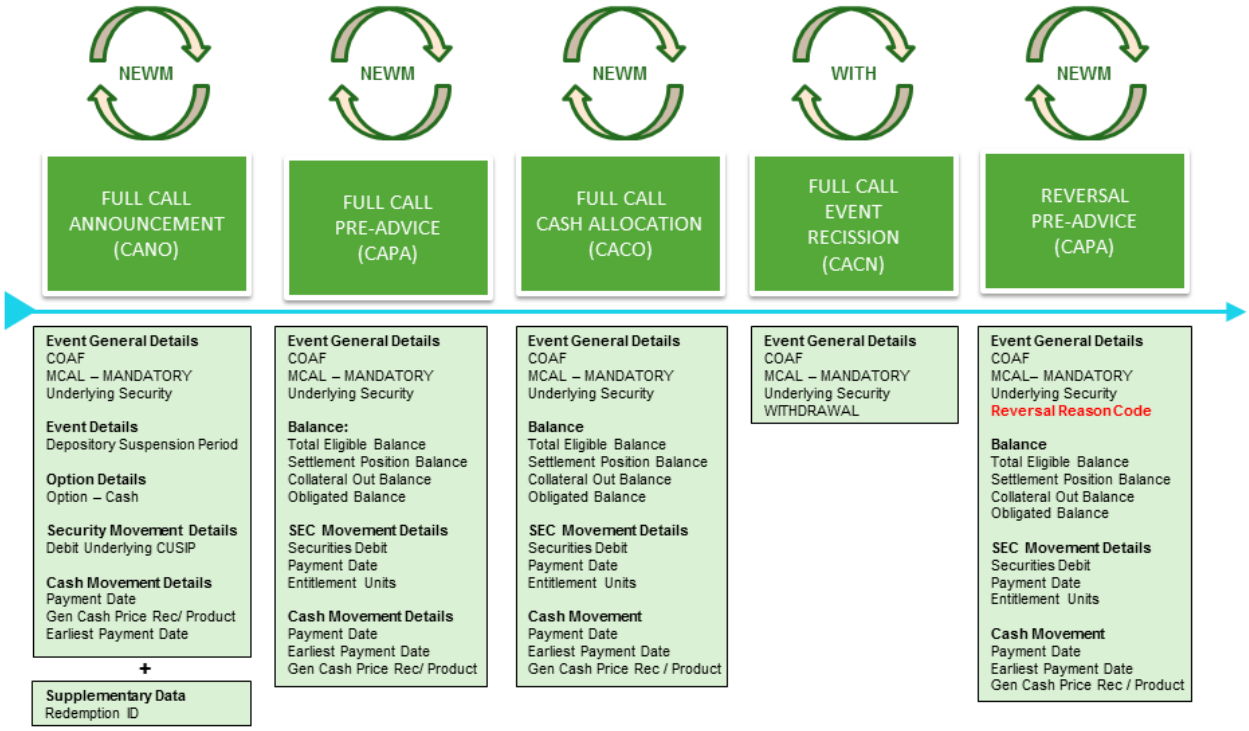
In this case, though, the event is canceled between the pre-advice and the allocation. Since the allocation has been projected, there are two cancellation messages that are sent by DTCC:

- The Event Cancellation (**CACN**) message corresponds to the CANO: it is sent to inform you that the event itself has been rescinded and will no longer take place. The
- The Projection Cancellation (**CAPC**) message corresponds to the CAPA: it informs you that the projected allocation will not take place. The Preliminary Movement ID has the same value as the Business Message Identifier on the CAPA.

[6] Please note that all scenario numbers are consistent with the scenarios in Appendix A.

Scenario 27: Full Call Cancellation (Post-Allocation)

This scenario deals with the cancellation of a full call event. In this case, however, the cancellation occurs on the *same day after* the cash has been allocated.



Scenario 27a: Full Call Cancellation (Post-Allocation): 1 of 2

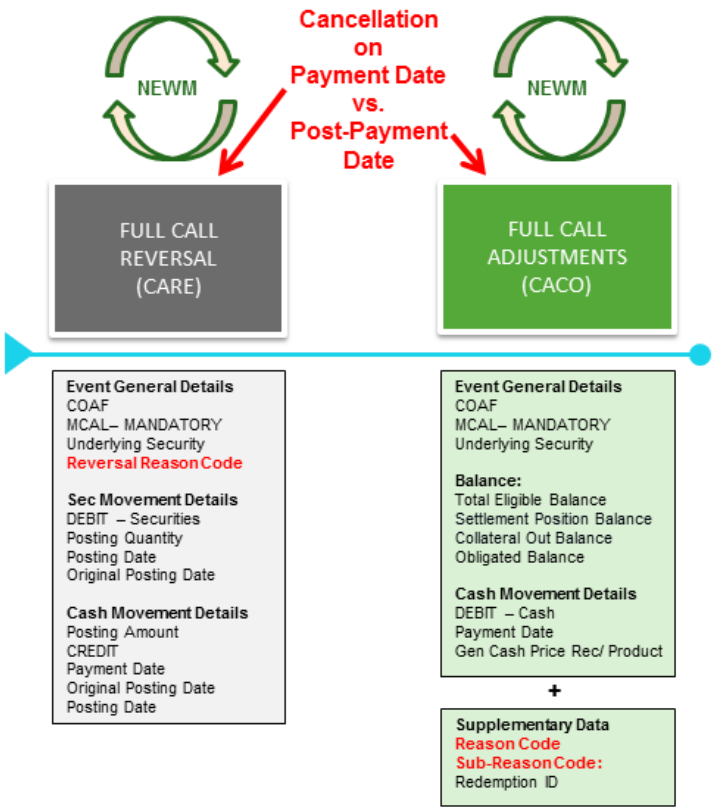
The **CANO** and **CAPA** messages are sent out as for a basic full call: you are not only informed of the event, but also of the affected balance, the rate (if known), the projected debit to the underlying CUSIP, the projected allocation, and the payment date.

On payment date, allocation is made and the **CACO** message serves as a payment confirmation for the event. On payment date, the underlying CUSIP is debited and cash is moved to your account.

At this point, however, the event is canceled. A **CACN** message is sent to rescind the event that was originally announced in the CANO.

After the event is rescinded, it needs to be reversed. A new CAPA is sent after the CACN, detailing what it is that will be reversed. Note that the details of the CAPA for the reversal mirror the CAPA for the event: they reflect what is *being* reversed, not what will happen as a *result* of the reversal.

This scenario concludes in the next diagram.



Scenario 27b: Full Call Cancellation (Post-Allocation): 2 of 2

Note: The CARE message in gray (above) is not currently in use. In the near future, it will be used for same-day allocation reversals. At the moment, all post-allocation reversals – same-day or otherwise – are made via the CACO message.

The CACO message presents the reversal details *after* the allocation has been reversed. Note that the details represent opposite movement from the CAPA messages: cash is debited *from* and securities are credited *to* your account.

Message Subscriptions and Timing

Redemptions messages will be sent to you based on your subscriptions. The timing for each is determined by your subscription options. Subscription options are based on event types rather than asset types.

The following tables describe message subscription options and their related times, as well as general processing times and holiday schedules.

Subscription Options: Lottery Events

All times are given in Eastern Standard Time.

Message	Message Times	Notes
CANO-E	**Via file:** • 12:30 a.m. • 1:45 p.m. • 5:30 p.m. • 6:50 p.m. **Real time:** • 8:00 a.m. – 5:30 p.m. • 6:50 p.m. • 12:30 a.m.	1. CANO-E messages apply to lottery events only. 2. Messages are available with or without Position Adjustment (Interim Accounting). 3. A time stamp in the Business Application Header (BAH) allows you to verify message order.
CAPA	Available via both file and real time at: • 12:30 a.m. • 10:45 a.m. • 1:30 p.m. • 2:30 p.m. • 3:30 p.m. CAPA REPL (replacement) messages are available after mainline date at 1:30 a.m.	*N/A*

Message	Message Times	Notes
CAPC	**Via file**: • 1:30 a.m. **Real time**: • Hourly 10:30 a.m. – 6:30 p.m. • 1:30 a.m.	1. A CAPC subscription will always require a CAPA subscription as well. 2. Conversely, a CAPA subscription does not require CAPC subscription. However, if you subscribe to CAPA messages, it is suggested that you subscribe to CAPC messages. 3. A time stamp in the Business Application Header (BAH) allows you to verify message order.
CACO CARE	**Via file:** • 12:30 a.m. • 1:30 p.m. • 2:30 p.m. • 3:30 p.m. • 4:00 p.m. **Real time:** • Every 20 minutes between 8:20 a.m. and 4:30 p.m.	A time stamp in the Business Application Header (BAH) allows you to verify message order.
CAPS	**Via file:** • 4:00 p.m. • 5:00 p.m. • 7:00 p.m. **Real time:** • Hourly between 1:00 p.m. and 7:00 p.m.	1. The CAPS message is sent based on the CAPA that was previously sent. 2. Reason codes are provided to explain why a given event was not allocated. 3. A time stamp in the Business Application Header (BAH) allows you to verify message order.

Subscription Options: Non-Lottery Events and Maturities

Message	Message Times	Notes
CANO-E	*Not available for these events*	*Not available for these events*
CAPA	Available via both file and real time at: • 1:30 a.m.	1. CAPA messages are sent on Payment Date – 7 for CAPA NEWM (new messages). 2. Between Payment Date – 6 and Payment Date – 1, CAPA REPL (replacement messages) are sent.
CAPC	**Via file**: • 1:30 a.m. **Real time**: • Hourly 10:30 a.m. – 6:30 p.m. • 1:30 a.m.	1. A CAPC subscription will always require a CAPA subscription as well. 2. Conversely, a CAPA subscription does not require CAPC subscription. However, if you subscribe to CAPA messages, it is suggested that you subscribe to CAPC messages. 3. A time stamp in the Business Application Header (BAH) allows you to verify message order.
CACO **CARE**	**Via file:** • 4:00 p.m. **Real time:** • Every 20 minutes between 8:20 a.m. and 4:30 p.m.	A time stamp in the Business Application Header (BAH) allows you to verify message order.
CAPS	**Via file:** • 4:00 p.m. • 5:00 p.m. • 7:00 p.m. **Real time:** • Hourly between 1:00 p.m. and 7:00 p.m.	1. The CAPS message is sent based on the CAPA that was previously sent. 2. Reason codes are provided to explain why a given event was not allocated. 3. A time stamp in the Business Application Header (BAH) allows you to verify message order.

Weekly Messaging Times

Generally, entitlements and allocations messages are sent Monday through Friday during the times specified below. Exceptions are noted in the holiday processing schedule.

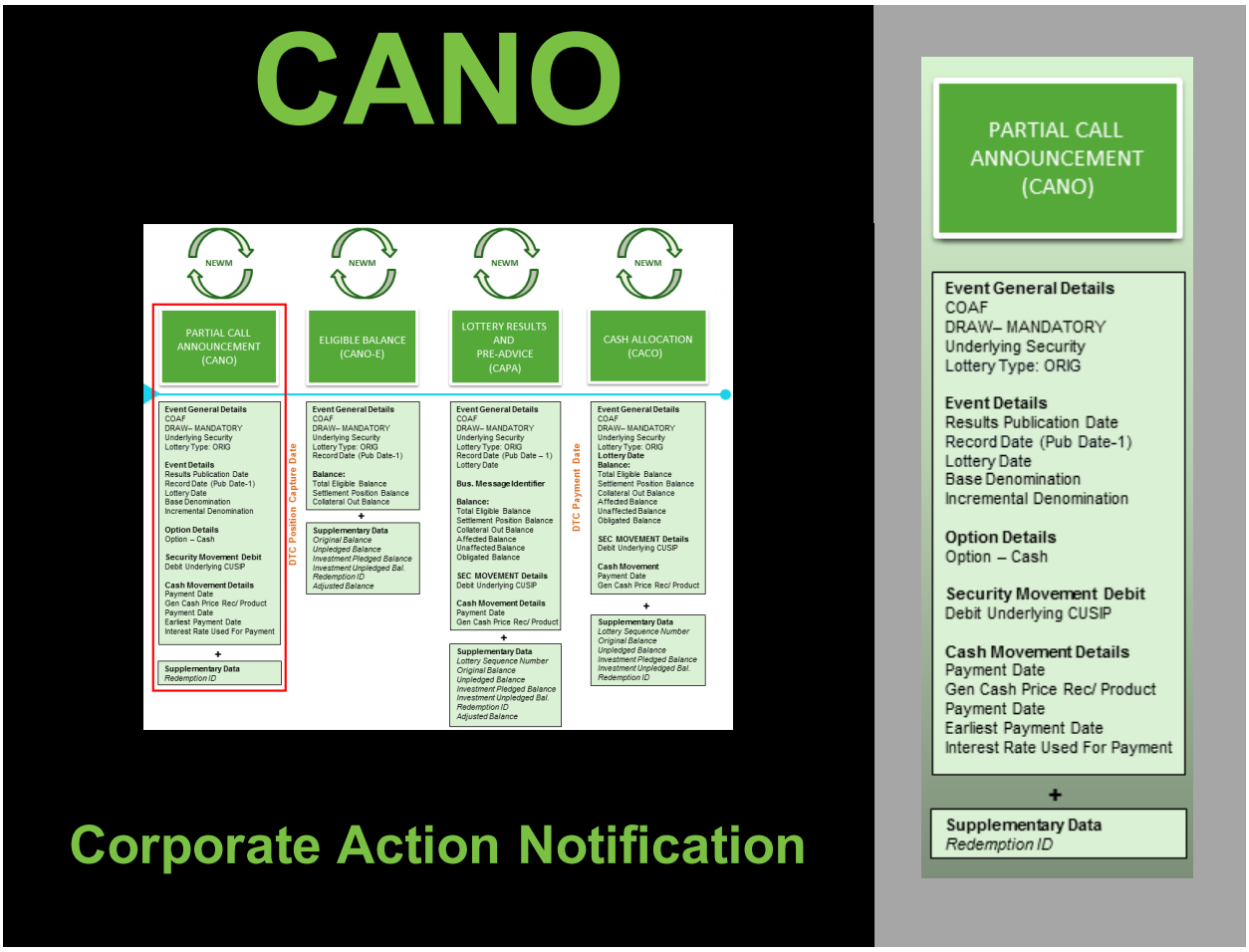
Message	Monday – Friday	Saturday and Sunday
CANO	Normal message volumes. Files transmitted based on customer subscription.	Saturday: • Limited volumes. • No files transmitted. Sunday: • Limited volumes. • Files transmitted based on customer subscription.
CANO-E	Messages at 2:00 p.m. and 11:30 p.m. eastern time. Files transmitted based on customer subscription.	No messages or files transmitted.
CAPA	Messages between 1:00 a.m. and 2:00 a.m. eastern time. Files transmitted at 1:30 a.m. eastern time.	No messages or files transmitted.
CAPC	Messages between 10:30 a.m. and 6:30 p.m. eastern time. Files transmitted at 1:30 a.m. eastern time.	No messages or files transmitted.
CACO **CARE**	Messages between 8:20 a.m. and 7:00 p.m. eastern time based on customer subscription. Files transmitted at 4:00 p.m., 7:00 p.m., and 1:30 a.m. eastern time, based on customer subscription.	No messages or files transmitted.
CAPS	Messages between 1:00 p.m. and 7:00 p.m. eastern time based on customer subscription. Files transmitted at 5:00 p.m. and 7:00 p.m. eastern time based on customer subscription.	No messages or files transmitted.

Holiday Processing Schedule

Messages/ Holidays	U.S. and Canadian Holidays (both closed)	U.S. Holidays (DTCC closed, Canada open)	Canadian Holidays (DTCC open, Canada closed)
CANO	Limited volumes. Files transmitted based on customer subscription.	Limited volumes. Files transmitted based on customer subscription.	Normal volumes. Files transmitted based on customer subscription.
CANO-E	No messages.	No messages or files transmitted.	Normal volumes. Files transmitted based on customer subscription.
CAPA CAPC	No messages.	Normal volumes. Files transmitted based on customer subscription.	Normal volumes. Files transmitted based on customer subscription.
CACO CARE	No messages.	Only for Canadian payments.	Normal volumes. Files transmitted based on customer subscription.
CAPS	No messages.	1:00 p.m., 2:00 p.m., and 3:00 p.m. eastern time for P&I and foreign payments.	Normal volumes. Files transmitted based on customer subscription.
For these holidays:	• New Year's Day • Labor Day • Christmas Day	• Dr. Martin Luther King, Jr. Day • Presidents' Day • Memorial Day • Independence Day • Thanksgiving Day	• Good Friday (All) • Victoria Day • Canada Day • CDN Thanksgiving Day • Boxing Day

In addition to this chart, please note that DTCC operates on two U.S. bank holidays:

- Columbus Day (stock allocation only; no cash allocation)
- Veterans' Day (stock allocation only; no cash allocation)



What is a CANO Message?

A Corporate Action Notification (CANO) message is an announcement of a corporate action. It contains all of the information known about a corporate action: event details, event status, security description and details, relevant dates, and more.

This guide focuses only on CANO messages for redemption events. Clients are encouraged to consult the DTCC Product Migration Guide and My Standards for more general information regarding CANO messages.

The identifying information for a CANO message is:

MX Identifier	ISO 20022 Message Names	Extension	Short Name	Equivalent ISO 15022	Equivalent DTCC Processes
seev.031.002.xx[7]	CA Notification	supl.001.001.xx[7]	CANO	MT 564	Announcements

The CANO is the first message a client will receive regarding a corporate action of any type. As such, it contains identifiers such as the Corporate Action Event ID that remain with the event throughout its lifecycle.

The message is sent per client account number regardless of whether the client has position in this security. The message contains event details only without account-related position or entitlement information.

When Are CANO Messages Generated?

CANO messages are available via **file** at:

- 1:30 a.m.
- 3:30 a.m.
- 6:00 a.m.
- 9:00 a.m.
- 11:00 a.m.
- 12:00 p.m.
- 1:00 p.m.
- 2:00 p.m.
- 3:00 p.m.
- 4:00 p.m.
- 5:00 p.m.
- 6:00 p.m.
- 7:00 p.m.
- 8:00 p.m.
- 9:00 p.m.
- 11:30 p.m.

Note: All times listed above represent Eastern Standard Time.

A client may subscribe to one, all, or any combination of these message times.

The messages are also available in **real time** via MQ.

[7] The last two digits in the MX Identifier and the Extension code signify the version number. The MX version number and/or the Supplementary version number may change during the SWIFT annual release based on mandatory or optional updates to the standards and extensions.
Current schemas are available on MyStandards, DTCC.com, and DTCC's Learning Center.

Weekly Messaging Times

Generally, announcement messages are sent Monday through Friday during the times specified below. Exceptions are noted in the holiday processing schedule.

Message	Monday – Friday	Saturday	Sunday
CANO	Normal message volumes. Files are transmitted based on customer subscription.	Limited message volumes. No files transmitted.	Limited message volumes. Files are transmitted based on customer subscription.

Holiday Processing Schedule

U.S. and Canadian Holidays (both closed)	U.S. Holidays (DTCC closed, Canada open)	Canadian Holidays (DTCC open, Canada closed)
Limited message volumes are sent on: • New Year's Day, • Labor Day, and • Christmas Day. Files are transmitted based on customer subscription.	Limited message volumes are sent on: • Dr. Martin Luther King, Jr. Day, • Presidents' Day, • Memorial Day, • Independence Day, and • Thanksgiving Day. Files are transmitted based on customer subscription.	Normal volumes are sent on: • Good Friday (All), • Victoria Day, • Canada Day, • CDN Thanksgiving Day, and • Boxing Day. Files are transmitted based on customer subscription.

Redemption Event Types

For redemption events, CANO messages will announce one of the following event types:

Event Name	Event Description
Default	A notice of failure by the issuer to honor commitments made within the terms of the issued security. It usually relates to making timely payments of interest and principal as they come due. A payment may be made in lieu of reinstituting the original payments.
Final Paydown	The final distribution of principal due on a security (typically CMOs).

Full Call	The security is redeemed for cash in its entirety on a date that is prior to the maturity date, and for which the holders receive the principal amount of the security.
Full Pre-Refunding	The exercise of a privilege by the issuer to repay, in full, any debt security prior to maturity when the issuer deposits assets in trust. This irrevocably restricts their use to satisfaction of the debt.
Maturity	The final repayment, usually in cash, by an issuer for the entire issue, or remaining outstanding securities of a specific security on a specified date.
Partial Call	Securities are redeemed by the issuer for cash, in part, before their scheduled maturity date. The outstanding amount of securities will be proportionally reduced based on a specific percentage of holding. A lottery may be run where pooled securities are held.
Partial Defeasance	The issuer sets aside cash in escrow to pay off a portion of the issue before the maturity date. New securities are issued for the portion defeased.
Partial Pre-Refunding	Similar to a full pre-refunding, a partial pre-refunding is the exercise of a privilege by the issuer to repay, in part, any debt security prior to maturity when the issuer deposits assets in trust. This irrevocably restricts their use to satisfaction of the debt. New securities are issued for the portion pre-refunded.
UIT Termination	A security, usually a form of a derivative (e.g., ADR or UIT), for which the agent or issuer has decided to terminate the derivative based on a change to the underlying security/ies or a change in strategy.

Redemption Event Information Contained on the CANO Message

Mapping for the message layout will conform to the ISO message rules.

CANO messages for redemption events have “levels” of information that categorize the data elements. These levels tell you whether the information refers to:

- The event in general,
- Event details, including lottery information (if applicable)
- Event text,
- Certificate number(s), if applicable,
- Options,
- Payouts,

- Agent information, or
- Related events.

The following table contains only data elements that refer specifically to redemption events, or common data elements that have a particular meaning in redemption event messages.

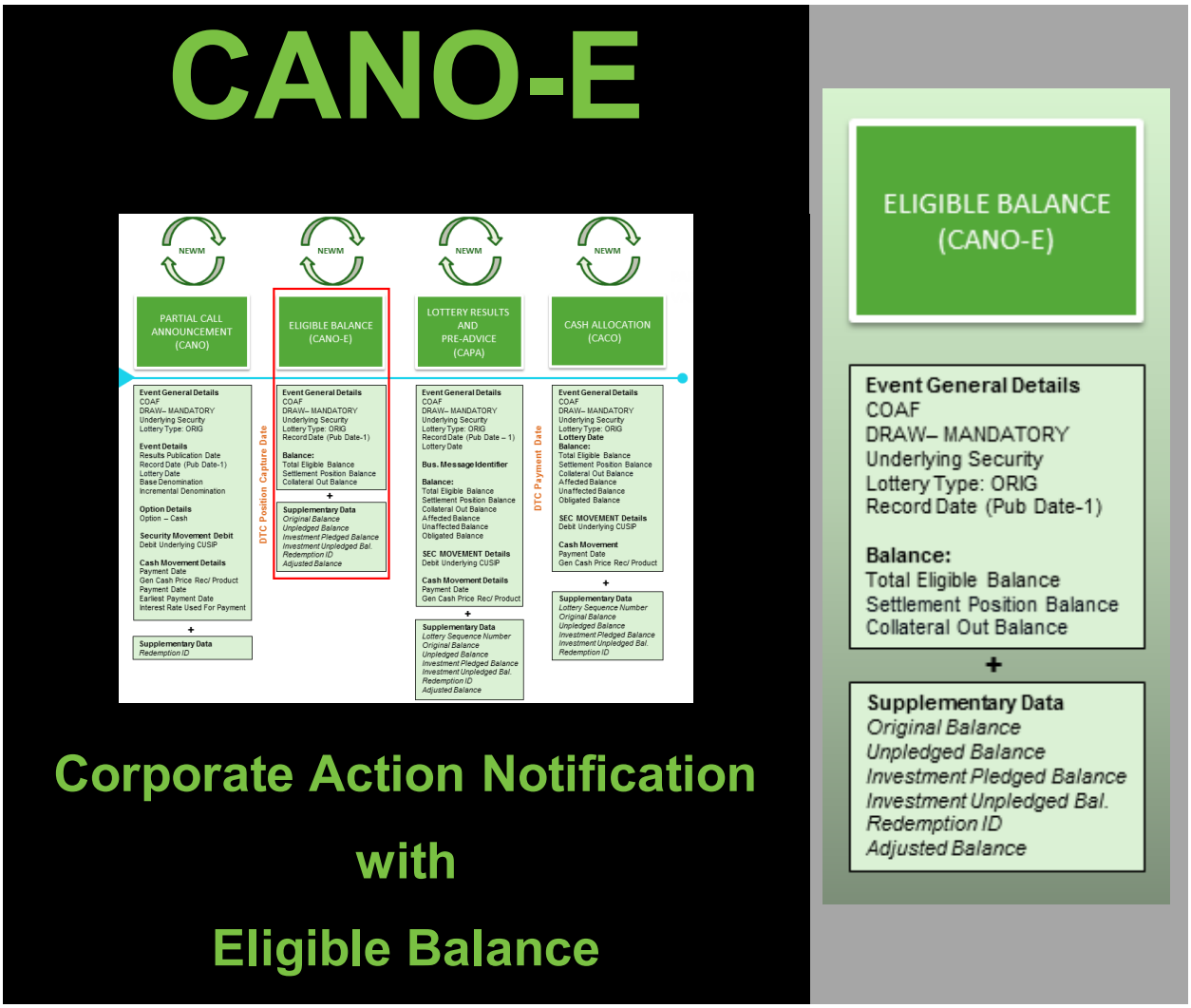
There are many more fields on the CANO message. For more detailed technical information about CANO message contents and elements, including ISO field names, please see the Data Dictionary and/or My Standards for this message.

Information	Definition / Notes
Message Type	Part of the message header. Always set to "CANO."
Notification Type	**NEWM** for new messages
Official Corporate Actions Event ID	The "Official Corporate Actions Identifier" is the official, unique identifier for the corporate action that will stay with the event throughout its lifecycle. It is made up of the CA ID preceded by "US." In order for this instruction to be accepted and processed, the COAF on the instruction must match the COAF on the announcement messages.
Event Type	• **DRAW** for partial calls • **PDEF** for partial defeasances and partial pre-refundings • **MCAL** for full calls, final paydowns, and maturities • **REDM** for final maturities and UIT terminations • **DFLT** for defaults
Extended Event Group	The code **REDM** is used to specify that a redemption event is being announced. It is the general event category; individual redemption events are specified in the Event Code field. For events other than redemption events, "Event Processing Type" is used to specify the event type. Redemption events do not use this field.
Underlying Security	Includes security description and CUSIP code
Redemption Identification	Unique number assigned by the system to all lottery and non-lottery events announced in DTC's legacy systems.
Notice Type	This indicates whether the notice received was universal or specific to securities registered in DTC's nominee name.
Security Description	This piece of Option information provides the description associated with the contra CUSIP.

Lottery Information
Lottery Events Only
	Lotteries only apply to some redemption events. They are, however, unique to redemptions.
	Some fields in the CANO message only appear for these events. They include:
	• **Lottery Type**. Defines the type of lottery being processed:
	  ○ **ORIG**. Original lottery.
	  ○ **SUPP**. Supplemental lottery.
	• **Event Stage**. The stage in the corporate action life cycle as it specifically relates to lotteries. Values include:
	  ○ **FULL**. Cancellation and re-run,
	  ○ **RESC**. Supplemental cancellation, and
	  ○ **PART**. Supplemental cancellation and re-run.
	• **Lottery Date**. The date on which called positions will be moved into either a segregated account or a DTC contra CUSIP.
	• **Lottery Contra CUSIP**. A DTC user CUSIP associated with the event for the purpose of segregating positions affected by the upcoming lottery.
	• **Base Denomination**. The denomination of the security used to run a lottery. This is a decimal value that uses units of the face amount depending on the security type.
	• **Denomination Increments**. Supplemental increments the lottery is run in. This is a decimal value that uses units of the face amount depending on the security type.

Refunding / Defeasement information
Lottery Events Only
	Partial pre-refunding and partial defeasements are lottery sub-types. Some fields only appear on the CANO for these events:
	• **Originating Security Information / Type**. This represents the original security identifier in partial defeasance and partial pre-refunding events, in which a secondary CUSIP is created for the amount defeased or refunded. The “type” for this security is always a CUSIP.
	• **Defeasement Indicator**. For partial defeasement events, this identifies which distributing security is defeased and which is non-defeased.
	  ○ **DEFE**. Defeased.
	  ○ **NDEF**. Non-defeased.
	• **Refunded Indicator**. For partial pre-refunding events, this identifies which distributing security is refunded and which is non-refunded.
	  ○ **REFU**. Refunded.
	  ○ **NREF**. Non-refunded.
	• **Refunded Maturity Date**. For partial pre-refunding events only, this represents the new maturity date for a pre-refunded security.

Mandatory / Voluntary Indicator	Redemption events are mandatory. The indicator is always set to **MAND**.
Declared Payable Date	The payable date for the redemption as announced by the agent or issuer. • This is mapped to all non-security payouts. • **UKWN** is used if the value is not available and is expected. • **ONGO** is used for ongoing events in which the concept of payable date does not exist.
Option Type	Only three option types apply to redemption events: • **CASH**. Holder will receive cash as a result of the redemption. • **SECU**. Holder will receive securities as a result of the redemption. • **CASE**. Holder will receive a combination of cash and securities as a result of the redemption.
Flags	These are yes/no indicators that specify certain pieces of information: • **Conditional Payment Applicable**. An Event flag that indicates whether the payment made by the issuer is based on a stated condition. • **Debit/Credit**. A Payout flag that signals that the movement specified in the announcement is a debit or a credit. Note that for redemption events, a debit of the underlying security will always take place. A credit for either securities or cash is then made.



What is a CANO-E Message?

The Corporate Action Notification with Eligible Balance (CANO-E) message will be generated upon subscription for partial call, partial pre-refunding, and partial defeasance events. CANO-E messages will not be generated for non-lottery events.

The CANO-E captures a customer's DTCC eligible position on Record Date for a particular corporate action (announced in the original CANO). This message provides information about your eligible balance (based on the details of the lottery) prior to the lottery being run.

Your settled and total eligible balances are contained in the core portion of the message, while additional segregated balances can be found in the message extension (when applicable).

The identifying information for a CANO-E message is:

MX Identifier	ISO 20022 Message Names	Extension	Short Name	Equivalent ISO 15022	Equivalent DTCC Processes
seev.031.002.xx[8]	CA Notification with Eligible Balance	supl.007.001.xx[8]	CANO-E	MT 564	Pre-Lottery Positions

The purpose of this message is to provide clients with eligibility information, and as such most event details are not provided within the CANO-E. These event details can be traced back to the CANO message through the Corporate Action Event ID. By using these identifiers, the body of the CANO message is not repeated in the CANO-E.

The important fields on the CANO-E include:

- Corporate Action Event ID,
- Event Type,
- Lottery Type,
- Mandatory/Voluntary indicator, and
- Record Date.

The corresponding legacy CCF file for the record date statement is REDEM L. Elements from the CCF file that are not market practice compliant and cannot be contained in the CANO-E message are contained in the message extension as supplementary data.

When Are CANO-E Messages Generated?

A CANO with eligible balance message will be generated once per event on position capture date (publication date – 1), in between a lottery event's announcement and the running of the lottery. The date of the upcoming lottery can be found on the CANO.

The first CANO-E received by a participant will always be a **NEWM**: this is the ISO notification type signifying a new message. All subsequent CANO-Es are **REPL**s, or replacement messages.

CANO-E NEWM messages are created on a daily basis for items for which the record date has been reached and position capture has occurred. In the case of a lottery re-run, a new Event ID has been assigned; therefore, a NEWM is sent for that new ID,

[8] The last two digits in the MX Identifier and the Extension code signify the version number. The MX version number and/or the Supplementary version number may change during the SWIFT annual release based on mandatory or optional updates to the standards and extensions.
Current schemas are available on MyStandards, DTCC.com, and DTCC's Learning Center.

CANO-E REPL messages are sent in two cases:

- When updates / adjustments are made to the pre-lottery position for client balances.
- After the lottery-based event has occurred and a supplemental lottery has been called in a CANO REPL message. Supplemental lotteries require the re-announcement of eligibility based upon the unaffected balances from the original lottery. These messages will contain a lottery type of “SUPP” to indicate the supplemental lottery.

CANO-E Messages and Pending Trades

Note that pending trades (as they relate to the lottery process) are *not* incorporated into the CANO-E message. Therefore, clients with pending trades due to settle between the publication date and the lottery date of an event will not see the potential short position within the CANO-E message. If you are driven short after the lottery has been run, that will be indicated by the Obligated Balance on the CAPA message. Please see the Account Balances and Lottery Events section for more information.

CANO-E Message Subscriptions and Timing

Subscription to the CANO-E message is mandatory for DRAW and PDEF events.

Via file:

- 12:30 a.m.
- 1:45 p.m.
- 5:30 p.m.
- 6:50 p.m.

Real time:

- 8:00 a.m. – 5:30 p.m.
- 6:50 p.m.
- 12:30 a.m.

Weekly Messaging Times

Generally, entitlements and allocations messages are sent Monday through Friday during the times specified below. Exceptions are noted in the holiday processing schedule.

Message	Monday – Friday	Saturday and Sunday
CANO-E	Messages at 2:00 p.m. and 11:30 p.m. eastern time. Files transmitted based on customer subscription.	No messages or files transmitted.

Holiday Processing Schedule

U.S. and Canadian Holidays (both closed)	U.S. Holidays (DTCC closed, Canada open)	Canadian Holidays (DTCC open, Canada closed)
No messages or files are sent on: • New Year's Day • Labor Day, and • Christmas Day.	No messages or files are sent on: • Dr. Martin Luther King, Jr. Day • Presidents' Day • Memorial Day • Independence Day, and • Thanksgiving Day.	Normal volumes occur on these days: • Good Friday (All) • Victoria Day • Canada Day • CDN Thanksgiving Day, and • Boxing Day. Files are transmitted based on customer subscription.

Information Contained on the CANO-E Message

Mapping for the message layout will conform to the ISO message rules.

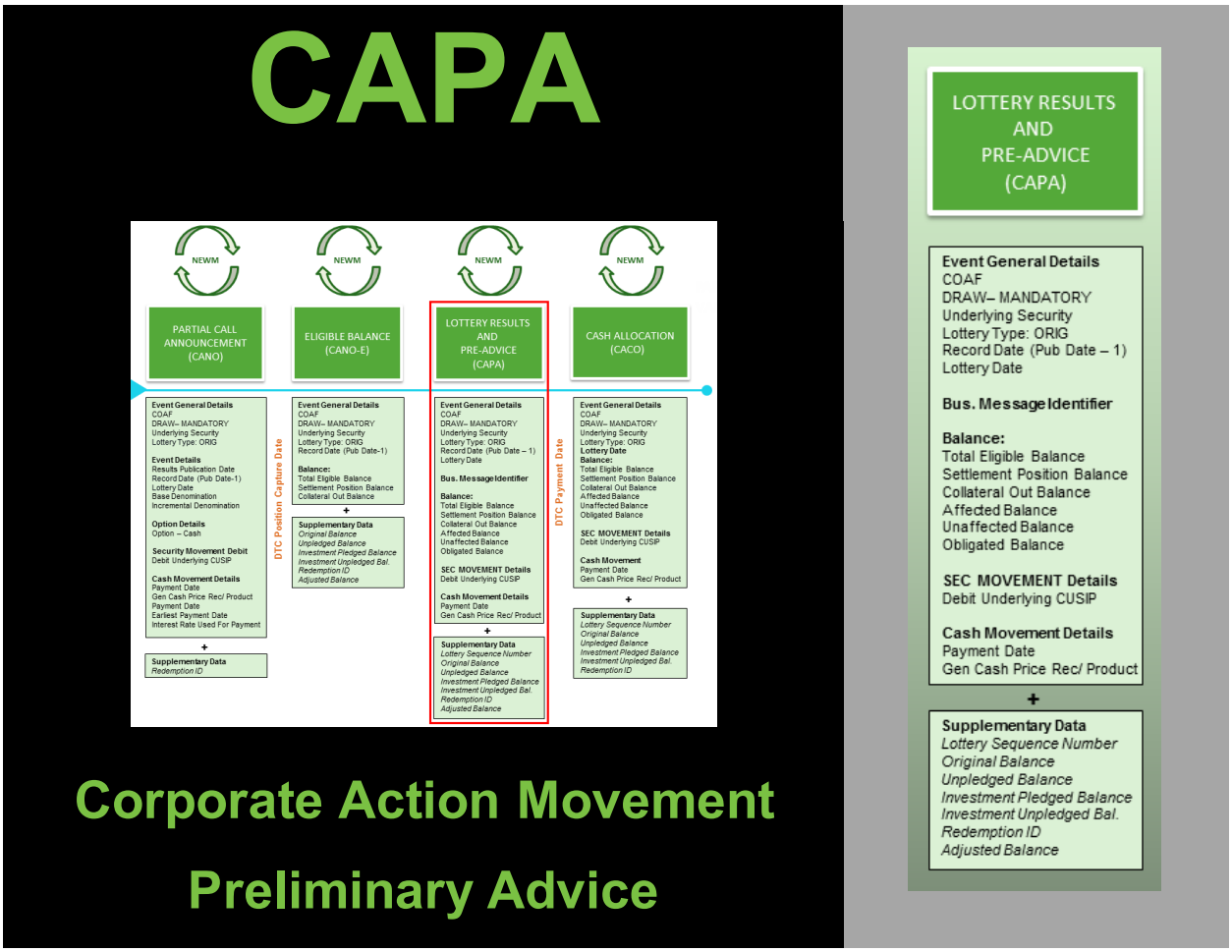
The following table contains some of the important elements in the CANO-E message.
For more detailed technical information about message contents and elements, please see the Data Dictionary and/or My Standards for this message.

Data Element	Definition / Information
Message Type	Always set to "CANO-E."
Official Corporate Actions Event ID	Official Corporate Actions Identifier. This is the official, unique identifier for the corporate action. It is made up of the CA ID preceded by "US." In order for this instruction to be accepted and processed, the COAF on the instruction must match the COAF on the announcement messages.
Event Type	• "DRAW" for partial calls. • "PDEF" for partial defeasances and partial pre-refundings.
Underlying Security	Includes security description and CUSIP code.
Lottery Type	• "ORIG" for original lottery. • "SUPP" for supplemental lottery.
Record Date (Pub Date)	Date/time at which positions are struck at the end of the day to determine eligible balances for the upcoming lottery.

Notification Type	• "NEWM" for new messages. • "REPL" for replacement messages.
CA ID	Corporate Actions Identifier. This is DTC's unique identifier for the corporate action event.
Total Eligible Balance	Represents the current eligible balance that could be called.
Settlement Position Balance	Balance of securities representing only settled transactions; pending transactions not included.
Collateral Out Balance	Balance of securities that belong to the safekeeping account indicated within this message and are deposited with a third party for the purpose of collateralization.

The extension for the CANO-E message includes the following information:

Data Element	Definition / Information
Balance Information	• **Original Balance**. The original eligible balance as determined on record date. The original balance will remain constant for the life of the event, including any subsequent supplemental lottery CANO-E messages. • **Adjusted Balance**. Total eligible balance containing manual adjustments. • **Unpledged Balance**. Total number of shares this participant has pledged to any number of pledgee banks for this security. Individual pledge records record the security, number of shares, participant, pledgee bank, and loan date. • **Investment Pledged Balance**. The total quantity of securities segregated from the General Free account of a firm, partner, officer, stockholder, or an omnibus account. This account is used for reporting information to the IRS about securities purchased for investment purposes. Individual investment ID records contain position, serial number, and trade date. • **Investment Unpledged Balance**. Position held that represents the total quantity of securities segregated from the General Free account. Individual segregated records contain security, serial number and number of shares. Only serial numbers 1 – 5 can be accessed directly by participants.
Redemption ID	Unique number systemically assigned to all lottery and non-lottery events in CA Web.



What is a CAPA Message?

The Corporate Action Movement Preliminary Advice (CAPA) message will be generated upon subscription for both lottery and non-lottery events.

- For lottery events, the CAPA message provides the lottery results, showing what position was affected ("called") and unaffected ("remaining") by the lottery. Based on the affected position, it will also state the cash amount to be received by the client. For PDEF events, it will provide the new securities to be received (either refunded and non-refunded or defeased and non-defeased).

- For non-lottery events, the CAPA message projects payments and allocations on a corporate action event.

The identifying information for a CAPA message is:

MX Identifier	ISO 20022 Message Names	Extension	Short Name	Equivalent ISO 15022	Equivalent DTCC Processes
seev.035.002.xx[9]	CA Movement Preliminary Advice	supl.009.001.xx[9]	CAPA	MT 564	Lottery Results and Projected Payments

The notification types for preliminary advice messages include **NEWM** (New Messages) and **REPL** (Replacement Messages). NEWM messages are sent on Payment Date minus 7; any subsequent messages for that same Corporate Action Event ID will be a REPL message.

If there is a change to the entitlement, a replacement (REPL) message will be generated for the participant for the event.

CAPA Messages for Lottery vs. Non-Lottery Events

Lottery Events

CAPA messages for lottery events inform you whether your position has been called or not.

- If your position has been called, the CAPA outlines your affected and unaffected position, the payment you can expect, and when you can expect it.
- The CAPA provides an obligated position if the amount to be called ("affected position") is greater than your settlement position on lottery date.
  Note: Your settlement position will be considered short (SHOR) if this occurs.
  Please see the Account Balances and Lottery Events section for more information.
- If your position was not called in the lottery, you will still receive a CAPA lottery results message stating zero affected balance.
- If a supplemental call is announced, it will be processed under the same Corporate Action Event ID but with a supplemental lottery type.
- CAPA lottery result messages are sent five times a day (at 12:30 a.m., 10:45 a.m., 1:30 p.m., 2:30 p.m., and 3:30 p.m.). CAPA messages for non-lottery events and maturities are sent at 1:30 a.m.

[9] The last two digits in the MX Identifier and the Extension code signify the version number. The MX version number and/or the Supplementary version number may change during the SWIFT annual release based on mandatory or optional updates to the standards and extensions.
Current schemas are available on MyStandards, DTCC.com, and DTCC's Learning Center.

Lottery Events and Pending Trades

For lottery events, clients with pending trades due to settle between the publication date and the lottery date of an event will not see the potential short position within the CANO-E message. If you are driven short after the lottery has been run, that will be indicated by the Obligated Balance on the CAPA message. Please see the Account Balances and Lottery Events section for more information.

The important information on the CAPA for lottery events includes:

- Event General Details
- Lottery Details
- Balance Information
- Cash/Security Movement Details

Non-Lottery Events

CAPA messages for non-lottery events include the projected allocation information for full calls, maturities, UIT terminations, and full pre-refunding.

The important information on the CAPA for non-lottery events includes:

- Event General Details
- Balance Information
- Cash/Security Movement Details

When Are CAPA Messages Generated?

Lottery Events

- CAPA messages are only sent for lottery events if a CANO-E has been sent for that client account.
- CAPA NEWMs are created on Lottery Date for lottery-based events (DRAW, PDEF) once the lottery has been run. If a rate is available, then the projected cash movement will be published. No subsequent updates will be sent until Payment Date – 1 unless the rate changes. If no rate is available, the projected cash entitlement will be marked as unknown ("UKWN").
- Between Payment Date – 7 and Payment Date – 1, CAPA REPL messages are sent when a rate has been received for an event in which the rate was previously unknown.
- On Payment Date – 1, a CAPA REPL message is automatically generated based on a projection by DTCC.
- CAPA NEWMs are also sent when supplemental lotteries are called.
  In this case, the CAPA is used to project the supplemental amount only.

Non-Lottery Events

- CAPA messages are created for clients subscribing to these non-lottery events:
    - REDM (Maturity FC 70; 75M; 77M;),
    - MCAL (Full Call FC 75F; 77F), and
    - DFLT (Default FC 86P Interim and 86F Final).
- CAPA messages begin generating on Payment Date -7. If the rate is not available, the projected cash entitlement will be marked as unknown ("UKWN").
- Between Payment Date – 7 and Payment Date – 1, CAPA REPL messages are sent when a rate has been received for an event for which the rate was previously unknown.
- A CAPA message will automatically be generated on Payment Date – 1 regardless of the subscription option.
- Full calls, maturities, defaults, UIT terminations, and full pre-refundings will only generate a CAPA message on Payment Date – 1.

CAPA Message Subscriptions and Timing

Lottery Events

CAPA messages are available via both file and real time at:

- 12:30 a.m.
- 10:45 a.m.
- 1:30 p.m.
- 2:30 p.m.
- 3:30 p.m.

CAPA REPL (replacement) messages are available after mainline date at 1:30 a.m.

Non-Lottery Events

CAPA messages are available via both file and real time at 1:30 a.m.

- CAPA messages are sent on Payment Date – 7 for CAPA NEWM (new messages).
- Between Payment Date – 6 and Payment Date – 1, CAPA REPL (replacement messages) are sent.

Weekly Messaging Times

Generally, entitlements and allocations messages are sent Monday through Friday during the times specified below. Exceptions are noted in the holiday processing schedule.

Message	Monday – Friday	Saturday and Sunday
CAPA	Messages between 1:00 a.m. and 2:00 a.m. eastern time. Files transmitted based on customer subscription.	No messages or files transmitted.

Holiday Processing Schedule

U.S. and Canadian Holidays (both closed)	U.S. Holidays (DTCC closed, Canada open)	Canadian Holidays (DTCC open, Canada closed)
No messages or files are sent on: • New Year's Day • Labor Day, and • Christmas Day.	Normal volumes occur on these days: • Dr. Martin Luther King, Jr. Day • Presidents' Day • Memorial Day • Independence Day, and • Thanksgiving Day. Files are transmitted based on customer subscription.	Normal volumes occur on these days: • Good Friday (All) • Victoria Day • Canada Day • CDN Thanksgiving Day, and • Boxing Day. Files are transmitted based on customer subscription.

Information Contained on the CAPA Message

Mapping for the message layout will conform to the ISO message rules.

The following two tables contain some of the important information in the CAPA messages for lottery and non-lottery events.

For more detailed technical information about message contents and elements, please see the Data Dictionary and/or My Standards for this message.

Lottery Events

Information	Definition / Notes
Message Type	Part of the message header. Always set to "CAPA."
Official Corporate Actions Event ID	Official Corporate Actions Identifier. This is the official, unique identifier for the corporate action. It is made up of the CA ID preceded by "US." In order for this instruction to be accepted and processed, the COAF on the instruction must match the COAF on the announcement messages.
Event Type	• **DRAW** for partial calls. • **PDEF** for partial defeasances and partial pre-refundings.
Underlying Security	Includes security description and CUSIP code.
Lottery Type	• **ORIG** for original lottery. • **SUPP** for supplemental lottery.
Record Date *(Pub Date - 1)*	Date/time at which positions are struck at the end of the day to determine eligible balances for the upcoming lottery.
Notification Type	• **NEWM** for new messages. • **REPL** for replacement messages.
Balance Information	The balances contained in the core CAPA message for lottery events include: • **Total Eligible Balance**. Represents the current eligible balance that could be called. • **Settlement Position Balance**. Balance of securities representing only settled transactions; pending transactions not included. • **Collateral Out Balance**. Balance of securities that belong to the safekeeping account indicated within this message and are deposited with a third party for the purpose of collateralization. • **Affected Balance**. The portion of the eligible position that *is* called by the lottery. For partial pre-refundings, this is the refunded balance; for partial defeasements, this is the defeased balance. • **Unaffected Balance**. The portion of the eligible position that is *not* called by the lottery. For partial pre-refundings, this is the non-refunded balance; for partial defeasements, this is the non-defeased balance. • **Obligated Balance**. Obligated position occurs when the affected balance is greater than the settled position. This can happen when a call notice is received late and the prior record date position is greater than what is currently settled.

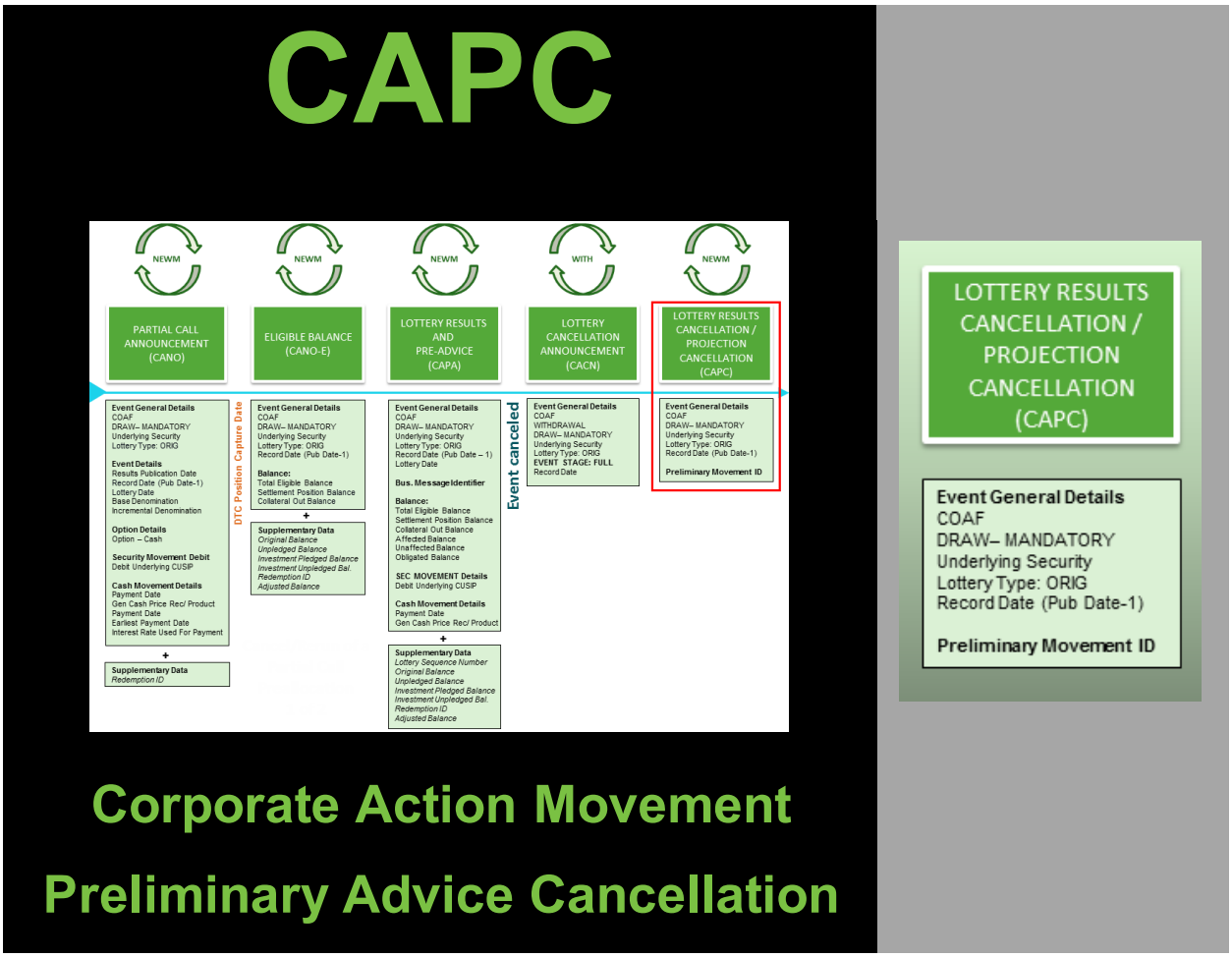
	This is position that account holders should return to the account servicer to participate in the event or to fulfill their obligation for the event to be complete (for example, return of securities for a late-announced drawing).
New Securities Issuance Indicator	For PDEF events (partial defeasances and partial pre-refundings), this indicates the new security type based on the lottery being run. Values include: • **DEFE**. Defeased • **NDEF**. Non-defeased • **REFU**. Refunded • **NREF** Non-refunded
Called Amount	The principal amount (for debt issues) or number of shares (for equity issues) that has been called for redemption for a particular certificate number

The extension for the CAPA message includes the following information:

Information	Definition / Notes
Redemption ID	A unique number systemically assigned to all lottery and non-lottery events in CA Web.
Lottery Sequence Number	A system-generated number to distinguish between the series of lotteries run against a particular redemption
Balance Information	• **Original Balance**. The original eligible balance as determined on record date. The original balance will remain constant for the life of the event, including any subsequent supplemental lottery CANO-E messages. • **Adjusted Balance**. Total eligible balance containing manual adjustments. • **Unpledged Balance**. Total number of shares this participant has pledged to any number of pledgee banks for this security. Individual pledge records record the security, number of shares, participant, pledgee bank, and loan date. • **Investment Pledged Balance**. The total quantity of securities segregated from the General Free account of a firm, partner, officer, stockholder, or an omnibus account. This account is used for reporting information to the IRS about securities purchased for investment purposes. Individual investment ID records contain position, serial number, and trade date. • **Investment Unpledged Balance**. Position held that represents the total quantity of securities segregated from the General Free account. Individual segregated records contain security, serial number and number of shares. Only serial numbers 1 – 5 can be accessed directly by participants.

Non-Lottery Events

Information	Definition / Notes
Message Type	Part of the message header. Always set to "CAPA."
Official Corporate Actions Event ID	Official Corporate Actions Identifier. This is the official, unique identifier for the corporate action. It is made up of the CA ID preceded by "US." In order for this instruction to be accepted and processed, the COAF on the instruction must match the COAF on the announcement messages.
Event Type	• **MCAL** for corporate full calls, municipal full calls, and CMO final paydowns. • **REDM** for UIT termination and final maturity (corporate maturity, municipal maturity, and CD redemption).
Underlying Security	Includes security description and CUSIP code.
Record Date *(Pub Date - 1)*	Date/time at which positions are struck at the end of the day to determine eligible balances for the upcoming lottery.
Notification Type	• **NEWM** for new messages. • **REPL** for replacement messages.
Balance Information	• **Total Eligible Balance**. Represents the current eligible balance that could be called. • **Settlement Position Balance**. Balance of securities representing only settled transactions; pending transactions not included. • **Collateral Out Balance**. Balance of securities that belong to the safekeeping account indicated within this message and are deposited with a third party for the purpose of collateralization.
Debit/Credit Indicator	Note that for redemption events, a debit of the underlying security will always take place. A credit for either securities or cash is then made.
Payment Date	The date on which the redemption payment is made to the client account.
Entitlement Units	Units of face amount depending upon the security type (debt / non-debt).



What is a CAPC Message?

The Corporate Action Movement Preliminary Advice Cancellation (CAPC) message cancels a CAPA message, indicating that the projected allocation will not take place. CAPC messages are always associated with a particular CAPA message through information provided in the Preliminary Movement ID – Business Message Identifier.

CAPC messages will be generated upon subscription for both lottery and non-lottery events.

The identifying information for a CAPC message is:

MX Identifier	ISO 20022 Message Names	Extension	Short Name	Equivalent ISO 15022	Equivalent DTCC Processes
seev.044.002.xx[10]	CA Movement Preliminary Advice Cancellation	*n/a*	CAPC	MT 564	*New*

When Are CAPC Messages Generated?

Lottery Events

CAPC messages for lottery events (DRAW, PDEF) are cancellations for previously sent CAPA messages (that detailed lottery results and their effect on a client's account). CAPC messages are used for Redemption lottery events in these situations:

1. An original lottery is canceled before allocation due to an event cancellation.
2. A reversal / rerun of a partial call before allocation in which:
   - The original lottery results (detailed in the CAPA message) are canceled, and
   - A new event is being created and re-run.
3. Both original and supplemental events are being canceled before allocation.
   A CAPC message is sent for each CAPA: one for the original event and one for the supplemental. The "Lottery Type" field links each CAPC message to its associated CAPA message.

CAPC messages are not sent post-allocation.

Non-Lottery Events

CAPC messages are sent when a non-lottery event (MCAL, REDM) is canceled before allocation. They are not sent post-allocation.

[10] The last two digits in the MX Identifier signify the version number. The MX version number may change during the SWIFT annual release based on mandatory or optional updates to the standards. Current schemas are available on MyStandards, DTCC.com, and DTCC's Learning Center.

CAPC Message Subscriptions and Timing

For both lottery and non-lottery events:

- CAPC messages are available via **file** at 1:30 a.m.
- In **real time**, CAPC messages are available hourly from 10:30 a.m. – 6:30 p.m.
- CAPC messages are available after mainline date at 1:30 a.m.
- A time stamp in the Business Application Header (BAH) allows you to verify message order.

A CAPC subscription always requires a client's subscription to CAPA messages.

Conversely, a CAPA subscription does not require CAPC subscription. However, if a client subscribes to CAPA messages, it is suggested that the client subscribes to CAPC messages.

Weekly Messaging Times

Generally, entitlements and allocations messages are sent Monday through Friday during the times specified below. Exceptions are noted in the holiday processing schedule.

Message	Monday – Friday	Saturday and Sunday
CAPC	Messages between 10:30 a.m. and 6:30 p.m. eastern time. Files transmitted at 1:30 a.m. eastern time.	No messages or files transmitted.

Holiday Processing Schedule

U.S. and Canadian Holidays (both closed)	U.S. Holidays (DTCC closed, Canada open)	Canadian Holidays (DTCC open, Canada closed)
No messages or files are sent on: • New Year's Day • Labor Day, and • Christmas Day.	Normal volumes occur on these days: • Dr. Martin Luther King, Jr. Day • Presidents' Day • Memorial Day • Independence Day, and • Thanksgiving Day. Files are transmitted based on customer subscription.	Normal volumes occur on these days: • Good Friday (All) • Victoria Day • Canada Day • CDN Thanksgiving Day, and • Boxing Day. Files are transmitted based on customer subscription.

Information Contained on the CAPC Message

Mapping for the message layout will conform to the ISO message rules.

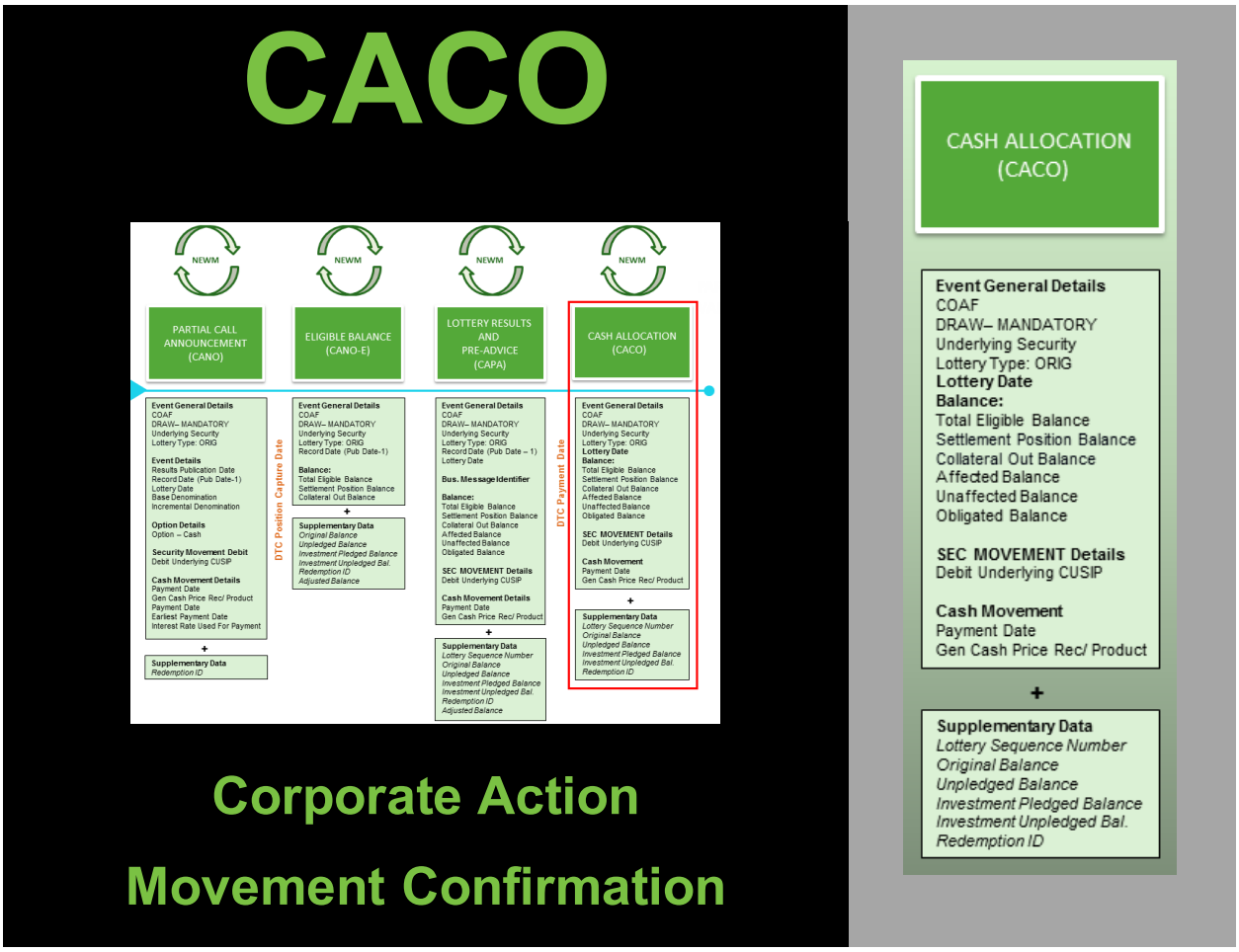
The following table contains some of the important information in the CAPC messages for lottery and non-lottery events.

For more detailed technical information about message contents and elements, please see the Data Dictionary and/or My Standards for this message.

Information	Definition / Notes
Message Type	Part of the message header. Always set to "CAPC."
Official Corporate Actions Event ID	Official Corporate Actions Identifier. This is the official, unique identifier for the corporate action. It is made up of the CA ID preceded by "US." In order for this instruction to be accepted and processed, the COAF on the instruction must match the COAF on the announcement messages.
Event Type	• **DRAW** for partial calls. • **PDEF** for partial defeasances and partial pre-refundings. • **MCAL** for full calls and maturities. • **REDM** for final maturities and exchanges. • **DFLT** for defaults.
Underlying Security	Includes security description and CUSIP code.

Lottery Information
Lottery Events Only
	Includes items specific to lottery events, such as:
	• Lottery Type:
	  ○ **ORIG** for original lottery.
	  ○ **SUPP** for supplemental lottery.
	• Event Stage.
	• Lottery Sequence Number.
	• Lottery Date.

Notification Type	CAPC messages are always **NEWM** for new messages.
Preliminary Movement ID	This identification number links the CAPC message to the original CAPA message. It allows clients to associate the cancellation with a particular projected allocation.



What is a CACO Message?

The Corporate Action Movement Confirmation (CACO) message will be generated upon subscription for both lottery and non-lottery events. It confirms the movement of the redemption allocation (as projected in the CAPA message) into a client's account.

The identifying information for a CACO message is:

MX Identifier	ISO 20022 Message Names	Extension	Short Name	Equivalent ISO 15022	Equivalent DTCC Processes
seev.036.002.xx[11]	CA Movement Confirmation	supl.011.001.xx[11]	CACO	MT 566	Allocations/ Payments

The message is sent per client account number. It is used to inform a client that a debit of the underlying security has been made from the client account for the redemption, and that a payment (of cash or securities, depending upon the event) has taken place as a result. It contains a brief event summary and the payment information.

Since CACO messages represent movement of cash and/or securities to and from your account, they are always new messages (NEWM).

When Are CACO Messages Generated?

CACO messages are generated and sent on the day that the allocation takes place.

CACO Message Subscriptions and Timing

Subscriptions and Timing for Lottery Events

Clients that subscribe to both CAPA and CACO for lottery events will not receive a CACO without having received a CAPA.

For some events, generation of the CACO and CAPA happen simultaneously (e.g., in PDEF events: the lottery is run and the positions are moved directly afterward, causing the CAPA and CACO messages to be output at the same time). This does not happen for DRAW events.

CACO messages are available via **file** at:

- 12:30 a.m.
- 1:30 p.m.
- 2:30 p.m.
- 3:30 p.m.

[11] The last two digits in the MX Identifier and the Extension code signify the version number. The MX version number and/or the Supplementary version number may change during the SWIFT annual release based on mandatory or optional updates to the standards and extensions.
Current schemas are available on MyStandards, DTCC.com, and DTCC's Learning Center.

- 4:00 p.m.

The messages are also available in **real time** every 20 minutes between 8:20 a.m. and 4:30 p.m.

Subscriptions and Timing for Non-Lottery Events

Clients that subscribe to messaging for non-lottery events are required to receive CACO messages as part of the service. If a client opts not to receive CAPA/CAPC messages, the client must receive a CANO announcement message in order to receive a CACO message.

CACO messages are available:

- Via **file** at 4:00 p.m.
- In **real time** every 20 minutes between 8:30 a.m. and 4:30 p.m.

Weekly Messaging Times

Generally, entitlements and allocations messages are sent Monday through Friday during the times specified below. Exceptions are noted in the holiday processing schedule.

Message	Monday – Friday	Saturday and Sunday
CACO	Messages between 8:20 a.m. and 7:00 p.m. eastern time based on customer subscription. Files transmitted at 4:00 p.m., 7:00 p.m., and 1:30 a.m. eastern time, based on customer subscription.	No messages or files transmitted.

Holiday Processing Schedule

U.S. and Canadian Holidays (both closed)	U.S. Holidays (DTCC closed, Canada open)	Canadian Holidays (DTCC open, Canada closed)
No messages or files are sent on: • New Year's Day • Labor Day, and • Christmas Day.	*Only Canadian payments* occur on these days: • Dr. Martin Luther King, Jr. Day • Presidents' Day • Memorial Day • Independence Day, and • Thanksgiving Day. Files are transmitted based on customer subscription.	Normal volumes occur on these days: • Good Friday (All) • Victoria Day • Canada Day • CDN Thanksgiving Day, and • Boxing Day. Files are transmitted based on customer subscription.

Information Contained on the CACO Message

Mapping for the message layout will conform to the ISO message rules.

All CACO messages contain securities debit information for the redemption event. Messages for all DRAW and PDEF events contain the "Lottery Type" field; REDM, DFLT, and MCAL events do not.

The following two tables contain some of the important information in the CACO messages for lottery and non-lottery events.

For more detailed technical information about message contents and elements, please see the Data Dictionary and/or My Standards for this message.

Information	Definition / Notes
Message Type	Part of the message header. Always set to "CACO."
Official Corporate Actions Event ID	Official Corporate Actions Identifier. This is the official, unique identifier for the corporate action. It is made up of the CA ID preceded by "US." In order for this instruction to be accepted and processed, the COAF on the instruction must match the COAF on the announcement messages.
Event Type	• **DRAW** for partial calls. • **PDEF** for partial defeasances and partial pre-refundings. • **MCAL** for full calls. • **REDM** for final maturities and exchanges. • **DFLT** for defaults.
Underlying Security	Includes security description and CUSIP code.

Lottery Information
Lottery Events Only
	Includes items specific to lottery events, such as:
	• Lottery Type:
	  ○ **ORIG** for original lottery.
	  ○ **SUPP** for supplemental lottery.
	• Event Stage.
	• Lottery Sequence Number.
	• Lottery Date.

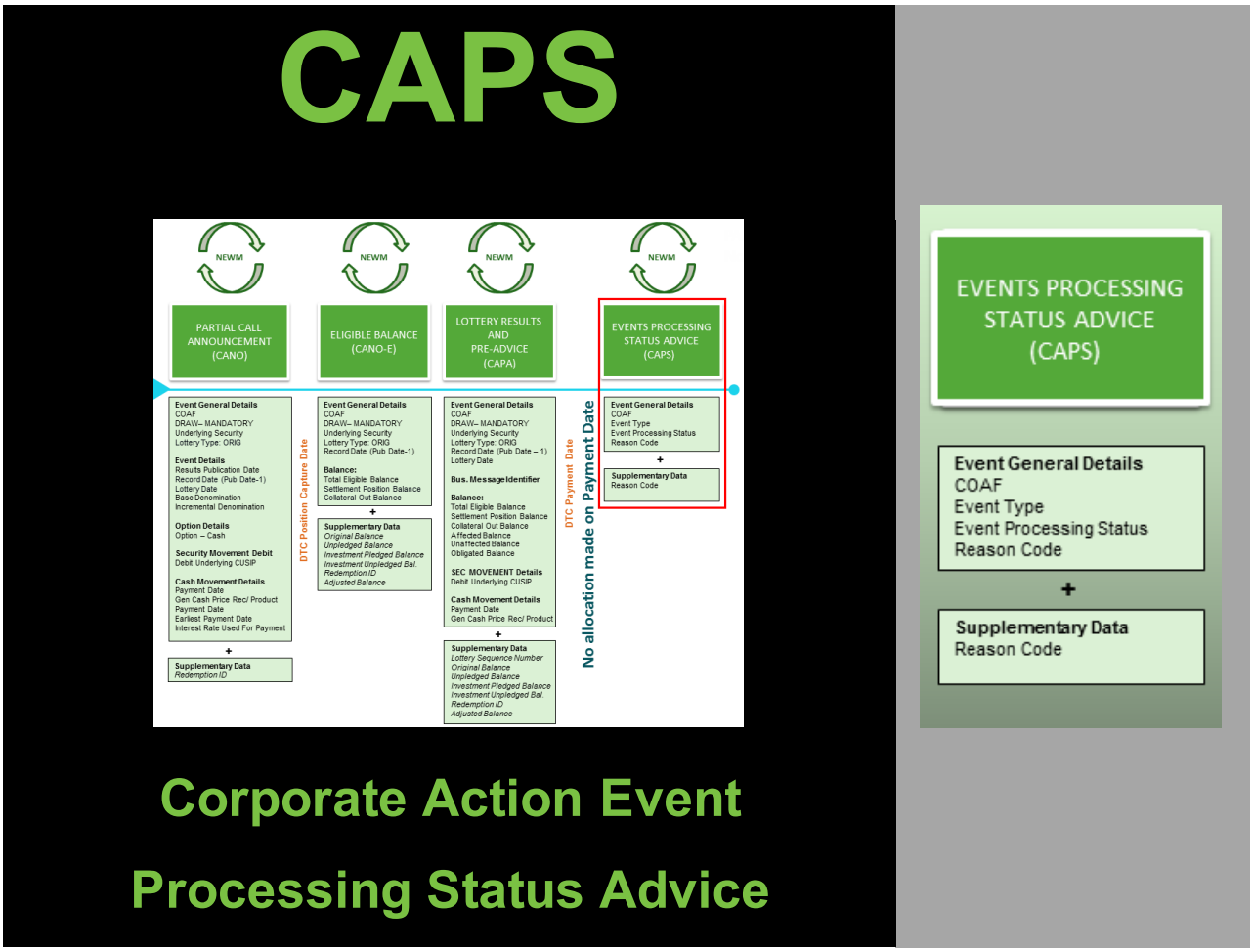
Record Date *(Pub Date – 1)*	Date/time at which positions are struck at the end of the day.
Notification Type	"NEWM" for new messages.

Balance Information	*Lottery and non-lottery events:* • **Confirmed Balance.** • **Total Eligible Balance**. The current eligible balance for the event. For lottery events, this is the total amount that could be called. • **Settlement Position Balance**. Balance of securities representing only settled transactions; pending transactions not included. • **Collateral Out Balance**. The balance of securities that belong to the safekeeping account indicated within this message and are deposited with a third party for the purpose of collateralization. *Lottery Events only:* • **Affected Balance.** The portion of the eligible position that *is* called by the lottery. For partial pre-refundings, this is the refunded balance; for partial defeasements, this is the defeased balance. • **Unaffected Balance**. The portion of the eligible position that is *not* called by the lottery. For partial pre-refundings, this is the non-refunded balance; for partial defeasements, this is the non-defeased balance.
Debit/Credit Indicator	Note that for redemption events, a debit of the underlying security will always take place. A credit for either securities or cash is then made.
Payment Date	This applies to either: • The date on which cash was moved into your account for the redemption of the security that was debited above, or • The date on which your position was moved into new securities for PDEF events.

The extension for the CACO message includes the following information:

Information	Definition / Notes
Redemption ID	A unique number systemically assigned to all lottery and non-lottery events in CA Web.
Lottery Sequence Number *for lottery events only*	A system-generated number to distinguish between the series of lotteries run against a particular redemption

Balance Information *for lottery events only*	• **Original Balance**. The original eligible balance as determined on record date. The original balance will remain constant for the life of the event, including any subsequent supplemental lottery CANO-E messages. • **Unpledged Balance**. The total number of shares this participant has pledged to any number of pledgee banks for this security. Individual pledge records record the security, number of shares, participant, pledgee bank, and loan date. • **Investment Pledged Balance**. The total quantity of securities segregated from the General Free account of a firm, partner, officer, stockholder, or an omnibus account. This account is used for reporting information to the IRS about securities purchased for investment purposes. Individual investment ID records contain position, serial number, and trade date. • **Investment Unpledged Balance**. The position held that represents the total quantity of securities segregated from the General Free account. Individual segregated records contain security, serial number and number of shares. Only serial numbers 1 – 5 can be accessed directly by participants.



What is a CAPS Message?

The Corporate Action Event Processing Status Advice (CAPS) message is created for payments that were anticipated but not allocated on payment date. If a same-day position capture event does not allocate, a CAPS message will be sent per client account number at the end of the day. A reason code on the CAPS message explains why the allocation was not made.

The identifying information for a CAPS message is:

MX Identifier	ISO 20022 Message Names	Extension	Short Name	Equivalent ISO 15022	Equivalent DTCC Processes
seev.032.002.xx[12]	CA Movement Preliminary Advice Cancellation	supl.010.001.xx[12]	CAPS	MT 567	Unallocated Positions

When Are CAPS Messages Generated?

CAPS messages for both lottery events (DRAW, PDEF) and non-lottery events (MCAL, REDM) are sent for non-allocated payments every day from payment date forward until the allocation is made. Each CAPS message is sent per CAPA message whenever the allocation specified in the CAPA does not occur.

CAPS Message Subscriptions and Timing

For both lottery and non-lottery events:

- CAPS messages are available via **file** at 4:00, 5:00, and 7:00 p.m.
- In **real time**, CAPS messages are available hourly from 1:00 p.m. – 7:00 p.m.
- A time stamp in the Business Application Header (BAH) allows you to verify message order.

Weekly Messaging Times

Generally, entitlements and allocations messages are sent Monday through Friday during the times specified below. Exceptions are noted in the holiday processing schedule.

Message	Monday – Friday	Saturday and Sunday
CAPS	Messages between 1:00 p.m. and 7:00 p.m. eastern time based on customer subscription. Files transmitted at 4:00 p.m., 5:00 p.m., and 7:00 p.m. eastern time based on customer subscription	No messages or files transmitted.

[12] The last two digits in the MX Identifier and the Extension code signify the version number. The MX version number and/or the Supplementary version number may change during the SWIFT annual release based on mandatory or optional updates to the standards and extensions.
Current schemas are available on MyStandards, DTCC.com, and DTCC's Learning Center.

Holiday Processing Schedule

U.S. and Canadian Holidays (both closed)	U.S. Holidays (DTCC closed, Canada open)	Canadian Holidays (DTCC open, Canada closed)
No messages or files are sent on: • New Year's Day • Labor Day, and • Christmas Day.	1:00 p.m., 2:00 p.m., and 3:00 p.m. eastern time for P&I and foreign payments on these days: • Dr. Martin Luther King, Jr. Day • Presidents' Day • Memorial Day • Independence Day, and • Thanksgiving Day. Files are transmitted based on customer subscription.	Normal volumes occur on these days: • Good Friday (All) • Victoria Day • Canada Day • CDN Thanksgiving Day, and • Boxing Day. Files are transmitted based on customer subscription.

Information Contained on the CAPS Message

Mapping for the message layout will conform to the ISO message rules.

The following table contains some of the important information in the CAPS messages for lottery and non-lottery events.

For more detailed technical information about message contents and elements, please see the Data Dictionary and/or My Standards for this message.

Information	Definition / Notes
Message Type	Part of the message header. Always set to “CAPS.”
Official Corporate Actions Event ID	Official Corporate Actions Identifier. This is the official, unique identifier for the corporate action. It is made up of the CA ID preceded by “US.” In order for this instruction to be accepted and processed, the COAF on the instruction must match the COAF on the announcement messages.
Event Type	• **DRAW** for partial calls. • **PDEF** for partial defeasances, partial pre-refundings, and full pre-refundings. • **MCAL** for full calls and final paydowns. • **REDM** for final maturities and UIT terminations.

	• **DFLT** for defaults.

Non-Allocation Reason Information	This series of fields explains why the allocation was not made. It includes:
	• **Pending / No Specified Reason**. This is used when an unallocated item has no ISO reason code available. It uses the code "NORE," meaning that there is no reason code available or there is nothing to report.
	• **Pending / Reason Code**. If an ISO reason code is available, it is specified here:
	  ○ **NPAY**. No payment made. See the Unallocated Reason Code in the message extension for more information.
	  ○ **OTHR**. Indicates that there is another reason for the non-allocation. See the narrative in Additional Reason Information for details.
	• **Additional Reason Information**. This is a text field that, when present, details any additional information about the non-allocation.
	• **Unallocated Reason Code**. These codes appear in the message extension. They apply to the CAPS message when an event's processing status is "Pending" and the reason code given in the core message is "NPAY" (for cash).
	The message extension provides the detailed reason for non-payment.

Balance Information	*Lottery and non-lottery events:* • **Total Eligible Balance**. Represents the eligible balance. • **Original Balance**. The original eligible balance as determined on record date. The original balance will remain constant for the life of the event, including any subsequent supplemental lottery CANO-E messages. • **Pledged Balance**. Portion of the Original Balance position held in the DTC General Free account as of the day prior to publication date. Position held in this account is subject to redemption lottery call. • **Unpledged Balance**. Total number of shares this participant has pledged to any number of pledgee banks for this security. Individual pledge records record the security, number of shares, participant, pledgee bank, and loan date. • **Investment Pledged Balance**. The total quantity of securities segregated from the General Free account of a firm, partner, officer, stockholder, or an omnibus account. This account is used for reporting information to the IRS about securities purchased for investment purposes. Individual investment ID records contain position, serial number, and trade date.

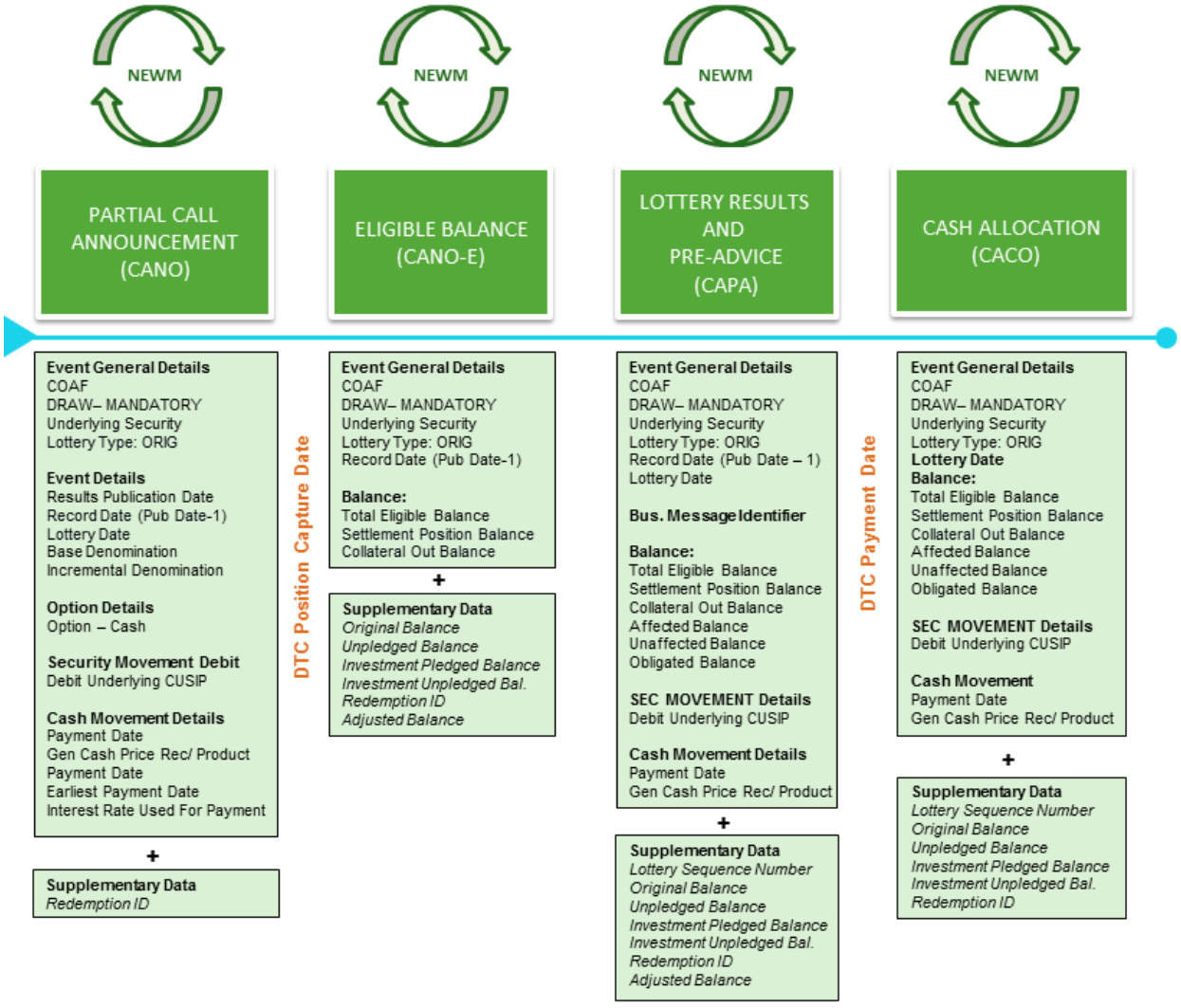
	• **Investment Unpledged Balance**. Position held that represents the total quantity of securities segregated from the General Free account. Individual segregated records contain security, serial number and number of shares. Only serial numbers 1 – 5 can be accessed directly by participants. *Lottery Events only:* • **Affected Balance.** The portion of the eligible position that *is* called by the lottery. For partial pre-refundings, this is the refunded balance; for partial defeasements, this is the defeased balance. • **Unaffected Balance**. The portion of the eligible position that is *not* called by the lottery. For partial pre-refundings, this is the non-refunded balance; for partial defeasements, this is the non-defeased balance. • **Obligated Balance**. Obligated position occurs when the affected balance is greater than the settled position. This can happen when a call notice is received late and the prior record date position is greater than what is currently settled.
Lottery Information *for Lottery Events Only*	Includes items specific to lottery events, such as: • Lottery Type: o **ORIG** for original lottery, or o **SUPP** for supplemental lottery. • Lottery Date.

Appendix A: Message Scenarios

Messaging Scenarios for Lottery Events

Scenario 1: Partial Call (Basic)

This scenario illustrates the flow of messages that a client can expect to receive for a partial call event. An announcement is made, eligible balances are determined, the lottery is run, affected balances and associated entitlements are determined, and allocations are made and documented.



Scenario 1: Partial Call

The process starts with the Partial Call Announcement message (**CANO**). This message presents clients with details about the event, including record date, CUSIP, and lottery date. The Redemption ID is given in the message extension.

The CANO is followed by the Eligible Balance message (**CANO-E**). This message provides information about a client's eligible balance prior to the lottery being run. The total eligible balance is contained in the main body of the message, while additional balances describing the position the client may have can be found in both the core message and the message extension (when applicable). The client is informed of your eligible position based on the details of the partial call.

The **CAPA** message is first sent when the lottery has been run. This message has two purposes.

- First, it informs the client of the DTC lottery results.
- Based on these results, this message also explains what portion of your eligible balance was affected ("called") by the lottery, and what you can therefore expect to see in cash as a result of this event.
  The CAPA message also specifies the payment date and payment rate (if available) in the credit cash movement. The message shows a debit projection of the underlying CUSIP.

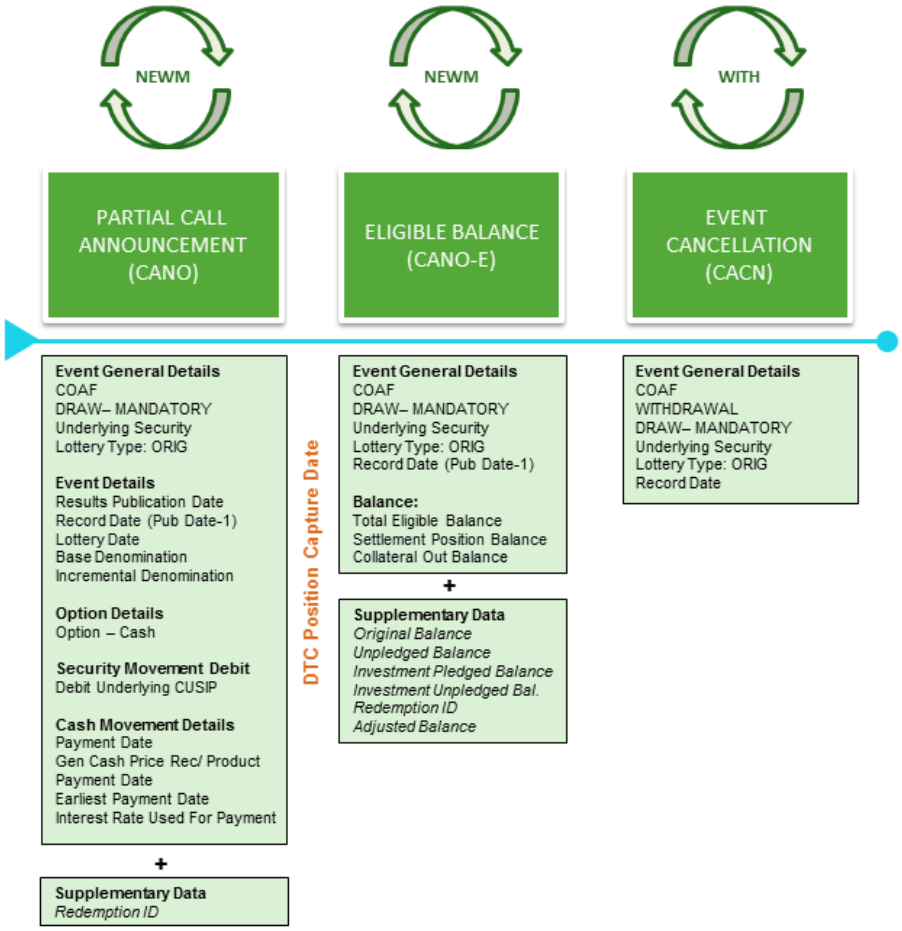
The first CAPA sent is always a CAPA NEWM, or "new message." CAPA REPL ("replacement") messages are sent if any information on the CAPA NEWM has changed, such as the rate.

Finally, the **CACO** message serves as a payment confirmation for the event. On payment date, your underlying CUSIP is debited and cash is moved to your account. The CACO message details the payment information regarding the partial call as well as lottery detail.

Scenario 2: Cancellation of a Partial Call (Pre-Lottery)

This scenario demonstrates the message flow for a situation in which an announcement was made for an event, but the event was canceled *before* the lottery was run.

In this case, you are informed of your eligibility, but the event is canceled before any determination has been made regarding your affected position.

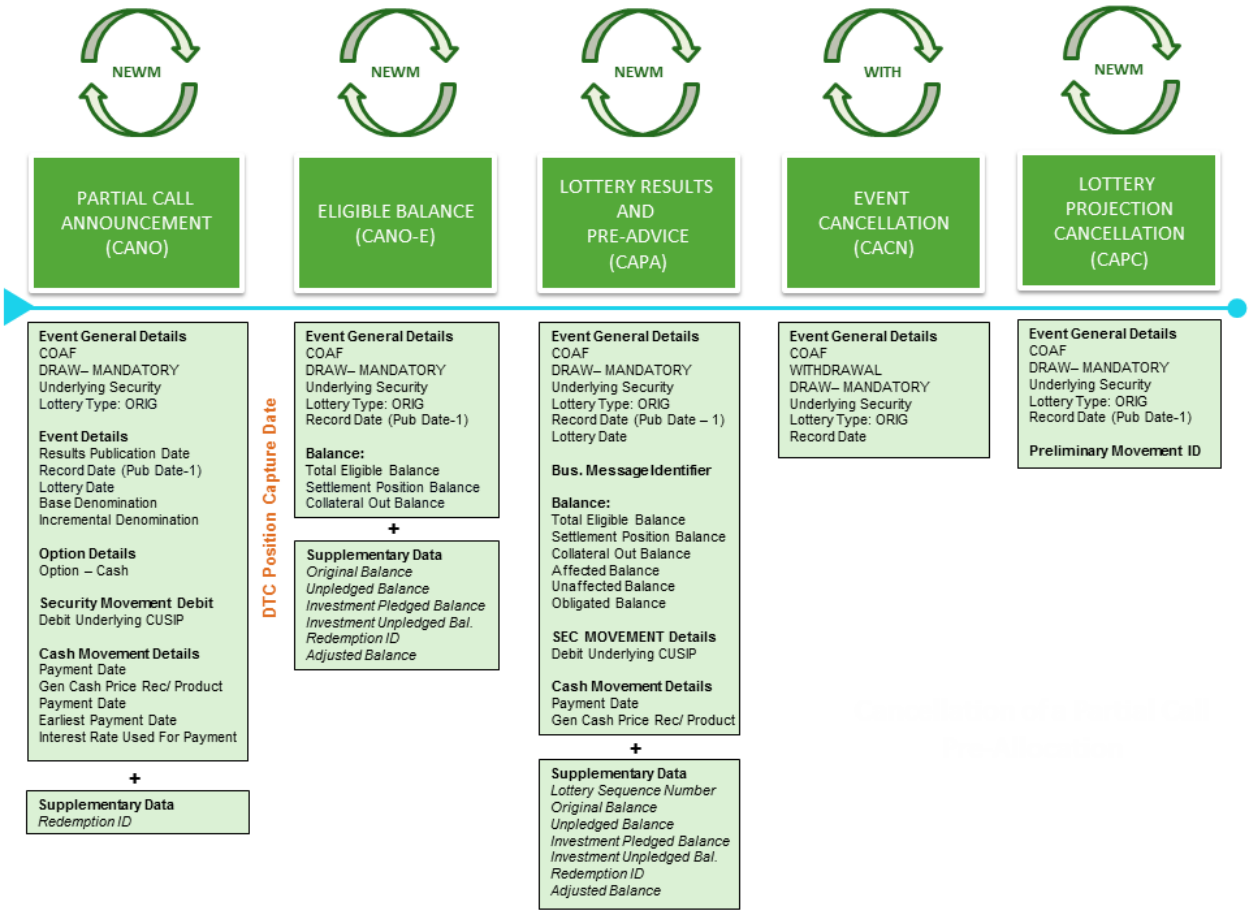


Scenario 2: Cancellation of a Partial Call (Pre-Lottery)

The **CANO** and **CANO-E** messages are sent out as for a basic partial call. However, before the CAPA gets sent, a **CACN** message informs you that the event will not take place.

Scenario 3: Cancellation of a Partial Call (Pre-Allocation)

As in Scenario 2, this scenario deals with the cancellation of a partial call event. In this case, however, the cancellation occurs *after* the lottery has been run but *before* the cash has been allocated.



Scenario 3: Cancellation of a Partial Call (Pre-Allocation)

The **CANO, CANO-E**, and **CAPA** messages are sent out as for a basic partial call: you are not only informed of the event and your eligible balance, but the lottery has been run and you are informed of your affected balance, the rate (if known), the projected debit to your underlying CUSIP, your projected allocation, and the payment date.

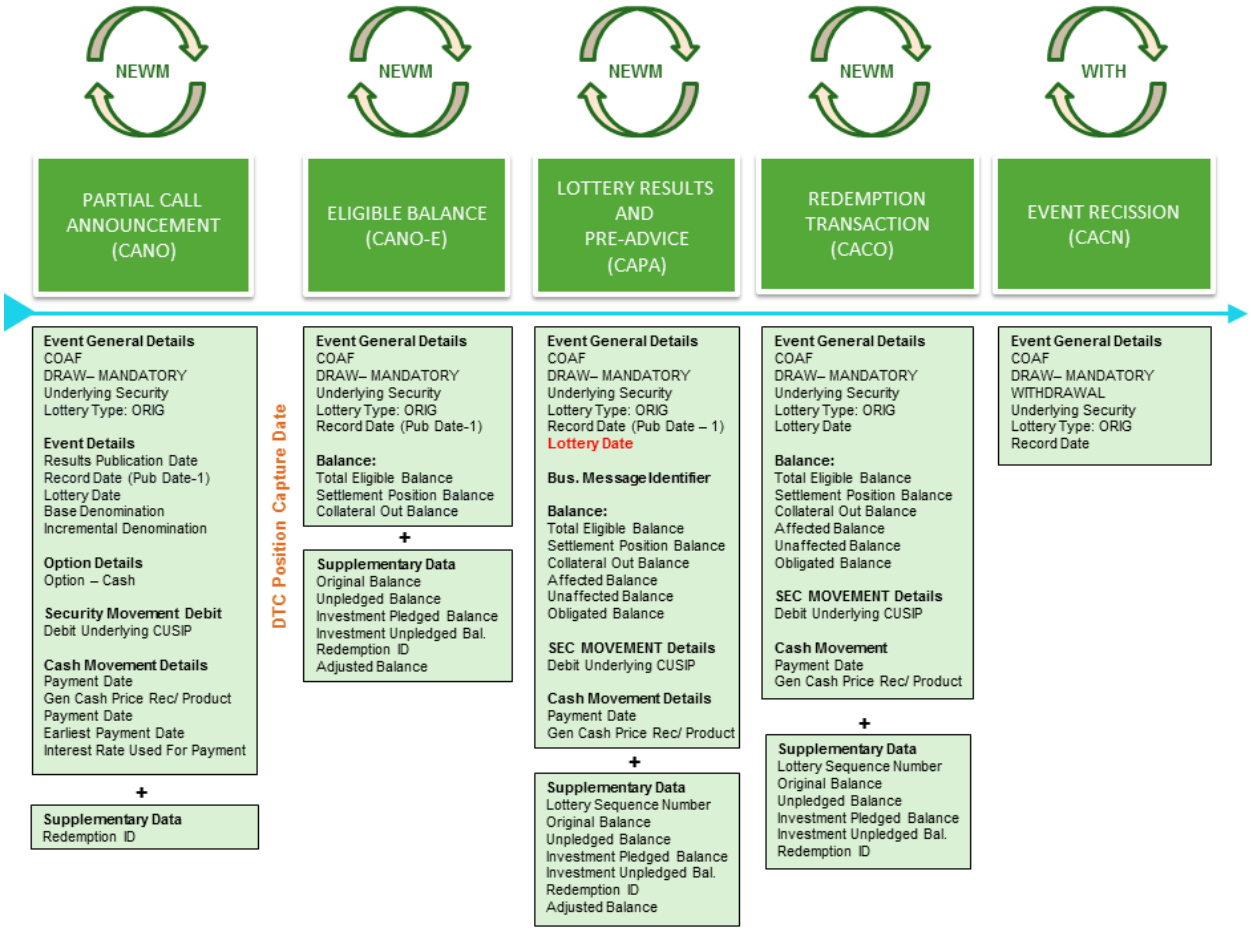
This time, the event is canceled between the pre-advice and the allocation. Since the lottery has already been run and the allocation has already been projected, there are two types of cancellation messages that are sent.

The Event Cancellation (**CACN**) message cancels the CANO: it is sent to inform you that the event itself has been canceled. This refers only to the event, not to the lottery.

The projection itself – that is, the lottery results and how they affect your position – must be canceled as well. The Lottery Projection Cancellation (**CAPC**) message retracts the CAPA: it informs you that the lottery results have been canceled.

Scenario 4: Cancellation of a Partial Call (Same-Day / Post-Allocation)

As in Scenarios 2 and 3, this scenario deals with the cancellation of a partial call event. In this case, however, the cancellation occurs on the *same day after* the lottery has been run and *after* the cash has been allocated.



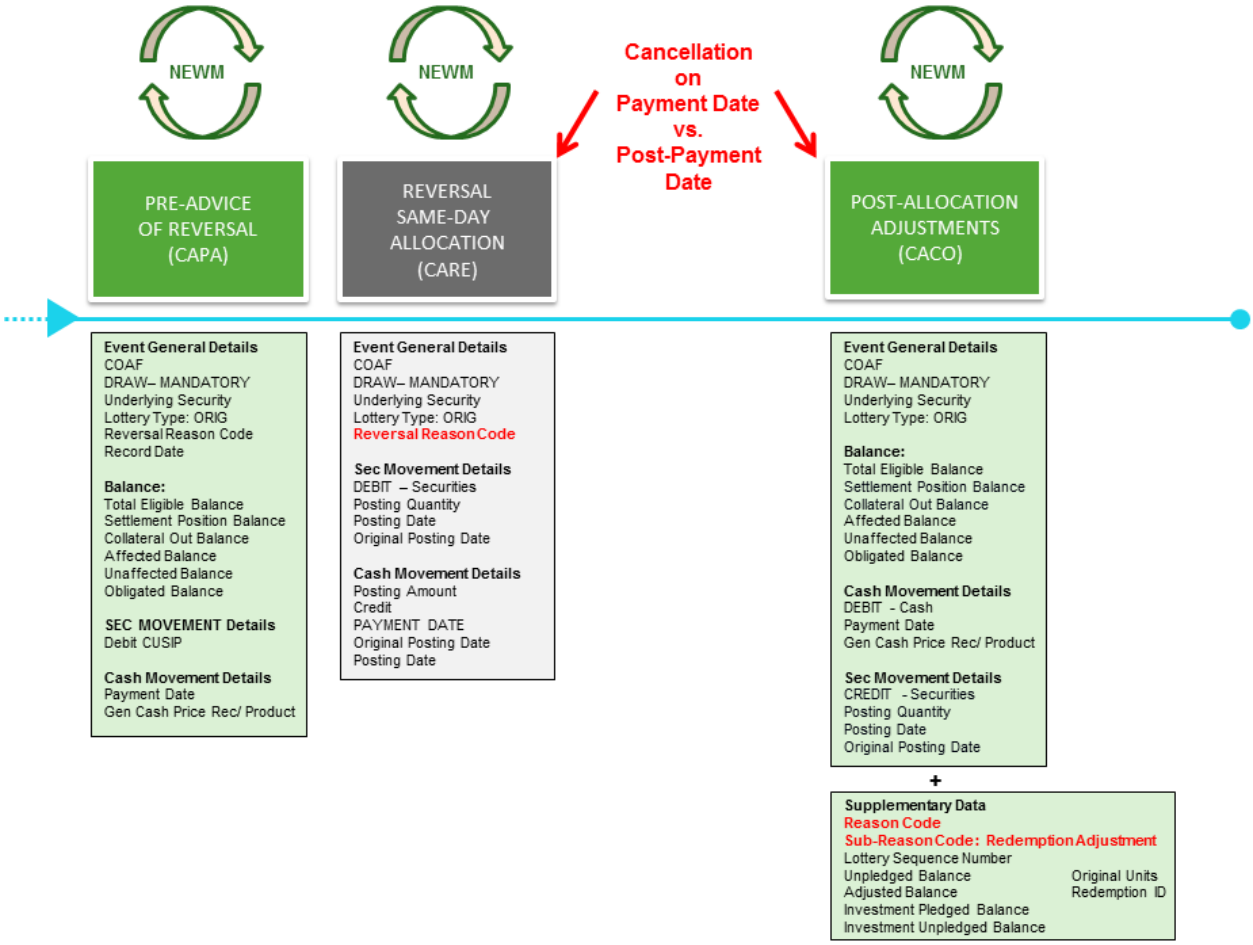
Scenario 4a: Cancellation of a Partial Call (Same-Day, Post-Allocation): 1 of 2

The **CANO, CANO-E**, and **CAPA** messages are sent out as for a basic partial call: you are not only informed of the event and your eligible balance, but the lottery has been run and you are informed of your affected balance, the rate (if known), the projected debit to your underlying CUSIP, your projected allocation, and the payment date.

On payment date, allocation is made and the **CACO** message serves as a payment confirmation for the event. On payment date, your underlying CUSIP is debited and cash is moved to your account.

At this point, however, the event is canceled. A **CACN** message is sent to rescind the event that was originally announced in the CANO.

This scenario concludes in the next diagram.



Scenario 4b: Cancellation of a Partial Call (Same-Day, Post-Allocation): 2 of 2

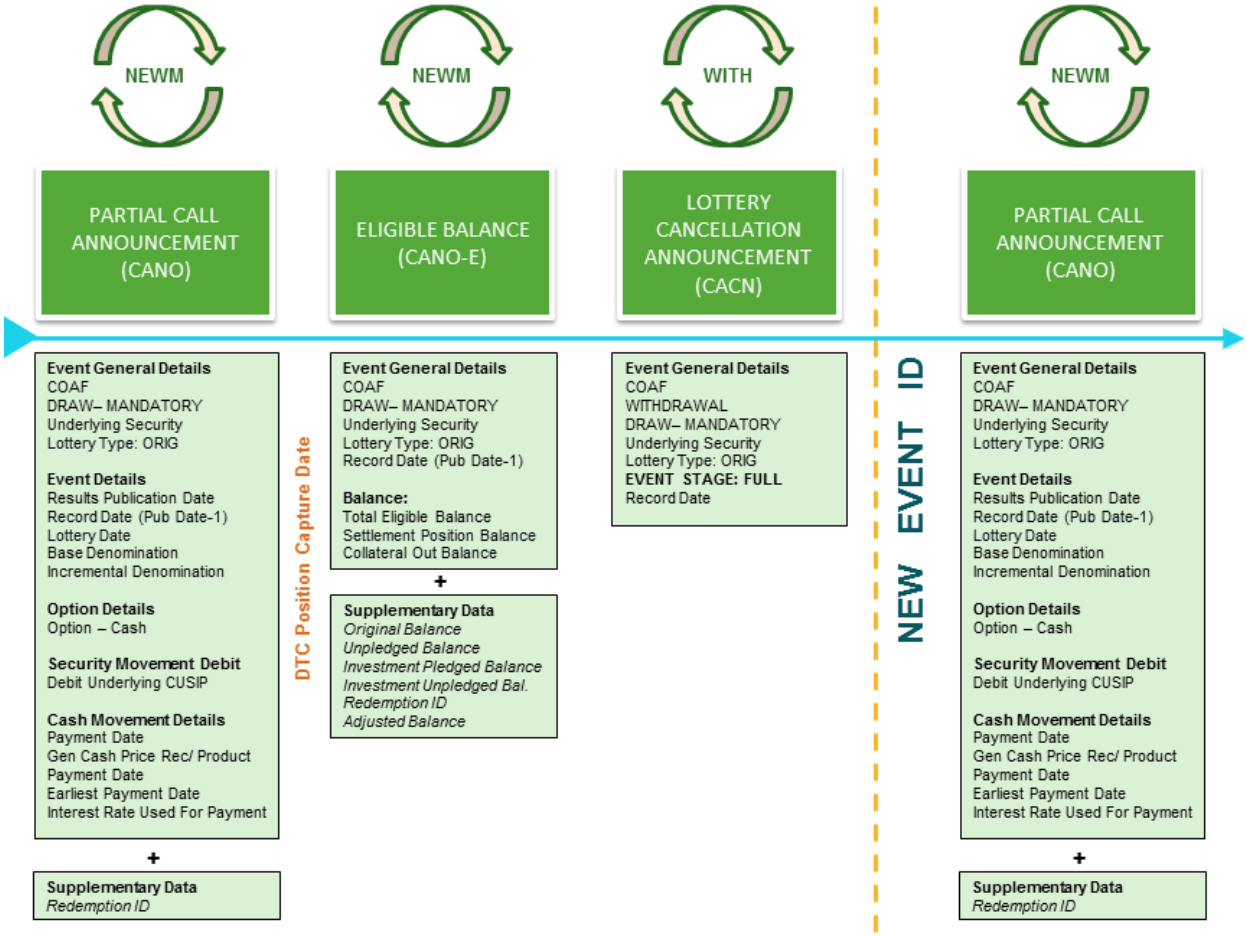
After the event is rescinded, it needs to be reversed. A new **CAPA** is sent after the CACN, detailing what it is that will be reversed. Note that the details of the CAPA for the reversal mirror the CAPA for the event: they reflect what is *being* reversed, not what will happen as a *result* of the reversal.

> **Note**: The CARE message in gray (above) is not currently in use. In the near future, it will be used for same-day allocation reversals. At the moment, all post-allocation reversals – same-day or otherwise – are made via the **CACO** message.

The **CACO** message will be used for adjustments if the CARE is not utilized. This occurs after payment date as CARE Messages will be sent only on payment date. Note that the details represent opposite movement from the CAPA messages: cash is debited *from* and securities are credited *to* the client account.

Scenario 5: Cancellation and Re-Run of a Partial Call (Pre-Lottery)

As in Scenario 2, this scenario deals with the cancellation of a partial call event before a lottery has been run. In this case, the event is re-run after cancellation.

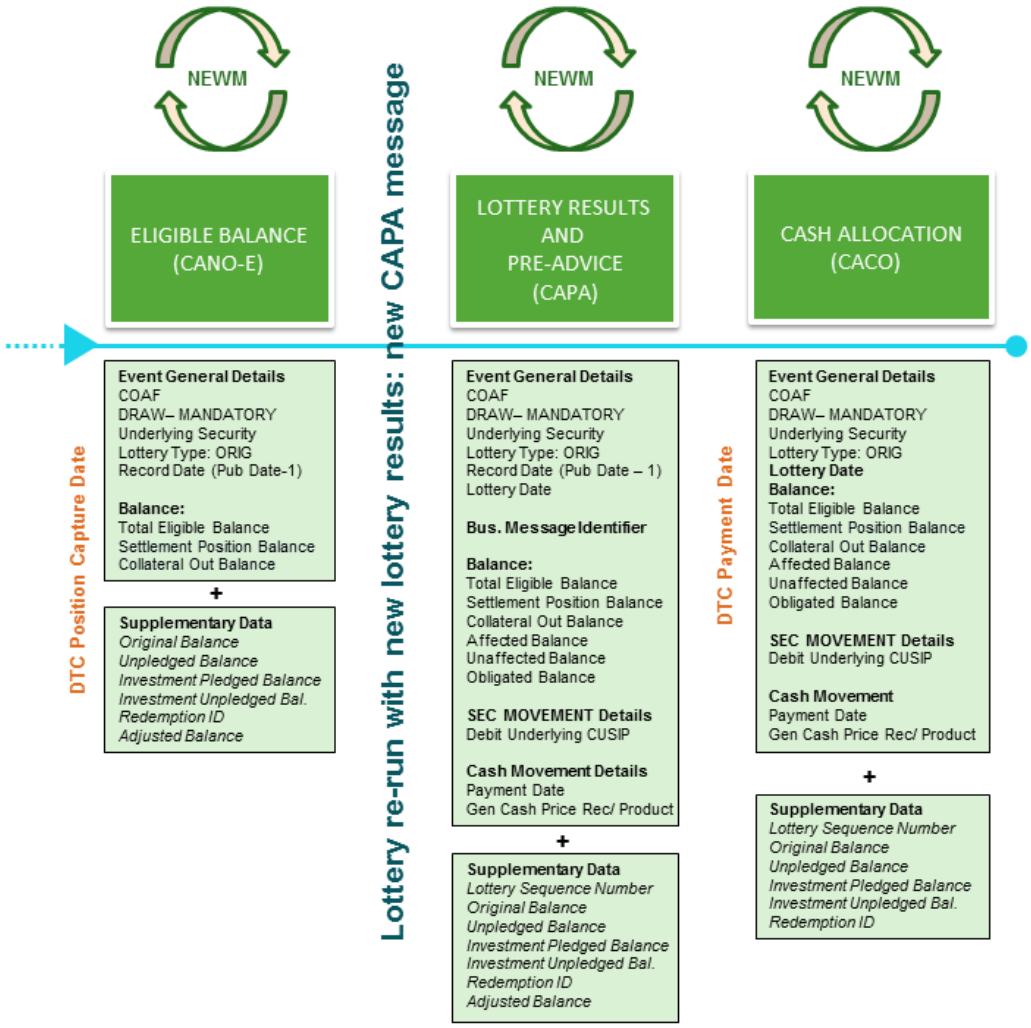


Scenario 5a: Cancellation / Re-run of a Partial Call (Pre-Lottery): 1 of 2

The **CANO** and **CANO-E** messages are sent out as for a basic partial call. A CAPA is not sent because no lottery has been run. The **CACN** message informs you that the event will not take place.

After the event is canceled, a new Corporate Actions Event ID is assigned to the event. A new **CANO** is sent: because the event was assigned a new ID, this is therefore a NEWM.

The scenario continues in the next diagram.



Scenario 5b: Cancellation / Re-run of a Partial Call (Pre-Lottery): 2 of 2

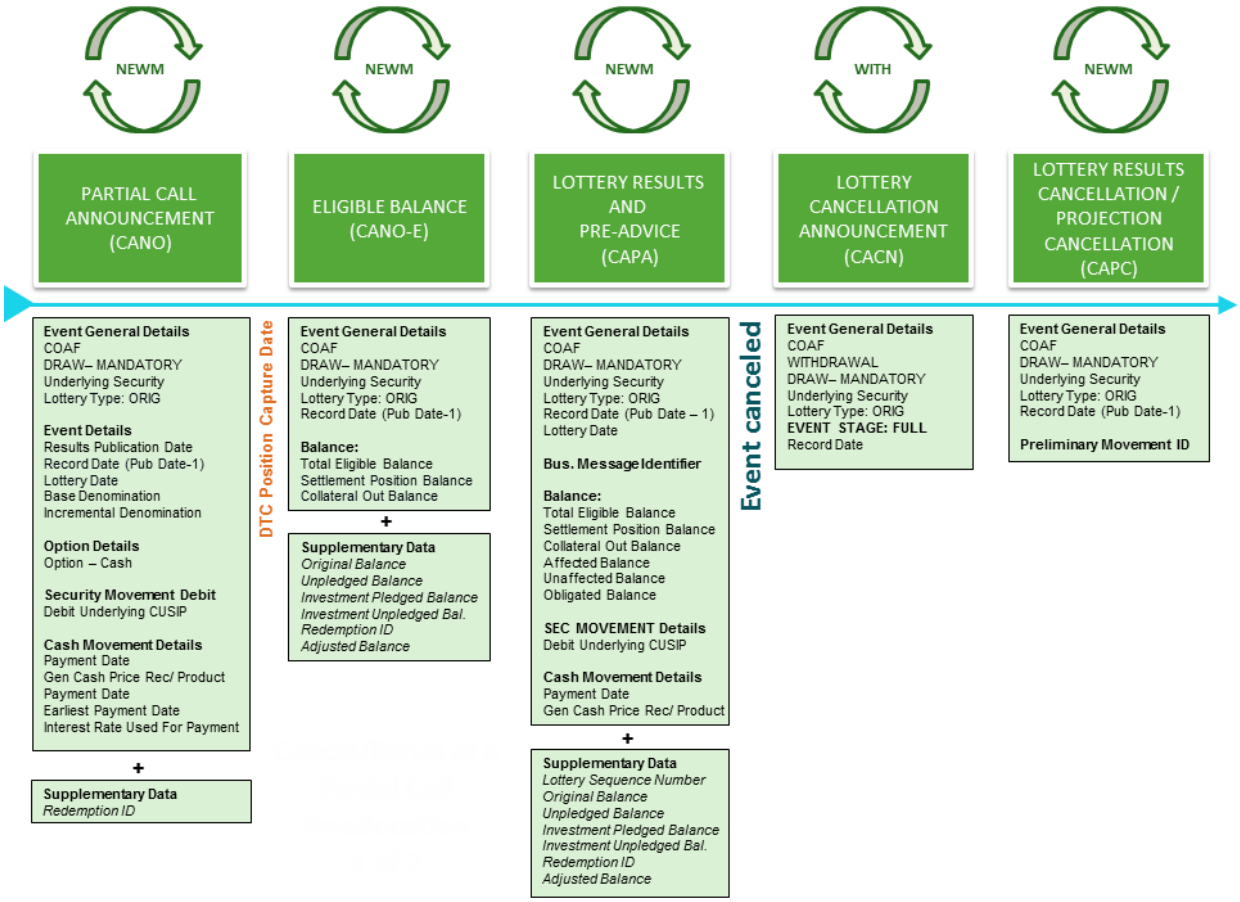
The **CANO-E** is sent, detailing eligibility for the event under the new Corporate Actions Event ID. The lottery is then re-run, and a new **CAPA** message details the lottery results.

On DTC Payment Date, the allocations are made. The **CACO** details the cash and security movements for the new event.

Scenario 6: Cancellation and Re-Run of a Partial Call (Post-Lottery, Pre-Allocation)

As in Scenario 3, the event is canceled post-lottery and pre-allocation. As before, the event is withdrawn and must be reversed.

Here, however, a new event will take the place of the initial event.



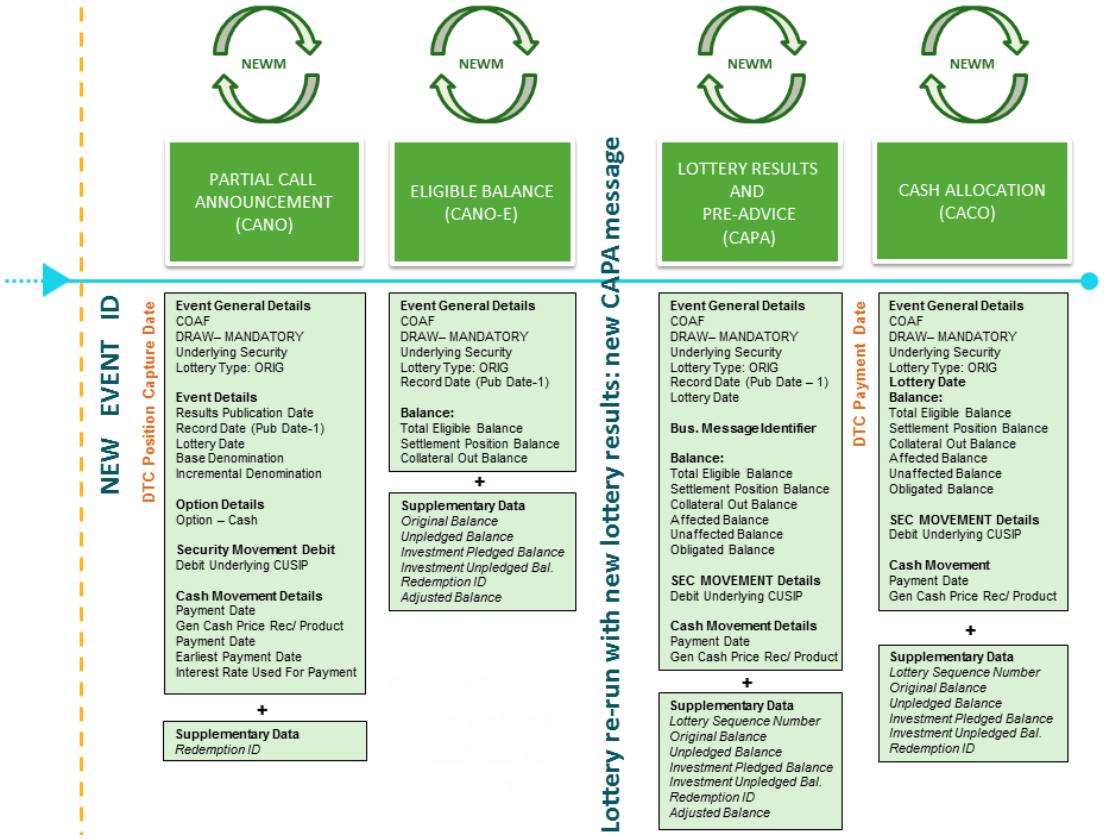
Scenario 6a: Cancellation and Rerun of a Partial Call (Post-Lottery, Pre-Allocation): 1 of 2

The first portion of this cancellation happens as in Scenario 3: a **CANO** message announces the event, a **CANO-E** message details a client's eligibility, a **CAPA** message informs the client of the lottery results and its affected balance, and a **CACN** message cancels the initial event.

The CACN, however, contains an event stage indicator that informs the client that this is a non-standard lottery process. It is used in conjunction with the Lottery Type. The value "FULL" refers to the cancellation and re-run of an original lottery or an original and supplemental lottery. A subsequent lottery will be performed under a new event.

After the cancellation, a new event is announced via a new **CANO** message, as was indicated by the event stage within the CACN message. This CANO contains the details for the replacement event.

This process continues in the following diagram.



Scenario 6b: Cancellation and Rerun of a Partial Call (Post-Lottery, Pre-Allocation): 2 of 2

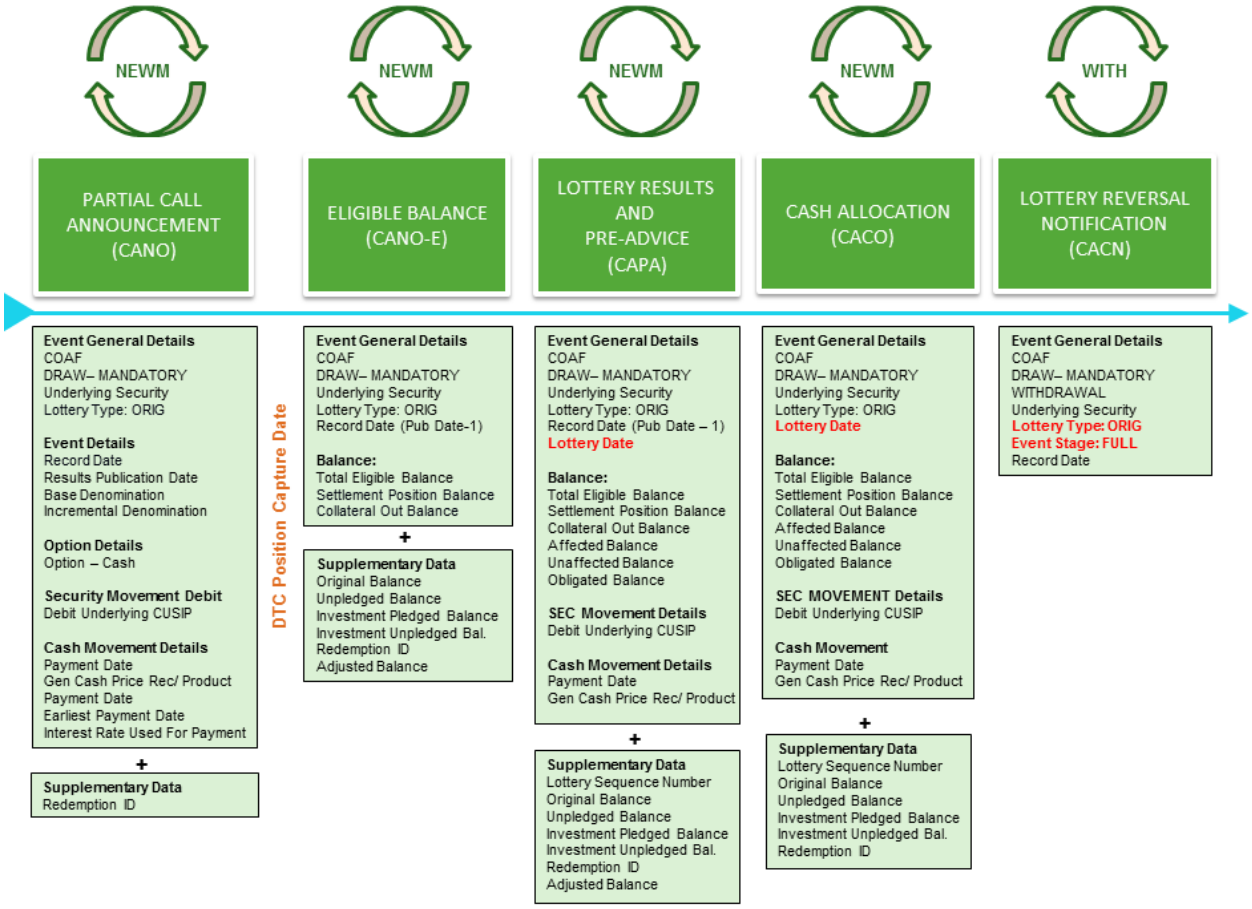
The process continues from this point as for a regular Partial Call.

The lottery is re-run and a new **CAPA** is sent, informing you of the lottery results and the effect the lottery will have on the client's position and balances.

On the new Payment Date, all allocations are made and a **CACO** message is sent as a payment confirmation for the event. On payment date, the client's underlying CUSIP is debited and cash is moved to its account.

Scenario 7: Cancellation and Re-Run of a Partial Call (Post-Allocation)

In this situation, the event is canceled *after* the lottery has been run and allocation has occurred. All allocations made on the canceled event have to be reversed before the allocations on the second event can take place.

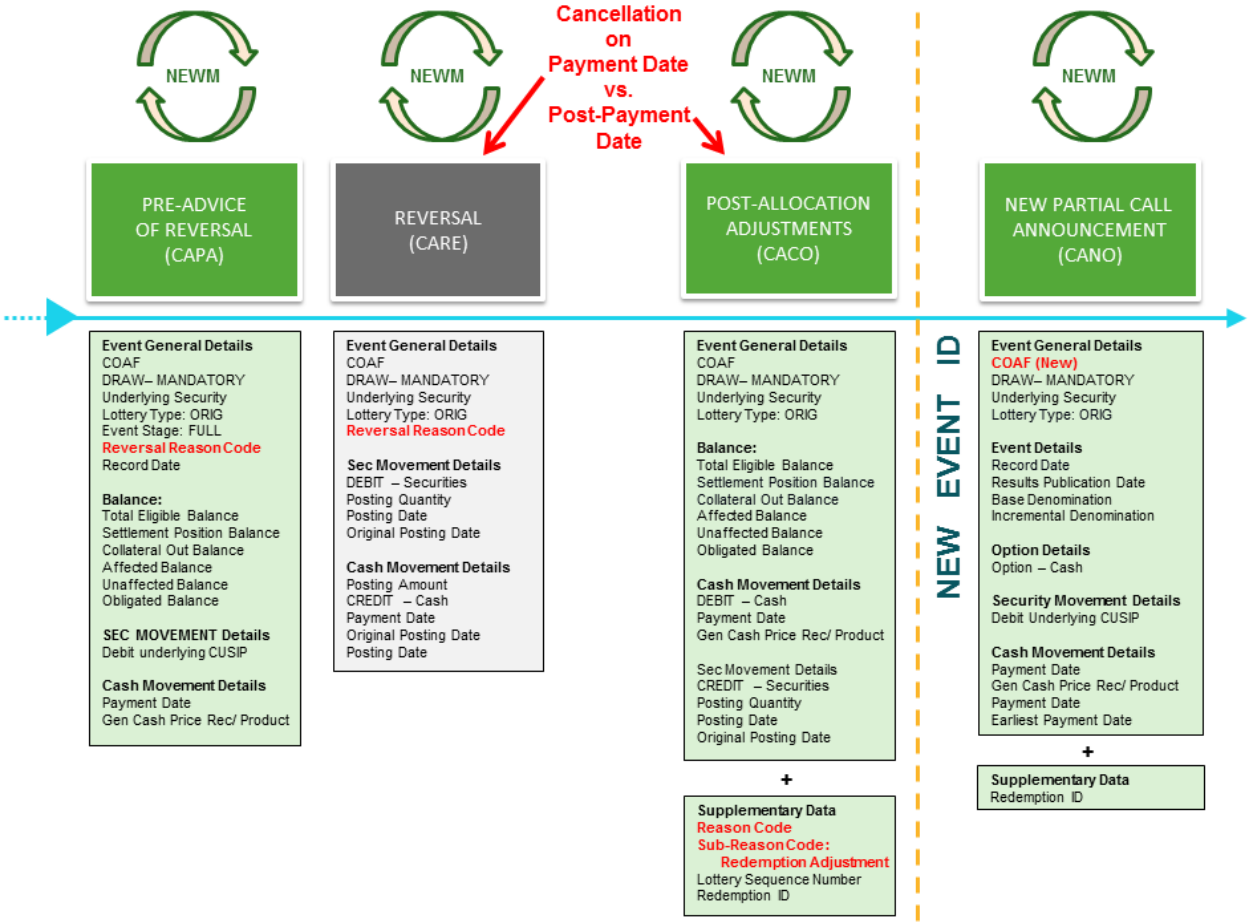


Scenario 7a: Cancellation and Rerun of a Partial Call (Post-Allocation): 1 of 3

The full event proceeds as in Scenario 1: The **CANO** is sent announcing the event, the **CANO-E** informs a client of its eligibility, the lottery is run, and the **CAPA** is sent announcing the lottery results. Allocation is made on payment date, and the **CACO** is sent post-allocation to confirm payment.

At this point, however, the announcement is canceled and the lottery is re-run. The **CACN** is sent, announcing that the lottery is canceled. On the CACN, the Event Stage field's value of "FULL" (used in conjunction with the Lottery Type field's value of "ORIG") informs you that this is a cancellation and re-run of an original lottery. A subsequent lottery will be performed under a new event.

This process continues in the next diagram.



Scenario 7b: Cancellation and Rerun of a Partial Call (Post-Allocation): 2 of 3

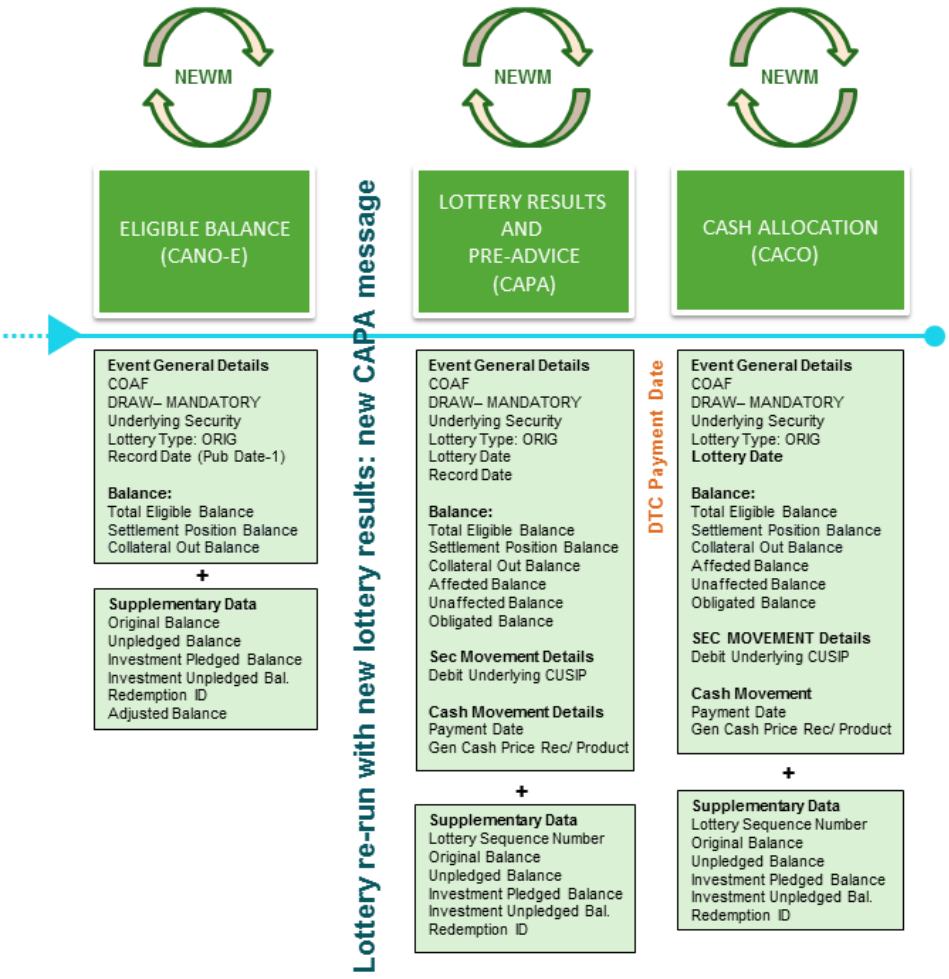
After the event is rescinded, it needs to be reversed. A new **CAPA** is sent after the CACN, detailing what it is that will be reversed. Note that the details of the CAPA for the reversal mirror the CAPA for the event: they reflect what is *being* reversed, not what will happen as a *result* of the reversal.

> **Note**: The **CARE** message in gray (above) is not currently in use. In the near future, it will be used for same-day allocation reversals. At the moment, all post-allocation reversals – same-day or otherwise – are made via the **CACO** message.

The **CACO** message will be used for adjustments if the CARE is not utilized. This occurs after payment date as CARE Messages will be sent only on payment date. Note that the details represent opposite movement from the CAPA messages: cash is debited *from* and securities are credited *to* the client account.

After the reversal is completed, a new event is announced via a new **CANO** message (as was indicated by the event stage within the CACN message). This CANO contains the details for the replacement event.

This scenario concludes in the following diagram.



Scenario 7c: Cancellation and Rerun of a Partial Call (Post-Allocation): 3 of 3

The **CANO-E** is sent, detailing eligibility for the event under the new Corporate Actions Event ID. The lottery is then re-run, and a new **CAPA** message details the lottery results.

On the new DTC Payment Date, the allocations are made. The **CACO** details the cash and security movements for the new event.

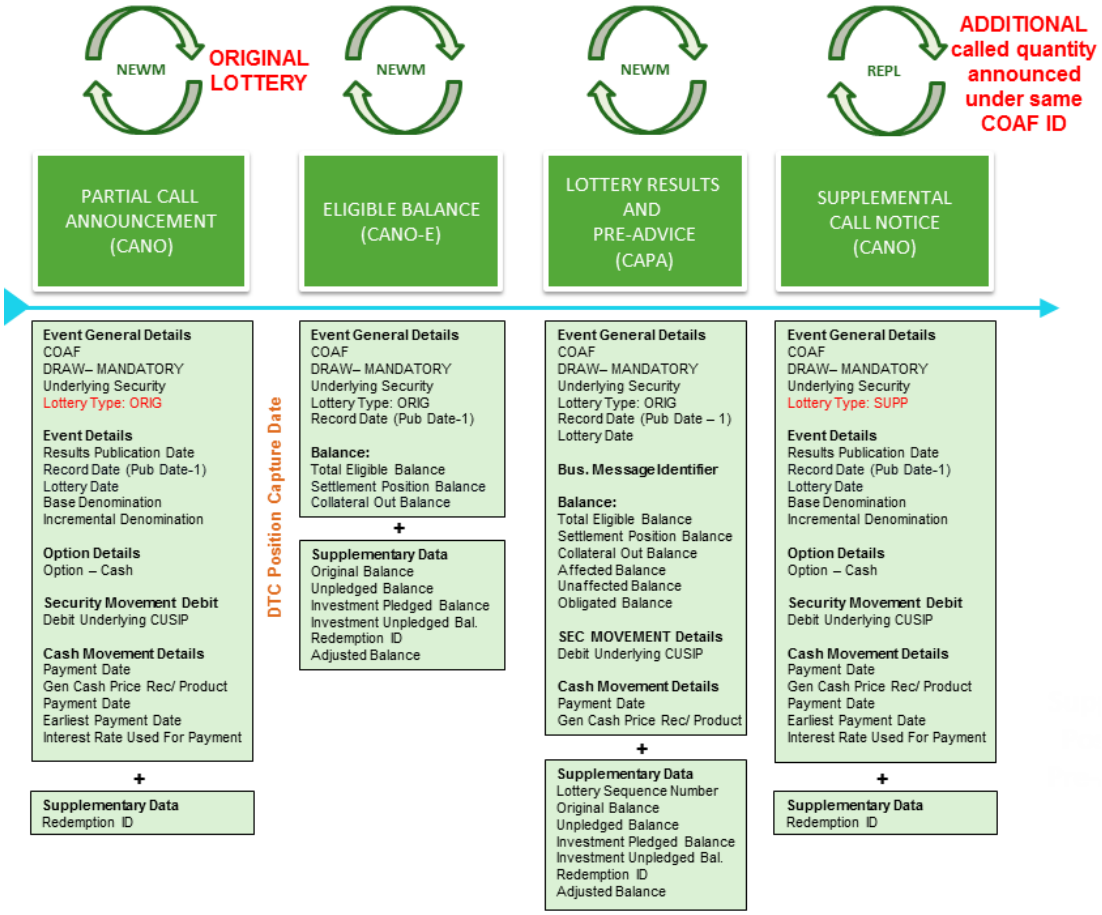
Messaging Scenarios for Supplemental Lotteries

Scenario 8: Supplemental Lottery

Supplemental lotteries are additional lotteries run on an event when the issuer needs to call additional quantity. They are processed under the same Event ID as the original lottery, and have many of the same characteristics as the original lottery (such as the record date and payment date). In the event messages, they can be distinguished by a value of "SUPP" for the Lottery Type element.

The eligible balance is based on the unaffected balance of the original lottery. Please see the Account Balances section for more information on balance flows.

The example that follows is of a supplemental lottery that has been run *after* an original lottery has been run but *before* the cash has been allocated.

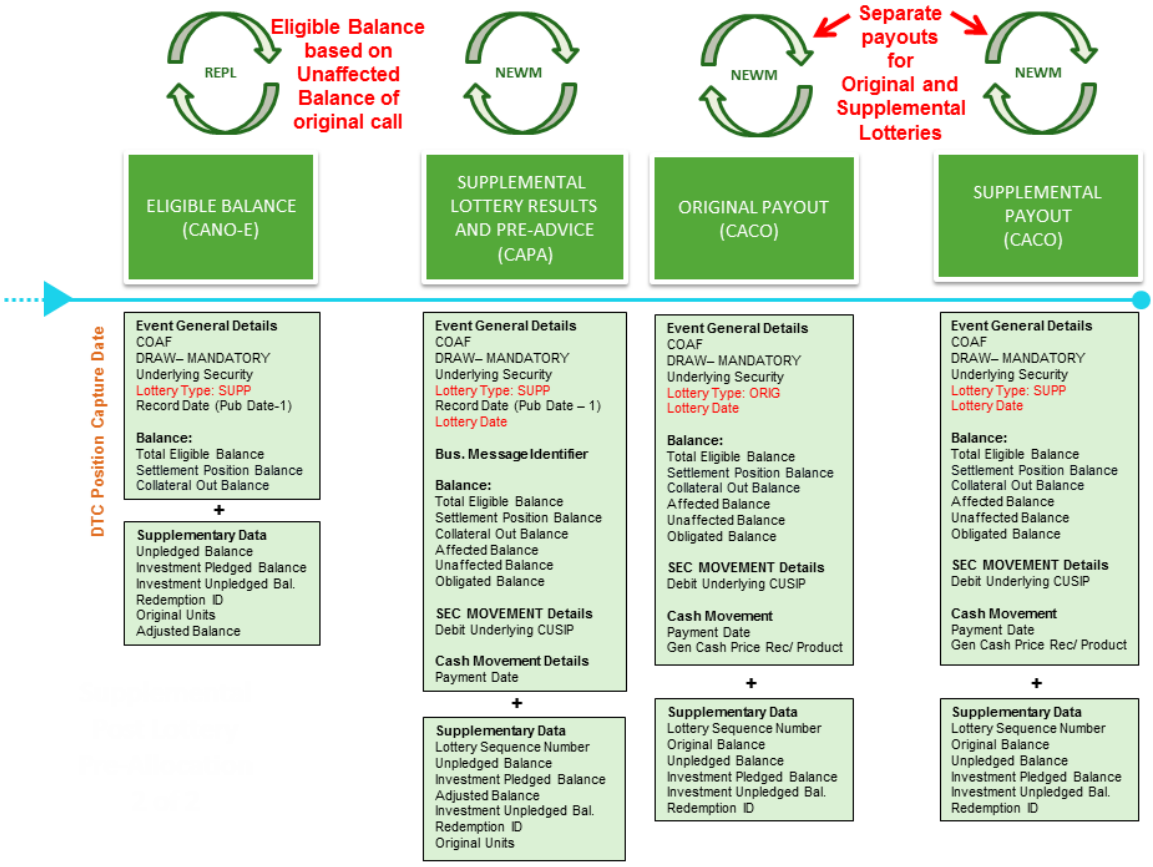


Scenario 8a: Supplemental Lottery (Post-Lottery, Pre-Allocation): 1 of 2

A partial call occurs as usual: the **CANO, CANO-E**, and **CAPA** messages are sent out. You are informed of the event and your eligible balance, and the lottery has been run and you are informed of your affected balance, the rate (if known), the projected debit to your underlying CUSIP, your projected allocation, and the payment date.

After you receive the CAPA with the lottery results, you receive an announcement message for a supplemental lottery on the same event. This second **CANO** specifies the supplemental lottery with the Lottery Type "SUPP."

This scenario continues with the following diagram (8b).



Scenario 8b: Supplemental Lottery (Post-Lottery, Pre-Allocation): 2 of 2

A second **CANO-E** (REPL) is sent; this one applies to the supplemental lottery. It specifies your eligibility based on the *original* lottery. Your unaffected balance in the original lottery becomes your eligible balance for the supplemental.

After the supplemental lottery is run, a **CAPA** message is sent that details the lottery results. It does not replace the CAPA that was sent on the original lottery; the results detailed here are for the supplemental lottery only. The CAPA message will contain the original Event ID.

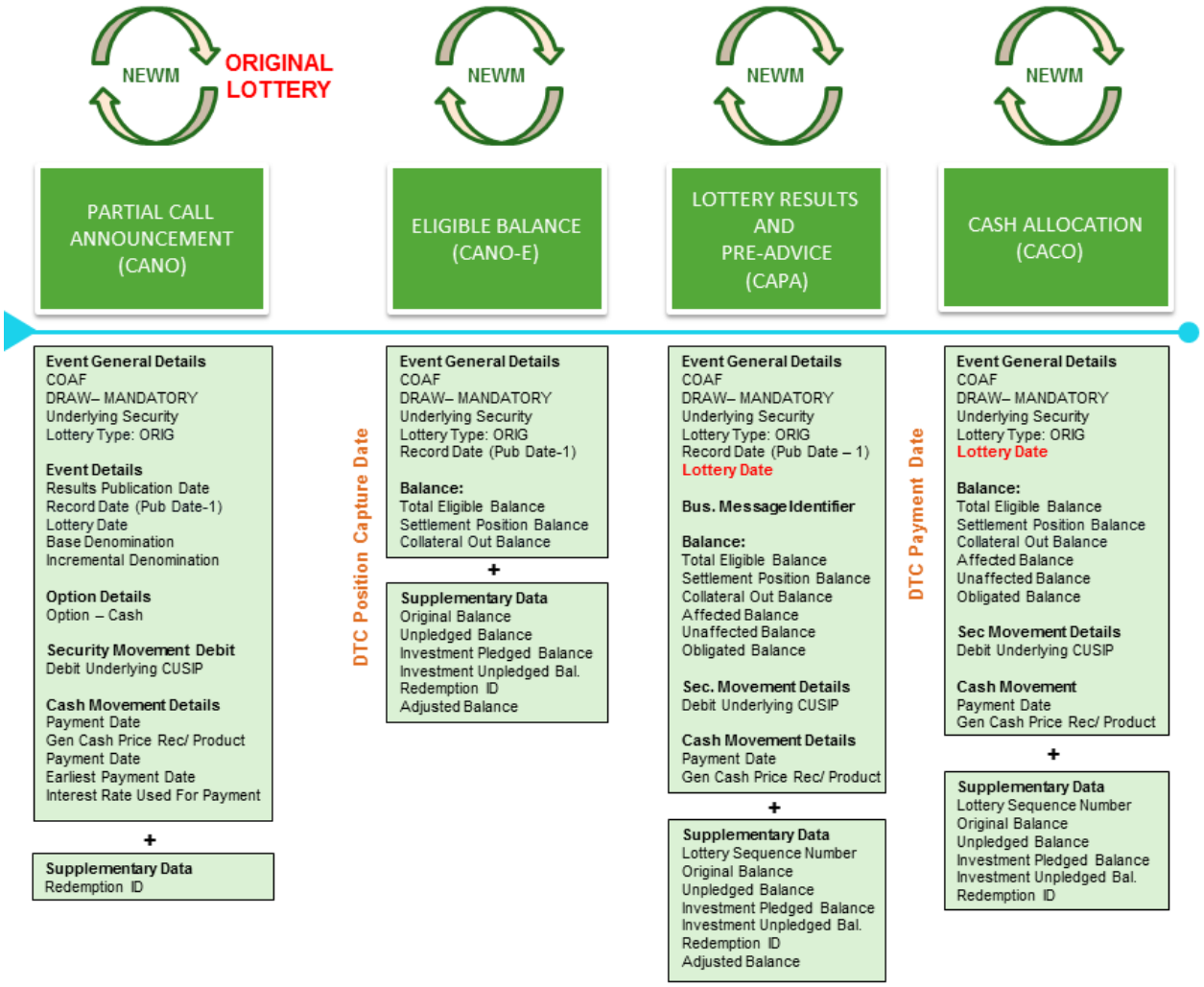
Two **CACO** messages (also containing the original Event ID) are then sent after pay date: one to confirm payment for the original lottery, and one to confirm payment for the supplemental. The Lottery Type element specifies which lottery the message applies to: "ORIG" for the original lottery and "SUPP" for the supplemental.

Scenario 9: Supplemental Lottery Post-Allocation

Please see the introduction to Scenario 8 for an explanation of supplemental lotteries.

The example that follows is of a supplemental lottery that has been run *after* an original lottery has been run and *after* the cash has been allocated.

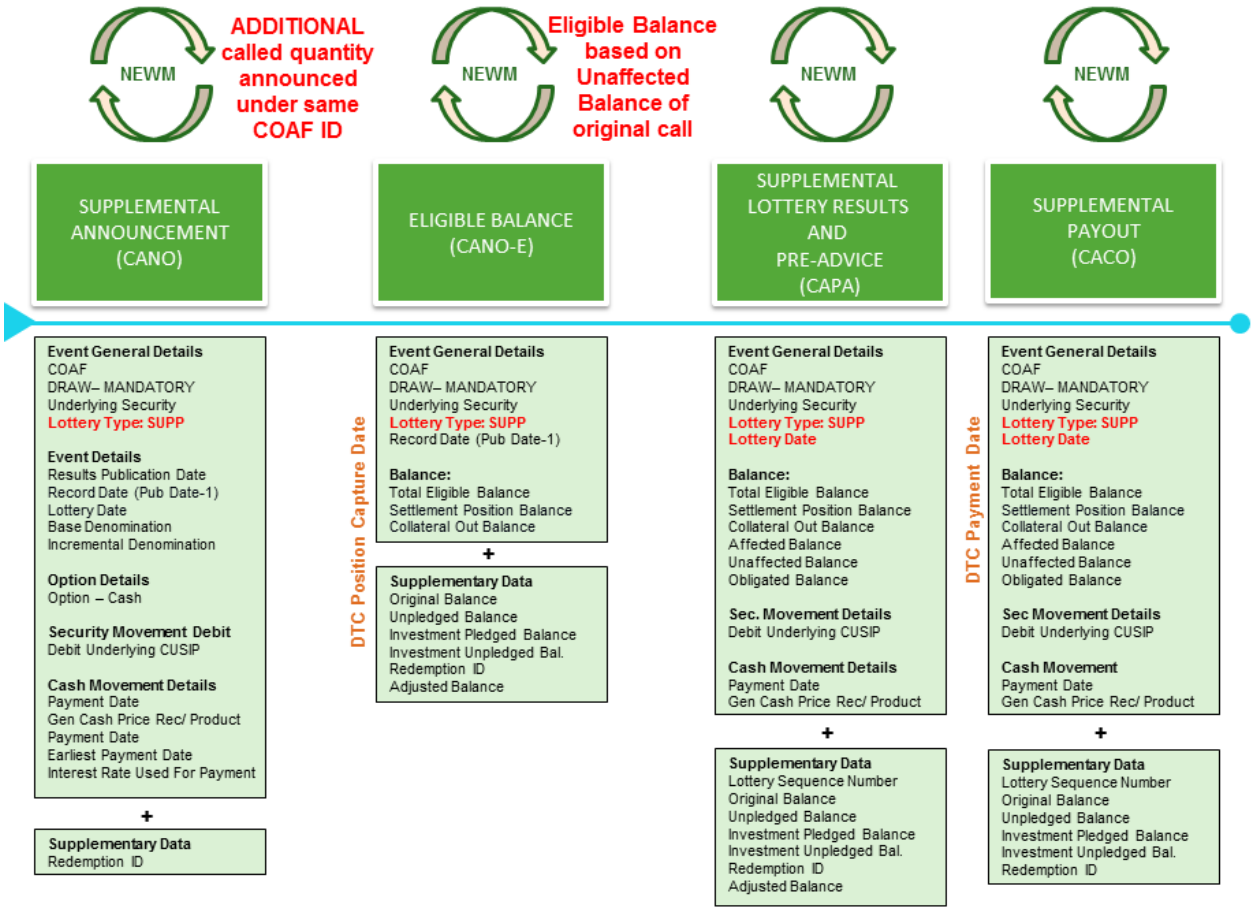
Essentially, the message flow is the same as for two partial calls. The major difference is that the second partial call is based on the first, composed of replacement messages for the CANO and CANO-E, and linked through the Corporate Action Event ID.



Scenario 9a: Supplemental Lottery (Post-Lottery, Post-Allocation): 1 of 2

The full event proceeds as in Scenario 1: The **CANO** is sent announcing the event, the **CANO-E** informs a client of its eligibility, the lottery is run, and the **CAPA** is sent announcing the lottery results. Allocation is made on payment date, and the **CACO** is sent post-allocation to confirm payment.

This scenario concludes with the following diagram.



Scenario 9b: Supplemental Lottery (Post-Lottery, Post-Allocation): 2 of 2

After payment date and allocation on the original lottery, a supplemental lottery is announced via a second **CANO** message. This replacement message uses the same Corporate Actions Event ID as the original lottery, but its "REPL" message type and its "SUPP" lottery type distinguish it as being an announcement of a supplemental lottery.

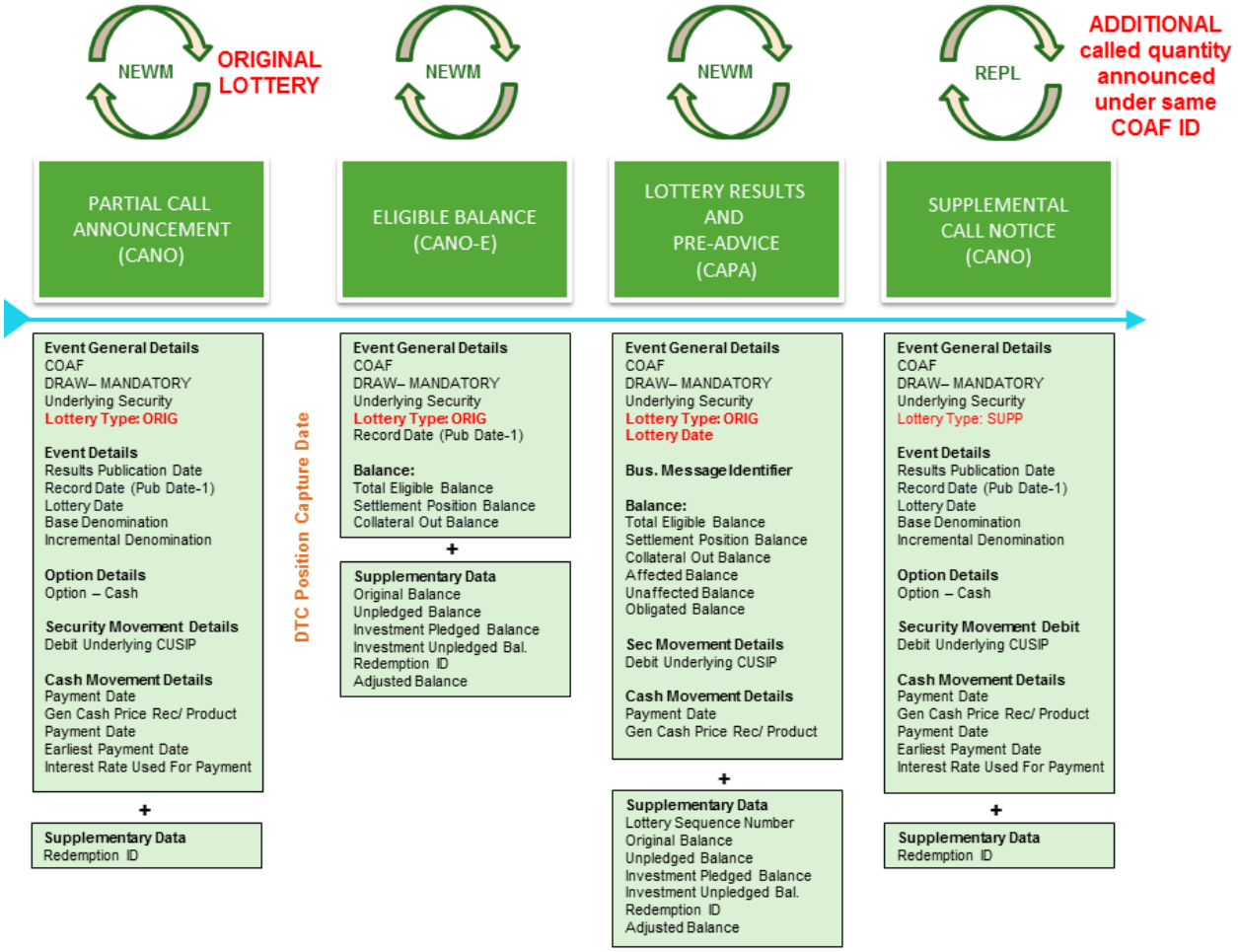
This is followed by a second **CANO-E** (REPL); this also refers to the supplemental lottery (SUPP). It specifies your eligibility based on the *original* lottery. Your unaffected balance in the original lottery becomes your eligible balance for the supplemental.

After the supplemental lottery is run, a **CAPA** message is sent that details the lottery results. It does not replace the CAPA that was sent on the original lottery; the results detailed here are for the supplemental lottery only (SUPP). The CAPA message also contains the original Event ID.

The **CACO** message (also containing the original Event ID) is then sent after allocation is made. The Lottery Type element of "SUPP" specifies that this was the payout for the supplemental lottery.

Scenario 10: Reversal / Re-Run of Original and Supplemental Lotteries

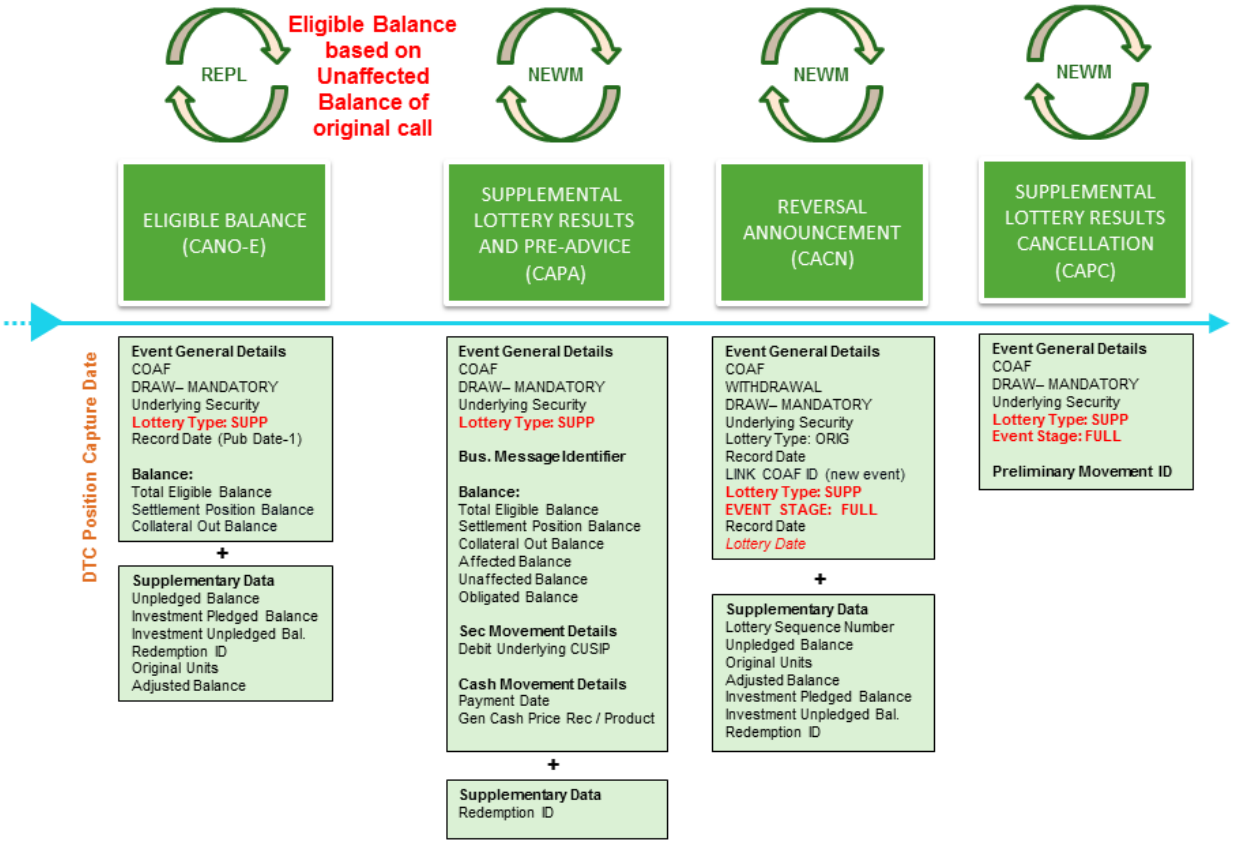
This scenario deals with the reversal and re-run of a partial call event after both an initial lottery and a supplemental lottery have been called and run. Since no allocations have been processed, both lotteries will be re-run after the cancellation of the original event.



Scenario 10a: Reversal / Re-Run of Original and Supplemental Lotteries: 1 of 3

The partial call announcement is made in the original **CANO**, eligibility is announced in the original **CANO-E**, the lottery is run and its results are given in the original **CAPA**. Following this, a supplemental lottery is called in a **CANO** (REPL) message. The “SUPP” value for “Lottery Type” on this last message indicates that this is a supplemental lottery based on the first CANO message.

This scenario continues in the following diagram.



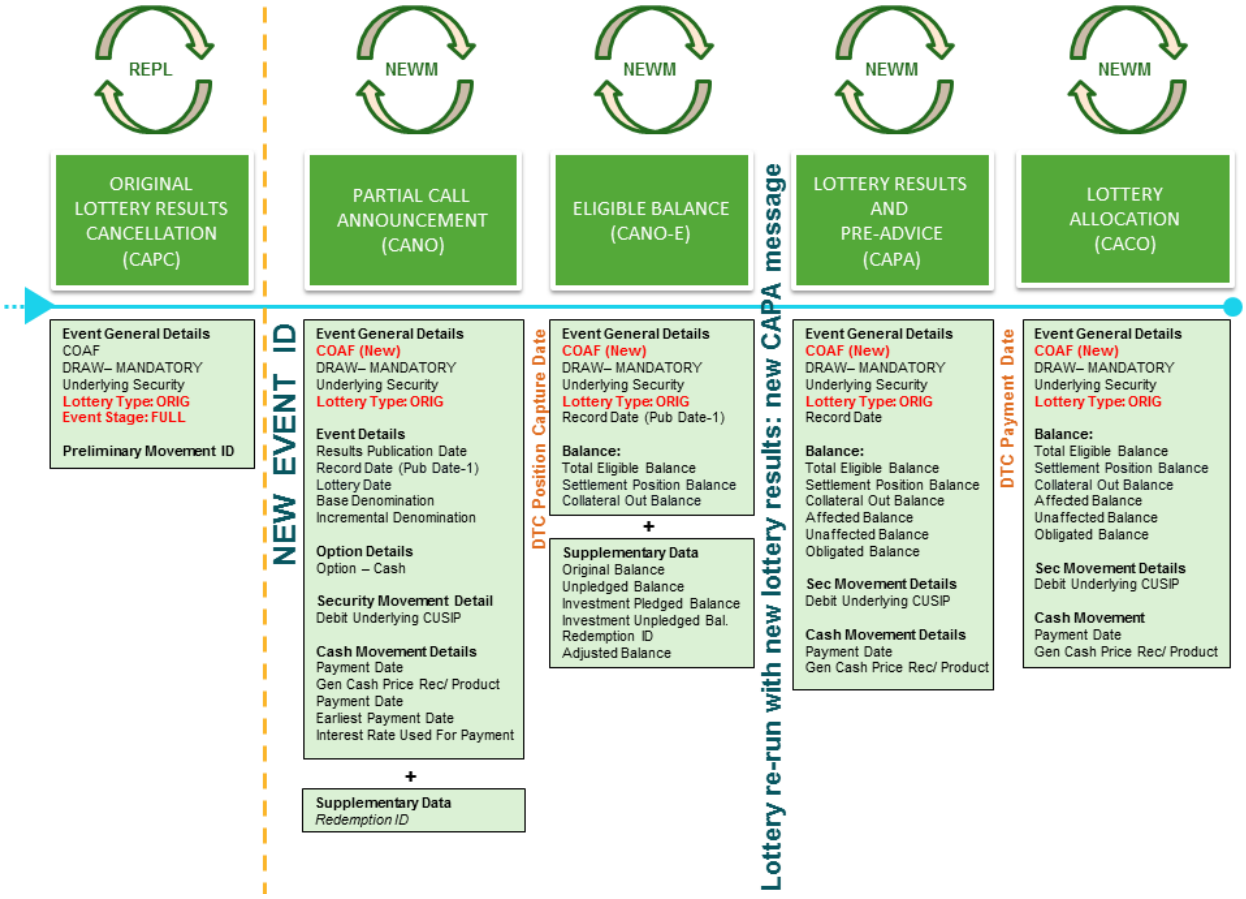
Scenario 10b: Reversal / Re-Run of Original and Supplemental Lotteries: 2 of 3

After the CANO is sent for the supplemental lottery, a **CANO-E** (REPL) message is sent, detailing the client's eligibility under the supplemental lottery. After the supplemental lottery is run, a **CAPA** is sent that details how the client was affected by the supplemental lottery.

At this point, the original event is canceled. A **CACN** reversal announcement is sent, announcing cancellation of the original event. Since the entire event is canceled, the cancellation applies to both the original and supplemental lotteries.

The following **CAPC** message rescinds the results of the supplemental lottery (the CAPA message shown in the above diagram).

This scenario concludes with the following diagram.



Scenario 10c: Reversal / Re-Run of Original and Supplemental Lotteries: 3 of 3

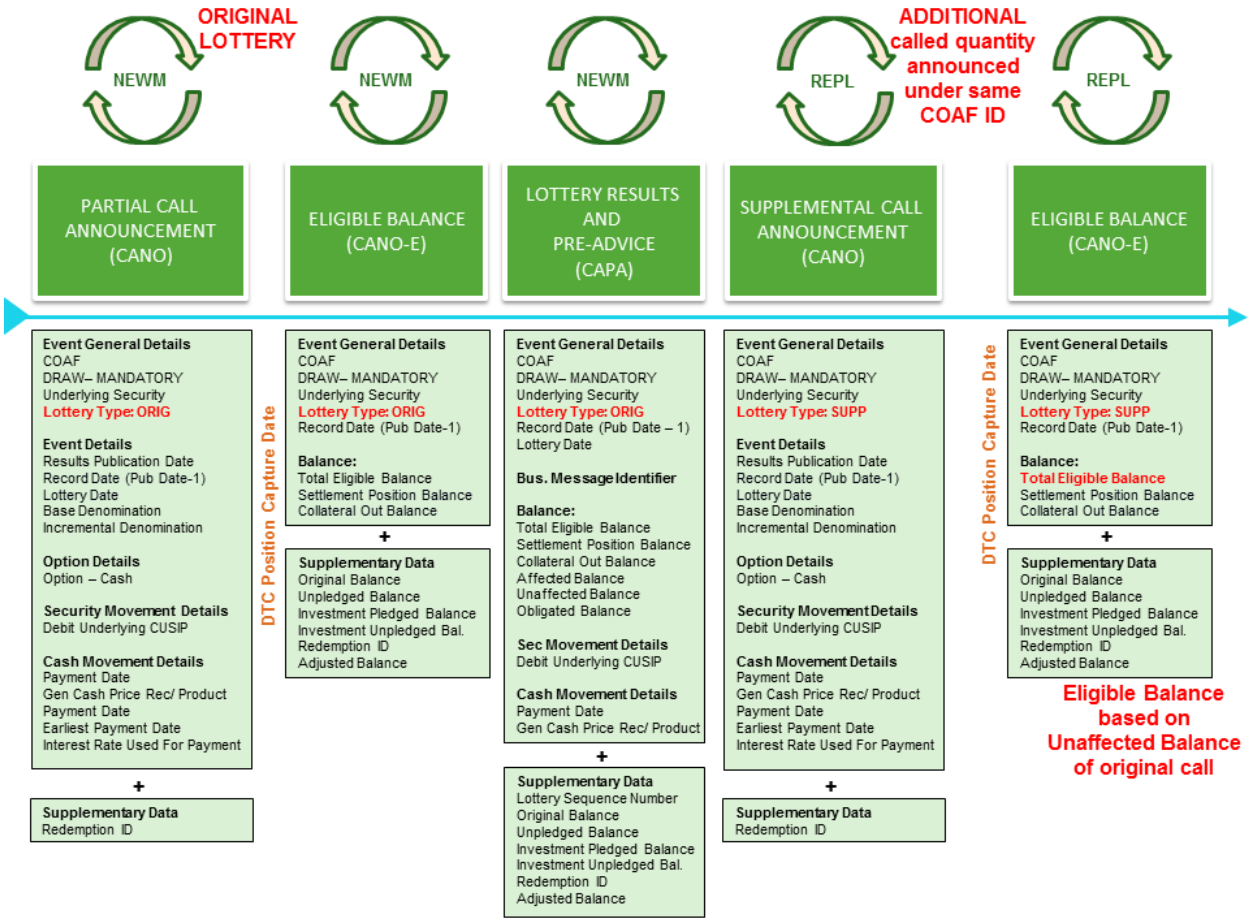
Just as the results of the supplemental lottery were canceled with the CAPC message in the previous diagram (10b), the results of the original lottery are canceled with a second CAPC message (shown above).

After the event and its associated lotteries have been canceled, the event is re-run. This re-running is now considered an original lottery (ORIG). A new Corporate Action Event ID is assigned and a **CANO** (NEWM) is sent, announcing the re-run. After the new DTC Position Capture Date, a **CANO-E** (NEWM) is sent, informing the client of its eligibility for the new lottery.

The lottery is re-run and new lottery results are obtained. A **CAPA** containing the lottery results is sent to the client. A **CACO** is sent after payment date, informing the client of the payment that was made in satisfaction of the lottery.

Scenario 11: Cancellation of Original and Supplemental Lotteries (Pre-Allocation)

This scenario deals with the cancellation of a partial call event after both an initial lottery and a supplemental lottery have been called and run, but before any allocations have been made.

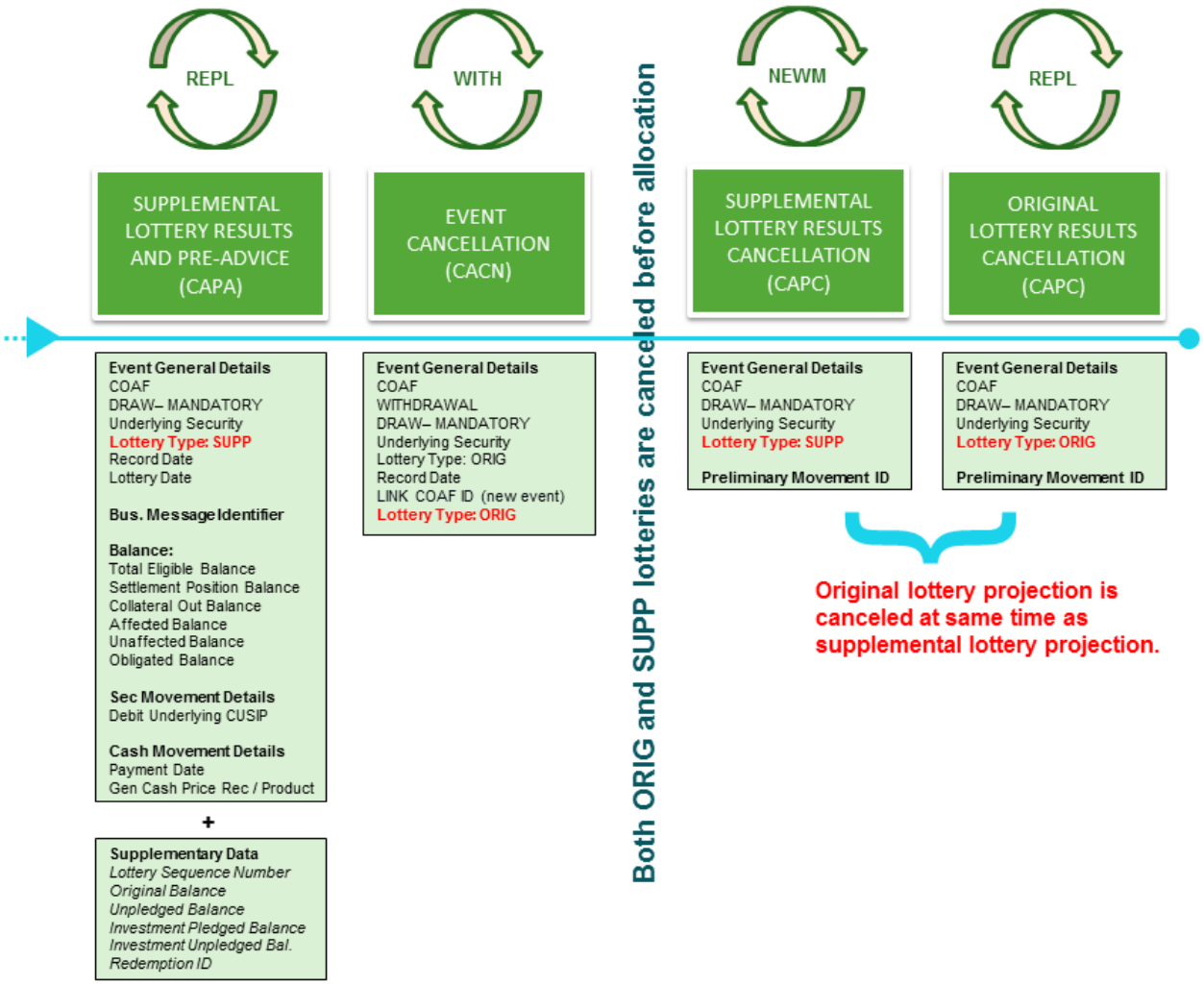


Scenario 11a: Cancellation of Original and Supplemental Lotteries (Pre-Allocation): 1 of 2

As in Scenario 10, the partial call announcement is made in the original **CANO**, eligibility is announced in the original **CANO-E**, the lottery is run and its results are given in the original **CAPA**. Following this, a supplemental lottery is called in a **CANO** (REPL) message. The “SUPP” value for “Lottery Type” on this last message indicates that this is a supplemental lottery based on the first CANO message.

After the CANO is sent for the supplemental lottery, a **CANO-E** (REPL) message is sent, detailing the client’s eligibility under the supplemental lottery.

This scenario concludes in the following diagram.

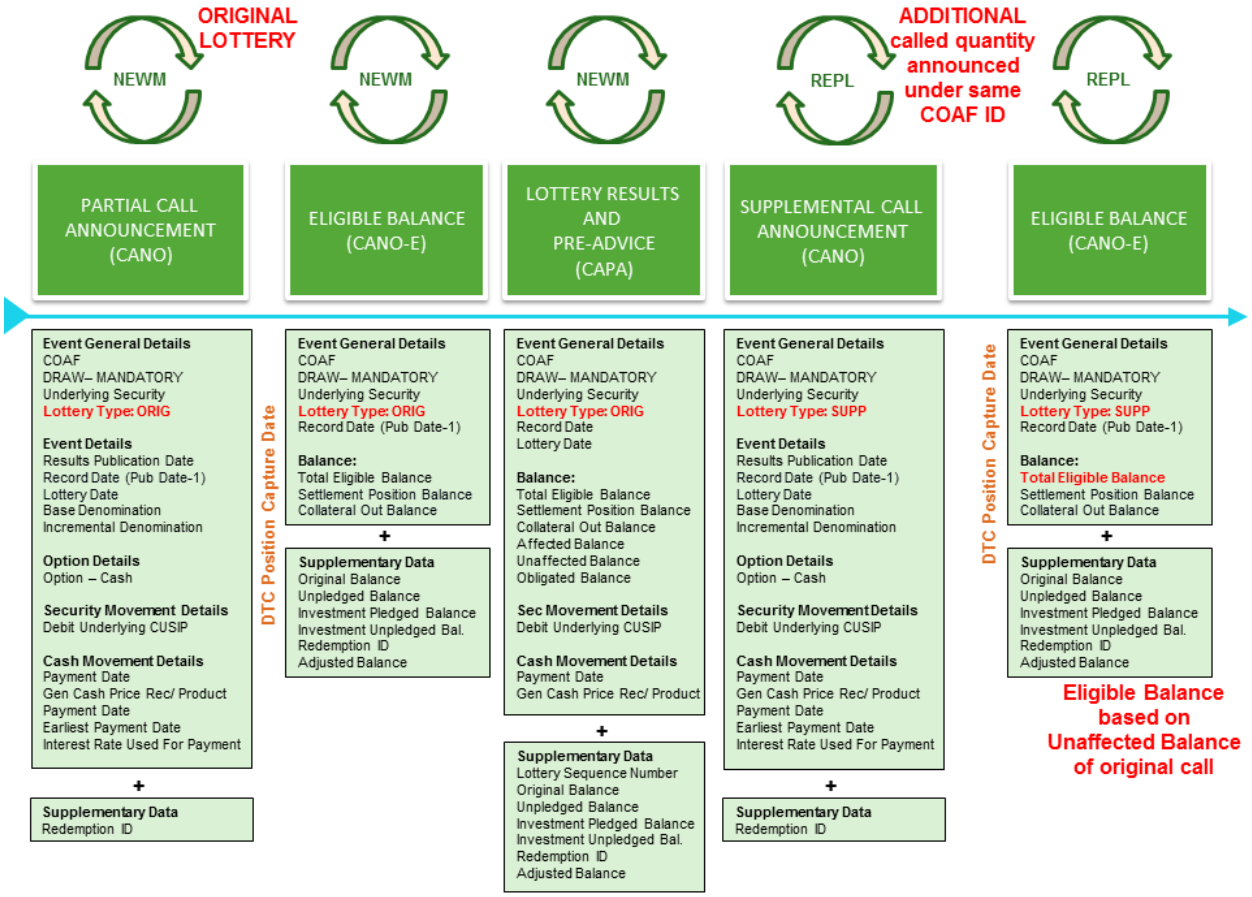


Scenario 11b: Cancellation of Original and Supplemental Lotteries (Pre-Allocation): 2 of 2

After the supplemental lottery is run, a **CAPA** is sent that details how the client was affected by the supplemental lottery.

At this point, the partial call event is canceled and a **CACN** message is sent. When an event is canceled, any associated lotteries are canceled as well. **CAPC** messages are sent for both the original and for the supplemental lotteries.

Scenario 12: Cancellation of Original and Supplemental Lotteries (Same Day / Post-Allocation)

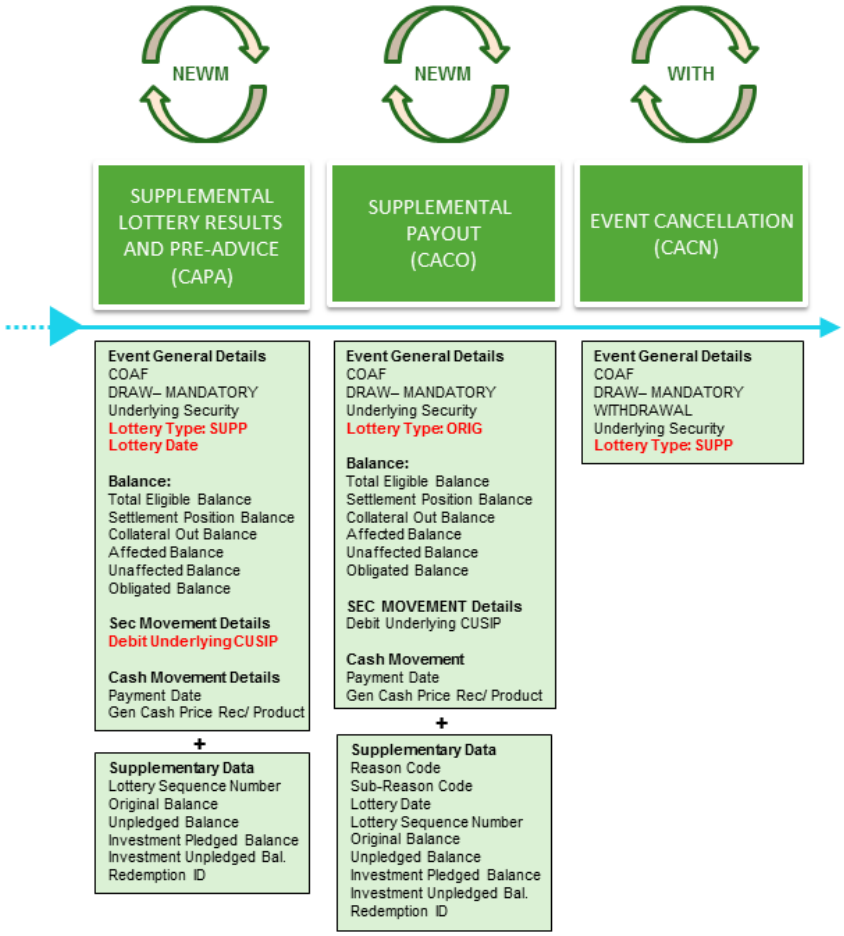


Scenario 12a: Cancellation of Original and Supplemental Lotteries (Same-Day, Post-Allocation): 1 of 3

As in Scenario 11, the partial call announcement is made in the original **CANO**, eligibility is announced in the original **CANO-E**, the lottery is run and its results are given in the original **CAPA**. Following this, a supplemental lottery is called in a **CANO** (REPL) message. The “SUPP” value for “Lottery Type” on this last message indicates that this is a supplemental lottery based on the first CANO message.

After the CANO is sent for the supplemental lottery, a **CANO-E** (REPL) message is sent, detailing the client’s eligibility under the supplemental lottery.

This scenario continues in the following diagram.

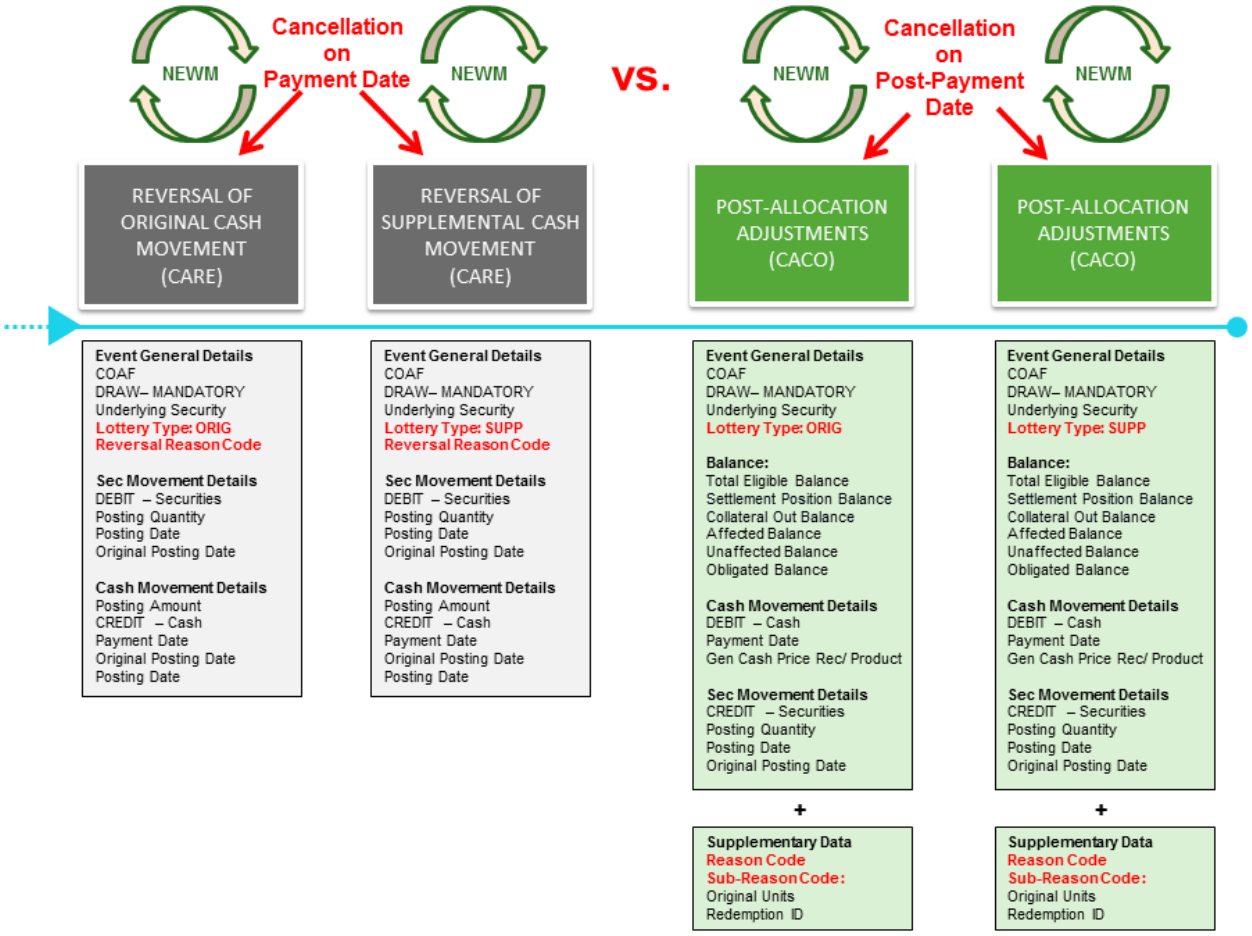


Scenario 12b: Cancellation of Original and Supplemental Lotteries (Same-Day, Post-Allocation): 2 of 3

After the eligibility is announced, the supplemental lottery is run and a **CAPA** (NEWM) details the results. The allocation for both lotteries is made, and a **CACO** message confirms the movement of cash and securities.

After allocation is made, however, the event is canceled and a **CACN** message is sent. An event cancellation serves to cancel any and all lotteries that have taken place attached to that event.

This scenario concludes in the following diagram.



Scenario 12c: Cancellation of Original and Supplemental Lotteries (Same-Day, Post-Allocation): 3 of 3

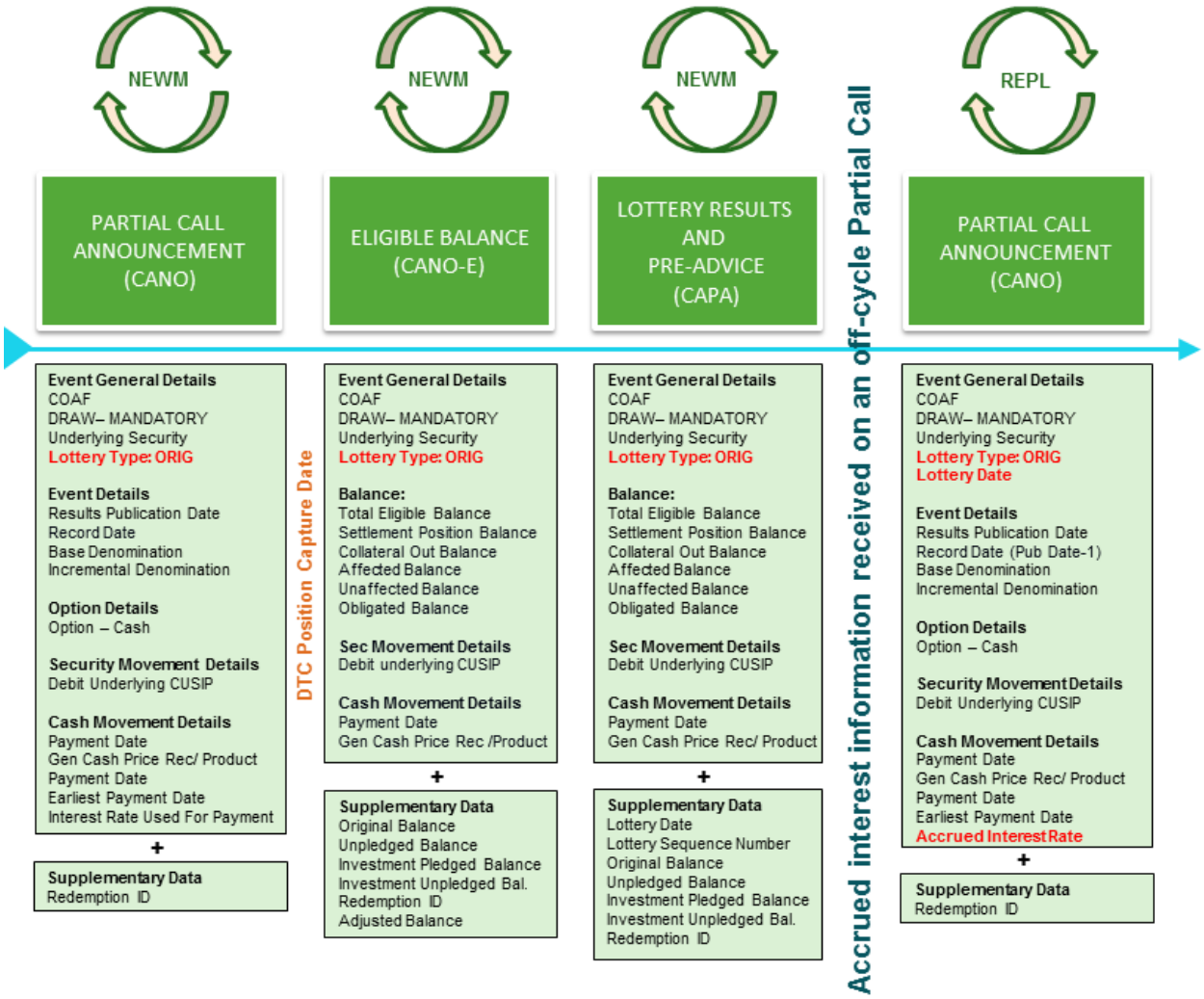
After the event is rescinded, it needs to be reversed. This will happen using a message for *each* lottery.

> **Note**: The CARE message in gray (above) is not currently in use. In the near future, it will be used for same-day allocation reversals. At the moment, all post-allocation reversals – same-day or otherwise – are made via the **CACO** message.

The **CACO** message presents the reversal details *after* the allocation has been reversed. Note that the details represent opposite movement from the CAPA messages: cash is debited *from* and securities are credited *to* the client account.

Scenario 13: Partial Call with Variable Rate

In this scenario, off-cycle interest information is received on an event after the lottery has been run.

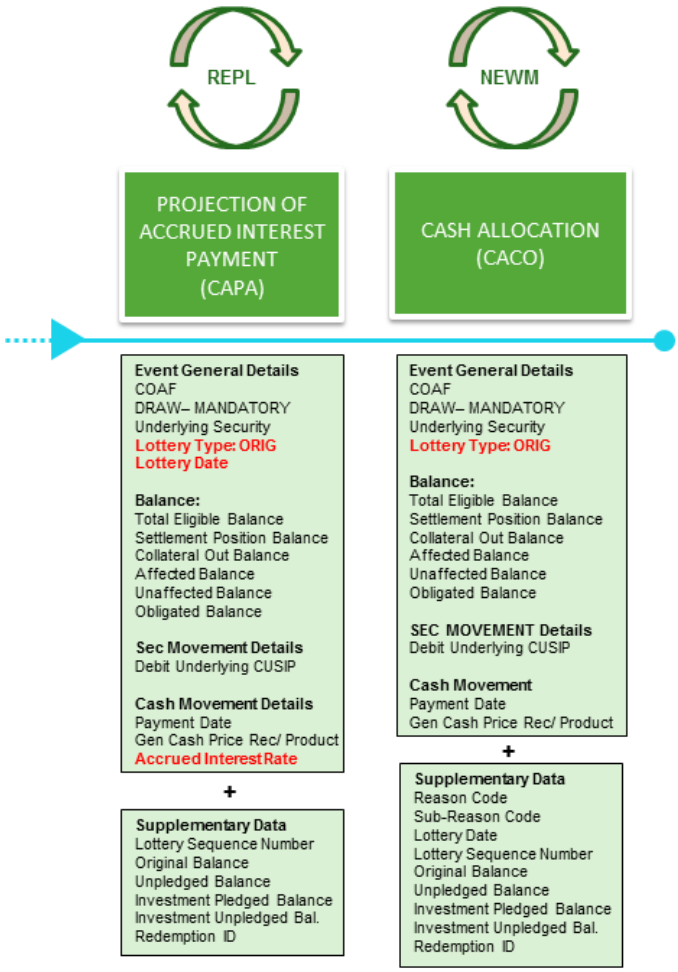


Scenario 13a: Partial Call with Variable Rate: 1 of 2

As for any partial call, the **CANO** (NEWM) announces the event, the **CANO-E** (NEWM) specifies a client's eligibility under the event, the lottery is run, and the **CAPA** (NEWM) states the lottery results for individual clients.

After the CAPA is sent to the client, accrued interest information is received on this off-cycle partial call. A replacement announcement containing this information must be sent. As such, a second **CANO** (REPL) is sent for the event, containing the rate information.

This scenario concludes in the following diagram.



Scenario 13b: Partial Call with Variable Rate: 2 of 2

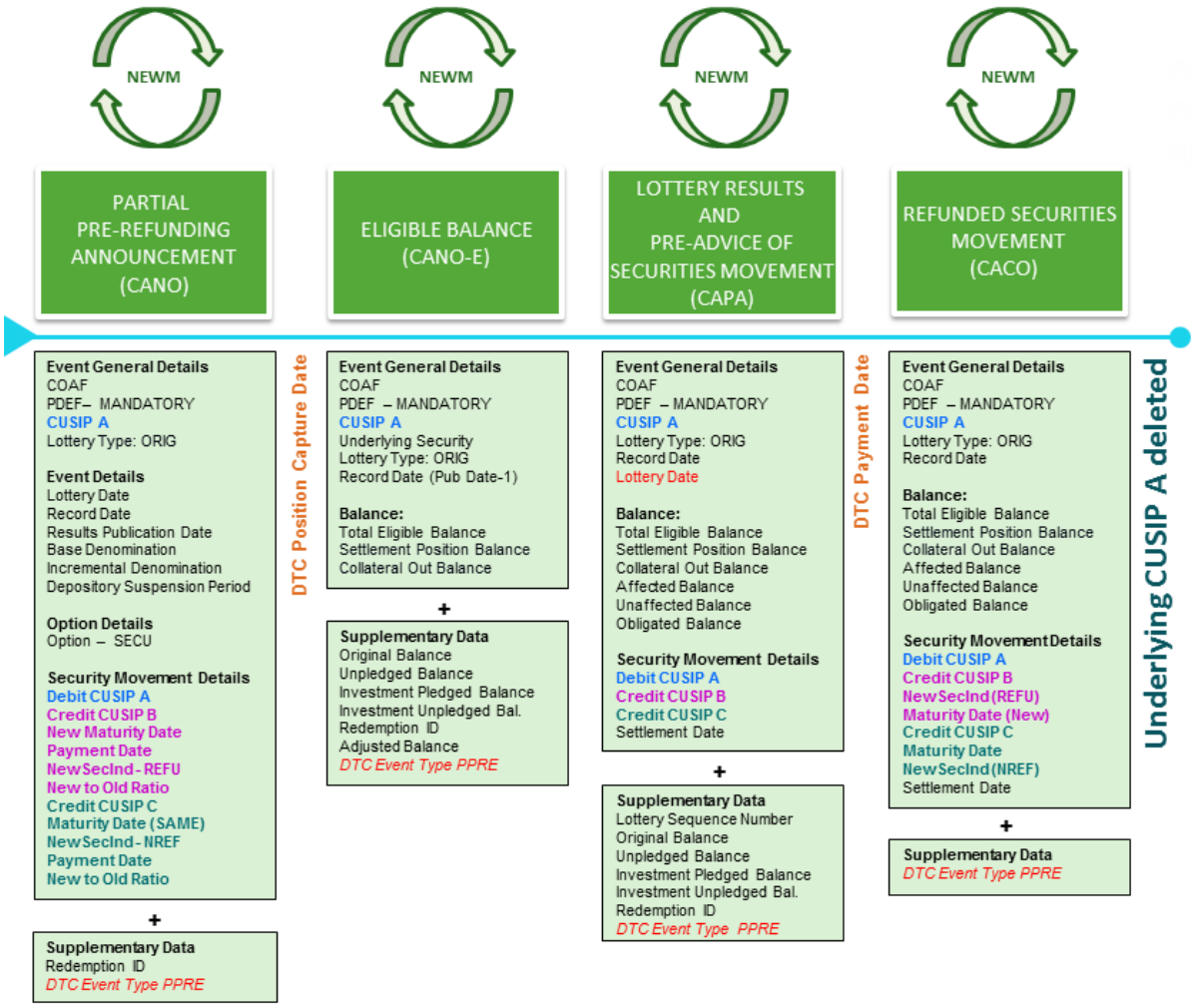
After the replacement CANO has been sent, a replacement **CAPA** (REPL) must be sent.

> **Note**: A replacement CANO-E message is not necessary because the client's eligibility has not changed. The allocations must be recalculated, however, to take the accrued interest rate into account. This requires a new projection and therefore a replacement CAPA.

Messaging Scenarios for PDEF Events

Scenario 14: Partial Pre-Refunding

In the case of a partial pre-refunding, the issuer has exercised its privilege to repay part of the debt security prior to maturity. The lottery determines how much of your balance in the original security will be affected. Functionally, it is very similar to a partial defeasance. The original CUSIP is surrendered and new securities are issued for the portion refunded and the portion non-refunded.



Scenario 14: Partial Pre-Refunding

The **CANO** message identifies the CUSIP that is being partially refunded (here, CUSIP A). In the Security Movement Details, you can see that CUSIP A is being debited and that two new CUSIPS are being created.

- CUSIP B is identified as a new security for the refunded portion. You can see the earlier payment date for CUSIP B as well as the new-to-old ratio.
- CUSIP C is identified as a new security for the non-refunded portion. It retains the original payment date. You can see the new-to-old ratio here as well.

A **CANO-E** message informs you of your eligibility. The only CUSIP relevant here is CUSIP A, the original security.

Next, the lottery is run and a **CAPA** message is sent to inform you of the lottery results. Since the original CUSIP is being replaced by two new CUSIPS – refunded and non-refunded – you will have two new balances, one in each CUSIP.

- Your affected balance becomes your balance in CUSIP B, the refunded CUSIP.
- Your unaffected balance becomes your balance in CUSIP C, the non-refunded CUSIP.
- Your entire balance in CUSIP A will be debited.

Additionally, if your balance in the original security decreased between the record date and the lottery date (for instance, if you delivered out shares after record date), your obligated balance is noted on the CAPA.

After all shares have been moved, a **CACO** message confirms the movement of all shares into the new refunded and non-refunded securities.

Scenario 15: Partial Pre-Refunding – Supplemental (Post-Lottery)

In this scenario, a supplemental lottery *cannot* occur under the original CUSIP because an original lottery has occurred and new securities have been allocated.

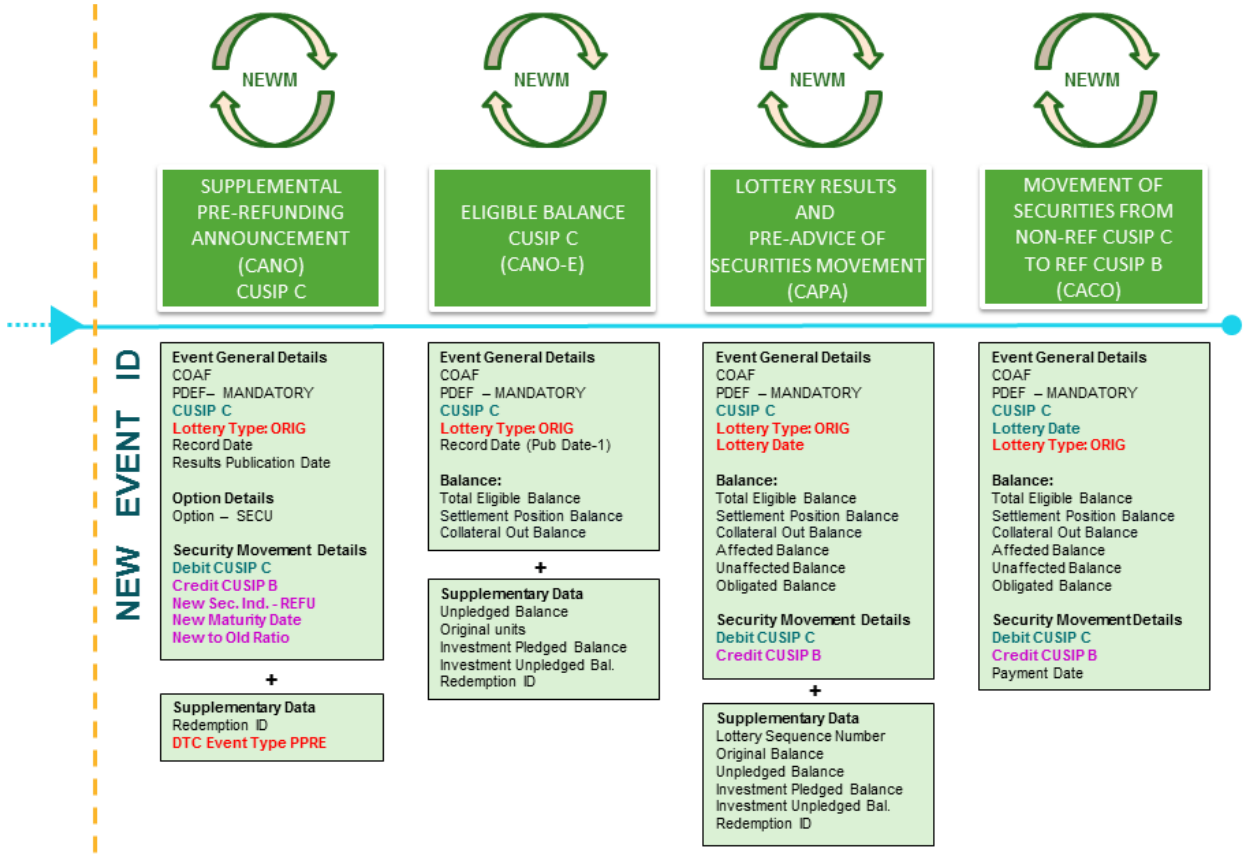
Instead, a new lottery will be run: the position of the non-refunded balance from the original lottery becomes the "eligible balance" of the new lottery.

Scenario 15a: Partial Pre-Refunding Supplemental (Post-Lottery): 1 of 2

The **CANO**, **CANO-E**, **CAPA**, and **CACO** messages are sent just as in Scenario 14, detailing the underlying CUSIP ("A") and the two new CUSIPs ("B" = refunded; "C" = non-refunded) that will result from the pre-refunding event. A client's eligibility is detailed in the CANO-E, a CAPA is sent to inform the client of the lottery results, the allocations from the old CUSIP to the two new CUSIPs are made on Payment Date, and a CACO confirms the movement of all shares from the underlying CUSIP to the refunded and non-refunded CUSIPs.

At this point, the underlying CUSIP "A" is deleted. The affected balance in CUSIP "B" has a new maturity date. The remaining unaffected balance in CUSIP "C" has the same maturity date as the deleted underlying security.

This scenario concludes in the following diagram.



Scenario 15b: Partial Pre-Refunding Supplemental (Post-Lottery): 2 of 2

A new Corporate Action Event ID is assigned to the event.

After this occurs, a supplemental lottery is called on the new event. The supplemental pre-refunding will be a new event based on the non-refunded CUSIP “C” for the additional called amount. CUSIP “C” will be debited for the additional amount. The balance of CUSIP “B” will be credited with that refunded amount. A new **CANO** message (NEWM) is sent for this supplemental lottery.

Eligibility is determined and reported on a **CANO-E** (NEWM). A client’s eligibility is based on CUSIP “C.”

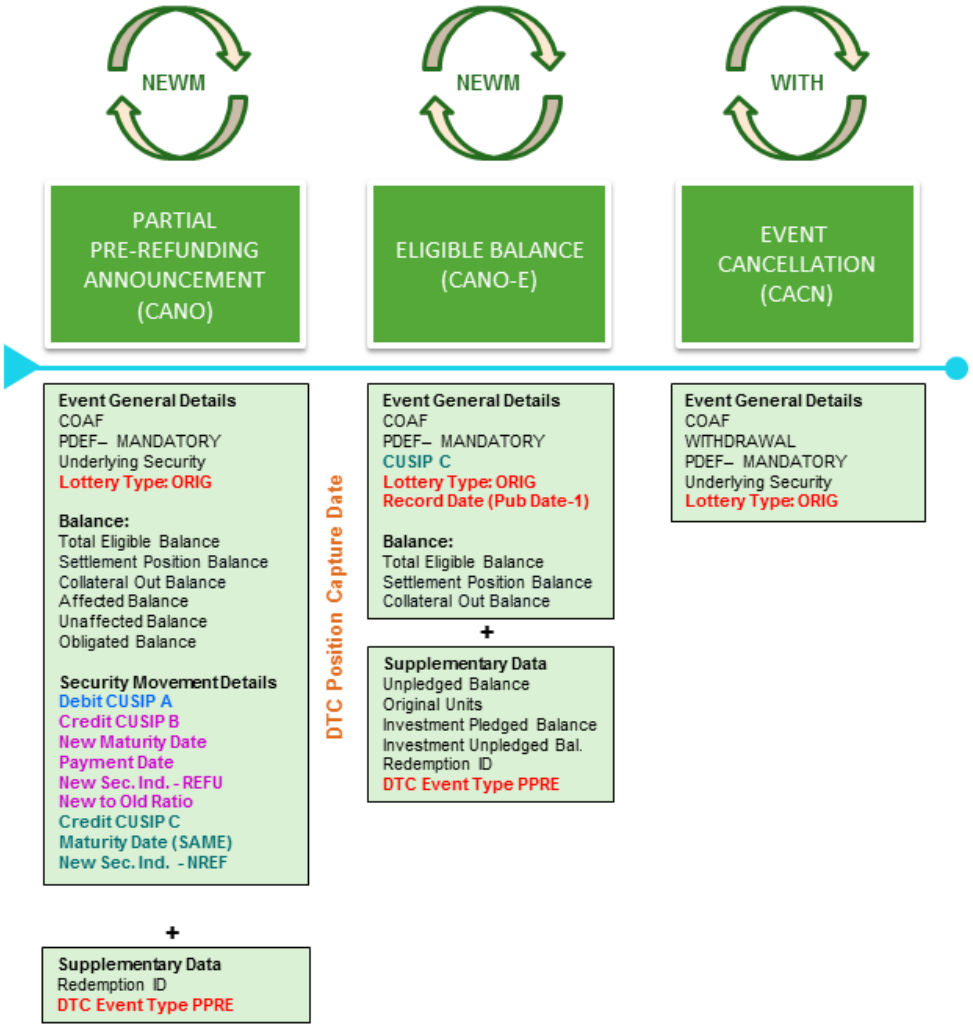
The supplemental lottery is run and the results are reported on a **CAPA** (NEWM). The CAPA details the amount of CUSIP “C” that will be pre-refunded into CUSIP “B.”

Allocation takes place on Payment Date. The **CACO** message confirms the movement of the called amount of CUSIP “C” into CUSIP “B.”

Scenario 16: Cancellation of a Partial Pre-Refunding (Pre-Lottery)

This scenario demonstrates the message flow for a situation in which an announcement was made for a partial pre-refunding event, but the event was canceled *before* the lottery was run.

In this case, you are informed of your eligibility, but the event is canceled before any determination has been made regarding your affected position.

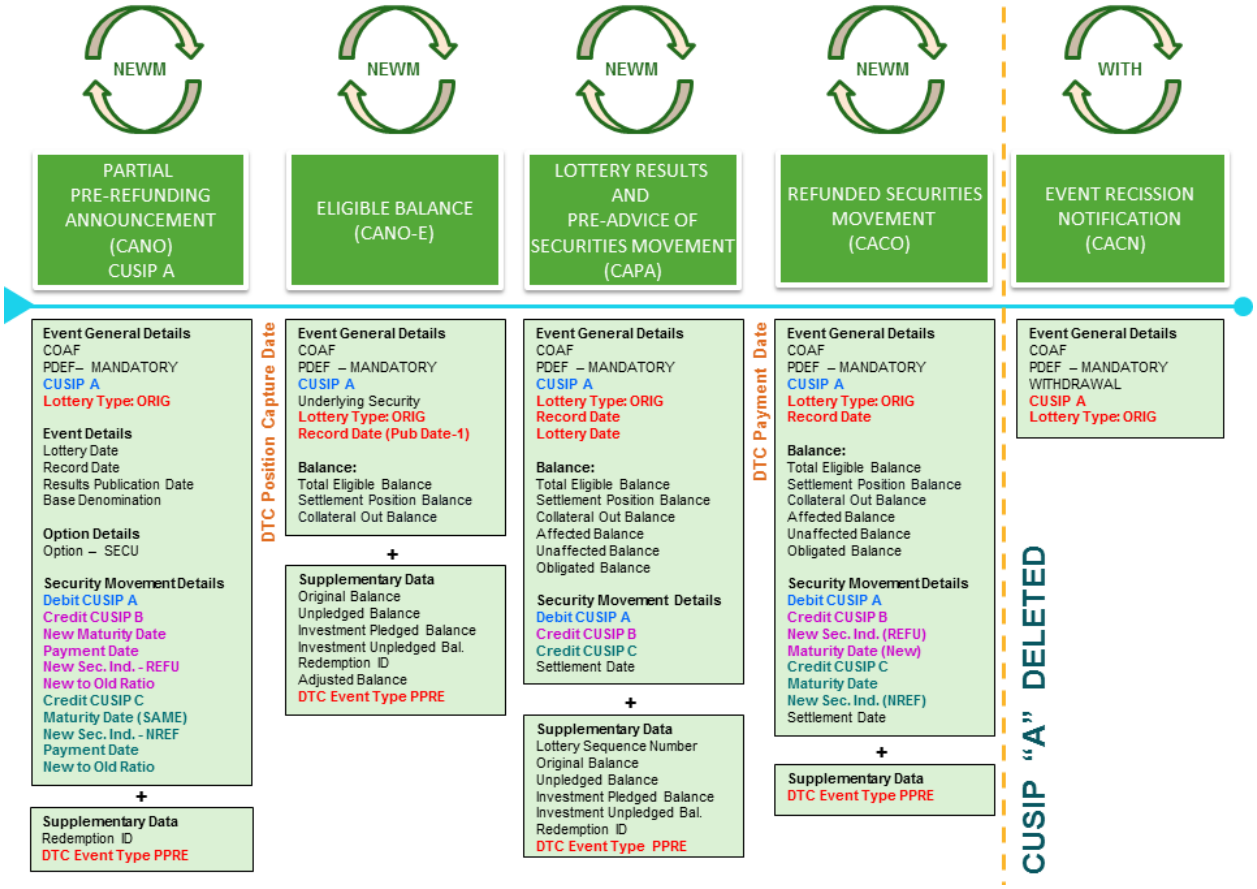


Scenario 16: Cancellation of a Partial Pre-Refunding (Pre-Lottery)

The **CANO** and **CANO-E** messages are sent out as for a basic partial pre-refunding. However, before the CAPA gets sent, a **CACN** message informs you that the event will not take place.

Scenario 17: Cancellation of a Partial Pre-Refunding (Post-Lottery)

This scenario demonstrates the message flow for a situation in which a lottery for a partial pre-refunding event has been run and allocated, but the event was canceled *after* allocations were made.



Scenario 17: Cancellation of a Partial Pre-Refunding (Post-Lottery)

The **CANO**, **CANO-E**, **CAPA**, and **CACO** messages are sent just as in Scenario 14. A client's eligibility is detailed in the CANO-E, a CAPA is sent to inform the client of the lottery results, the allocations are made on Payment Date, and a CACO confirms the movement of all shares from the underlying CUSIP to the refunded and non-refunded CUSIPs.

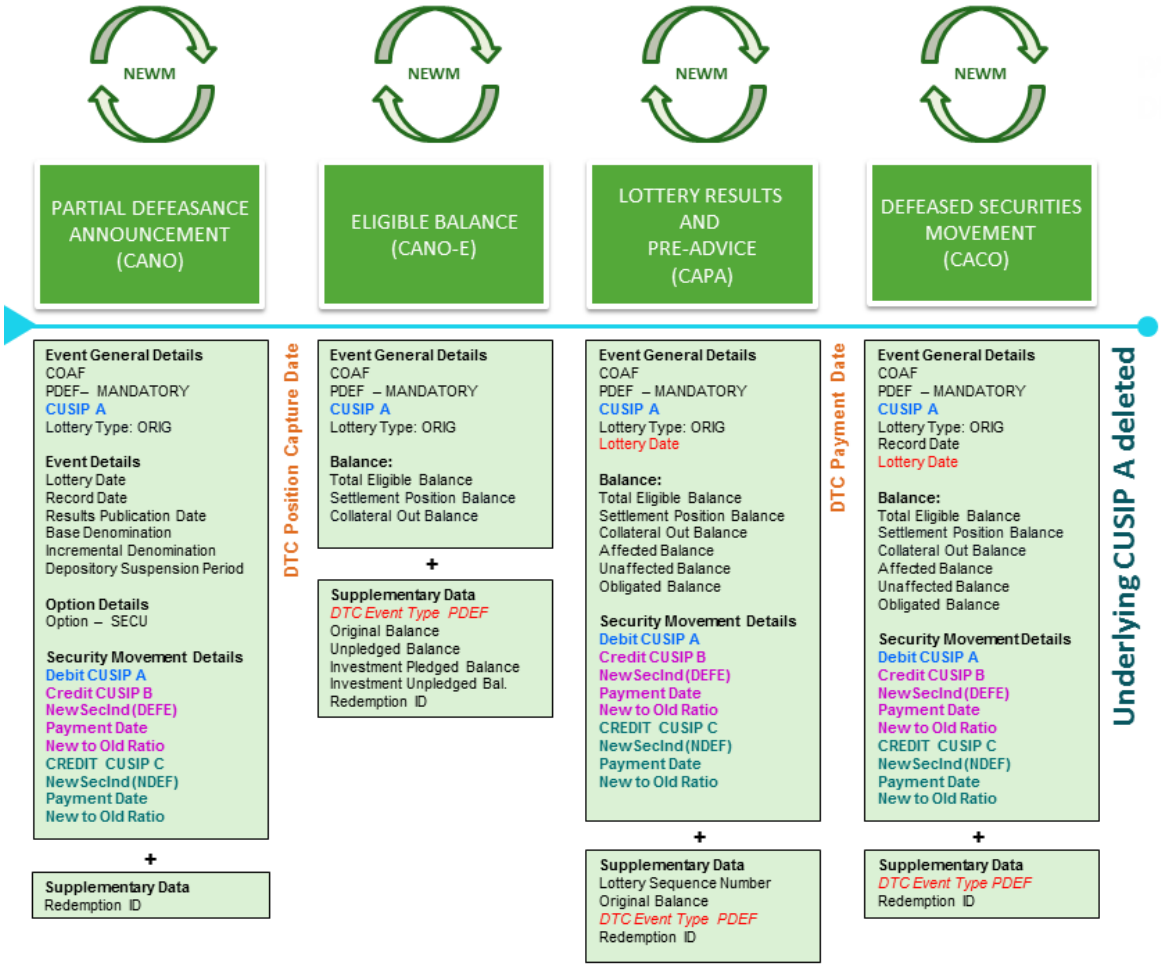
At this point, the underlying CUSIP "A" is deleted. The affected balance in CUSIP "B" has a new maturity date. The remaining unaffected balance in CUSIP "C" has the same maturity date as the deleted underlying security.

After this has taken place, the event is canceled. A **CACN** event recission message is sent to inform clients of the cancellation.

> **Note**: Position movements back to the original CUSIP (here, CUSIP "A") will not currently appear via ISO 20022 messaging. These movements will be handled as adjustments that cannot currently be linked to the Corporate Action Event ID (COAF).

Scenario 18: Partial Defeasance

In the case of a partial defeasance, the issuer sets aside cash in escrow to pay off a portion of the issue. The original CUSIP is surrendered, and new securities are issued for the portion defeased and the portion non-defeased.



Scenario 18: Partial Defeasance

The **CANO** message identifies the CUSIP that is being defeased (here, CUSIP A). In the Security Movement Details, CUSIP A is being debited and two new CUSIPS are being created.

- CUSIP B is identified as a new security for the defeased portion. The message details the earlier payment date for CUSIP B as well as the new-to-old ratio.
- CUSIP C is identified as a new security for the non-defeased portion. It retains the original payment date. The message details the the new-to-old ratio here as well.

A **CANO-E** message informs a client of its eligibility. The only CUSIP relevant here is CUSIP A, the original security.

Next, the lottery is run and a **CAPA** message is sent to inform the client of the lottery results. Since the original CUSIP is being replaced by two new CUSIPS – defeased and non-defeased – the client will have two new balances, one in each CUSIP.

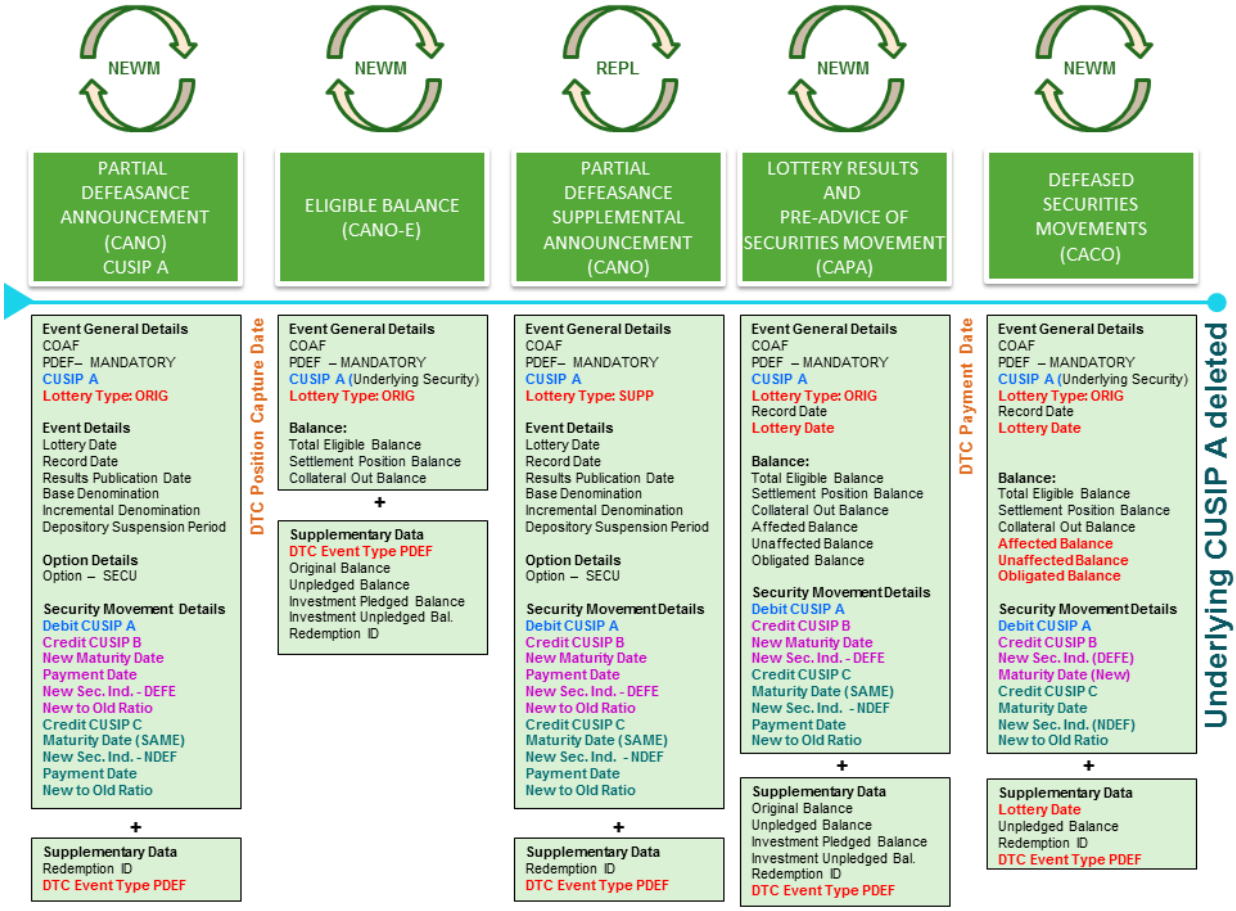
- The affected balance becomes the balance in CUSIP B, the defeased CUSIP.
- The unaffected balance becomes the balance in CUSIP C, the non-defeased CUSIP.
- The entire balance in CUSIP A is debited.

Additionally, if the balance in the original security decreased between the record date and the lottery date (for instance, if you delivered out shares after record date), the obligated balance is noted on the CAPA.

After all shares have been moved, a **CACO** message confirms the movement of all shares into the new defeased and non-defeased securities.

Scenario 19: Partial Defeasance Supplemental Lottery (Pre-Lottery)

In this scenario, a supplemental lottery is called on a partial defeasance after initial eligibility has been announced but before the original lottery has been run.



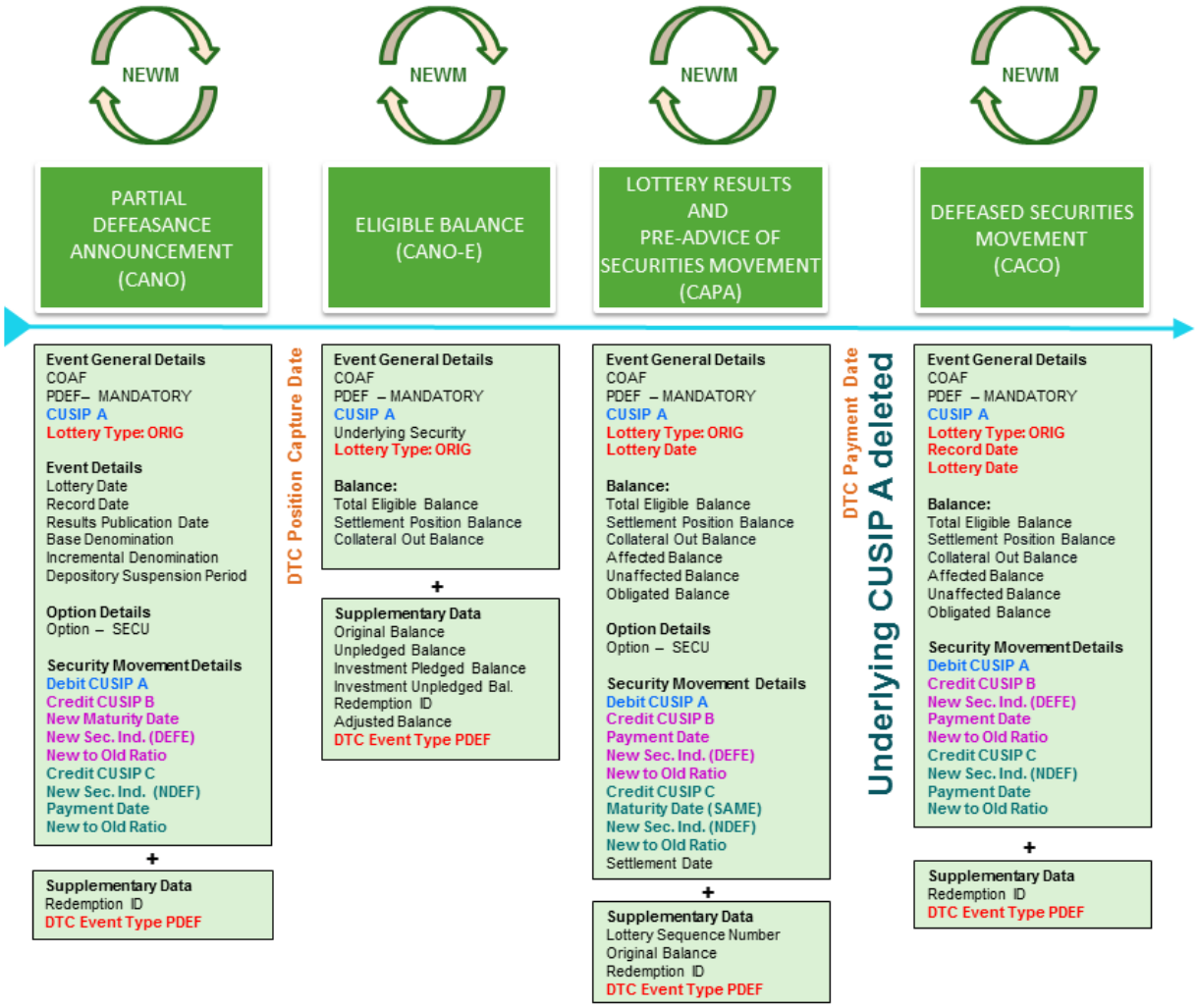
Scenario 19: Partial Defeasance Supplemental Lottery (Pre-Lottery)

The **CANO** and **CANO-E** messages are sent just as in Scenario 18, detailing the underlying CUSIP ("A") and the two new CUSIPs ("B" = defeased; "C" = non-defeased) that will result from the pre-refunding event. A client's eligibility is detailed in the CANO-E.

Before that lottery is run, however, a supplemental lottery is announced in a replacement **CANO-E** message (REPL). The **CAPA** message that follows serves as the results message for both the original and supplemental lotteries.

Following this, the amounts outlined in the CAPA are allocated on Payment Date, and the **CACO** message confirms the amounts that were allocated as a result of both lotteries. After the CACO is sent, the underlying CUSIP (here, "CUSIP A") is deleted. The new CUSIP ("B") has a new maturity date for the affected balance. The remaining unaffected balance in CUSIP "C" has the same maturity date as the deleted underlying CUSIP ("A").

Scenario 20: Partial Defeasance Supplemental Lottery (Post-Lottery)

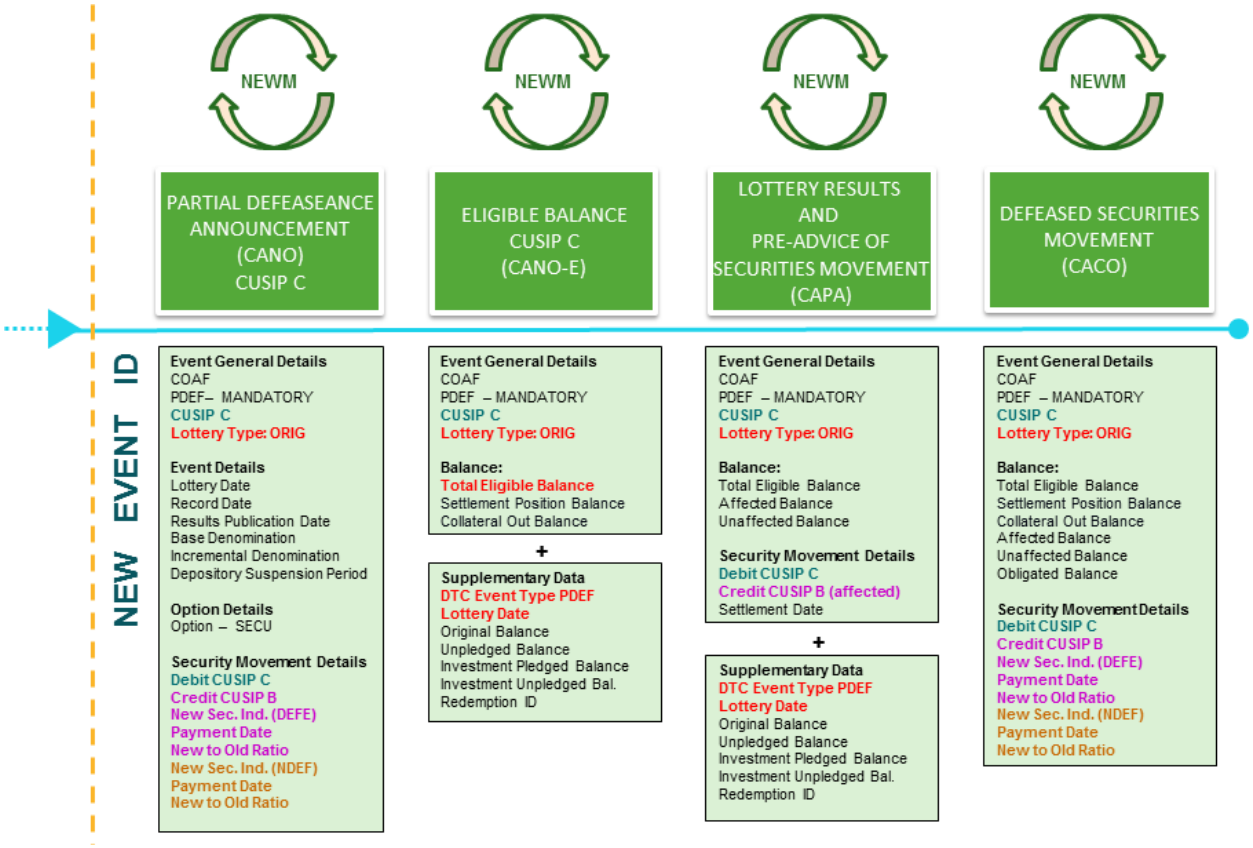


Scenario 20a: Partial Defeasance Supplemental (Post-Lottery): 1 of 2

The **CANO**, **CANO-E**, **CAPA**, and **CACO** messages are sent just as in Scenario 18, detailing the underlying CUSIP ("A") and the two new CUSIPs ("B" = defeased; "C" = non-defeased) that will result from the pre-refunding event. A client's eligibility is detailed in the CANO-E, a CAPA is sent to inform the client of the lottery results, the allocations from the old CUSIP to the two new CUSIPs are made on Payment Date, and a CACO confirms the movement of all shares from the underlying CUSIP to the refunded and non-refunded CUSIPs.

At this point, the underlying CUSIP "A" is deleted. The affected balance in CUSIP "B" has a new maturity date. The remaining unaffected balance in CUSIP "C" has the same maturity date as the deleted underlying security.

This scenario concludes in the following diagram.



Scenario 20b: Partial Defeasance Supplemental (Post-Lottery): 2 of 2

A new Corporate Action Event ID is assigned to the event.

After this occurs, a supplemental lottery is called on the new event. The supplemental defeasance will be a new event based on the non-refunded CUSIP "C" for the additional called amount. CUSIP "C" will be debited for the additional amount. The balance of CUSIP "B" will be credited with the portion defeased. A new **CANO** message (NEWM) is sent for this supplemental lottery.

Eligibility is determined and reported on a **CANO-E** (NEWM). A client's eligibility is based on CUSIP "C."

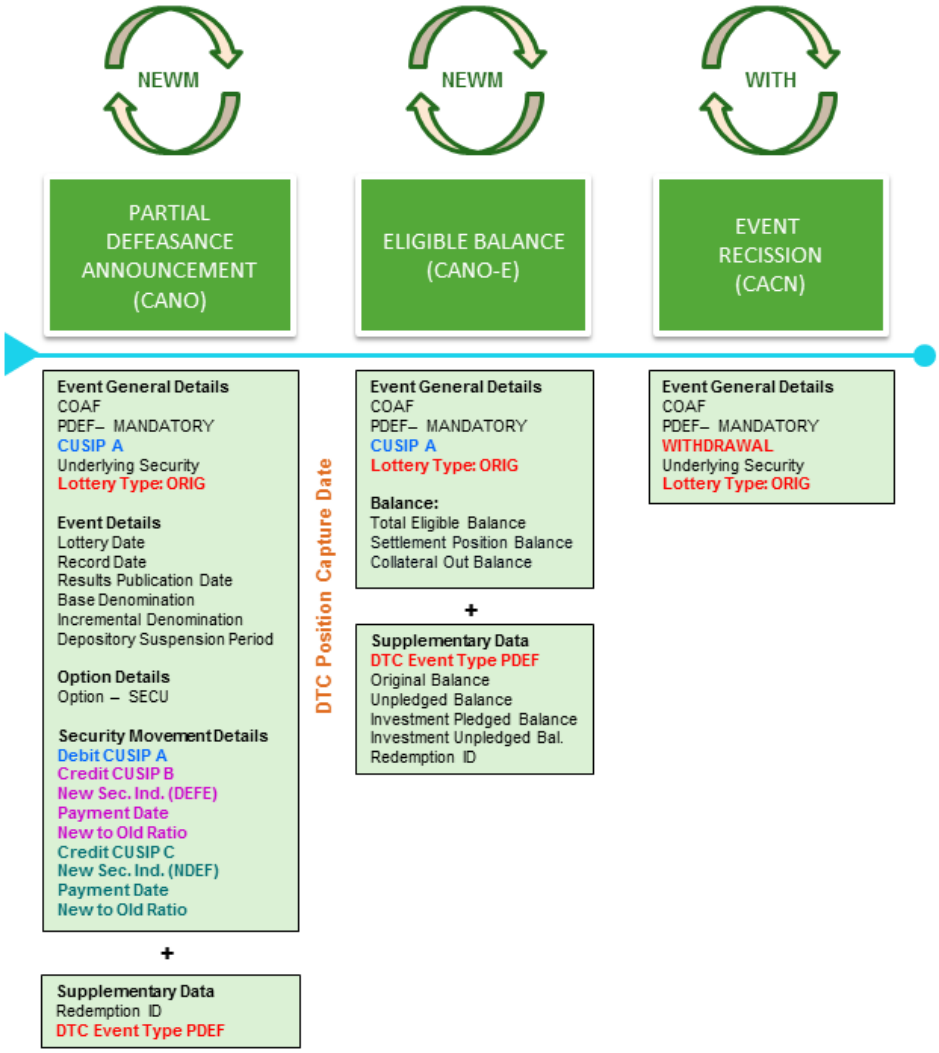
The supplemental lottery is run and the results are reported on a **CAPA** (NEWM). The CAPA details the amount of CUSIP "C" that will be pre-refunded into CUSIP "B."

Allocation takes place on Payment Date. The **CACO** message confirms the movement of the called amount of CUSIP "C" into CUSIP "B."

Scenario 21: Cancellation of a Partial Defeasance (Pre-Lottery)

This scenario demonstrates the message flow for a situation in which an announcement was made for a partial defeasance event, but the event was canceled *before* the lottery was run.

In this case, you are informed of your eligibility, but the event is canceled before any determination has been made regarding your affected position.

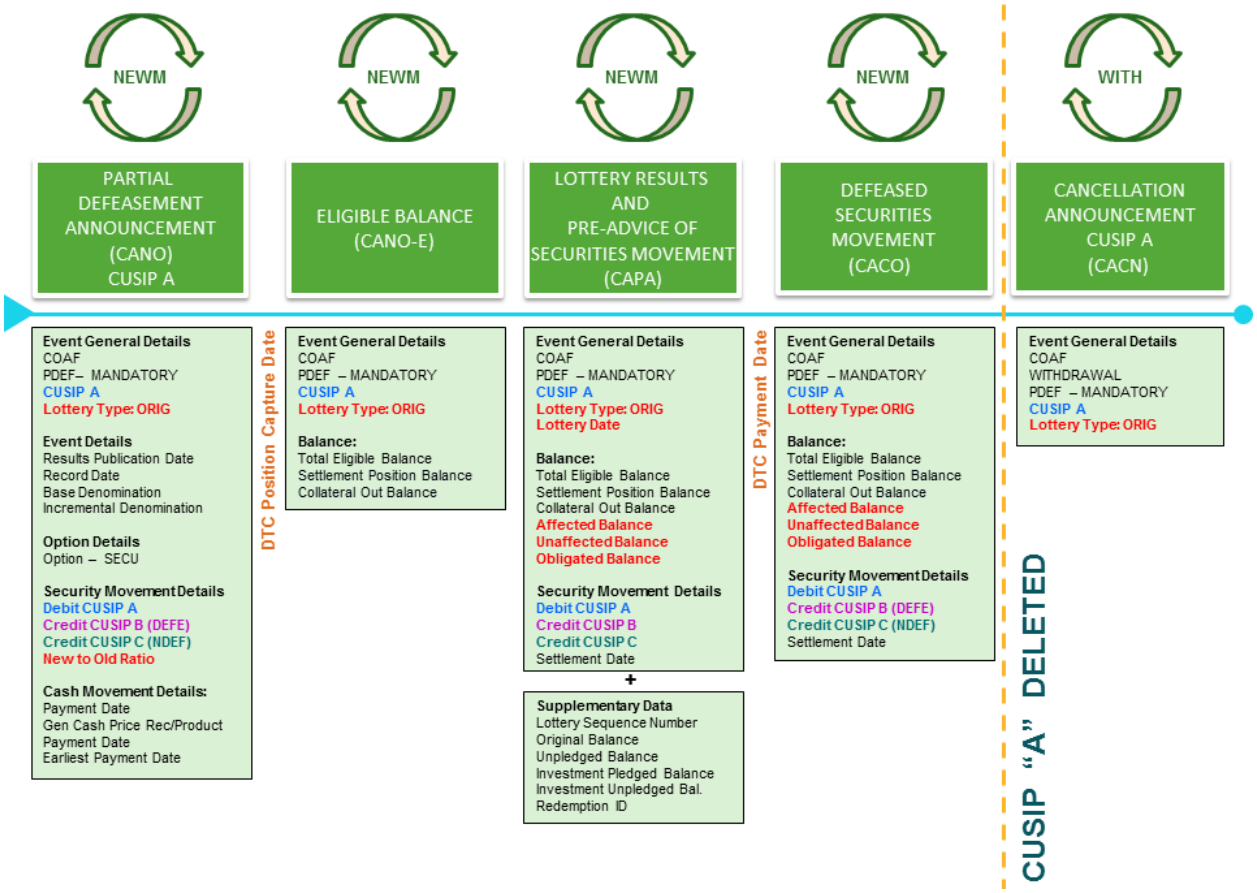


Scenario 21: Cancellation of a Partial Defeasance (Pre-Lottery)

The **CANO** and **CANO-E** messages are sent out as for a basic partial defeasance. However, before the CAPA gets sent, a **CACN** message informs you that the event will not take place.

Scenario 22: Cancellation of a Partial Defeasance (Post-Lottery)

This scenario demonstrates the message flow for a situation in which a lottery for a partial defeasance event has been run and allocated, but the event was canceled *after* allocations were made.



Scenario 22: Cancellation of a Partial Defeasance (Post-Lottery)

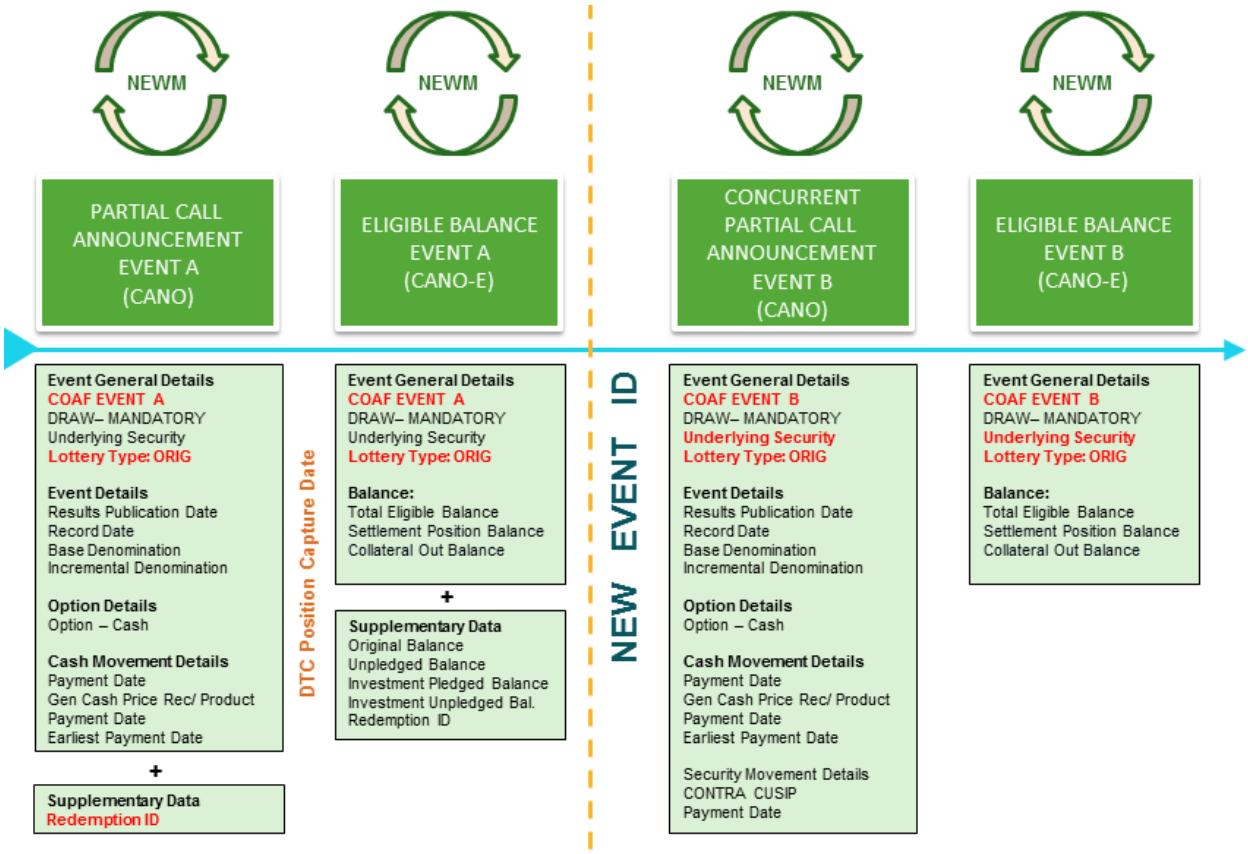
The **CANO**, **CANO-E**, **CAPA**, and **CACO** messages are sent just as in Scenario 18. A client's eligibility is detailed in the CANO-E, a CAPA is sent to inform the client of the lottery results, the allocations are made on Payment Date, and a CACO confirms the movement of all shares from the underlying CUSIP to the defeased and non-defeased CUSIPs.

At this point, the underlying CUSIP "A" is deleted. The new defeased CUSIP ("B") has a new maturity date. The remaining unaffected balance in CUSIP "C" has the same maturity date as the deleted underlying security.

After this has taken place, the event is canceled. A **CACN** event recission message is sent to inform clients of the cancellation.

Note: Position movements back to the original CUSIP (here, CUSIP "A") will not currently appear via ISO20022 messaging. These movements will be handled as adjustments that cannot currently be linked to the Corporate Action Event ID (COAF).

Scenario 23: Concurrent Late Partial Calls



Scenario 23a: Concurrent Late Partial Calls: 1 of 2

An initial partial call event ("Event A") is announced and eligibility is determined (on **CANO** and **CANO-E** messages, respectively).

Concurrently (and under a different Corporate Actions Event ID), a **CANO** (NEWM) is received for a second event ("Event B") on the same security with a different payment rate for the same payment date. Since the lottery has not yet been run for Event A, a contra-CUSIP must be created. This contra-CUSIP is announced on the CANO for Event B. The following **CANO-E** (NEWM) message details the client's eligibility for Event B.

This scenario concludes in the following diagram.

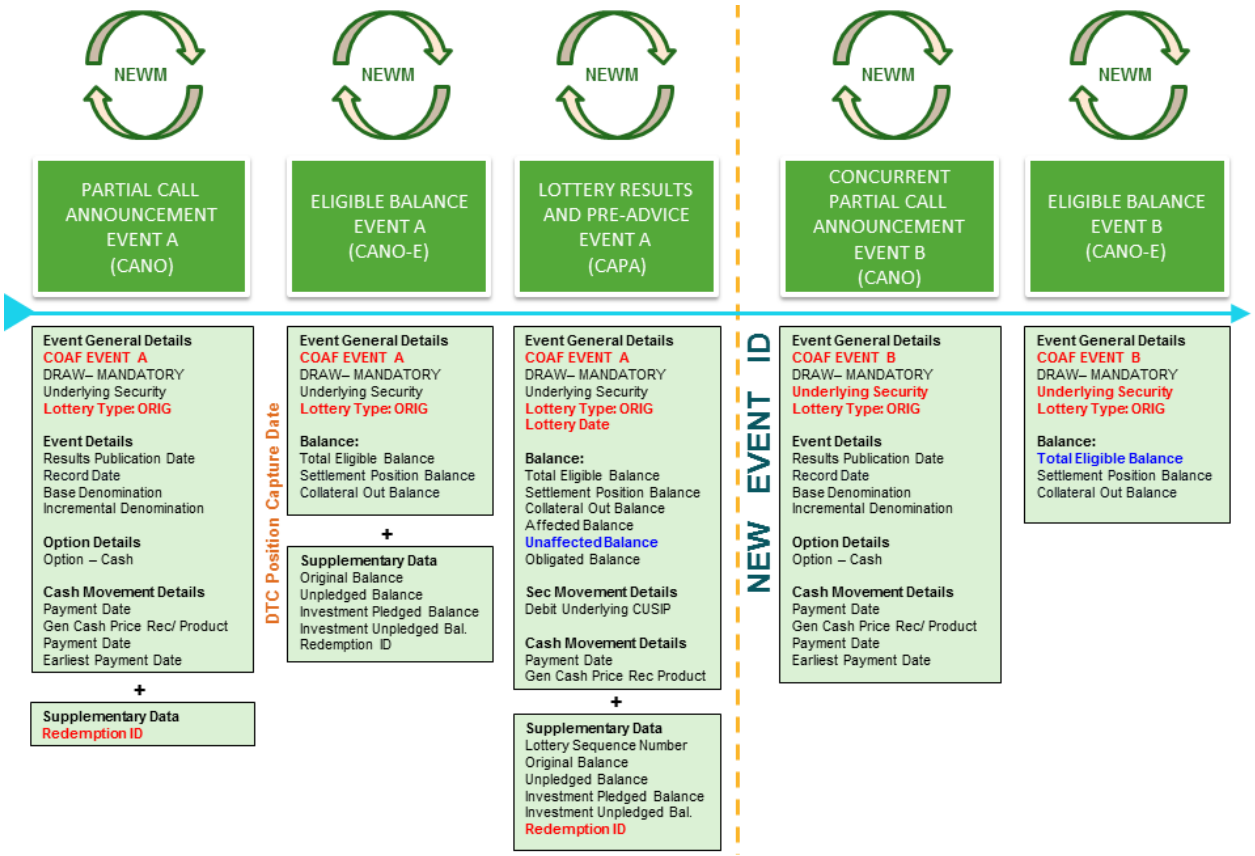
Scenario 23b: Concurrent Late Partial Calls: 2 of 2

After the lottery is run for Event A, the client receives a **CAPA** message detailing the lottery results for that event. The unaffected balance specified on the CAPA becomes the affected balance for Event B. Each client's eligibility for Event B is re-determined and reported on the **CANO-E** (REPL) message.

At this point, the lottery is run for Event B. Lottery results are reported in a second **CAPA** (NEWM). The underlying CUSIP is debited and the contra-CUSIP is credited. The contra-CUSIP will then be debited to credit the cash.

On the payment date for each event, two **CACO** (NEWM) messages announce the allocation of their associated events. The CACO for Event A shows the cash allocation from the underlying CUSIP. The CACO for Event B shows the credit to the contra-CUSIP and .its movement into cash.

Scenario 24: Concurrent Partial Calls (No Contra-CUSIP)



Scenario 24a: Concurrent Partial Calls (no Contra-CUSIP): 1 of 2

An initial partial call event ("Event A") is announced and eligibility is determined (on **CANO** and **CANO-E** messages, respectively). The lottery is run and the **CAPA** message details the lottery results and pre-advice.

Meanwhile, a **CANO** (NEWM) is received for a second event ("Event B") on the same security under a different Corporate Actions Event ID. It has a different payment rate for the same payment date. Because the lottery for Event A has already been run, Event B does not require a contra-CUSIP.

The following **CANO-E** (NEWM) message details the client's eligibility for Event B. The unaffected balance on the CAPA for Event A becomes the total eligible balance on the CANO-E for Event B.

This scenario concludes in the following diagram.

Scenario 24b: Concurrent Partial Calls (No Contra-CUSIP):2 of 2

After the lottery is run for Event B, the client receives a **CAPA** message detailing the lottery results for that event. The underlying security is debited and the client receives a cash credit.

On the payment date for each event, two **CACO** (NEWM) messages announce the allocation of their associated events. The CACO for Event A shows the cash allocation from the underlying CUSIP. The CACO for Event B shows the cash allocation from the "unaffected" portion of the balance remaining after Event A has been allocated.

Messaging Scenarios for Non-Lottery Events

Scenario 25: Full Call

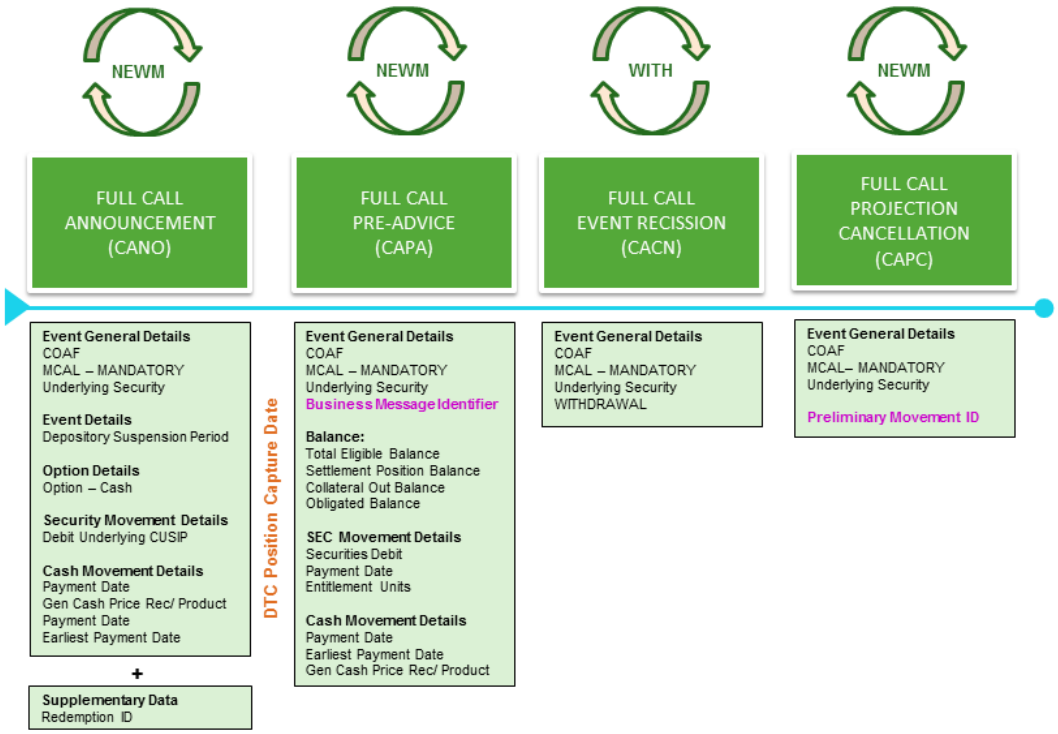
In a full call, all shares are called back for redemption by the issuer.

Scenario 25: Full Call

The **CANO** message announces the event. The **CAPA** message details what a particular client will be receiving as a result of the full call. After payment date, the **CACO** message details the allocations that were made.

Scenario 26: Cancellation of a Full Call (Pre-Allocation)

The security issuer announces a full call: all shares of a security are called back for redemption by the issuer. Before the redemption occurs, however, the event is rescinded.



Scenario 26: Full Call Cancellation (Pre-Allocation)

The **CANO** and **CAPA** messages are sent out as for a basic full call: clients are informed of the event, the projected debit to the underlying CUSIP, the projected allocation, and the payment date.

In this case, though, the event is canceled between the pre-advice and the allocation. Since the allocation has been projected, there are two cancellation messages that are sent by DTCC:

- The Event Cancellation (**CACN**) message corresponds to the CANO: it is sent to inform clients that the event itself has been rescinded and will no longer take place.
- The Projection Cancellation (**CAPC**) message corresponds to the CAPA: it informs clients that the projected allocation will not take place. The Preliminary Movement ID has the same value as the Business Message Identifier on the CAPA.

Scenario 27: Cancellation of a Full Call (Post-Allocation)

This scenario deals with the cancellation of a full call event. In this case, however, the cancellation occurs on the *same day after* the cash has been allocated.

Scenario 27a: Full Call Cancellation (Post-Allocation): 1 of 2

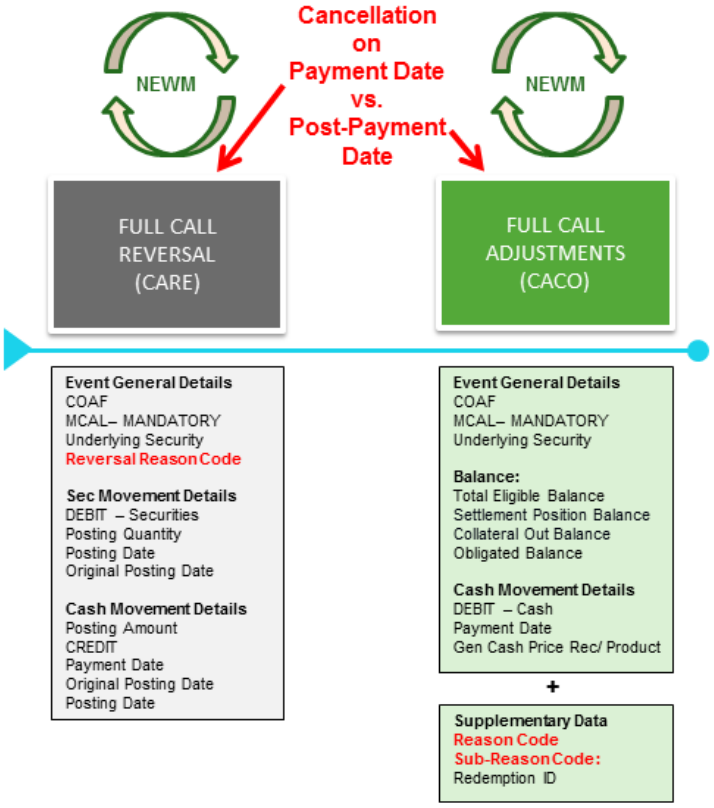
The **CANO** and **CAPA** messages are sent out as for a basic full call: a client is not only informed of the event, but also of the affected balance, the rate (if known), the projected debit to the underlying CUSIP, the projected allocation, and the payment date.

On payment date, allocation is made and the **CACO** message serves as a payment confirmation for the event. On payment date, the underlying CUSIP is debited and cash is moved to the client account.

At this point, however, the event is canceled. A **CACN** message is sent to rescind the event that was originally announced in the CANO.

After the event is rescinded, it needs to be reversed. A new **CAPA** is sent after the CACN, detailing what it is that will be reversed. Note that the details of the CAPA for the reversal mirror the CAPA for the event: they reflect what is being reversed, not what will happen as a result of the reversal.

This scenario concludes in the next diagram.



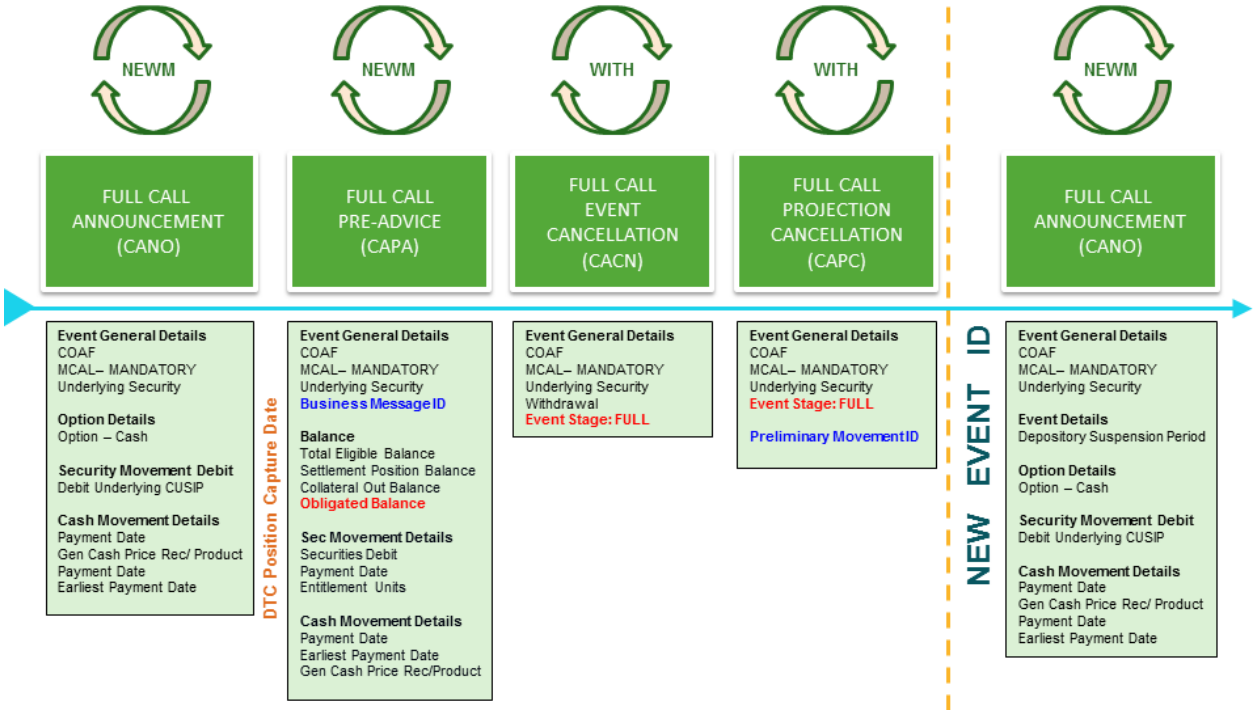
Scenario 27b: Full Call Cancellation (Post-Allocation): 2 of 2

Note: The CARE message in gray (above) is not currently in use. In the near future, it will be used for same-day allocation reversals. At the moment, all post-allocation reversals – same-day or otherwise – are made via the **CACO** message.

The **CACO** message presents the reversal details after the allocation has been reversed. Note that the details represent opposite movement from the CAPA messages: cash is debited from and securities are credited to the client account.

Scenario 28: Cancellation and Re-Run of a Full Call (Pre-Allocation)

As before, the security issuer announces a full call: all shares of a security are called back for redemption by the issuer. Before the redemption occurs, the event is rescinded. Here, however, a new event will take the place of the initial event.



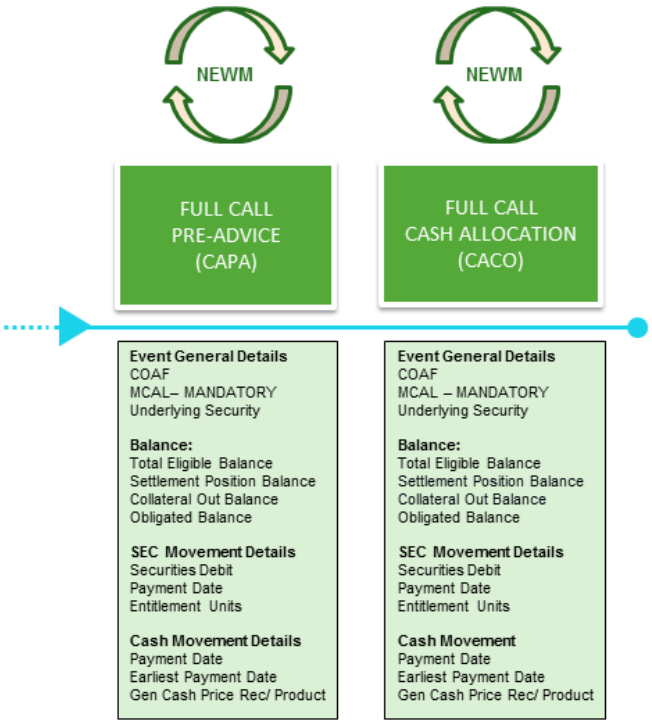
Scenario 28a: Cancellation and Re-Run of a Full Call (Pre-Allocation): 1 of 2

The first portion of this cancellation happens as in Scenario 26. The **CANO** and **CAPA** messages are sent out as for a basic full call: clients are informed of the event, the projected debit to the underlying CUSIP, the projected allocation, and the payment date.

After the projection advice is sent, the event is canceled. A **CACN** message rescinds the original CANO that was sent. Since the allocations were projected in the CAPA, those projections must be canceled as well: the **CAPC** message cancels those projections.

After the cancellation, a new event is announced via a new **CANO** message. This CANO contains the details for the replacement event, including the new Corporate Actions Event ID.

This scenario concludes in the following diagram.



Scenario 28b: Cancellation and Re-Run of a Full Call (Pre-Allocation): 2 of 2

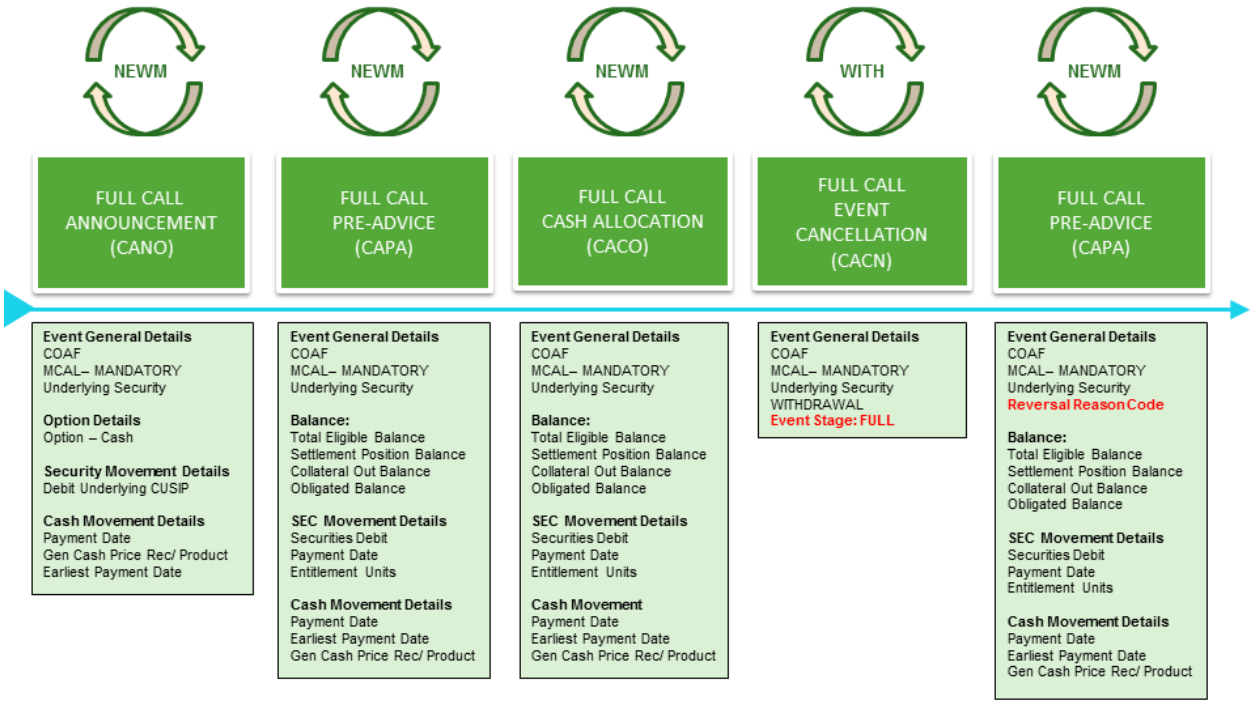
The process continues from this point as for a regular full call.

A new CAPA is sent, informing the client of its projected allocation associated with the new event.

On the new payment date, all allocations are made and a CACO message is sent as a payment confirmation for the event. On payment date, the client's underlying CUSIP is debited and cash is moved to the client's account.

Scenario 29: Cancellation and Re-Run of a Full Call (Post-Allocation)

In this situation, the event is canceled *after* allocation has occurred. All allocations made on the canceled event have to be reversed before the allocations on the second event can take place.



Scenario 29a: Cancellation and Rerun of a Full Call (Post-Allocation): 1 of 2

The full event proceeds as in Scenario 27. The **CANO** and **CAPA** messages are sent out as for a basic full call: a client is not only informed of the event, but also of the affected balance, the rate (if known), the projected debit to the underlying CUSIP, the projected allocation, and the payment date.

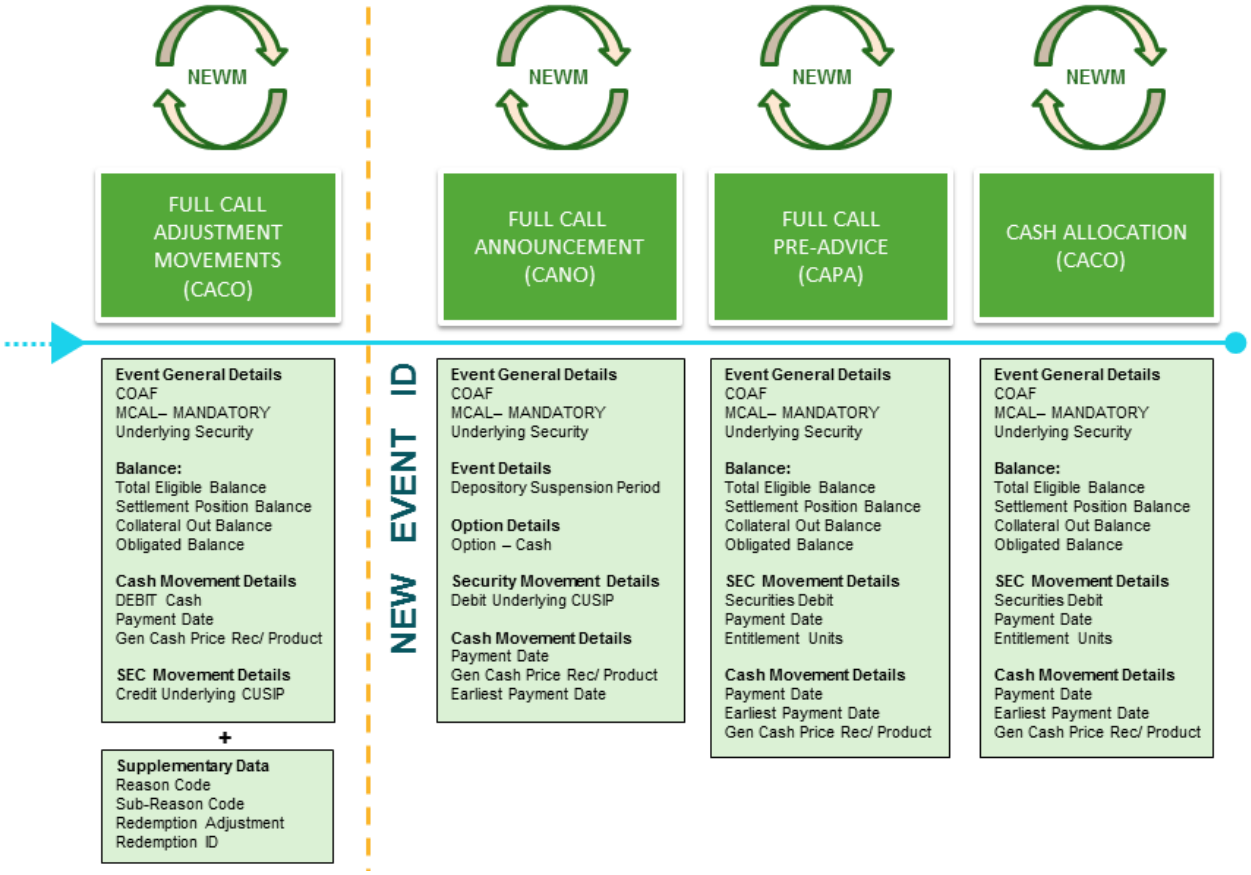
On payment date, allocation is made and the **CACO** message serves as a payment confirmation for the event. On payment date, the underlying CUSIP is debited and cash is moved to the client account.

In this example, the event is canceled due to an invalid payment date. A **CACN** message is sent to rescind the event that was originally announced in the CANO.

After the event is rescinded, it needs to be reversed. A new **CAPA** is sent after the CACN, detailing what it is that will be reversed.

- The details of the CAPA for the reversal mirror the CAPA for the event: they reflect what is *being* reversed, not what will happen as a *result* of the reversal.
- A Reversal Reason Code gives an explanation for why this projection is being reversed: in this case, the invalid payment date.

This scenario concludes in the following diagram.



Scenario 29b: Cancellation and Rerun of a Full Call (Post-Allocation): 2 of 2

The **CACO** message confirms the reversal details after the allocation has been reversed. Note that the details represent opposite movement from the CAPA messages: cash is debited from and securities are credited to the client account.

After the reversal is completed, a new event is announced via a new **CANO** message (as was indicated by the event stage within the CACN message). This CANO contains the details for the replacement event.

The new **CAPA** message specifies the allocation projections. After payment is made, the **CACO** details the cash and security movements for the new event.

Scenario 30: Maturity

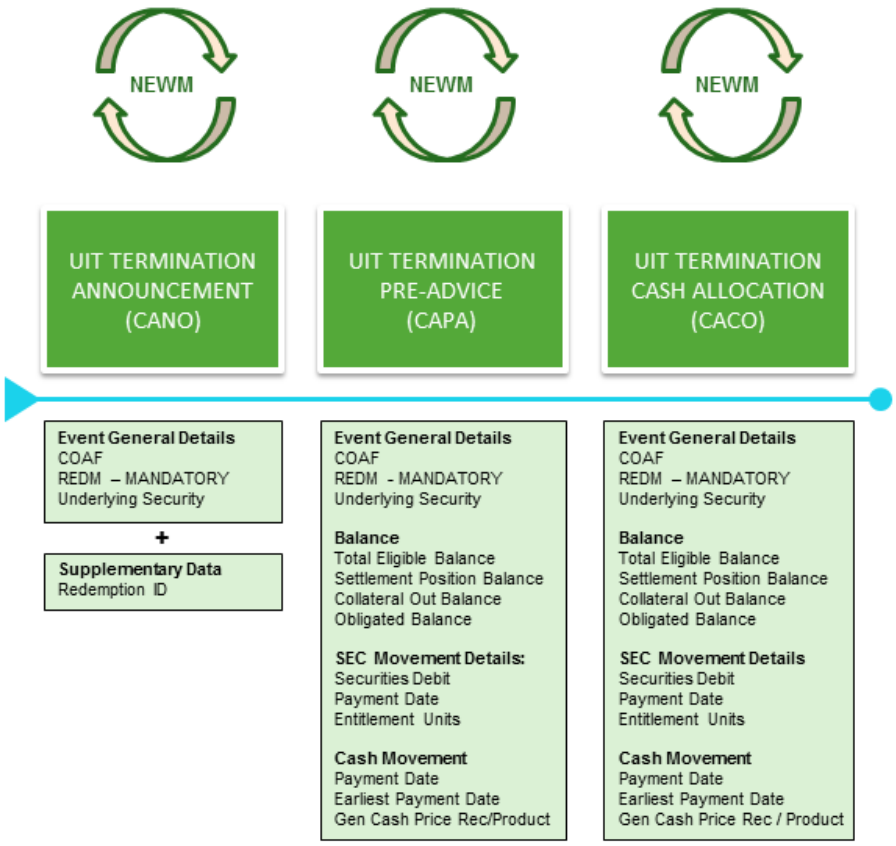
Functionally, the message sequence for a maturity is identical to that of a full call.

Scenario 30: Maturity

The **CANO** message announces the event. The **CAPA** message details what a particular client will be receiving as a result of the maturity. After payment date, the **CACO** message details the allocations that were made.

Scenario 31: UIT Termination

Functionally, the message sequence for the termination of a unit investment trust is identical to that of a full call.



Scenario 31: UIT Termination

The **CANO** message announces the event. The **CAPA** message details what a particular client will be receiving as a result of the UIT termination. After payment date, the **CACO** message details the allocations that were made.

Scenario 32: Full Pre-Refunding

Functionally, the message sequence for a full pre-refunding is identical to that of a full call.

Scenario 32: Full Pre-Refunding

The **CANO** message announces the event. The **CAPA** message details what a particular client will be receiving as a result of the full pre-refunding. After payment date, the **CACO** message details the allocations that were made.

FOR MORE INFORMATION

Email DTCC Learning at:
DTCCLearning@dtcc.com

or visit us on the web at:
www.dtcclearning.com