



FIXML Allocate and Claim Services

API Specification and Technical User's Guide Version 1.0

March 2005



TABLE OF CONTENTS

1	INT	TRODUCTION	4
	1.1 1.2 1.3 1.4	BACKGROUND PURPOSE AND SCOPE PREREQUISITES REFERENCES	4 4
2	ALI	LOCATE AND CLAIM BASICS	5
	2.1 2.2 2.3 2.4 2.5 2.6	OVERVIEW BASIC ALLOCATIONS DESIGNATING TRADES FOR BASIC ALLOCATION AVERAGE PRICE ALLOCATIONS DESIGNATING TRADES FOR AVERAGE PRICE ALLOCATION. BASIC, GENERIC AND SPECIFIC GROUPING.	5 5 5
3	BAS	SIC AND AVERAGE PRICE MESSAGE MODEL	7
	3.1 3.2 3.3 3.4 3.5	SIMPLE ALLOCATION MESSAGE FLOW. AVERAGE PRICE ALLOCATION MESSAGE FLOW. COMPLETING GROUPS CLAIMING ALLOCATIONS UPDATING ALLOCATIONS INSTRUCTIONS.	13 14
4	ACS	S MESSAGE MODEL	15
	4.1 4.2 4.3	SIMPLE ALLOCATION MESSAGE FLOW CLAIMING ALLOCATIONS UPDATING ACS ALLOCATIONS INSTRUCTIONS	18
5	ME	SSAGE FUNCTION OVERVIEW	20
	5.1 5.2 5.3 5.4 5.5 5.6 5.7 5.8 5.9 5.10	BASIC FIXML ALLOCATION MESSAGES MESSAGE FUNCTION TO MESSAGE TYPE MAPPING GROUP SUMMARY ALERTS CREATING ALLOCATIONS COMPLETING AVERAGE PRICE GROUPS (NOT APPLICABLE TO ACS GROUPS) CLAIMING ALLOCATION INSTRUCTIONS UPDATING PENDING OR REJECTED ALLOCATIONS UPDATING ACCEPTED ALLOCATIONS REVERSING OR RELEASING ACCEPTED ALLOCATIONS SUB ALLOCATIONS/THIRD PARTY ALLOCATIONS OF ACCEPTED ALLOCATIONS	
6	CO	MPONENTS OF APS AND ACS FIXML MESSAGES	
	6.1	KEY ELEMENTS AND ATTRIBUTES	
7	DE	TAILED MESSAGE SAMPLES	
	7.1 7.2 7.3 7.4 7.5 7.6 7.7 7.8 7.9 7.10	DESIGNATING TRADES FOR APS OR ACS ALLOCATION CLEARING SYSTEM ACKNOWLEDGES THE TRADE. GROUP LEVEL MESSAGES GROUP HANDLING MESSAGES (COMPLETE, INCOMPLETE & CANCEL) ALLOCATION INSTRUCTIONS ALLOCATION CONFIRMS AND ALERTS ACCEPTING AND REJECTING ALLOCATIONS UPDATE ALLOCATIONS REVERSING ALLOCATIONS SUB ALLOCATIONS/ THIRD PARTY ALLOCATIONS BY CARRY FIRM TRANSFERS DONE THRU CLEARING LIL	
	7.11	Transfers done thru Clearing UI	88



8	RE	QUIRED FIELDS	92
_	.1	REQUIRED FIELDS ON INBOUND ALLOCATION INSTRUCTION MESSAGES	
_	.2	REQUIRED FIELDS ON INBOUND ALLOCATION REPORT ACKNOWLEDGEMENT MESSAGES	
9	API	PENDIX	109
9	.1	TABLE 8.1 – FIX VALUE CONVERSION USED IN APS API	109



1 INTRODUCTION

1.1 Background

The FIXML 4.4 Schema Specification has been developed to allow participants in the financial services industry to transmit trade and post-trade information in a common extensible and flexible format. It was originally developed for post-trade execution reporting and positions management. It is now being extended to support the allocation and claiming of trades.

Today the basic allocations messages used to interface with the CME Clearing House web-based Front End Clearing application (FEC) are defined using the fixed length Trade Exchange Record Layout (TREX) protocol. In 2005 a new average price allocation module will be added to FEC and this new module will exclusively use the FIXML 4.4 Schema Specification for allocate and claim messages. Basic allocations will be supported by both FIXML and TREX for a short period after the implementation of average price allocations.

1.2 Purpose and Scope

This user's guide describes in detail all aspects of the FIXML Allocation Model as implemented to support post-trade allocation in the CME web-based trade management system, Front End Clearing (FEC).

This user guide describes the format and usage of the following FIXML Allocation messages:

- Allocation Group Summary Notices
- Basic and average price allocation instructions
- Updates to allocations
- Reverse and release requests to previously submitted and accepted allocations
- Sub-Allocation or third party allocation requests
- Allocation instruction alerts
- Allocation instruction claim alerts
- Acknowledgment to all allocation instructions and responses

1.3 Prerequisites

This document assumes a basic working understanding of XML and familiarity with basic CME trade processing terms.

1.4 References

CME Clearing House FIXML web page:

www.cme.com/clearing/cm/stan/fixml6615.html

You will find the following material at this site:

- Allocation FIXML 4.4 (FIA Extensions 1.1) Schema files
- FIXML Allocation message examples

Other References:

http://www.fixprotocol.org/specifications/fix4.4fixml



2 Allocate and Claim Basics

2.1 Overview

The terms allocate and claim describe the method by which trades are routed to their ultimate firm and account in the CME Clearing House Front End Clearing (FEC) web-based trade management system. Trades can be designated for allocation by simply submitting them with an allocation indicator although additional specific allocation information such as carry firm, account and origin can also be appended to trades marked for allocation. Specific allocation instructions can also be submitted as stand alone instructions referencing a group of trades already marked for allocation. Once these specific instructions have been submitted, whether with the initial trade information or later with stand alone allocation instructions, the clearing system sends an allocation alert message to the designated carry firm. The carry firm can respond to this alert by either claiming or rejecting the allocation. The claiming firm's response would then be communicated back to the allocating firm by the CME clearing system.

2.2 Basic Allocations

Basic Allocations are those that are done at a fixed trade price determined by the execution price of the trade. No price averaging is involved. Trades designated for basic allocation are aggregated according to predefined criteria into "allocation groups". The convention currently used for assigning trades to an allocation group uses the following criteria:

- Firm and Trader
- Trade Date
- Instrument definition (Symbol)
- Side of Market
- Trade Price
- Customer Account
- Trade Type
- Client Order ID

2.3 Designating Trades for Basic Allocation

Trades designated for basic allocation are first added to an allocation group and then, if the appropriate preallocation instruction details have been provided, becomes part of an allocation proper that is routed to the claim firm. The executing firm has the option of providing both the Group ID and Allocation ID, although under current listed derivatives convention the ID's are automatically assigned by the clearing house. At the time of execution, a firm has 2 options with respect to designating the allocation.

- An executing firm may direct the trade into an allocation group pending the receipt of allocation instruction details. At this point the allocation is considered to be in "pending" status awaiting the executing firm to provide the details necessary to complete the allocation. The allocation Group ID is automatically assigned by the Clearing House and the information is sent to the claim firm in the form of an Allocation Alert.
- 2. An executing firm may also provide all requisite allocation details at the time of the trade. In this case, the trade will be assigned to an allocation group as well as create an actual allocation that will be sent to the claim firm. At this point, the allocation is considered to be in "preliminary" status.

2.4 Average Price Allocations

Average price allocations are different from basic allocations in three significant ways.

- 1. Trade Prices within a Group are averaged.
- 2. For average price allocations, grouping is a two stage process:
 - a. For purposes of averaging, trades can be grouped according to a very broad set of criteria in what we will call "Generic" groups.
 - For purposes of allocating, each Generic group will yield one or more underlying "Specific" groups whose criteria are defined in the same way as Basic allocation groups excepting price.



3. Allocation instructions submitted for average price allocation groups are not released until the allocating firm has "completed" the Generic average price group. Completion indicates that no more trades will be averaged in the designated group. Once the firm has completed the average price allocation group all existing allocation instructions are released to the designated carry firms.

2.5 Designating Trades for Average Price Allocation

Unlike basic allocations, trades to be allocated at an average price will not be automatically assigned allocation groups. Instead, trades marked for average price allocation must be assigned an **average price group id** by the allocating firm. Trades designated for average price allocation but not assigned an average price group id are stored in FEC as unassigned trades. Firms can provide an average price group id for unassigned trades by updating individual trades via trade update messages or selecting multiple unassigned trades within the FEC user interface and assigning them to an existing or new average price group.

2.6 Basic, Generic and Specific Grouping

The concept of grouping, whether in the context of Basic, Generic or Specific allocation groups, is essential to the process of post-trade allocation. The assignment of trades into Basic allocation groups is automatically determined by the clearing system based on the criteria of the trades marked for allocation. Generic allocation groups are delimited by four very basic trade criteria and the firm assigned group id. Trades in a Generic group are assigned to underlying Specific allocation groups using Basic allocation grouping criteria minus price. The table below compares the different grouping criteria used for basic and average price allocations:

Grouping Criteria	Basic Allocation Groups	Grouping for Average (Generic)	for Allocation (Specific)
Product	X	X	X
Contract Details (contract date, put/call, strike, etc.)	X	X	X
Market Side (e.g. buy/sell)	X	X	X
Price	X		
Account Number	X		X
Order Number	X		X
Trade Type (e.g. spread/outright)	X		X
Venue (e.g. Electronic/Open Outcry)	X		X
Broker	X		X
Origin	X		Χ
Trade Date	X	X	X

Table 2.1

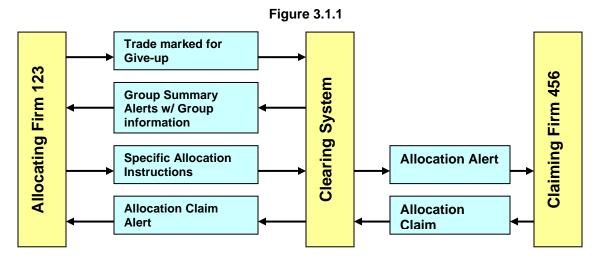


3 Basic and Average Price Message Model

3.1 Simple Allocation Message Flow

As described above, the Clearing House acts as an intermediary between the allocation firm and the claiming firm. Designation of trades for allocation by the executing initiates the allocation grouping process in the clearing system. When allocation groups are created the clearing system generates group summary alerts to the allocating firm. If specific allocation instructions were appended to trades reported to the clearing system or once stand alone allocation instructions are submitted referencing existing allocation groups, the clearing system sends an allocation alert to the designated carry firm. The carry firm may then respond by either claiming or rejecting the allocations.

Below is an illustration of the basic allocation message flow used today in FEC:



3.2 Average Price Allocation Message Flow

Average price allocation message flow is in many ways similar to basic allocation flow. The only significant differences are the two types of allocation groups associated with average price allocations, the application of allocation instructions between generic and specific groups and the requirement that the allocating firm complete the average price group before allocation instructions are sent to the carry or claiming firm.

3.2.1 Generic Groups

Once the allocating firm has designated a trade for average price allocation and assigned it an average price group id, the clearing system will respond with two group summary alert messages. The first group summary alert message, or "generic" summary message, contains certain key information about the trades being averaged:

- the firm assigned average price group id
- the clearing system assigned average price group id
- the trade ids of the trades that make up the generic group
- the product and contract details of the trades being averaged
- whether it is a buy or sell generic group
- the overall quantity of contracts being averaged
- relevant averaged allocation prices:
 - o the rounded or working average price
 - o the true average price
 - o the cash residual
- the generic group status, e.g. whether it has been completed or not
- the business and trade date
- the message event source id
- the input device



3.2.2 Specific Groups

The second group summary record is the "specific" group summary record. Each trade assigned to a generic average price group will also be assigned to a specific allocation group according to the same criteria, excluding price, currently used to group basic allocations. The specific group summary record contains the following information:

- the firm assigned average price group id of it's parent generic average price group
- a new specific allocation group id assigned by the clearing system
- the trade ids of the trades contained within the specific group
- the product and contract details for the specific group
- specific group quantity
- relevant averaged allocation prices
- specific group status, e.g. whether it is fully allocated and accepted or not
- buy/sell indicator
- the generic group status, e.g. whether it is complete or not
- message event source id
- input device
- and most significantly, the specific trade information that defines the specific group such as:
 - o account number
 - o order number
 - o trade type
 - o origin
 - o trade venue
 - o broker

Below is the message flow for Generic and Specific average price group summary alerts:

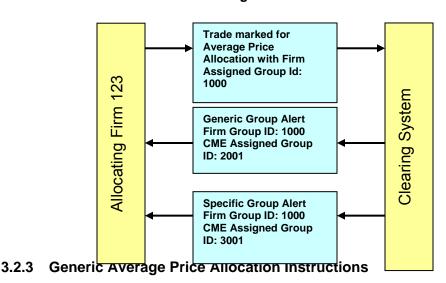
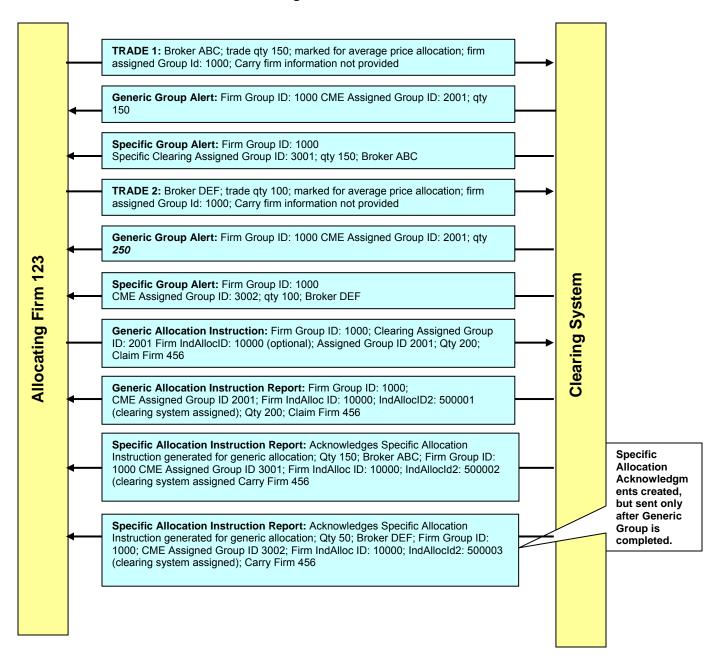


Figure 3.2.2

Average price allocation instructions can be submitted for generic or specific allocation groups. If submitted at a generic group level the clearing system will automatically apply them to as many underlying specific groups as necessary in order to complete the allocation after the Generic group has been completed. Allocation instructions can also be submitted for specific allocation groups. The allocating firm uses the CME Assigned Group ID, defined as attribute ID2 in FIXML, to differentiate between specific and generic allocation groups. Allocation instructions that are submitted with trade messages are automatically applied to the specific group to which the trade was assigned. Figure 3.3 illustrates how allocation instructions can be submitted for average price allocation groups and how they are applied.



Figure 3.2.3





In Figure 3.2.3 allocation instructions are being submitted at the generic level and applied at the specific level. A 200-lot allocation instruction was submitted for a generic group with a quantity of 250, made up of one150-lot trade and one 100-lot trade executed by two different brokers but assigned the same average price group id by the allocation firm. Each of those trades were assigned separate specific allocation groups just as they would have been assigned to different Basic allocation groups if they were marked as Basic allocations. This is important to remember, Specific allocation groups are formed from the trades in their parent generic group according to the same criteria, excluding price, as Basic allocation groups.

When applying allocation instructions at the generic level, in this case an allocation instruction for 200, the generic allocation quantity is assigned with the aim of minimizing breaking up the quantity of the generic allocation. In this case, since neither specific allocation group was large enough to satisfy the quantity of the generic allocation instruction, one specific group was completely allocated and the second group was partially allocated. 150 were applied to the specific group with the CME assigned group id of 3001 and the remaining quantity of 50 was applied to the specific allocation group with the CME assigned group id of 3002



3.2.4 Specific Average Price Allocation Instructions

Average price allocation instructions can also be submitted at the specific group level. This can be accomplished in two ways, either by appending specific allocation instructions to trades designated for average price allocation or by submitting allocation instructions referencing a specific allocation group.

3.2.4.1 Submitting Specific Allocation Instruction with Trade Capture Reports

As discussed in **Section 2** specific allocation instructions such as carry firm, carry account, origin and customer type indicator can be nested within the instructions for trades marked for allocation. When these instructions are nested within trades designated for average price allocations, allocation instructions are generated for the Specific group to which the trade is assigned. Let's assume that trade number 2 from figure 3.3 was submitted with specific allocation instructions. Figure 3.4 below demonstrates the message flow:

Trade 2: Broker DEF; trade qty 100; marked for average price allocation; firm assigned Group Id: 1000;

Nested Specific Allocation Instructions: Carry Firm: 456; Carry Account: 123456;

Generic Group Alert: Firm Group ID: 1000
CME Assigned Group ID: 3001; atv. 350
Specific Group Alert: Firm Group ID: 1000
CME Assigned Group ID: 3002; qty 100

Specific Allocation Report: Firm Group ID: 1000 CME Assigned Group ID: 3002; qty 100;
Carry Firm: 456; Carry Account: 123456;
IndAllocID2: 500003 (clearing system assigned)

Figure 3.2.4.1

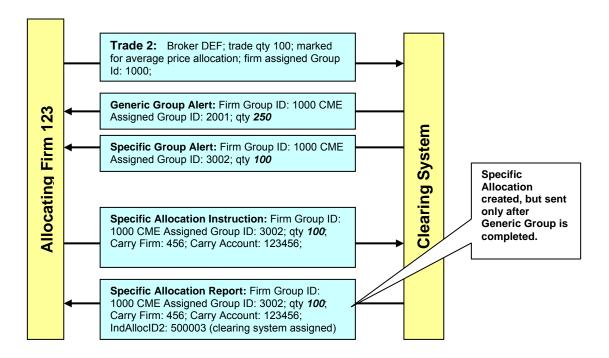
Note that if you allocate specifically you will receive the specific acknowledgement. If you allocate generically you will receive the generic acknowledgment. If you allocate generically after completion you receive a generic acknowledgment, a generic delete and then a specific acknowledgement.



3.2.4.2 Submitting Stand Alone Specific Allocation Instructions

An allocation firm can also submit specific allocations by referencing a specific allocation group. This is done using the clearing system assigned specific group id (ID2). Figure 3.5 demonstrates the message flow:

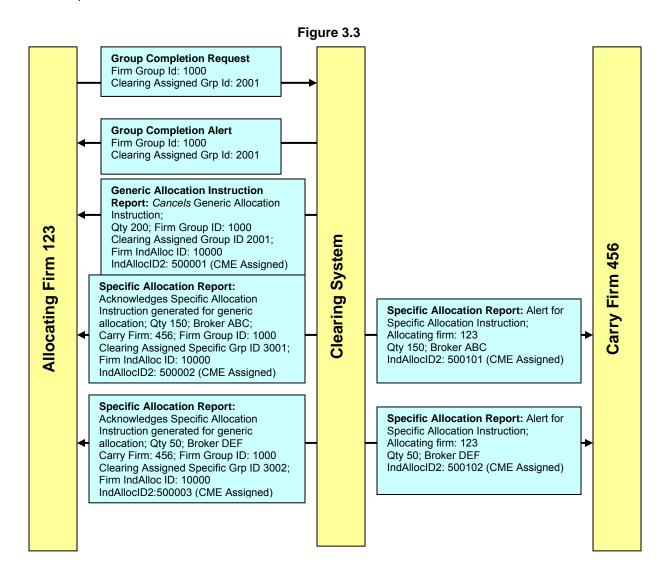
Figure 3.2.4.2





3.3 Completing Groups

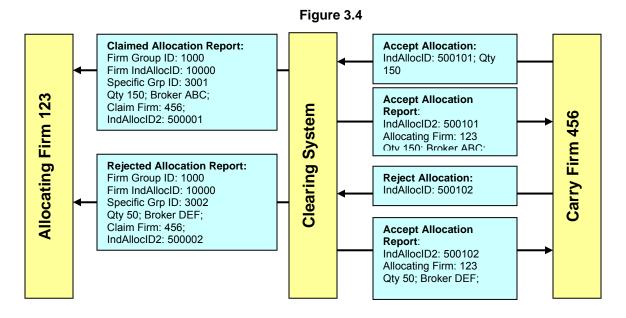
Allocation instructions submitted for average price allocation groups are not transmitted to the claiming firm until the average price group is completed. Completing an average price group indicates that no more trades will be added to the group. Only Generic average price groups can be completed, Specific groups are completed when their parent Generic group is completed. Group completion can be accomplished via message or using the FEC user interface. Below is an illustration of the message flow for average price group completion.





3.4 Claiming Allocations

Once alerted of a pending allocation the claiming firm can either reject or accept the allocation. Note that the claiming firm does not have to send specific trade information like executing broker or trade type on its claim message, but the Accept Allocation Report from the clearing system will contain all trade information.



3.5 Updating Allocations Instructions

The allocating firm can modify both pending and rejected allocations. The allocating firm can change the claim firm number, claiming firm account, customer type and origin and change the allocation quantity. If the carry firm is changed on a pending or rejected allocation, the original carry firm receives a Cancel allocation message and the new carry firm receives a new allocation instruction alert. When we left off in figure 3.4, claiming firm 456 had rejected one of the allocations from firm 123. In figure 3.5, allocating firm 123 is changing the claiming firm number to claim firm 789.

Carry Firm **Cancel Report: Update Allocation Instruction:** IndAllocID2: 500102 Firm Group ID: 1000; Firm IndAllocID: 10000; Specific Allocating Firm: 123 Qty 50; Broker DEF Group ID 3002; IndAllocID2: **Give-Up Firm 123** Clearing System 500002: Claim firm: 789 **Update Allocation Report:** New Allocation Report: Firm Group ID: 1000; Firm Allocating firm: 123 IndAllocID: 10000; Specific Grp Qty 50; Broker DEF ID: 3002; Qty 50; Broker DEF; IndAllocID2: 500102 (CME Claim Firm: 789; Assigned) IndAllocID2: 500002

Figure 3.5

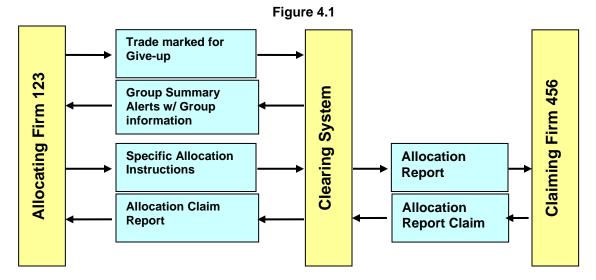


4 ACS Message Model

4.1 Simple Allocation Message Flow

As described above, the Clearing House acts as an intermediary between the allocation firm and the claiming firm. Designation of trades for allocation by the executing initiates the allocation grouping process in the clearing system. Unlike trades marked for average pricing, trades marked for ACS will automatically be assigned to specific allocation groups. When allocation groups are created the clearing system generates group summary alerts to the allocating firm. If specific allocation instructions were appended to trades reported to the clearing system or once stand alone allocation instructions are submitted referencing existing allocation groups, the clearing system sends an allocation report to the designated carry firm. The carry firm may then respond by either claiming or rejecting the allocations.

Below is an illustration of the basic allocation message flow used today in FEC:

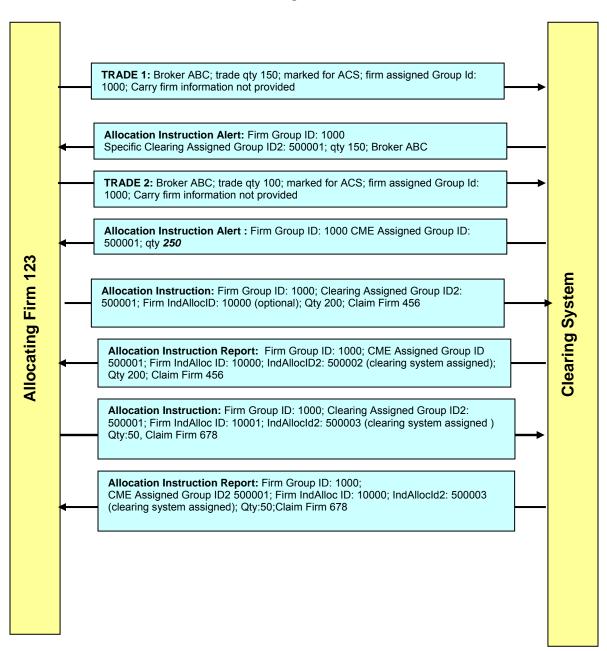




4.1.1 ACS Allocation Instructions

ACS allocation instructions can be appended to trades reported to the clearing system or as stand alone allocation instructions referencing existing basic allocation groups. The allocating firm uses the CME Assigned Group ID, defined as attribute ID2 in FIXML, to differentiate between different ACS allocation groups. Allocation instructions that are submitted with trade messages are automatically applied to the specific ACS group to which the trade was assigned. Figure 4.2 illustrates how allocation instructions can be submitted for specific ACS allocation groups and how they are applied.

Figure 4.2





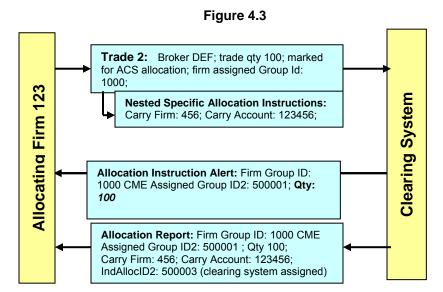
In Figure 3.2, allocation instructions are being submitted. A 200-lot and a 50-lot basic allocation instruction was submitted for a group with a quantity of 250, made up of one150-lot trade and one 100-lot trade executed by the same broker. Each of those trades were assigned to the same basic allocation group (ID2) since they met the same grouping criteria for basic allocation groups set out in table 2.1. The firm has the option of submitting their own reference group ID (Attribute=ID) and allocation ID (AllocIndID); however, the clearing system will generate their values if they are not supplied by the firm. The allocating firm will need to populate both the ID and ID2 when sending allocation instructions.

4.1.2 Submitting ACS Allocation Instructions for Trades

ACS allocation instructions can also be by appending specific allocation instructions to trades designated for ACS allocation or by submitting allocation instructions referencing a specific allocation group.

4.1.2.1 Submitting Allocation Instruction Upon Trade Submission

As discussed in **Section 2** specific allocation instructions such as carry firm, carry account, origin and customer type indicator can be nested within the instructions for trades marked for allocation. When these instructions are nested within trades designated for ACS allocations, allocation instructions are generated for the basic group to which the trade is assigned. Let's assume that trade number 2 from figure 3.2 was submitted with basic allocation instructions. Figure 4.3 below demonstrates the message flow:



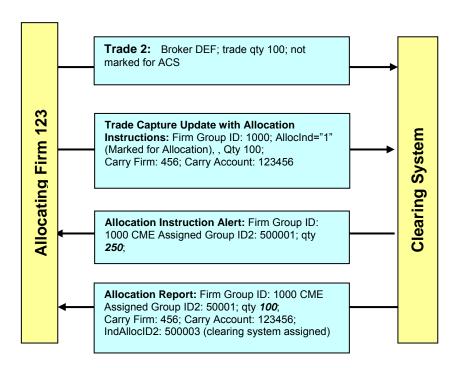
Page 17 of 113



4.1.2.2 Submitting Basic Allocation Instruction Via Trade Capture Reports

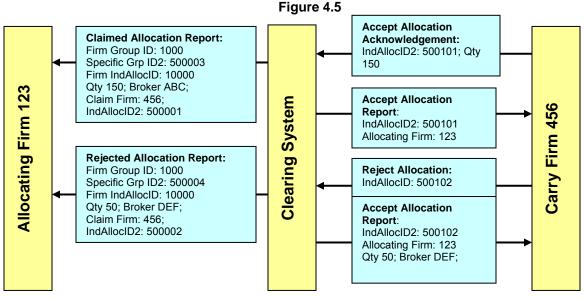
An allocation firm can also submit allocations by updating a trade unmarked for ACS with the requisite allocation information: Let's assume that trade number 2 from figure 3.2 was submitted without basic allocation instructions. Figure 4.4 demonstrates the message flow:

Figure 4.4



4.2 Claiming Allocations

Once alerted of a pending allocation the claiming firm can either reject or accept the allocation. Note that the claiming firm does not have to send specific trade information like executing broker or trade type on its claim message, but the Accept Allocation Report from the clearing system will contain all trade information.



Page 18 of 113

FIXML Allocation API User's Guide ©Chicago Mercantile Exchange, 2005 March 2005



4.3 Updating ACS Allocations Instructions

The allocating firm can modify both pending and rejected allocations. The allocating firm can change the claim firm number, claiming firm account, customer type and origin and change the allocation quantity. If the carry firm is changed on a pending or rejected allocation, the original carry firm receives a Cancel allocation message and the new carry firm receives a new allocation instruction alert. The AllocIndID2 is used to specify which specific allocation is to updated. When we left off in figure 3.4, claiming firm 456 had rejected one of the allocations from firm 123. In figure 3.5, allocating firm 123 is changing the claiming firm number to claim firm 789.

Update Allocation Instruction: Carry Firm Firm Group ID: 1000; Firm **Cancel Allocation** Report: IndAllocID: 10000; Specific IndAllocID2: 500102 Group ID 500004; IndAllocID2: TransTyp="2" 500002; Claim firm: 789 Give-Up Firm 123 Clearing System Allocating Firm: 123 Qty 50; Broker DEF **Update Allocation Report:** Firm Group ID: 1000; Firm IndAllocID: 10000; Specific Grp **New Allocation Report:** Carry Firm 789 ID: 500004; Qty 50; Broker DEF; Allocating firm: 123 Claim Firm: 789; Qty 50; Broker DEF IndAllocID2: 500002 IndAllocID2: 500102 (CME Assigned)

Figure 3.5



5 Message Function Overview

5.1 Basic FIXML Allocation Messages

There are four main FIXML message types used to complete the allocation and claiming of trades:

- AllocInstrctnAlert (Allocation Instruction Alert)
 - The Group Summary message. Alerts are used by the Clearing House to notify the allocating firm of changes to the composition or status of allocation summary groups.
- AllocInstrctn (Allocation Instruction)
 - Used to submit allocation instructions by the allocating firm
 - Sent by the allocating firm to update previously submitted allocation instructions
 - Sent by the claim firm to request that a claimed allocation be sub-allocated or allocated to a 3rd-party
- AllocRpt (Allocation Report)
 - Used exclusively by the Clearing System to notify allocating and claiming firms of the creation of allocations
 - Sent whenever the status or information on an allocation changes
- AllocRptAck (Allocation Report Acknowledgment)
 - Used by the claiming firm, in response to an Allocation Report from the Clearing System, to accept or reject an allocation

Below are the basic rules for the usage of the four types of allocation messages:

- Reports are outbound from Clearing House only.
- 2. Instructions are inbound from Giveup firm only
- 3. Alerts are outbound from Clearing House only and are used only to advise of group updates
- 4. AllocStatus is only provided by the Clearing House
- AllocType and AllocReportType are bi-directional and used to indicate the business purpose of a message.

In this section we will describe in detail how to properly form these FIXML message types in order to accurately communicate allocation instructions and responses.



5.2 Message Function to Message Type mapping

Message Function (GAPI Msg)	FIX 4.4 Message Type	TransTyp (Allocation Trans Type)	Stat (Allocation Status required for Allocation Alerts and Reports)	Typ (Alloc Type required for Instrctn)	RptTyp (Allocation Report required for Report)	Sent by	Received by
(Complete g	group and the attrib	oute Typ value	1. COMPLETE of "12"is applicable only have Typ="	to Average Pricing I	Messaging. Transfers	and ACS v	vill always
1a. Create Group (GS)	AllocInstrctn	0=New, 1=Replace, 2=Cancel		13 - GroupComplete, 12 - GroupIncomplete		Give-up firm	Clearing House
1b. Summary Notice (GSA)	AllocInstrctnAlert	0=New, 1=Replace, 2=Cancel	6 – AllocationPending	13 - GroupComplete, 12 - GroupIncomplete		Clearing House	Give-up firm
		2. CR	EATE GROUP (INITIATED		RE)		
2a. Summary Notice (GSA)	AllocInstrctnAlert	0=New, 1=Replace, 2=Cancel	6 – AllocationPending	13 - GroupComplete, 12 - GroupIncomplete		Clearing House	Give-up firm
			3. CREATE ALLO	OCATION			3
3a. Allocation (GA)	AllocInstrctn	0=New		2 - Preliminary		Give-up firm	Clearing House
3b. Allocation Alert (GAA)	AllocRpt	0=New	3 – Received (in Clearing System)		11-AcceptPending	Clearing House	Carry Firm
3c. Allocation Confirmation (GAC)	AllocRpt	0=New	3 – Received (in Clearing System) 1 - Block Level Reject 2 - Account Level Rej		2-Preliminary	Clearing House	Give-up firm
			4. CANCEL/UPDATE	ALLOCATION			
4a. Update Allocation (GA Chg)	AllocInstrctn	1=Replace, 2=Cancel		2 - Preliminary		Give-up firm	Clearing House
4b. Update Allocation Alert (GAA Chg/Del)	AllocRpt	1=Replace, 2=Cancel	3 – Received (in Clearing System)		11-AcceptPending	Clearing House	Carry Firm
4c. Update Allocation Confirmation (GAC)	AllocRpt	1=Replace, 2=Cancel	3 – Received (in Clearing System) 1 - Block Level Reject 2 - Account Level Rej		2-Preliminary	Clearing House	Give-up firm
			5. ACCEPT ALLO	OCATION			
5a. Claim or Reject (GC)	AllocRptAck	0=New			9 - Accept, 10 - Reject	Carry Firm	Clearing House
5b. Claim/Reject Alert (GCA)	AllocRpt	0=New	0-Accepted (in Clearing System)		9 - Accept, 10 - Reject	Clearing House	Give-up Firm
5c. Claim/Reject Confirmation (GCC)	AllocRpt	0=New	0–Accepted (in Clearing System)		12=Complete	Clearing House	Carry Firm



Message Function	FIX 4.4 Message Type	TransTyp (Allocation Trans Type)	Stat (Allocation Status required for Ack and Report)	Typ (Alloc Type required for Instrctn)	RptTyp (Allocation Report required for Report)	Sent by	Received by
		6	. UPDATE ACCE	PTED ALLO	CATION		
6a. Update Allocation (GC Chg)	AllocRptAck	1=Replace			8 - Request	Carry Firm	Clearing House
6b. Update Allocation Confirmation (GCC)	AllocRPT	1=Replace	0-Accepted (in Clearing System) 1 - Rejected (in Clearing System)		New Attribute, 12=Complete	Clearing House	Carry Firm
		7. SU	B-ALLOCATE A	CCEPTED AL	LOCATION		
7a. SubAllocation (GC Chg)	AllocInstrctn	1-Replace			8 - Request	Carry Firm	Clearing House
7b. Update Allocation Confirmation (GCC)	AllocRpt	1-Replace	3-Received		2-Preliminary	Clearing House	Carry Firm*
	*Carry I	Firm becomes a	Give-up firmrefe	rence Create	Group and Create Allocat	ion	-
		8. SIMULTAI	NEOUSLY ACCE	PT AND GIVE	E-UP ALLOCATION		
8a. Third-party Allocation with Claim (GC Chg)	AllocRptAck	0=New			12 - Accept, 13 - Reject	Carry Firm	Clearing House
8b. Claim Alert (GCA) (sent to original give-up firm)	AllocRpt	0=New	0–Accepted (in Clearing System)		9 - Accept, 10 - Reject	Clearing House	Give-up Firm
8c. Claim Confirmation (GCC)	AllocRpt	0=New	3-Received		2 - Preliminary	Clearing House	Carry Firm*
	*Carry I	irm becomes a	Give-up firmrefe	rence Create	Group and Create Allocat	ion	1
			9. REVERSE	ALLOCATIO	DN		
9a. Reversal	AllocInstrctn	6=Reversal		8 - Request		Initiating Firm	Clearing House
9b. Reversal Confirmation	AllocRpt	6=Reversal	3 – Received		8 - Request	Clearing House	Initiating Firm
9c. Reversal Alert	AllocRpt	6=Reversal	3 – Received		14 - ReversalPending	Clearing House	Responding Firm
		10. ACCEP	T/REJECT REVE	RSE ALLOC	ATION REQUEST		
10a. Accept or Reject Reversal	AllocRptAck	6=Reversal			9 - Accept, 10 - Reject	Responding Firm	Clearing House
10b. Accept/Reject Reversal Alert	AllocRpt	6=Reversal	0–Accepted; 1-Rejected		9 - Accept, 10 - Reject	Clearing House	Initiating Firm
10c. Accept Reversal Confirmation	AllocRpt	6=Reversal	0–Accepted, 1 Rejected		12=Complete	Clearing House	Responding Firm



5.3 Group Summary Alerts

When a trade is marked for allocation, a new allocation group is created or the trade is added to an existing group. Each time a new trade is added to an allocation group, new or existing, the allocating firm receives a FIXML group summary alert message, "AllocInstrctnAlert". One of the key attributes in a group summary alert message is the "TransTyp". When a new group is created this attribute will have the enumeration of '0' which means 'New'. When a trade is added to an existing allocation group the group summary alert TransTyp will be set to '1' or 'Replace'. Average price allocation group summary alerts will also contain the allocating firm assigned average price group id, designated by the attribute 'ID' and the clearing assigned group id designated by the attribute 'ID2'. The attribute value for 'ID', will be assigned by the clearing system if not assigned by the firm. Also, ACS groups will always have the Typ="13" (GroupComplete), unlike APS groups which will initially have a Typ="12" (incomplete group) since only APS groups require completing.

Message Function	FIX Message Type	TransTyp	Stat	Тур	RptTyp	Sent by	Received by
Summary Notice (GSA)	AllocInstrctnAlert	0=New 1=Replace 2=Cancel	6 –AllocationPending	13 -GroupComplete, 12- GroupIncomplete		Clearing House	Allocating firm

Allocating Firm		CME	Carry Firm
	←	Allocation Instruction	
	`	<u>Alert</u>	
		<allocinstrctnalert< th=""><th></th></allocinstrctnalert<>	
		TransTyp="0" ID=	
		"500001" ID2="500001"	
		Qty="3" Stat="6"	
		Typ="13" TrdDt="2007-	
		02-26"	
		<hdr <="" sid="CME" th=""><th></th></hdr>	
		TID="092" TSub="CME"	
		<instrmt< th=""><th></th></instrmt<>	
		SecTyp="FUT"ID="SP"	
		CFI="FFICSO"	
		/>	



5.4 Creating Allocations

5.4.1 Allocation Instruction Messages

The allocating firm uses the FIXML Allocation Instruction (AllocInstrctn) message type to submit allocation instructions. The clearing system confirms all AllocInstrctn messages with the FIXML Allocation Report (AllocRpt) message. The allocating firm **must** supply the clearing system assigned group id (ID2) and firm assigned group id (ID) on allocation instructions. The allocating firm places the carry or claim firm information in the Allocation (Alloc) block. The attribute "Typ" should equal "2" on the inbound messages.

Message Function	FIX Message Type	TransTyp	Stat	Тур	RptTyp	Sent by	Received by
Allocation (GA)	AllocInstrctn	0=New		2 - Preliminary		Allocating firm	Clearing House
Allocation Confirmation (GAC)	AllocRpt	0=New	3 – Received (in Clearing System) 1 - Block Level Reject 2 - Account Level Reject		2- Preliminary	Clearing House	Give-up firm

Allocating Firm		CME	Carry Firm
Allocation Instruction <allocinstrctn <="" <instrmt="" cfi="FFICSO" id="SP" id2="500001" qty="3" td="" transtyp="0" trddt="2007-02-26" trdtyp="0" typ="2"><td>\rightarrow</td><td></td><td></td></allocinstrctn>	\rightarrow		
	←	Allocation Report <allocrpt <hdr="" id2="500001" qty="3" rptid="500001" rpttyp="2" sid="CME" stat="3" tid="092" transtyp="0" trddt="2007-02-26" tsub="CME"></allocrpt> <instrmt cfi="FFICSO" id="SP" sectyp="FUT"></instrmt> <pty id="092" r="1"></pty> <alloc <pty="" id="CME" indallocid2="500002" r='22"/'> <pty id="###" r="1"></pty> </alloc>	





5.4.2 Specific or Generic for Average Price Allocations

For average price allocations, the allocating firms can submit allocations at a Generic level or at a Specific Level. The value necessary to differentiate between a Generic and Specific allocation instruction is the clearing system assigned group id, "ID2". Generic allocations will be applied to as many specific groups as necessary to satisfy the allocation instruction. Generic allocations will be confirmed immediately by the clearing system but Specific allocation instruction confirms will not be sent to the allocating firm until the Generic group is completed. Furthermore, no Specific allocation instructions will be sent to the carry firm until the Generic group is completed.

Message Function	FIX Message Type	TransTyp	Stat	Тур	RptTyp	Sent by	Received by
Allocation (GA)	AllocInstrctn	0=New		2 - Preliminary		Allocating firm	Clearing House
Allocation Alert (GAA)	AllocRpt	0=New	3 – Received		11-AcceptPending	Clearing House	Carry Firm
Allocation Confirmation (GAC)	AllocRpt	0=New	3 – Received 1 - Block Level Reject 2 - Account Level Rej		2-Preliminary	Clearing House	Allocating firm

Allocating Firm		CME	Carry Firm
Allocation Instrctn	_		
<allocinstrctn <="" id="3001" td=""><td></td><td></td><td></td></allocinstrctn>			
ID2="3002" Typ="2"			
TransTyp="0" Qty="2"			
TrdDt="2005-05-16"			
<hdr <="" ssub="CME" td=""><td></td><td></td><td></td></hdr>			
<pre><instrmt <="" id="SP" pre=""></instrmt></pre>			
CFI="FFICSO"			
SecTyp="FUT"			
/>			
<pty id="092" r="1"></pty>			
<alloc< td=""><td></td><td></td><td></td></alloc<>			
<pty id="###" r="1"></pty>			
<pty id="CME" r="22"></pty>			



	Allered's a Descript	
←	Allocation Report	
	<allocrpt <="" rptid="10001" th=""><th></th></allocrpt>	
	ID2="3002" TransTyp="0"	
	Stat="3"	
	RptTyp = "2" Qty="2"	
	TrdDt="2005-05-16"	
	<hdr <="" sid="CME" th=""><th></th></hdr>	
	TID="092" TSub="CME"	
	/>	
	<pre><instrmt <="" id="SP" pre=""></instrmt></pre>	
	CFI="FFICSO"	
	/>	
	<pty id=""></pty>	
	<alloc< th=""><th></th></alloc<>	
	IndAllocID2="500002"	
	<pre></pre>	
	<pty id="CME" r='22"/'></pty>	
	···	
	Allocation Report	$ \rightarrow $
	<allocrpt <="" rptid="111" th=""><th></th></allocrpt>	
	ID2="111" TransTyp="0"	
	Stat="3" RptTyp="11"	
	Qty="2" TrdDt="2005-05-	
	16"	
	<hdr <="" sid="CME" th=""><th></th></hdr>	
	TID="092" TSub="CME"	
	/>	
	<instrmt <="" id="SP" th=""><th></th></instrmt>	
	CFI="FFICSO"	
	SecTyp="FUT"	
	/>	
	<pty id=""></pty>	
	<alloc< th=""><th></th></alloc<>	
	IndAllocID2="500102"	
	<pty id="###" r="1"></pty>	
	<pty id="CME" r='22"/'></pty>	

5.4.3 ACS Allocations

For ACS allocations, the allocating firm must submit both the the clearing system assigned group id, "ID2" and firm assigned (or clearing assigned) ID. Specific allocation instruction confirms will be sent to the allocating and claim firm immediately after the clearing system has processed the message. The allocating firm has the option the assign the AllocIndID to internally identify the allocation. The clearing system shall assign the AllocIndID2 which must be referenced when making changes to the allocation.



Message Function	FIX Message Type	TransTyp	Stat	Тур	RptTyp	Sent by	Received by
Allocation (GA)	AllocInstrctn	0=New		2 - Preliminary		Allocating firm	Clearing House
Allocation Alert (GAA)	AllocRpt	0=New	3 – Received		11-AcceptPending	Clearing House	Carry Firm
Allocation Confirmation (GAC)	AllocRpt	0=New	3 – Received 1 - Block Level Reject		2-Preliminary	Clearing House	Allocating firm

Allocating Firm		CME	Carry Firm
Allocation Instrctn <allocinstrctn <hdr="" id="500001" id2="500001" qty="2" sid="CME" tid="092" transtyp="0" trddt="2007-02-26" tsub="CME" typ="2"></allocinstrctn> <instrmt <="" cfi="FFICSO" id="SP" td=""><td>\rightarrow</td><td></td><td></td></instrmt>	\rightarrow		
/> <pty id="092" r="1"></pty> <alloc< td=""><td>~</td><td>Allocation Report <allocrpt <hdr="" id2="500001" qty="2" rptid="500001" rpttyp="2" sid="CME" stat="3" tid="092" transtyp="0" trddt="2007-02-26" tsub="CME"></allocrpt> <instrmt <="" cfi="FFICSO" id="SP" td=""><td></td></instrmt></td></alloc<>	~	Allocation Report <allocrpt <hdr="" id2="500001" qty="2" rptid="500001" rpttyp="2" sid="CME" stat="3" tid="092" transtyp="0" trddt="2007-02-26" tsub="CME"></allocrpt> <instrmt <="" cfi="FFICSO" id="SP" td=""><td></td></instrmt>	
		<pty id="CME" r='22"/'> </pty>	



Allocation Report	\rightarrow	
<allocrpt< td=""><td></td><td></td></allocrpt<>		
RptID="500010"		
ID="500001"		
TransTyp="0" Stat="3"		
RptTyp="11" Qty="2"		
TrdDt="2007-02-26"		
<pre><hdr <="" pre="" sid="CME"></hdr></pre>		
TID="092" TSub="CME"		
/>		
<instrmt <="" id="SP" td=""><td></td><td></td></instrmt>		
CFI="FFICSO"		
/>		
<pty id=""></pty>		
<alloc< td=""><td></td><td></td></alloc<>		
IndAllocID2="500102"		
<pre></pre>		
<pre><pty id="CME" r='22"/'></pty></pre>		
_		



5.5 Completing Average Price Groups (Not applicable to ACS groups)

The Allocating firm can complete a Generic group by sending a group complete message. Once a Generic group is completed all previously submitted allocation instructions are canceled and Specific allocation instructions are transmitted to the carry firm and acknowledgements are sent to the allocating firm.

Message Function	FIX Message Type	TransTyp	Stat	Тур	Sent by	Received by
Create Group (GS)	Allocinstrctn	0=New 1=Replace 2=Cancel		13 - GroupComplete, 12 - GroupIncomplete	Allocating firm	Clearing House
Summary Notice (GSA)	AllocInstrctnAlert	0=New 1=Replace 2=Cancel	6 – AllocationPending	13 - GroupComplete, 12 - GroupIncomplete	Clearing House	Allocating firm

Allocating Firm		CME	Carry Firm
Allocation Instruction <allocinstrctn <hdr="" id="2000" id2="2001" qty="2" ssub="CME" transtyp="1" trddt="2005-03-16" typ="13"></allocinstrctn> <instrmt <="" sectyp="FUT" td=""><td>\rightarrow</td><td></td><td></td></instrmt>	\rightarrow		
	←	Allocation Instruction Alert Alert Alert TransTyp="1" ID="2000" ID2="2001" Stat="3" Typ="13" Qty="2" TrdDt="2005-03-16" <a 092"="" href="mailto:Hdr D2ID=" tid="092" tsub="CME"> <instrmt <="" cfi="FFICSO" sectyp="FUT" td=""><td></td></instrmt>	



5.6 Claiming Allocation Instructions

Once a carry or claiming firm receives an allocation report they may respond by either claiming or rejecting the allocation using the Allocation Report Acknowledgement (AllocRptAck) message. The claim firm uses a RptTyp="9" to accept and a RptTyp= "10" to reject the allocation. When the clearing system receives a valid accept or reject request an allocation report is generated for both the allocating and claim firm. The new status of the allocation is communicated using the Allocation Status attribute (Stat) using the enumeration of "0" (Accepted) or "1" (Rejected). For ACS claiming instructions, the RptID and AllocIndID2 must be present (the ID is not sent to the claim firm for ACS allocations).

Message Function	FIX Message Type	TransTyp	Stat	Тур	RptTyp	Sent by	Received by
Claim or Reject (GC)	AllocRptAck	0=New			9 – Accept 10 - Reject	Carry Firm	Clearing House
Claim/Reject Alert (GCA)	AllocRpt	0=New	0-Accepted		9 – Accept 10 - Reject	Clearing House	Allocating Firm
Claim/Reject Confirmation (GCC)	AllocRpt	0=New	0-Accepted		12=Complete	Clearing House	Carry Firm

Allocating Firm		CME		Carry Firm
			~	Allocation Report Ack <allocrptack <hdr="" id="500001" rptid="500010" rpttyp="9" ssub="CME" transtyp="0"></allocrptack>
	←	Allocation Report <allocrpt <hdr="" id2="500001" qty="2" rptid="500010" rpttyp="9" stat="0" tid="##" transtyp="0" trddt="2005-03-16" tsub="CME"></allocrpt> <instrmt cfi="FFICSO" sectyp="FUT"></instrmt> <pty id=""></pty> <alloc <pty="" id="##" indallocid2="500001" r="1"></alloc> <pty id="CME" r='22"/'> </pty>		



Allocation Report		Ī	
<allocrpt< td=""><td></td><td></td><td></td></allocrpt<>			
RptID="500010"			
TransTyp="0" Stat="0"			
RptTyp= "12" Qty="2"			
TrdDt="2007-02-26"			
<hdr <="" td="" tid="###"><td></td><td></td><td></td></hdr>			
TSub="CME" />			
<instrmt< td=""><td></td><td></td><td></td></instrmt<>			
CFI="FFICSO"SecTyp="FUT	\rightarrow		
"			
/>			
<pty id=""></pty>			
<alloc< td=""><td></td><td></td><td></td></alloc<>			
IndAllocID2="500102"			
<pty id="###" r="1"></pty>			
<pty id="CME" r='22"/'></pty>			



5.7 Updating Pending or Rejected Allocations

Before an allocation has been claimed or when it has been rejected, the allocating firm can submit changes or delete the allocation. The allocating firm uses an Allocation Instruction message (AllocInstrctn) with the TransTyp attribute and enumeration of "1" for Replace to communicate an update and "2" for Cancel to communicate a delete request. Once a valid update or cancel request is received the Clearing System will send an allocation report to both the allocating firm and the claim firm to communicate the change to the allocation. When updating specific allocations from average price allocation groups the allocating firm must indicate the Clearing System assigned Allocation ID (ID2).

Message Function	FIX Message Type	TransTyp	Stat	Тур	RptTyp	Sent by	Received by
Update Allocation (GA Chg)	AllocInstrctn	1=Replace, 2=Cancel		2 - Preliminary		Allocating firm	Clearing House
Update Allocation Alert (GAA Chg/Del)	AllocRpt	1=Replace, 2=Cancel	3 – Received		11-AcceptPending	Clearing House	Carry Firm
Update Allocation Confirmation (GAC)	AllocRpt	1=Replace, 2=Cancel	3 – Received 1 - Block Level Reject 2 - Account Level Reject		2-Preliminary	Clearing House	Allocating firm

Allocating Firm		СМЕ	Carry Firm
Allocation Instruction	1		
<allocinstrctn< td=""><td></td><td></td><td></td></allocinstrctn<>			
TransTyp="1" ID="110"			
ID2="500010" Typ="2"			
Qty="7" TrdDt="2007-02-26"			
<hdr ssub="CME"></hdr>			
<pre><instrmt <="" pre="" sectyp="FUT"></instrmt></pre>			
/>			
<pty id=""></pty>			
<alloc< td=""><td></td><td></td><td></td></alloc<>			
IndAllocID2="500001"			
<pty id="###" r="1"></pty>			
<pty id="CME" r="22"></pty>			



\leftarrow	Allocation Report		
`	<pre><allocrpt <="" pre="" rptid="10001"></allocrpt></pre>		
	ID2="500010"		
	TransTyp="1" Stat="3"		
	RptTyp= "2" Qty="7"		
	TrdDt=2007-02-26"		
	<hdr <="" th="" tid="###"><th></th><th></th></hdr>		
	TSub="CME" />		
	<instrmt< th=""><th></th><th></th></instrmt<>		
	CFI="FFICSO"SecTyp="FUT		
	"		
	/>		
	<pre></pre>		
	<alloc< th=""><th></th><th></th></alloc<>		
	IndAllocID2="500001"		
	<pre><pty id="###" r="1"></pty></pre>		
	<pre><pty id="CME" r='22"/'></pty></pre>		
	Trey ID- CME R-22 />		
	Allocation Report	\rightarrow	
	<allocrpt <="" rptid="10001" th=""><th>\rightarrow</th><th></th></allocrpt>	\rightarrow	
	<allocrpt <br="" rptid="10001">TransTyp="1" Stat="3"</allocrpt>	\rightarrow	
	<pre><allocrpt <="" pre="" qty="7" rptid="10001" rpttyp="11" stat="3" transtyp="1"></allocrpt></pre>	\rightarrow	
	<pre><allocrpt <="" pre="" qty="7" rptid="10001" rpttyp="11" stat="3" transtyp="1" trddt="2007-02-26"></allocrpt></pre>	\rightarrow	
	<pre><allocrpt <="" <hdr="" pre="" qty="7" rptid="10001" rpttyp="11" stat="3" tid="###" transtyp="1" trddt="2007-02-26"></allocrpt></pre>	\rightarrow	
	<pre><allocrpt <hdr="" qty="7" rptid="10001" rpttyp="11" stat="3" tid="###" transtyp="1" trddt="2007-02-26" tsub="CME"></allocrpt></pre>	\rightarrow	
	<pre><allocrpt <hdr="" qty="7" rptid="10001" rpttyp="11" stat="3" tid="###" transtyp="1" trddt="2007-02-26" tsub="CME"></allocrpt> <instrmt< pre=""></instrmt<></pre>	\rightarrow	
	<pre><allocrpt <hdr="" qty="7" rptid="10001" rpttyp="11" stat="3" tid="###" transtyp="1" trddt="2007-02-26" tsub="CME"></allocrpt> <instrmt 10001"="" <hdr="" cfi="FFICSO" qty="7" rpttyp="11" sectyp="FUT</pre></th><th><math>\rightarrow</math></th><th></th></tr><tr><th></th><th><pre><AllocRpt RptID=" stat="3" tid="###" transtyp="1" trddt="2007-02-26" tsub="CME"></instrmt> <instrmt <="" cfi="FFICSO" pre="" sectyp="FUT"></instrmt></pre>	\rightarrow	
	<pre><allocrpt <hdr="" qty="7" rptid="10001" rpttyp="11" stat="3" tid="###" transtyp="1" trddt="2007-02-26" tsub="CME"></allocrpt> <instrmt "="" cfi="FFICSO" sectyp="FUT"></instrmt></pre>	\rightarrow	
	<pre><allocrpt <hdr="" qty="7" rptid="10001" rpttyp="11" stat="3" tid="###" transtyp="1" trddt="2007-02-26" tsub="CME"></allocrpt> <instrmt <="" cfi="FFICSO" sectyp="FUT" th=""><th>\rightarrow</th><th></th></instrmt></pre>	\rightarrow	
	<pre><allocrpt <hdr="" qty="7" rptid="10001" rpttyp="11" stat="3" tid="###" transtyp="1" trddt="2007-02-26" tsub="CME"></allocrpt> <instrmt <="" cfi="FFICSO" sectyp="FUT" th=""><th>\rightarrow</th><th></th></instrmt></pre>	\rightarrow	
	<pre><allocrpt <hdr="" qty="7" rptid="10001" rpttyp="11" stat="3" tid="###" transtyp="1" trddt="2007-02-26" tsub="CME"></allocrpt> <instrmt <="" cfi="FFICSO" sectyp="FUT" th=""><th>\rightarrow</th><th></th></instrmt></pre>	\rightarrow	
	<pre><allocrpt <hdr="" qty="7" rptid="10001" rpttyp="11" stat="3" tid="###" transtyp="1" trddt="2007-02-26" tsub="CME"></allocrpt> <instrmt <="" cfi="FFICSO" sectyp="FUT" th=""><th>\rightarrow</th><th></th></instrmt></pre>	\rightarrow	
	<pre><allocrpt <hdr="" qty="7" rptid="10001" rpttyp="11" stat="3" tid="###" transtyp="1" trddt="2007-02-26" tsub="CME"></allocrpt> <instrmt <="" cfi="FFICSO" sectyp="FUT" th=""><th>\rightarrow</th><th></th></instrmt></pre>	\rightarrow	
	<pre><allocrpt <hdr="" qty="7" rptid="10001" rpttyp="11" stat="3" tid="###" transtyp="1" trddt="2007-02-26" tsub="CME"></allocrpt> <instrmt <="" cfi="FFICSO" sectyp="FUT" th=""><th>\rightarrow</th><th></th></instrmt></pre>	\rightarrow	



5.8 Updating Accepted Allocations

The Carry-Firm can update non-critical fields after the allocation has been claimed. The carry firm submits another Allocation Report

Message Function	FIX Message Type	TransTyp	Stat	Тур	RptTyp	Sent by	Received by
Update Allocation (GC Chg)	AllocRptAck	1=Replace			8 - Request	Carry Firm	Clearing House
Update Allocation Confirmation (GCC)	AllocRpt	1=Replace	0-Accepted (in Clearing System) 1 - Rejected (in Clearing System)		12=Complete	Clearing House	Carry Firm

Allocating Firm	CME		Carry Firm
		←	Allocation Report Ack <allocrptack <hdr="" id="2000" id2="500010" rptid="10001" rpttyp="8" ssub="CME" stat="0" transtyp="1"></allocrptack>
	Allocation Report <allocation <hdr="" allocrpt="" qty="7" report="" rptid="10001" rpttyp="12" stat="0" tid="###" transtyp="1" trddt="2007-02-26" tsub="CME"></allocation> <instrmt "="" cfi="FFICSO" sectyp="FUT"></instrmt> <pty id=""></pty> <alloc <pty="" id="###" indallocid2="500102" r="1"></alloc> <pty id="CME" r='22"/'> </pty>	\rightarrow	



5.9 Reversing or Releasing Accepted Allocations

The term reverse and release are synonymous in FIXML but for the initial implementation of FIXML release and reversal will be initiated and processed the same way that Basic allocation releases and reversals are handled today with TREX. The carry firm initiates releases and they are only possible if the allocation has not been accepted and cleared during an end of day clearing cycle. Once an allocation is no longer eligible for release it can only be reversed, and reversals are initiated by the allocating firm.

5.9.1 Release/Reverse Instructions

A carry firm can initiate a Release after accepting an allocation, but only on the same Clearing Business date on which the allocation was accepted. An allocating firm can initiate a Reversal on the next Clearing Business date after the allocation has been claimed by the carry firm.

Message Function	FIX Message Type	TransTyp	Stat	Тур	RptTyp	Sent by	Received by
Reversal	AllocInstrctn	6=Reversal		8 - Request		Initiating Firm	Clearing House
Reversal Confirmation	AllocRpt	6=Reversal	3 – Received		8 - Request	Clearing House	Initiating Firm
Reversal Alert	AllocRpt	6=Reversal	3 – Received		14 – Reversal Pending	Clearing House	Responding Firm

Initiating Firm		CME	Responding Firm
Allocation Instruction <allocinstrctn <hdr="" id="2000" id2="2001" qty="7" ssub="CME" transtyp="6" trddt="2007-02-26" typ="8"></allocinstrctn>	\rightarrow		
	←	Allocation Report <allocrpt <hdr="" id2="2001" qty="7" rptid="10001" rpttyp="8" stat="3" tid="###" transtyp="6" trddt="2007-02-26" tsub="CME"></allocrpt>	



Allocation Report <allocrpt <hdr="" qty="7" rptid="10001" rpttyp="14" stat="3" tid="###" transtyp="6" trddt="2007-02-26" tsub="CME"></allocrpt>	\rightarrow	

5.9.2 Accept / Reject Reversals (Release)

Before the initiating firm's reversal or release request can be completed the counter-party to the allocation must respond to the request. The responding firm uses the Allocation Report Acknowledgement to confirm or reject a reversal or release request.

Message Function	FIX Message Type	TransTyp	Stat	Тур	RptTyp	Sent by	Received by
Accept or Reject Reversal	AllocRptAck	6=Reversal			9 – Accept 10 - Reject	Responding Firm	Clearing House
Accept/Reject Reversal Alert	AllocRpt	6=Reversal	0–Accepted 1-Rejected		9 – Accept 10 - Reject	Clearing House	Initiating Firm
Accept Reversal Confirmation	AllocRpt	6=Reversal	0–Accepted 1 Rejected		12=Complete	Clearing House	Responding Firm

Initiating Firm	CME		Responding Firm		
			Allocation Report Ack		
			<allocrptack< th=""></allocrptack<>		
			RptID="10001" ID="2000"		
			TransTyp="6" Typ="9"		
			TrdDt="2007-02-26"		
			<hdr ssub="CME"></hdr>		
		←	<pre> <instrmt cfi="FFICSO"></instrmt> <pty id=""></pty> <allocack< pre=""></allocack<></pre>		
			IndAllocID2="500102" <pty id="###" r="1"></pty> <pty id="CME" r="22"></pty> AllocRptAck		



	Allocation Report <allocrpt "tid="###" <hdr="" qty="7" rptid="10001" rpttyp="12" stat="0" transtyp="6" trddt="2007-02-26" tsub="CME"></allocrpt>	\rightarrow	
←	Allocation Report <allocrpt <hdr="" id2="2001" qty="7" rptid="10001" rpttyp="9" stat="0" tid="###" transtyp="6" trddt="2007-02-26" tsub="CME"></allocrpt>		
	<pre>IndAllocID2="500001"</pre>		



5.10 Sub Allocations/Third Party Allocations of Accepted Allocations

Once an allocation has been accepted the claim firm can sub-allocate the allocation to different accounts or allocate it to a third-party. The Carry-Firm uses the Allocation Instruction message to communicate this to the Clearing System. Once a valid sub-allocation or third-party allocation request has been received by the Clearing System from a claiming firm, the request is acknowledged and then a group summary alert and allocation reports are generated just as if the claim firm was initiating the allocation of a trade.

Message Function	FIX Message Type	TransTyp	Stat	Тур	RptTyp	Sent by	Received by
SubAllocation (GU)	AllocInstrctn	1-Replace		8 - Request		Carry Firm	Clearing House
Update Allocation Confirmation (GUC)	AllocRpt	1-Replace	3-Received		2-Preliminary	Clearing House	Carry Firm*
Summary Notice (GSA)	AllocinstrctnAlert	0=New, 1=Replace, 2=Cancel	6 – AllocationPending	13 -GroupComplete, 12 -GroupIncomplete		Clearing House	Give-up firm
Allocation Alert (GAA)	AllocRpt	0=New	3 – Received (in Clearing System)		11-AcceptPending	Clearing House	Carry Firm
Allocation Confirmation (GAC)	AllocRpt	0=New	3 – Received (in Clearing System) 1 - Block Level Reject 2 - Account Level Reject		2-Preliminary	Clearing House	Give-up firm

Sub Allocating Firm	СМЕ		Carry Firm
			Allocation Instruction
			<allocinstrctn <="" id="2001" td=""></allocinstrctn>
			TransTyp="1" Typ="8"
			Qty="7" TrdDt="2007-02-26"
			
			<hdr ssub="CME"></hdr>
			<instrmt< td=""></instrmt<>
			SecTyp="FUT"CFI="FFICSO"
			/>
			<pty id=""></pty>
			<alloc< td=""></alloc<>
			IndAllocID2="500028"
		\leftarrow	<pty id="###" r="1"></pty>
		•	<pty id="CME" r="22"></pty>
			<pty id="G1234" r="24"></pty>
			<alloc <="" qty="90" td="" typ="1"></alloc>
			<pty id="###" r="1"></pty>
			<pty id="CME" r="22"></pty>
			<pty id="G4567" r="24"></pty>



Allocation Report <allocrpt <hdr="" qty="7" rptid="10001" rpttyp="2" stat="3" tid="###" transtyp="1" trddt="2007-02-26" tsub="CME"></allocrpt>	→	
Allocation Instruction Alert <aliocation "="" ###"="" <a="" alert="" href="Hdr TID=" id="2000" id2="222" instruction="" qty="7" stat="6" transtyp="0" trddt="2007-02-26" tsub="CME" typ="12"></aliocation> <instrmt cfi="FFICSO" sectyp="FUT"></instrmt>	\rightarrow	



Allocation Report <allocrpt <hdr="" id2="222" qty="90" rptid="10001" rpttyp="11" stat="3" tid="###" transtyp="0" trddt="2007-02-26" tsub="CME"></allocrpt> <instrmt cfi="FFICSO" sectyp="FUT"></instrmt> <pty id="###" r="1"></pty> <pty id="CME" r="22"></pty> <pty id="G1234" r="24"> </pty> <alloc <pty="" id="###" indallocid2="7777" r="1"></alloc> <pty id="###" r="1"></pty> <pty id="###" r="24"> </pty> <alloc <pty="" id="###" indallocid2="7777" r="2"></alloc> <pty id="G4567" r="24"> </pty>	→
Allocation Report <allocinstrctn <hdr="" id2="333" qty="7" rptid="10001" rpttyp="2" stat="3" tid="###" transtyp="0" trddt="2007-02-26" tsub="CME"></allocinstrctn> <instrmt cfi="FFICSO" sectyp="FUT"></instrmt> <pty id="###" r="1"></pty> <pty id="CME" r="22"></pty> <pty id="G1234" r="24"> </pty> <alloc <pty="" id="###" indallocid2="6666" r="1"></alloc> <pty id="###" r="1"></pty>	



6 Components of APS and ACS FIXML Messages

6.1 Key Elements and Attributes

6.1.1 Allocation Transaction Type (TransTyp)

The Allocation Trans Type signifies the action to be performed on the message. For example a TransTyp of "New" in an Allocation Instruction from a firm implies the firm is sending a new Allocation. The firm sending the message sets this attribute, and the Clearing System echoes it back on its Confirms and Alerts. For list of all the values used in the API refer to **Table 8.1.**

6.1.2 Allocation Type or Allocation Report Type (Typ and RptTyp)

The Allocation Type and Allocation Report Type convey the business purpose of the message. Either the Allocation or Allocation Report type is required on inbound messages from firms.

6.1.3 Allocation Status (Stat)

The Allocation status in the message implies the status of the message. This attribute is set by the Clearing System on its alerts and confirms to the Firms. For example the clearing system would send a status of "Rejected" in response to an allocation that did not have the right Product ID. For list of all the values used in the API refer to **Table 8.1.**

6.1.4 ID/ID2 Usage

The ID and ID2 denote the group ID of APS or ACS groups. ID value is assigned to trades by the allocating firm and the ID2 value is assigned by the clearing system to all Basic as well as Generic and Specific allocation groups. The ID is the firm's internal group ID. If the firm sends this ID, it is echoed back to the firms on all its subsequent confirms. The ID2 is generated by the Clearing System and sent to the firm. The ID2 sent by the Clearing System is associated with the context for the message. For example if the Clearing System is sending a Group Summary Alert for a Specific Group, the ID2 is the Specific Group ID.

In the above example, the presence of fee-specific information signifies that ID2 is a Specific Group ID.

Note: It is extremely important for the firm to send back the ID2 attribute sent by the Clearing System to refer to the Group.

6.1.5 Individual Allocation ID(s) Usage

The Individual Allocation Id in the <Alloc> Block is used to store the allocation Id of the allocation. Again, the API allows the firm to generate its own internal Allocation Id and send it in IndAllocID. The Clearing system generated Allocation Id will be sent back in the IndAllocID2 attribute. Additionally if the firm had sent in an Allocation ID, it will be echoed back to the firm.



```
<AllocInstrctn
      ID = "1000"
                           (Firm Supplied APS Group ID)
      ID2 = "2001"
                     (Clearing Supplied Specific Group ID)
      TrdTyp = "0"
                      (Trade Type)
       TrdSubTyp = "8" (Trade Sub Type - Spread Leg)
      MLeqRptTyp = "2" (Single Leq of a Multi Leq Instrument)
      SesSub = "P"
                        (Venue - Pit)
       <Alloc
         IndAllocID = "10000" (Firm supplied Allocation ID)
         IndAllocID2 = "500001" (Clearing system generated
                                   Allocation ID)
      </Alloc>
</AllocInstrctn>
```

In the above example, the presence of fee-specific information signifies that ID2 is a Specific Group ID. The Allocation ID in the <Alloc> Block is the specific Allocation ID.

Note: It is extremely important for the firm to send back the Group ID (ID2) attribute and the Allocation ID (IndAllocID2) while referring to the allocations for ACS and APS.

6.1.6 Average Price (AvgPx)

The Average Price is the running average price of all the trades in the Group. For ACS groups, this value will remain the same since price is one of the grouping criteria. This value is calculated by the clearing system and sent to the firms on all its alerts and confirms. The Average Price sent by the firms will be ignored by the Clearing system.

6.1.7 Rounded Price (RndPx- For APS Only)

The Rounded Price is the average price rounded to the contract tick value

6.1.8 Message Event Source (MsgEvtSrc)

The Message Event Source identifies the Source of the message. For example if the firm is sending the message the attribute is set to "MQM". If the exchange is sending the message, this is set to "CMESys".

6.1.9 Sender ID (SID)

The Sender ID (SID) attribute in the Header (Hdr) element is a key attribute in identifying the sender of the message. This is required in all the APS messages. The firm sending the message will identify itself in the message. The exchange will send back its ID in the SID attribute on all its messages.

6.1.10 Amount Block (For APS Only)

The purpose of the Amount Block in the APS Allocation messages is primarily for storing the Residual amount.

The Amount Block consists of the following Attributes.

Amount Type (Typ) identifies the Amount type stored in the Block. In APS messages, the Typ has a value of "CRES", the Cash Residual Amount.



Amount (Amt) identifies the actual Residual Amount. This is equal to the AvgPx - RndPx Currency (Ccy) identifies the Currency the residual price is represented in.

```
<Amt
    Typ="CRES" (Cash Residual Amount Type)
    Amt="237.53" (Residual Amount )
    Ccy="USD" /> (Currency)
```

6.1.11 Parties Block

The purpose of the Parties Block is to provide at, standard way of expressing Firm and Account information in API Messages. The Parties block The Parties Block consists of the following attributes and elements:

Party Role, Party ID, Party Sub ID, and Party ID Source.

<u>Party Role</u> is a static number used to express the type of party, for example Clearing Organization, Clearing Firm, etc.

Party ID is the value representing the party, for example, "CME", "560", etc.

Party Sub Element

<u>Party Sub ID</u> is used to express information, which further qualifies the party such as origin for the <u>Customer Account</u>.

Party Sub ID Typ identifies the type of qualification of the Party.

Valid values for Party Role and Party Sub Type used in the API can be found in Table 8.1 below.

In APS messages, the Parties Block in the main body of the message signifies the Give-up or the Executing Firm

In this example, The Exchange is CME, the Clearing Organization is CME, the Give-up Firm is 560, and the origin for the Give-up firm is of Customer segregation.

If the Parties Block is present in the Alloc Block it signifies the Carry Firm.



6.1.12 CFI Code - Classification of Financial Instruments

6.1.12.1.1 FIX Definition of CFI Code

The CFI Code field was added to the FIX Protocol in an attempt to provide a standards-based source of security type values by using values defined in ISO 10962 standards: Classification of Financial Instruments (CFI code).

The ISO 10962 standard defines a 6-character code in which each character's position value carries a special significance (attribute) and set of values. Note that "X" represents an unspecified or unknown attribute, thus it is not always necessary to specify every attribute (character position value).

6.1.12.2 Definition for Options (code defined by character position):

Char 1 Product Type	Char 2 Put/Call	Char 3 Option Style	Char 4 Underlying	Char 5 Delivery Method	Char 6 Standard/Non- Std (flexible)
O=Option	C=Call P=Put M=Other X=Unkno wn(n/a)	A=America n E=Europea n X=Unknow n(n/a)	B=Basket S=Stock-Equities D=Interest rate/notional debt sec T=Commodiites C=Currencies I=Indices O=Options F=Futures W=Swaps M=Other X=Unknown(n/a)	P=Physical C=Cash X=Unknow n(n/a)	S=Standardized terms (maturity date, strike price, contract size) N=Non- standardized terms X=Unknown(n/a)

Examples:

OCXXXS	Standardized Call Option
OPXXXS	Standardized Put Option
OCXFXS	Standardized Call Option on a
	Future
OPXFXS	Standardized Put Option on a
	Future
OCEFCN	Nonstandard (flex) call option on
	future with european style
	expiration and cash delivery
OPAFPN	Nonstandard (flex) put option on
	future with american style expiration
	and physical delivery
OPXSPN	Nonstandard (flex) put option on a
	stock with physical delivery (the
	expiration style is not specified – so
	is assumed to default to the market
	standard for flex options).



OCEICN	Nonstandard (flex) call option on an
	index with european style expiration and cash delivery

6.1.12.3 Definition for Futures (code defined by character position):

Char 1	Char 2	Char 3	Char 4	Char 5	Char 6
Product	Product	Underlying	Delivery	Standard/Non-Std	N/A
Type	Group		Method	(flexible)	Undefined
F=Futur e	F=Financial Futures C=Commo dity Futures M=Others X=Unknow n(n/a)	A=Agriculture, forestry, and fishing B=Basket S=Stock-Equities (for financial future) or Services (for commodities futures) D=Interest rate/notional debt sec C=Currencies I=Indices (for financial futures) or Industrial Products (for commodities futures) O=Options F=Futures W=Swaps M=Other	Method P=Physical C=Cash X=Unknow n(n/a)	(flexible) S=Standardized terms (maturity date, strike price, contract size) N=Non- standardized terms X=Unknown(n/a)	X=Not applicable / undefined
		O=Options F=Futures W=Swaps			

Examples:

FXXXS	Standardized Future
FFICN	Nonstandard (flex) Financial Future
	on an index with cash delivery
FCEPN	Nonstandard (flex) Commodity
	Future on an extraction resource
	with physical delivery
FXXXN	Nonstandard (flex) future – contract
	type specified in symbology – not
	provided in CFICode



7 Detailed Message Samples

In this section you can find detailed message samples for each type of FIXML allocate and claim message. Each message has a functional label as well as the analogous TREX 2- or 3-byte message descriptor that most closely resembles the FIXML message type.

7.1 Designating Trades for APS or ACS Allocation

7.1.1 Designating Futures trades for Allocation

As discussed throughout the user guide, an executing firm can designate a trade for allocation by appending an allocation indicator to it as well as submitting more specific allocation information such as carry firm, carry account, customer type indicator and fee code.

```
Trade Capture Report for a Future's Trade Marked for APS Allocation (TRX)
<?xml version="1.0" encoding="UTF-8" ?>
<FIXML>
     <TrdCaptRpt
         RptID="10001"
                                                 ← Trade ID (To be replaced by TrdID)
                                                 ← Trade Type
         TrdTyp="0"
         TransTyp="0"
                                                 ← TransTyp=0 (New)
         TrdSubTyp="8"
                                                 ← Trade SubType (spread leg)
         MLegRptTvp="2"
                                                 ← Single leg of a multi-leg instrument
                                                 ← Trade Price
         LastPx="1098.00"
         TxnTm="2007-02-26T08:15:00"
                                                 ← Execution Time (GMT/CST with an Offset)
         OrdTypCD="D"
                                                 ← Order Type Code
         LastQty="150"
                                                 ← Trade Quantity
         TrdDt="2007-02-26"
                                                 ← Trade Date
                                                 ← Message Event Source
         MsgEvtSrc="MQM"
         AvgPxInd="1"
                                                 ← Average Price Indicator (For APS only)
         LinkID="1000">
                                                 ← Firm Group ID (For APS only)
         <Hdr
               Snt = "2007-02-26T08:20:00-05:00" ← Message Time
              SID="123"
                                                 ← Sender ID
              SSub="CME />
                                                 ← Sending Firm Exchange
          <Instrmt
              Exch="CME"
                                                 ← Product Exchange
              ID="SP"
                                                 ← Product Code
              SecTyp="FUT"
                                                 ← Security Type
              SubTyp="CAL"
                                                 ← Spread Type
              CFI="FXXXXXX"
                                                 ← Product Period
              MMY="200703"/>
          <RptSide
              CustCpcty="4"
                                                 ← CTI Code
              Side="1"
                                                 ← Buy/Sell Indicator (1=Buy)
              CIOrdID=" A456721"
                                                 ← Customer Order
               SesID="RTH"
                                                 ← Business Cycle
              SesSub="P"
                                                 ← Venue is Pit
              InptSrc="ETC"
                                                 ← Input Source is ETC
              AllocInd="1"
                                                 ← Marked for Allocation (Required for ACS and APS)
              TmBkt="T">
                                                 ← Time Bracket
              <Pty ID="CME" R="21"/>
                                                 ← Clearing Org
              <Pty ID="CME" R="22"/>
                                                 ← Exchange
              <Pty ID="123" R="1"/>
                                                 ← Executing Firm
              <Pty ID="ABC" R="12"/>
                                                 ← Executing Trader
               <Pty ID="123456" R="24">
                                                 ← Customer Account
                    <Sub ID="1" Typ="26"/>
                                                 ← Origin
              </Pty>
              <Pty ID="350" R="17"/>
                                                 ← Opposite Firm
```



```
<Pty ID="BAT" R="37"/> ← Opposite Trader
</RptSide>
</TrdCaptRpt>
</FIXML>
```

```
Trade Capture Report for a Future's Trade Marked for ACS Allocation (TRX) With Alloction Info
<FIXML>
        <TrdCaptRpt
                TxnTm="2007-01-11T07:21:22-06:00" ← Execution Time (GMT/CST with an Offset)
                TransTyp="2"
                                                    ← TransTyp=2 (Change/Replace)
                MtchStat="1"
                                                    ← Match Status (Unmatched)
                TrdDt="2007-01-11"
                                                    ← Trade Date
                TrdTyp="0"
                                                    ← Trade Type
                RptTyp="0"
                                                    ← Trade Type
                MLegRptTyp="1"
                                                    ← Single leg
                LastQty="1000"
                                                    ← Trade Quantity
                LastPx="1431.0"
                                                    ← Trade Price
                RptID="012502"
                                                    ← Trade ID (To be replaced by TrdID)
                TrdID="12502">
                                                    ← Trade ID
           <Hdr
                Snt="2007-01-11T07:21:22-06:00"
                                                    ← Message Time
                SID="770"
                                                    ← Sender ID
                TID="CME" />
                                                    ← Target ID
           <Instrmt
                Exch="CME"
                                                    ← Product Exchange
                ID="SP"
                                                     ← Product
                CFI="FXXXXXX"
                                                    ← CFI Code
                SecTyp="FUT"
                                                    ← Security Type
                MMY="20070300"/>
                                                     ← Product Period
        <RptSide
                SesSub="P"
                                                    ← Venue is Pit
                Side="2"
                                                    ← Buy/Sell Indicator (2=Sell)
                TmBkt="P"
                                                    ← Time Bracket
                CIOrdID="AL874492"
                                                    ← Customer Order ID
                OrdID="AL874492"
                                                    ← Match Engine Assigned Order ID
                SesID="RTH"
                                                    ← Business Cycle
                                                    ← Business Cycle
                CustCpcty="4"
                AllocInd="1">
                                                    ← Marked for Allocation
                <Pty ID="CME" R="21"/>
                                                    ← Clearing Organization
                <Pty ID="CME" R="22"/>
                                                    ← Executing Firm Exchange
                <Pty ID="770" R="1"/>
                                                    ← Executing Firm
                <Pty ID="770" R="4"/>
                                                    ← Clearing Member Firm
                <Pty ID="770" R="38"/>
                                                    ← Position Account
                <Pty ID="HRI" R="12"/>
                                                    ← Trader ID
                <Ptv ID="50037853" R="24">
                                                    ← Customer Report
                         <Sub ID="1" Typ="26"/>
                                                    ← Customer Origin
                </Ptv>
           <Alloc
                                                    ← Optional Allocation ID (from firm)
                 IndAllocID="651"
                                                    ← Allocation Quantity
                Qty="100">
                <Pty ID="CME" R="22"/>
                                                    ← Carry Firm Exchange
                <Pty ID="770" R="1"/>
                                                    ← Carry Firm
                <Pty ID="CARRY1" R="24">
                                                    ← Carry Account
                </Pty>
           </Alloc>
           <Alloc
                IndAllocID="652"
                                                    ← Optional Allocation ID (from firm)
```



7.1.2 Designating Options trades for Allocation

```
Trade Capture Report for an Option Trade Marked for Average Price Allocation (TRX)
<?xml version="1.0" encoding="UTF-8" ?>
<FIXML>
    <TrdCaptRpt
         RptID="10001"
                                                ← Trade ID
          TrdTyp="0"
                                                 ← TradeType
                                                 ← TransTyp=0 (New)
         TransTyp="0"
                                                 ← Trade Price
         LastPx="1098.00"
         TxnTm="2007-02-26T08:15:00"
                                                ← Execution Time (GMT/CST with an Offset)
         OrdTypCD="D"
                                                ← Order Type Code
         LastQty="150"
                                                ← Trade Quantity
         TrdDt="2007-02-26"
                                                 ← Trade Date
         MsgEvtSrc="MQM"
                                                ← MessageEventSource=Firm
         AvaPxInd="1"
                                                    ← Average Price Indicator (For APS only)
         LinkID="1000">
                                                   ← Firm Group ID (For APS only)
         <Hdr
              Snt = "2007-02-26T08:20:00-05:00" ← Message Time
              SID="123"
                                                 ← Sender ID
              SSub="CME"/>
                                                   ← Sending Firm Exchange
         <Instrmt
              Exch="CME"
                                                 ← ProductExchange
              ID="SP"
                                                 ← ProductCode
              CFI="OPXXXX"
                                                  ← CFI Cdoe (Option/Put)
              StrkPx="22.55"
                                                   ← Strike Price
              MMY="200703"/>
                                                 ← ProductPeriod
          <RptSide
              CustCpcty="4"
                                                  ← CTI Code
              Side="1"
              CIOrdID=" A456721"
              SesID="RTH"
                                                 ← Business Cycle
              SesSub="P"
                                                 ← Venue is Pit
              InptSrc="ETC"
                                                 ← Input Source is ETC
              AllocInd="1"
                                                   ← Marked for Allocation (Required for ACS and APS)
              TmBkt="T">
                                                 ← Time Bracket
              <Pty ID="CME" R="21"/>
                                                ← Clearing Org
              <Pty ID="CME" R="22"/>
                                                ← Exchange
              <Pty ID="123" R="1"/>
                                                ← Executing Firm
              <Pty ID="ABC" R="12"/>
                                                ← Executing Trader
              <Pty ID="123456" R="24">
                                                ← Customer Account
                    <Sub ID="1" Typ="26"/>
                                                 ← Origin
              </Ptv>
```





7.1.3 Designating Flex Options trades for Allocation

This is an example of an options trade with Underlying specified.

```
Trade Capture Report for a Future's Trade Marked for Average Price Allocation (TRX)
<?xml version="1.0" encoding="UTF-8" ?>
<FIXML>
     <TrdCaptRpt
         RptID="10001"
                                                 ← Trade ID
         TrdTyp="0"
                                                 ← TradeType
                                                 ← TransTyp=0 (New)
         TransTyp="0"
         LastPx="1098.00"
                                                 ← Trade Price
         TxnTm="2007-02-26T08:15:00"
                                                 ← Execution Time (GMT/CST with an Offset)
         OrdTypCD="D"
                                                 ← Order Type Code
         LastQty="150"
                                                 ← Trade Quantity
         TrdDt="2007-02-26"
                                                 ← Trade Date
         MsgEvtSrc="MQM"
                                                 ← MessageEventSource=Firm
         AvgPxInd="1"
                                                    ← Average Price Indicator (For APS only)
         LinkID="1000">
                                                   ← Firm Group ID (For APS only)
         <Hdr
               Snt = "2007-02-26T08:20:00-05:00" ← Message Time
              SID="123"
                                                  ← Sender ID
              SSub="CME" />
                                                   ← Sending Firm Exchange
          <Instrmt
              Exch="CME"
                                                 ← ProductExchange
              ID="SP"
                                                 ← ProductCode
              CFI="OPXXXX"
                                                   ← Product Type , Put/Call, Option Style
              StrkPx="22.55"
                                                    ← Strike Price
              MMY="200703"/>
                                                 ← ProductPeriod
          <Undly
              CFI="FXXXXX"
                                                   ← Underlying Product Type
                                                    ← Underlying Product ID
              ID="ED"
              MMY="200410"/>
                                                 ← Underlying Period Code
          <RptSide
              CustCpcty="4"
                                                   ← CTI Code
              Side="1"
              CIOrdID=" A456721"
              SesID="RTH"
                                                  ← Business Cycle
              SesSub="P"
                                                 ← Venue is Pit
              InptSrc="ETC"
                                                 ← Input Source is ETC
              AllocInd="1"
                                                ← Marked for Allocation
                                                                         (Required for ACS and APS)
              TmBkt="T">
                                                 ← Time Bracket
              <Pty ID="CME" R="21"/>
                                                 ← Clearing Org
              <Pty ID="CME" R="22"/>
                                                 ← Exchange
              <Pty ID="123" R="1"/>
                                                 ← Executing Firm
              <Ptv ID="ABC" R="12"/>
                                                 ← Executing Trader
               <Pty ID="123456" R="24">
                                                 ← Customer Account
                    <Sub ID="1" Typ="26"/>
                                                 ← Origin
              <Pty ID="350" R="17"/>
                                                 ← Opposite Firm
              <Pty ID="BAT" R="37"/>
                                                 ← Opposite Trader
         </RptSide>
    </TrdCaptRpt>
    </FIXML>
```



7.2 Clearing System acknowledges the Trade

The clearing system acknowledges each trade submission with a Trade Capture Acknowledgment.

```
Trade Capture Report Acknowledgment for Trade Marked for Allocation (TRX)
<?xml version="1.0" encoding="UTF-8" ?>
<FIXML>
     <TrdCaptRptAck
         RptID="10001"
                                                 ← Trade ID
         TransTyp="0"
                                                 ← TraansTyp=) (New)
                                                 ← Trade Report Status 0=Accepted
         TrdRptStat="0"
         TrdTyp="0"
                                                ← TradeType
                                                ← TradeSubType (spread leg)
         TrdSubTyp="8"
         MLegRptTyp="2"
                                                ← Single leg of a multileg instrument
         LastPx="1098.00"
                                                ← Trade Price
         TxnTm="2007-02-26T08:15:00"
                                                ← Execution Time
         OrdTypCD="D"
                                                ← Order Type Code
         LastQty="150"
                                                ← Trade Quantity
         BizDt="2004-05-14"
                                                ← Clearing Business Date
                                                ← Trade Date
         TrdDt="2007-02-26"
                                                ← MessageEventSource=CME System
         MsgEvtSrc="CMESys"
         AvaPxInd="1"
                                                ← Average Price Indicator (For APS only)
         LinkID="1000" >
                                                ← Firm Group ID (For APS only)
         <Hdr
              Snt = "2007-02-26T08:20:00-05:00" ← Message Time
                                                ← Target Firm Exchange
              TSub="CME"
              TID = "123"
                                                ← Target Firm ID
              SID="CME" />
                                                ← Sender ID
         <Instrmt
              Exch="CME"
                                                ← ProductExchange
              ID="SP"
                                                ← ProductCode
              SecTyp="MLEG"
                                                ← Security Type
              SubTyp="CAL"
                                                ← Spread Type
              CFI="FXXXXXX"
              MMY="200703"/>
                                                ← ProductPeriod
          <RptSide
              CustCpcty="4"
                                                 ← CTI Code
              Side="1"
              ClOrdID=" A456721"
              AllocInd="1"
                                                 ← Marked for Allocation (Required for ACS and APS)
              TmBkt="T"
                                                ← Time Bracket
              SesID="RTH"
                                                ← Business Cycle
              SesSub="P"
                                                ← Venue is Pit
              InptSrc="ETC">
                                                ← Input Source is ETC
              <Pty ID="CME" R="21"/>
                                                ← Clearing Org
              <Pty ID="CME" R="22"/>
                                                ← Exchange
                                                ← Executing Firm
              <Pty ID="123" R="1"/>
              <Ptv ID="ABC" R="12"/>
                                                ← Executing Trader
              <Ptv ID="123456" R="24">
                                                ← Customer Account
                    <Sub ID="1" Typ="26"/>
                                                ← Origin
              <Pty ID="350" R="17"/>
                                                ← Opposite Firm
              <Pty ID="BAT" R="37"/>
                                                ← Opposite Trader
          </RptSide>
     </TrdCaptRptAck>
```

The LinkID is the average price group id to which this trade will be assigned.



7.3 Group Level Messages

There are three types of Group Summary messages. There are alerts when groups are first created for trades marked for either basic or average price allocation. These messages are all generated by the clearing system and transmitted to the allocating firm. Allocating firms may send updates to generic average price groups in order to complete or un-complete average price groups. There are also group summary updates sent when subsequent trades are added to an allocation group. Finally, the allocating firm may submit a group summary instruction to complete or incomplete an average price allocation group. ACS groups will always be in complete status. ACS groups do not have the same distinction between group and trade level grouping like APS because the system uses the more stringent basic grouping. ACS alerts bear a closer resemblance to specific alerts in the amount of information provided.

Generic Group Summary Alerts

```
This is an Alert to the Firms that a trade has been added to an allocation group and it
              can submit allocation instructions for this group of trades.
                      APS Generic Group Summary Alert (GSA)
<FIXML>
    < AllocInstrctnAlert
                                      ← AllocTransType=New
         TransTyp ="0"
        ID="1000"
                                      ← Firm Assigned Average Price ID
        ID2 ="2001"
                                      ← APS Generic Group ID (Clearing Generated ID)
         Stat="6"
                                      ← AllocStatus=Allocation Pending
                                      ← Alloc Type=Group Incomplete
         Tvp="12"
         BizDt="2005-01-14"
                                      ← Clearing Business Date
         Qty="150"
                                      ← Group Summary Quantity
         TrdDt="2005-01-14"
                                      ← Trade Date
         Side="1"
                                      ← Buy/Sell (Buy)
         InptDev="API"
                                      ← API/UI Indicator
        MsgEvtSrc="CMESys"
                                      ← MessageEventSource=CME System
         AvgPxInd="1"
                                      ← AveragePriceInd (For APS only)
                                      ← Rounded Average Price (For APS only)
         RndPx="1097.00"
         AvgPx="1097.55625">
                                      ← True Average Price
         <Hdr
             Snt = "2007-02-26T08:20:00-05:00" ← Message Time
             TID="123"
                                      ← Target Firm ID
             TSub="CME"
                                      ← Target Firm Exchange
             SID="CME" />
                                      ← Sender ID
                                      ← Trade ID (Trade ID)
         <AllExc ExecID="10001" />
         <Instrmt
             Exch="CME"
                                      ← ProductExchange
             ID="SP"
                                      ← ProductCode
             MMY="200703"
                                      ← Contract Period
             CFI="FXXXXXX"
             />
         <Pty ID="CME" R="21"/>
                                      ← Clearing Org
         <Pty ID="CME" R="22"/>
                                      ← Exchange
         <Pty ID="123" R="1">
                                      ← Executing Firm
         </AllocInstrctnAlert>
</FIXML>
```

- All allocation groups have two ids, the group id assigned by the firm (ID) and the clearing assigned group id (ID2)
- The Stat enumeration of 6 is relevant all allocations, and simply means the group has not been fully allocated and claimed.



• For APS, the AvgPxInd enumeration of 1 indicates the group is still incomplete in the sense that the firm has not completed it and that trades may still be added to it. An AvgPxInd enumeration of 2 indicates an average price group is complete and the final averaging calculations have been performed.



7.3.1 APS/ACS Specific Group Summary Alerts

Unlike ACS, when a trade is marked for Average Price Allocation *two* group summary messages (rather than one) are generated, one for the generic group it has been assigned to and the second for the specific group it has been assigned to. The presence of trade specific information in the group alert message indicates that it is a specific. The specific group can be linked to its parent generic group by the firm assigned group id. ACS alerts will resemble these specific alert messages. Unlike APS alerts, the group status will always be complete (Stat="13") since ACS groups do not the additional completion step like APS groups.

```
APS Specific Group Summary Alert (GSA)
<FIXML>
    < AllocInstrctnAlert
         TransTyp ="0"
                                        ← AllocTransType=New
         ID="1001"
                                        ← Firm Assigned Average Price Group ID
                                        ← Clearing Assigned Specific Group ID
         ID2 ="3001"
                                        ← AllocStatus=Allocation Pending
         Stat="6"
         Typ="12" ("13" always for ACS) ← Alloc Type
         BizDt="2004-05-14"
                                        ← Clearing Business Date
                                        ← Group Summary Quantity
         Qty="150"
         TrdDt="2004-05-14"
                                        ← Trade Date
         TrdTyp="0"
                                        ← TradeType
         TrdSubTvp="8"
                                        ← TradeSubType (spread leg)
         MLegRptTyp="2"
                                        ← Single leg of a multileg instrument
         SesID="RTH"
                                        ← Business Cycle
                                        ← Venue is Pit
         SesSub="P"
         Side="1"
                                        ← Buy/Sell (Buy)
                                        ← API/UI Indicator
         InptDev="API"
                                        ← MessageEventSource=CME System
         MsgEvtSrc="CMESys"
                                        ← AveragePriceInd (APS Only)
         AvgPxInd="1"
         RndPx="1097.00"
                                        ← Rounded Average Price (APS Only)
         AvgPx="1097.55625">
                                        ← True Average Price
         <Hdr
              Snt = "2007-02-26T08:20:00-05:00" ← Message Time
              TSub="CME"
                                                ← Target Firm Exchange
              TID="123"
                                                ← Target Firm ID
              SID="CME" />
                                                ← Sender ID
         <OrdAlloc
         CIOrdID="A456721" />
                                                ← Order Number
         <AllExc ExecID="100001" />
                                                ← Trade ID (Trade ID)
         <Instrmt
              Exch="CME"
                                                ← Product Exchange
              ID="SP"
                                        ← Product Code
              CFI="FXXXXXX"
                                        ← CFI Code
              MMY="200703"/>
                                        ← Contract Period
         <Pty ID="CME" R="21"/>
                                        ← Clearing Org
         <Pty ID="CME" R="22"/>
                                        ← Exchange
         <Pty ID="ABC" R="12"/>
                                        ← Executing Trader
         <Ptv ID="123" R="1"/>
                                        ← Executing Firm
         <Ptv ID="123456" R="24">
                                        ← Customer Account
           <Sub ID="1" Typ="26"/>
                                        ← Carry Origin
         <Amt Typ="CRES" Amt=".55625" Ccy="USD" />
                                                        ← Residual Amount (APS Only)
    </AllocInstrctnAlert>
    </FIXML>
```



```
ACS Specific Group Summary Alert (GSA)
<FIXML>
    <AllocInstrctnAlert
         ID="500391"
                                               ← Firm Assigned Average Price Group ID
         ID2="500391"
                                               ← Clearing Assigned Specific Group ID
         SesID="RTH"
                                               ← Business Cycle
                                               ← Venue is Electronic
         SesSub="E"
         AvgPx="1847.75"
                                               ← Average Price
         TrdDt="2007-04-18"
                                               ← Trade Date
         BizDt="2007-04-18"
                                               ← Clearing Business Date
         TrdTyp="0"
                                               ← TradeType
         Stat="6"
                                               ← AllocStatus=Allocation Pending
         MsqEvtSrc="CMESvs"
                                               ← MessageEventSource=CME System
         TxnTm="2007-04-20T08:40:53-05:00"
                                               ← Execution Time
         InptDev="API"
                                               ← API/UI Indicator
         TransTvp="0"
                                               ← AllocTransType=New
         Typ="13" ("13" always for ACS)
                                               ← Alloc Type
         Qty="2"
                                               ← Group Summary Quantity
         Side="2">
                                               ← Buy/Sell (sell)
     <Hdr
         Snt="2007-04-20T08:40:53-05:00"
                                               ← Message Time
         SID="CME"
                                               ← Sender ID
         TID="287"
                                               ← Target Firm ID
         SSub="CME"
                                               ← Sending Firm Exchange
         TSub="CME"/>
                                               ← Target Firm Exchange
     <OrdAlloc
         CIOrdID="ORDER"/>
                                               ← Order Number
     <Instrmt
         ID="NQ"
                                               ← Product Code
         CFI="FFICSO"
                                               ← CFI Code
          MMY="200706"
                                               ← Contract Period
          Exch="CME"/>
                                               ← ProductExchange
         <PtyID="CME" R="21">
                                               ← Clearing Org
         <Pty ID="CME"R="22">
                                                ← Exchange
         </Ptv>
         <Pty ID="770"R="1">
                                                ← Executing Firm
         </Pty>
          <Pty ID="ACCOUNT" R="24">
                                                ← Customer Account
            <Sub ID="1"Typ="26"/>
                                                ← Carry Origin
          <Pty ID="XD4L" R="12">
                                                ← Executing Trader
          </Ptv>
          <Pty ID="OperatorID" R="44">
                                                ← Operator ID
          </Ptv>
     </AllocInstrctnAlert>
</FIXML>
```

- The firm assigned group id is the same as parent generic group id (ID). Each specific group will also have a unique clearing assigned group id (ID2)
- The Stat attribute indicates whether the group has been fully allocated and claimed. The Stat
 enumeration of 6 is relevant for both all allocations, and simply means the group has not been fully
 allocated and claimed.
- The presence of order number, broker, account number, origin, and trade type information indicates that this is a specific group summary record.
- For APS, the AvgPxInd enumeration of 1 indicates the parent generic group has not been completed by the allocating firm. The Specific group AvgPxInd enumeration will always be the same as its generic parent.



 The cash residual is for the specific APS group and so will in most cases be different from the generic group residual.

7.4 Group handling messages (Complete, Incomplete & Cancel)

7.4.1 Complete Generic Group (APS Only)

Completing and Un-completing a group are average price allocation functions. Specific average price allocation alerts and confirms are not released until the generic average price group is completed. Once an average price Generic group is completed no new trades can be added to it. Only Generic groups can be completed.

```
Complete Average Price Group (GS)
<FIXML>
    < AllocInstrctn
         TransTvp ="1"
                                        ← AllocTransType=Replace
                                        ← Firm Assigned Average Price ID
         ID="1000"
         ID2 ="2001"
                                        ← Clearing assigned Generic Group ID
         Typ="13"
                                        ← AllocType=Block Complete
         Qty="150"
                                        ← Group Summary Quantity
         TrdDt="2004-05-14"
                                        ← Trade Date
         Side="1"
                                        ← Buy/Sell (Buy)
         MsgEvtSrc="MQM"
                                        ← MessageEventSource=Firm
         AvgPxInd="2">
                                        ← AveragePriceInd (Complete)
         <Hdr
              Snt = "2007-02-26T08:20:00-05:00" ← Message Time
              SID="123"
                                                 ← Sender ID
                                                 ← Sending Firm Exchange
              SSub="CME" />
         <Instrmt
              Exch="CME"
                                                 ← Product Exchange
              ID="SP"
                                                ← Product Code
              CFI="FXXXXXX"
              MMY="200703"/>
                                                ← Contract Period
           <Pty ID="CME" R="22" />
                                                ← Allocating Firm Exchange
           <Pty ID="123" R="1" />
                                                ← Allocating Firm
     </AllocInstrctn>
</FIXML>
```

- An instruction to compete a group is a change, so the TransTyp must be equal to 1(Replace).
- The inclusion of the attribute "Typ" with an enumeration of 14 indicates that the allocating firm wants to complete this group.



7.4.2 Un-Complete a Generic Group (GS) (APS Only)

If a firm completes a group prematurely and needs to add more trades to it the group must first be uncompleted. Only groups with no accepted allocations may be un-completed. Only generic groups can be un-completed.

```
Un-Complete Average Price Group (GS)
<FIXML>
    <AllocInstrctn
         TransTyp ="1"
                                        ← AllocTransType=Replace
         ID="1000"
                                        ← Firm Assigned Average Price ID
         ID2 ="2001"
                                        ← Clearing Assigned Generic Group ID
         Typ="12"
                                        ← AllocType= Un-Complete
         Qtv="150"
                                        ← Group Summary Quantity
         TrdDt="2004-05-14"
                                        ← Trade Date
         Side="1"
                                        ← Buy/Sell (Buy)
                                        ← MessageEventSource=Firm
         MsqEvtSrc="MQM"
         AvaPxInd="1">
                                        ← AveragePriceInd (inComplete)
         <Hdr
              Snt = "2007-02-26T08:20:00-05:00" ← Message Time
                                                ← Sending Firm Exchange
              SSub="CME"
              SID="123" />
                                                ← Sender ID
         <Instrmt
              Exch="CME"
                                                ← Product Exchange
              ID="SP"
                                                ← Product Code
              CFI="FXXXXXX"
              MMY="200703"/>
                                                ← Contract Period
                                                ← GiveupExchange
           <Pty ID="CME" R="22" />
           <Pty ID="123" R="1" />
                                                ← Allocating Firm
     </AllocInstrctn>
</FIXML>
```

■ The enumeration for the attribute "Typ" is set to 12, un-complete.

7.4.3 Cancel an ACS Group (GS)

The following is an example of a firm canceling an ACS group to unmark the trades for ACS.

```
Cancel an ACS Group (GS)
<FIXML>
    <AllocInstrctn
         TransTyp ="2"
                                       ← AllocTransType=Replace
                                          ← Clearing Assigned Generic Group ID
         ID2 ="500001"
                                        ← AllocType= Un-Complete
         Typ="12"
         Qty="150"
                                       ← Group Summary Quantity
         TrdDt="2007-04-07"
                                        ← Trade Date
         Side="1"
                                        ← Buy/Sell (Buy)
                                        ← MessageEventSource=Firm
         MsaEvtSrc="MQM"
         <Hdr
              Snt = "2007-04-07T08:20:00-05:00" ← Message Time
                                                ← Sending Firm Exchange
              SSub="CME"
              SID="123" />
                                                ← Sender ID
         <Instrmt
              Exch="CME"
                                                ← Product Exchange
              ID="ED"
                                                ← Product Code
              CFI="FXXXXXX"
              MMY="200706"/>
                                                ← Contract Period
```





7.5 Allocation Instructions

Allocation Requests

Allocation requests can be nested or appended within trade messages or they can be submitted as stand alone instructions referencing a group of trades already designated for allocation and assigned to an allocation group. For average price allocations there are two types of allocation requests, those referencing Generic groups and those referencing Specific groups. ACS allocation requests are essentially the same as Specific group requests minus the average price group and average price indicator attributes.

7.5.1 Generic APS Allocation Requests

For APS, generic allocation instructions will generate at least two allocation instruction acknowledgements, one for the Generic allocation instruction, and one or more for the allocation instructions applied to the underlying Specific groups. Unlike group summary alerts the specific allocation instruction acknowledgements will not be sent to the allocating firm until the Generic group is completed. Note that with the FIXML allocate and claim API the allocating firm may submit their own allocation id (IndAllocId). This is an optional field, and whether or not the firm assigns its own allocation id, the firm allocation instruction will be assigned an allocation id by the clearing system (IndAllocId2). If a firm does assign their own allocation id for a Generic allocation instruction that id will be assigned to all the Specific allocations created to satisfy the Generic allocation.

```
Generic Allocation Instruction (GA)
<FIXML>
        < AllocInstrctn
         TransTyp ="0"
                                                 ← AllocTransType=New
         ID="1000"
                                                 ← Firm Group ID (Firm supplied)
         ID2 ="2001"
                                                 ← Clearing Assigned Generic Group ID
         Typ="2"
                                                 ← Alloc Type=Preliminary
         Qty="150"
                                                 ← Allocation Qtv
         AvgPxInd="1"
                                                 ← AveragePriceInd
         TrdDt="2004-05-14"
                                                 ← Trade Date
                                                 ← MessageEventSource=MQM/Firm
         MsqEvtSrc="MQM"
         Side="1">
                                                 ← Buy/Sell (Buy)
         <Hdr
              Snt = "2007-02-26T08:20:00-05:00" ← Message Time
              SSub="CME" />
                                                 ← Sending Firm Exchange
              SID="123" />
                                                 ← Sender ID
         <Instrmt
              Exch="CME"
                                                 ← Product Exchange
              ID="SP"
                                                 ← Product Code
              MMY="200703"
                                                 ← Contract Period
              CFI="FXXXXX" />
           <Pty ID="CME" R="22" />
                                                 ← Allocating Firm Exchange
           <Pty ID="123" R="1" />
                                                 ← Allocating Firm
           <Alloc
              IndAllocID="10000"
                                                 ← Firm assigned allocation id
              Qty="150"
                                                 ← AllocationQty
              CustCpcty="4">
                                                ← CTI Code
              <Pty ID="CME" R="22" />
                                                ← CarryExchange
              <Ptv ID="456" R="1"/>
                                                 ← CarryFirm
              <Pty ID="G104A" R="24">
                                                ← CarryAccount
                <Sub ID="1" Typ="26"/>
                                                ← CarryOrigin
              </Pty>
           </Alloc>
    </AllocInstrctn>
```

 Note that both the firm and clearing system Generic group ids must be provided on inbound allocation instructions



- The absence of the 'Stat' attribute and a 'TransTyp' of New, and 'Typ" of Preliminary (2) indicates that this is an allocation instruction from an allocating firm.
- The CME assigned ID2 references a Generic group.
- This message introduces the "Alloc" block where the claiming firm information should be placed. This is also where the firm assigned allocation id would be placed. Each Alloc block (<Alloc />) can be assigned a unique id by the firm and can indicate different carry firm information and quantities. All Alloc block quantities must equal the overall quantity indicated in the top level of the allocation instruction.

7.5.2 Specific APS/ACS Allocation Instructions

There are three ways to submit Specific allocations:

- Nested within a trade submission message designated for average price allocation or appended to a trade already reported.
- Generic allocation instructions for APS are implicitly specific since each Generic allocation instruction will create one or more Specific allocations.
- As stand alone specific allocation instructions referencing a Specific APS/ACS allocation group. Below
 are two examples of stand alone specific allocation instructions, one with the trade data of the Specific
 allocation group and one without the trade data.

```
Specific APS Allocation Instruction with Trade Information (GA)
<FIXML>
       < AllocInstrctn
         TransTvp ="0"
                                                 ← AllocTransType=New
         ID="1000"
                                                 ← Firm Group ID
         ID2="3001"
                                                 ← Specific Group ID (Generated by Clearing)
         Typ="2"
                                                 ← Alloc Type=Preliminary
         Qty="150"
                                                 ← Allocation Qty
         AvgPxInd="1"
                                                 ← AveragePriceInd (Incomplete)
         TrdDt="2004-05-14"
                                                 ← Trade Date
         MsgEvtSrc="MQM"
                                                 ← MessageEventSource=MQM/Firm
                                                 ← TradeType
         TrdTyp="0"
         TrdSubTyp="8"
                                                 ← TradeSubType
                                                 ← Single Leg of multi-leg trade
         MLegRptTyp="2"
         Side="1"
                                                 ← Buy/Sell (Buy)
         SesSub="P"
                                                 ← TradeVenue
         RndPx="1097.00"
                                                 ← Rounded Price
         AvgPx="1097.55625">
                                                 ← Average Price
         <Hdr
              Snt = "2007-02-26T08:20:00-05:00" ← Message Time
              SSub="CME" />
                                                 ← Sending Firm Exchange
              SID="123" />
                                                ← Sender ID
         <OrdAlloc
              ClOrdID="A456721" />
                                                ← Order Number
         <Instrmt
              Exch="CME"
                                                ← ProductExchange
              ID="SP"
                                                ← ProductCode
              MMY="200703"
                                                ← Contract Period
              CFI="FXXXXX" />
                                                ← CFI code
                                                ← Allocating Firm Exchange
           <Pty ID="CME" R="22" />
           <Pty ID="123" R="1" />
                                                ← Allocating Firm
           <Pty ID="123456" R="24">
                                                ← Customer Account
                                                 ← Allocating Firm Origin
               <Sub ID="1" Typ="26"/>
           <Pty ID="ABC" R="2" />
                                                ← Specific Group Broker
           <Amt Typ="CRES" Amt=".55625" Ccy="USD" /> ← Residual Amount
              IndAllocID="10001"
                                                ← Allocation ID (Firm Provided)
              Qtv="150"
                                                ← Allocation Quantity
              CustCpcty="4">
                                                ← CTI Code
            <Pty ID="CME" R="22" />
                                                ← Claiming Firm Exchange
            <Pty ID="456" R="1"/>
                                                ← Claiming Firm
```



```
Specific APS Allocation Instruction without Trade Information (GA)
<FIXML>
        < AllocInstrctn
                                                  ← AllocTransType=New
         TransTyp = "0"
         ID="1000"
                                                  ← Firm Group ID
         ID2="3001"
                                                  ← Specific Group ID (Generated by Clearing)
                                                  ← Alloc Type=Preliminary
         Typ="2"
         Qty="150"
                                                  ← Allocation Qty
         AvgPxInd="1"
                                                  ← AveragePriceInd (Incomplete)
         TrdDt="2004-05-14"
                                                  ← Trade Date
         MsgEvtSrc="MQM"
                                                  ← MessageEventSource=MQM/Firm
         Side="1" >
                                                  ← Buy/Sell (Buy)
          <Hdr
              Snt = "2007-02-26T08:20:00-05:00"
                                                 ← Message Time
              SSub="CME"
                                                 ← Sending Firm Exchange
              SID="123" />
                                                 ← Sender ID
          <OrdAlloc
                                                 ← Order Number
               CIOrdID="A456721" />
          <Instrmt
              Exch="CME"
                                                 ← ProductExchange
              ID="SP"
                                                 ← ProductCode
              MMY="200703"
                                                 ← Contract Period
              CFI="FXXXXX" />
                                                 ← CFI Code
           <Pty ID="CME" R="22" />
                                                 ← Allocating Firm Exchange
           <Pty ID="123" R="1" />
                                                 ← Allocating Firm
           <Alloc
               IndAllocID="10001"
                                                 ← Firm Assigned Allocation ID
              Qty="150"
                                                 ← Allocation Quantity
                                                 ← CTI Code
              CustCpcty="4">
                <Pty ID="CME" R="22" />
                                                 ← Carry Exchange
                <Pty ID="456" R="1"/>
                                                 ← Carry Firm
                <Pty ID="G104A" R="24">
                                                 ← Carry Account
                         <Sub ID="1" Typ="26"/>
                                                 ← Carry Origin
                         </Ptv>
           </Alloc>
    </AllocInstrctn>
</FIXML>
```

```
Specific ACS Allocation Instruction with Trade Information (GA)
<FIXML>
        <AllocInstrctn
              ID="500231"
                                                  ← Firm Group ID
              ID2="500231"
                                                  ← Specific Group ID (Generated by Clearing)
              SesSub="P"
                                                  ← TradeVenue
              AvgPx="1.2935"
                                                  ← Group Price
              TrdDt="2007-03-19"
                                                  ← Trade Date
              MLegRptTyp="1"
                                                  ← Single leg
              TransTyp="0"
                                                  ← AllocTransType=New
              Qty="100"
                                                  ← Quantity
              Typ="2"
                                                  ← Alloc Type=Preliminary
```



```
Side="2">
                                                  ← Buy/Sell (Buy)
             <Hdr
              Snt="2007-03-19T07:01:40-05:00"
                                                  ← Message Time
                                                  ← Sender ID
              SID="770"
              SSub="CME"
                                                  ← Sending Firm Exchange
             <OrdAlloc
               CIOrdID="12345678"/>
                                                  ← Order Number
             <Instrmt
               ID="EC"
                                                  ← ProductCode
               CFI="FFCPSO"
                                                  ← CFI Code
               MMY="200706"
                                                  ← Contract Period
              Exch="CME"/>
                                                  ← Product Exchange
             <Pty ID="CME" R="22"/>
                                                  ← Allocating Firm Exchange
             <Pty ID="770" R="1"/>
                                                  ← Allocating Firm
                                                  ← Customer Account
             <Pty ID="ABCDEFGHIJ" R="24">
             <Sub ID="1" Typ="26"/>
                                                  ← Allocating Firm Origin
             </Ptv>
             <Pty ID="TAHO" R="12"/>
                                                  ← Executing Broker
             <Alloc
                                                  ← Firm Assigned Allocation ID
              IndAllocID="16634"
                                                  ← Allocation Quantity
              Qty="100">
             <Pty ID="CME" R="22"/>
                                                  ← Carry Firm Exchange
             <Pty ID="102" R="1"/>
                                                  ← Carry Firm
             <Pty ID="CARRY" R="24">
                                                  ← Carry Account
                                                  ← Carry Origin
             <Sub ID="2" Typ="26"/>
             </Pty>
             </Alloc>
        </AllocInstrctn>
</FIXML></
```

- Note that the firm group id and clearing system Specific group id must be provided on Specific allocation instructions
- As outlined in table 3.2.2, only the presence of a TransType of "0" (New) and an AllocType of "2" (Preliminary) is necessary to indicate that this is a new allocation instruction, AllocStatus is not necessary.
- Notice that there are two 'qty' attributes, one in the main body of the message and one in the Alloc block. The quantity in the main block indicates the sum of all the allocation quantities contained within this allocation instruction. The Alloc block is a repeating block, in other words multiple Alloc blocks may be contained within a single AllocInstrctn message.



7.6 Allocation Confirms and Alerts

7.6.1 Allocation Instruction Confirms to Allocating Firm

For Basic allocations, once an allocation request has been submitted to the clearing system an Allocation Report (AllocRpt) is sent back to the allocating firm. The allocation report will always contain all trade data and confirm whether or not the allocation instruction was valid. For APS only, generic allocation instructions will be acknowledged but the underlying Specific allocations that are derived from Generic allocation instructions will not be transmitted to the allocating firm until the group is completed. Specific allocation instructions will be handled just like Basic allocation instructions. While the firm is not required to submit all trade data for allocation instructions the allocation report will reflect all trade data for Specific and Basic

allocations and at least product and price information for Generic allocations.

```
APS Specific Allocation Report Confirmation (GAC)
<FIXML>
 <AllocRpt
                                      ← AllocTransType=New
           TransTyp ="0"
           Stat="3"
                                      ← Status=Received
           RptTyp="2"
                                      ← Report Type=Preliminary
           BizDt="2004-05-14"
           ID="1000"
                                      ← Firm Average Price Group ID
           ID2="3001"
                                      ← Specific Group ID Assigned by Clearing
           Qty="150"
                                      ← Allocation Qty
                                      ← Trade Date
           TrdDt="2004-05-14"
                                      ← TradeType
           TrdTvp="0"
                                      ← TradeSubType
           TrdSubTyp="8"
           MLegRptTyp="2"
                                      ← Single Leg of multi-leg trade
           Side="1"
                                      ← Buy/Sell (Buy)
           SesSub="P"
                                      ← TradeVenue
           InptDev="API"
                                      ← API/UI Indicator
           SesID="RTH"
                                      ← BusinessCycleCode
                                      ← MessageEventSource = CME System
           MsqEvtSrc="CMESys"
           AvaPxInd="1"
                                      ← AveragePriceInd
           RndPx="1097.00"
                                      ← Rounded Price
           AvgPx="1097.55625"
                                      ← Average Price
                                                      ← Execution Time
           TxnTm="2007-02-26T08:15:00"
           RptID="1000" >
                                                      ← Report ID
      <Hdr
            Snt = "2007-02-26T08:20:00-05:00" ← Message Time
                                              ← Target Firm Exchange
            TSub="CME"
            TID = "123"
                                              ← Target Firm ID
            SID="CME" />
                                              ← Sender ID
      <OrdAlloc
           CIOrdID="A456721" />
                                              ← Order Number
      <Instrmt
           Exch="CME"
                                              ← ProductExchange
           ID="SP"
                                              ← ProductCode
                                              ← Contract Period
           MMY="200703"
                                              ← CFI Code
           CFI="FXXXXX" />
                                      ← Allocating Firm Exchange
        <Pty ID="CME" R="22" />
        <Ptv ID="123" R="1" />
                                      ← Allocating Firm
        <Pty ID="123456" R="24">
                                      ← Customer Account
            <Sub ID="1" Typ="26"/>
                                      ← Origin
           </Pty>
        <Pty ID="ABC" R="2" />
                                      ← Executing Broker
        <Amt Typ="CRES" Amt=".55625" Ccy="USD" />
                                                        ← Residual Amount
      <Alloc
           IndAllocID="10001"
                                      ← Allocation ID (Firm Provided)
           IndAllocID2="500001"
                                      ← Allocation ID (Clearing system generated)
           Qtv="150"
           CustCpcty="4">
                                              ← CTI Code
             <Pty ID="CME" R="22" />
                                              ← Carry Firm Exchange
```



```
ACS Specific Allocation Report Confirmation (GAC)
<FIXML>
         <AllocRpt
             BizDt="2007-04-19"
            MsgEvtSrc="CMESys"
                                                   ← MessageEventSource = CME System
               TxnTm="2007-04-19T15:12:48-05:00"
                                                  ← Execution Time (GMT/CST with an offset)
               InptDev="API"
                                                   ← API/UI Indicator
               TrdSubTyp="5"
                                                   ← TradeType
                                                   ← Single Leg of multi-leg trade
               MLegRptTyp="2"
               RptTyp="2"
                                                   ← Report Type=Preliminary
               AvgPx="0.8333"
                                                   ← Group Price
               RptID="500035"
                                                   ← Report ID
                                                   ← Buy/Sell (Buy)
               Side="1"
               ID="500035"
                                                   ← Firm Average Price Group ID
               Stat="3"
                                                   ← Status=Received
               TransTyp="0"
                                                   ← AllocTransType=New
               Qty="1"
                                                   ← Allocation Qty
               TrdDt="2007-04-19"
                                                   ← Trade Date
                                                   ← TradeVenue
               SesSub="E"
               SesID="ETH">
                                                   ← BusinessCycleCode
          <Hdr
             Snt="2007-04-19T15:12:48-05:00"
                                                   ← Message Time
             SID="CME"
                                                   ← Sender ID
             TID="770"
                                                   ← Target Firm ID
            SSub="CME"
                                                   ← Sender Firm Exchange
             TSub="CME">
                                                   ← Target Firm Exchange
        </Hdr>
        <OrdAlloc
            CIOrdID="ORDER">
                                                   ← Order Number
            </OrdAlloc>
        <Instrmt
             ID="E1"
                                                   ← Firm Average Price Group ID
             CFI="FFCPSO"
                                                   ← CFI Code
            MMY="200706"
                                                   ← Contract Period
            Exch="CME">
                                                   ← Product Exchange
       <Pty ID="CME" R="21">
                                                 ← Allocating Firm Exchange
            </Pty>
             <Pty ID="CME" R="22">
                                                 ← Allocating Firm Exchange
            </Ptv>
                                                  ← Allocating Firm Exchange
             <Pty ID="770" R="1">
            </Ptv>
             <Pty ID="ACCOUNT" R="24">
                                                  ← Customer Account
                  <Sub ID="1" Typ="26">
                                                  ← Origin
                  </Sub>
             </Ptv>
             <Pty ID="7G0L" R="12">
                                                 ← Executing Trader
            </Pty>
             <Pty ID="OPERATORID" R="44">
                                                ← Operator ID
            </Pty>
       <Alloc
```



```
← Allocation ID (Clearing system generated)
             IndAllocID2="500036"
             CustCpcty="4"
                                                   ← CTI Code
             Qtv="1">
                                                   ← Allocation Qtv
             <Pty ID="CME" R="22">
                                                   ← Carry Firm Exchange
             </Ptv>
             <Pty ID="555" R="1">
                                                   ← Carry Firm
             </Pty>
                                                  ← Carry Firm Account
          <Pty ID=" CARRY" R="24">
                     <Sub ID="1" Typ="26">
                                                  ← Carry Firm Origin
                     </Sub>
             </Pty>
          </Alloc>
      </AllocRpt>
</FIXML>
```

- Note that the TransTyp of New ("0") and the Stat of Received ("3") and RptTyp of Preliminary ("2") indicates that this is the confirmation of a new allocation instruction.
- The firm's submitted IndAllocID has been recorded by the clearing system and is reflected on the confirmation message and a clearing assigned IndAllocID2 has been assigned.

7.6.2 Allocation Alert to Carry Firm

When a valid Basic allocation instruction is received from an allocating firm an allocation report is generated and routed to the claiming firm designated on the instruction. For average price allocation groups only Specific allocation reports are sent as alerts to the claiming firm and then only when the Generic group has been completed. The Clearing System will not pass on the allocating firm's IndAllocID to the carry firm and will assign a new, unique IndAllocID2 for the Carry Firm. The group ids are also not passed on to the claiming firm.

```
APS Allocation Alert to Claiming Firm (GAA)
<FIXML>
  < AllocRpt
    TransTyp ="0"
                                            ← AllocTransType=New
    RptTyp="11"
                                            ← ReportType=AcceptPending
    Stat="3"
                                            ← AllocStatus=Received
    ID="1000"
                                            ← Firm Average Price Group ID
     BizDt="2004-05-14"
                                            ← Clearing Business Date
    Qty="150"
                                            ← Total Allocation Qty
    TrdDt="2004-05-14"
                                            ← Trade Date
                                            ← TradeType
    TrdTyp="0"
    TrdSubTyp="8"
                                            ← TradeSubType
    MLegRptTyp="2"
                                            ← Single Leg of Multi-Leg Trade
    SesSub="P"
                                            ← TradeVenue
    Side="1"
                                            ← Buy Sell Indicator (Buy)
    MsgEvtSrc="CMESys"
                                            ← MessageEventSource=CME System
    SesID="RTH"
                                            ← BusinessCycleCode
                                            ← AveragePriceInd
    AvgPxInd="2"
    RndPx="1097.00"
                                            ← Rounded Price
    AvgPx="1097.55625"
                                            ← Average Price
    RptID ="1000"
                                            ← Report ID
    <Hdr
          Snt = "2007-02-26T08:20:00-05:00" ← Message Time
          TSub="CME"
                                            ← Target Firm Exchange
          TID = "456"
                                            ← Target Firm ID
    SID="CME" />
                                           ← Sender ID
     <OrdAlloc
      CIOrdID="A456721" />
                                            ← Order Number
     <Instrmt
          Exch="CME"
                                            ← ProductExchange
            ID="SP"
                                            ← ProductCode
```



```
CFI="FXXXXXX"
                                                 ← ProductPeriod
            MMY="200703"/>
                                                ← Contract Period
        <Pty ID="CME" R="22" />
                                                 ← Allocating Firm Exchange
         <Pty ID="123" R="1" />
                                                 ← Allocating Firm
         <Pty ID="ABC" R="2" />
                                                 ← Executing Broker
         <Ptv ID="123456" R="24"/>
                                                 ← Customer Account
         <Amt Typ="CRES" Amt=".55625" Ccy="USD" />
                                                        ← Residual Amount
         <Alloc
               IndAllocID2="500214"
                                                 ← Allocation ID (Clearing generated)
                Qty="150"
                                                 ← AllocationQty
                CustCpcty="4">
                                                ← CTI Code
               <Pty ID="CME" R="22" />
                                                ← Carry Firm Exchange
                <Pty ID="456" R="1"/>
                                                ← Carry Firm
               <Pty ID="G104A" R="24">
                                                ← Carry Firm Customer Account
                                                ← Carry Firm Origin
                   <Sub ID="1" Typ="26"/>
                </Pty>
         </Alloc>
   </AllocRpt>
</FIXML>
```

```
ACS Allocation Alert to Claiming Firm (GAA)
<FIXML>
   <AllocRpt
        BizDt="2007-04-18"
                                               ← Clearing Business Date
                                               ← MessageEventSource=CME System
       MsgEvtSrc="CMESys"
    TxnTm="2007-04-20T08:40:53-05:00"
                                               ← Execution Time (GMT/CST with an offset)
                                               ← API/UI Indicator
       InptDev="API"
       TrdSubTyp="6"
                                               ← TradeSubType
       MLegRptTyp="2"
                                               ← Single Leg of Multi-Leg Trade (Spread)
                                               ← ReportType=AcceptPending
       RptTyp="11"
       AvgPx="1847.75"
                                               ← Average Price
       RptID="500391"
                                               ← Report ID
       Side="2"
                                               ← Buy Sell Indicator (sell)
       ID="500391"
                                               ← Firm Average Price Group ID
       Stat="3"
                                               ← AllocStatus=Received
       TransTyp="0"
                                               ← AllocTransType=New
       Qty="2"
                                               ← Total Allocation Qtv
       TrdDt="2007-04-18"
                                               ← Trade Date
       SesSub="E"
                                                       ← TradeVenue
       SesID="RTH">
                                               ← BusinessCycleCode
    <Hdr
       Snt="2007-04-20T08:40:53-05:00"
                                               ← Message Time
       SID="CME"
                                               ← Sender ID
       TID="102"
                                               ← Target Firm ID
          SSub="CME"
                                               ← Sending Firm Exchange
       TSub="CME"/>
                                               ← Target Firm Exchange
  <OrdAlloc
       CIOrdID="0WXU"/>
                                               ← Order Number
  <Instrmt
       ID="NQ"
                                               ← ProductCode
      CFI="FFICSO"
                                               ← CFI Code
      MMY="200706"
                                               ← Contract Period
      Exch="CME"/>
                                               ← ProductExchange
  <Pty ID="CME" R="21"/>
                                               ← Allocating Firm Exchange
                                               ← Allocating Firm Exchange
  <Pty ID="CME" R="22"/>
  <Pty ID="287" R="1"/>
                                               ← Carry Firm
  <Ptv ID="R88E0111" R="24">
                                               ← Carry Firm Customer Account
  <Sub ID="1" Typ="26"/>
                                                ← Carry Firm Origin
```



```
</Ptv>
   <ptv>ID="3D4L" R="12"/>
   <Ptv ID="MASHC1" R="44"/>
   <Alloc
        IndAllocID="500392"
                                                  ← Allocation ID (Firm Provided)
        IndAllocID2="500002"
                                                   ← Allocation ID (Clearing generated
        CustCpcty="4"
                                                   ← CTI Code
        Qtvy="2">
                                                   ← AllocationQty
   <Pty ID="CME" R="22"/>
                                                  ← Allocating Firm Exchange
   <Pty ID="102" R="1"/>
                                                   ← Carry Firm
   <Pty ID=" R88E0111" R="24">
                                                   ← Carry Firm Customer Account
   <Sub ID="1" Typ="26"/>
                                                  ← Carry Firm Origin
   </Pty>
   </Alloc>
   </AllocRpt>
</FIXML>
```

• The carry firm is designated in the "Alloc" block of the AllocInstrctn message while the allocating firm is

7.7 Accepting and Rejecting Allocations

7.7.1 ACS/APS Allocation Accept/Reject Request

In order to accept an allocation the carry firm submits an Allocation Report Acknowledgement (AllocRptAck) message to the Clearing System. The carry firm must use the clearing system assigned Allocation ID (IndAllocID2) provided to them on the allocation report alert. Additionally the Carry firm may also append their own Allocation ID (generated by them) using the IndAllocID attribute.

```
ACS/APS Allocation Accept Request (GC)
<FIXML>
    <AllocRptAck
       ID="1000"
                                         ← Firm Group ID
        TransTyp ="0"
                                         ← AllocTransType=New
        RptTyp="9" ("10")
                                         ← Allocation Report Type=Accept (Reject)
        TrdDt="2003-01-13"
                                         ← Trade Date
                                         ← APS Ind (for APS only, exclude for ACS)
       AvgPxInd="2"
       MsgEvtSrc="MQM"
       RptID = "500102"
                                         ← Trade ID (to be replaced by TrdID)
       TrdID="500102"
                                         ←Trade ID
       TxnTm="2007-02-26T08:15:00">
                                                 ← Execution Time
        <Hdr
            Snt = "2007-02-26T08:20:00-05:00"
                                                 ← Message Time
            SSub="CME"
                                                 ← Sending Firm Exchange
            SID="456" />
                                                 ← Sender ID
                                         ← Allocating Firm Exchange
        <Pty ID="CME" R="22"/>
        <Pty ID="123" R="1"/>
                                         ← Allocating Firm
        <AllocAck
          IndAllocID="15000"
                                         ← Allocation ID (Carry Firm generated)
                                         ← Allocation ID (Clearing generated)
          IndAllocID2="500102"
          Qty="150"
                                         ← Allocation Qty
          CustCpcty="4">
                                         ← CTI Code
          <Pty ID="CME" R="22" />
                                         ← Carry Firm Exchange
          <Pty ID="456" R="1"/>
                                         ← Carry Firm
                                         ← Carry Firm Customer Account
          <Pty ID="G104A" R="24">
                                         ← Carry Firm Origin
                <Sub ID="1" Typ="26"/>
         </Pty>
      </AllocAck>
```



```
</AllocRptAck>
</FIXML>
```

- The only specific trade information required on an allocation accept or reject request is the contract information and the allocating firm information.
- The only difference between an accept and reject is the enumeration supplied with the "RptTyp" attribute. "9" equals accept and "10" equals reject.
- Also note that on the AllocRptAck the AllocAck Block is used, not the Alloc block.

7.7.2 Allocation Claim Confirm to Carry Firm (GCC Accept)

Each allocation acceptance request will be confirmed by the clearing system. All trade information will be provided.

```
APS Allocation Accept Confirm Report to Carry Firm (GCC Accept)
<FIXML>
    <AllocRpt
           .
TransTyp ="0"
                                               ← AllocTransType=New
           Stat="0"
                                               ← AllocStat=Accepted (in Clearing)
           RptTyp="12"
                                               ← RptType=Complete
           BizDt="2004-05-14"
           ID="1000"
                                               ← Firm Group ID (Firm supplied)
           RptID="500102"
                                                ← Rpt ID (Clearing generated Allocation ID)
           Qty="100"
                                                ← Group Quantity
           TrdDt="2003-01-13"
                                                ← Trade Date
           TrdTyp="0"
                                               ← TradeType
                                               ← TradeSubType
           TrdSubTyp="8"
           MLegRptTyp="2"
                                               ← Single Leg of multi-leg trade
           Side="1"
                                               ← Buy/ Sell (Buy)
           SesSub="P"
                                               ← Trade Venue
           InptDev="API"
                                               ← API/UI Indicator
           MsgEvtSrc="CMESvs"
           AvaPxInd="2"
                                               ← AveragePriceInd
           RndPx="1097.00"
                                               ← Rounded Price
           AvgPx="1097.55625"
                                               ← Average Price
                                               ← Execution Time
           TxnTm="2007-02-26T08:15:00" >
       <Hdr
            Snt = "2007-02-26T08:20:00-05:00"
                                               ← Message Time
            TID = "456"
                                               ← Target Firm ID
            TSub = "CME"
                                               ← Target Firm Exchange
         SID="CME" />
                                                ← Sender ID
         <OrdAlloc
           CIOrdID="A456721" />
                                               ← Order Number
         <Instrmt
              Exch="CME"
                                               ← Product Exchange
              ID="SP"
                                               ← Product Code
              CFI="FXXXXXX"
              MMY="200703"/>
                                               ← Contract Period
           <Pty ID="CME" R="22"/>
                                               ← Allocating Firm Exchange
           <Pty ID="123" R="1"/>
                                               ← Allocating Firm
           <Pty ID="ABC" R="2" />
                                                ← Executing Broker
           <Pty ID="123456" R="24" />
                                               ← Customer Account
           <Alloc
              IndAllocID="15000"
                                               ← ID sent by Clearing (Optional)
              IndAllocID2="500102"
                                               ← Allocation ID (Clearing system generated)
              Qty="100"
              CustCpcty="4">
                                                ← CTI Code
               <Pty ID="CME" R="22" />
                                               ← Carry Firm Exchange
               <Pty ID="456" R="1"/>
                                               ← Carry Firm
```



```
ACS Allocation Accept Confirm Report to Carry Firm (GCC Accept)
<FIXML>
        <AllocRpt
                BizDt="2006-12-26"
                                                  ← Business Date
                MsgEvtSrc="CMESys"
                                                  ← Message Source (CME Systems)
                TxnTm="2006-12-26T10:37:25-06:00" ← Execution Time
                                                 ← API/UI Indicator
                InptDev="API"
                                                  ← Onset dut to an allocation
                TrdSubTyp="6"
                RptTyp="12"
                                                  ← RptType=Complete
                AvgPx="1430.25"
                                                  ← Group Price
                RptID="500562"
                                                 ← Trade ID (to be replaced by TrdID)
                                                 ← Buy/Sell Indicator
                Side="1"
                ID="500562"
                                                 ← Firm Group ID (Firm supplied)
                Stat="0"
                                                 ← AllocStat=Accepted (in Clearing)
                TransTyp="0"
                                                 ← AllocTransType=New
                MLegRptTyp="2"
                                                 ← Single Leg of multi-leg trade
                Qtv="9"
                                                 ← Qty
                TrdDt="2006-12-26"
                                                 ← Trade Date
                                                 ← Trade Venue is Electronic
                SesSub="E"
                SesID="RTH">
                                                 ← Session is during RTH
           <Hdr
                Snt="2006-12-26T10:37:25-06:00" ← Message Transmission Time (UTC)
                                                 ← Sender ID
                SID="CME"
                TID="102"
                                                 ← Target ID
                SSub="CME"
                                                 ← Sender Exchange
                TSub="CME"/>
                                                 ← Trader Exchange
           <OrdAlloc
                CIOrdID="0006M1B0"/>
                                                 ← Customer Order
           <Instrmt
                ID="ES"
                                                 ← Product Code
                                                 ← CFI
                CFI="FFICSO"
                MMY="200703"
                                                 ← Product Period
                Exch="CME"/>
                                                 ← Product Exchange
                                                 ← Clearing Exchange
                <Pty ID="CME" R="21"/>
                                                 ← Executing Firm Exchange
                <Pty ID="CME" R="22"/>
                <Pty ID="770" R="1"/>
                                                 ← Executing Firm
                </Ptv>
                <Ptv ID="7G2L" R="12"/>
                                                  ← Executing Broker
                <Pty ID="2464" R="44"/>
                                                  ← Executing Operator ID
           <Alloc
                IndAllocID="500563"
                                                  ← ID sent by Clearing (Optional)
                IndAllocID2="500001"
                                                  ← Allocation ID (Clearing system
                generated)
                CustCpcty="4"
                                                  ← CTI
                Qtv="9">
                                                  ← Quantity
                <Pty ID="CME" R="22"/>
                                                  ← Carry Exchange
                <Pty ID="102" R="1"/>
                                                  ← Carry Firm
                <Pty ID=" 50036933" R="24">
                                                  ← Carry Firm Account
                        <Sub ID="1" Typ="26"/>
                                                  ← Carry Firm Origin
                </Pty>
           </Alloc>
        </AllocRpt>
```



</FIXML>

7.7.3 Allocation Claim Confirm to Carry Firm (GCC Reject)

Each allocation acceptance request will be confirmed by the clearing system. All trade information will be provided.

```
Allocation Reject Confirm to Carry Firm (GCC)
<FIXML>
    <AllocRpt
            TransTyp ="0"
                                                 ← AllocTransType=New
            Stat="1
                                                 ← AllocStat=Rejected (in Clearing)
            RptTyp="12"
                                                 ← RptType=Complete
            BizDt="2004-05-14"
                                                 ← Business Date
            ID="1000"
                                                 ← Firm Group ID (Firm supplied)
                                                  ← Rpt ID (Clearing generated Allocation ID)
            RptID="500102"
                                                 ← Clearing Assigned Specific Group ID
            ID2 ="2001"
            Qty="100"
                                                 ← Group Quantity
            TrdDt="2003-01-13"
                                                  ← Trade Date
            TrdTyp="0"
                                                 ← TradeType
            TrdSubTyp="8"
                                                 ← TradeSubType
            MLegRptTyp="2"
                                                 ← Single Leg of multi-leg trade
            Side="1"
                                                 ← Buy/ Sell (Buy)
            SesSub="P"
                                                 ← Trade Venue
            InptDev="API"
                                                 ← API/UI Indicator
            MsgEvtSrc="CMESvs"
                                                 ← Message Source (CME Systems)
            AvgPxInd="2"
                                                 ← AveragePriceInd
            RndPx="1097.00"
                                                 ← Rounded Price
            AvgPx="1097.55625"
                                                 ← Average Price
                                                 ← Execution Time
            TxnTm="2007-02-26T08:15:00" >
        <Hdr
             Snt = "2007-02-26T08:20:00-05:00"
                                                 ← Message Time
             TID = "456"
                                                 ← Target Firm ID
             TSub = "CME"
                                                 ← Target Firm Exchange
                                                 ← Sender ID
             SID="CME" />
         <OrdAlloc
           CIOrdID="A456721" />
                                                 ← Order Number
         <Instrmt
              Exch="CME"
                                                 ← Product Exchange
              ID="SP"
                                                 ← Product Code
              CFI="FXXXXXX"
                                                 ← Contract Period
              MMY="200703"/>
           <Pty ID="CME" R="22"/>
                                                 ← Allocating Firm Exchange
           <Pty ID="123" R="1"/>
                                                 ← Allocating Firm
            <Pty ID="ABC" R="2" />
                                                 ← Executing Broker
            <Pty ID="123456" R="24" />
                                                 ← Customer Account
            <amt Typ="CRES" Amt=".55625" Ccy="USD" /> ← Residual Amount
         <Alloc
               IndAllocID="15000"
                                                 ← ID assigned by Carry Firm (Optional)
              IndAllocID2="500102"
                                                 ← Allocation ID (Clearing system generated)
              Qty="100"
              CustCpcty="4">
                                                 ← CTI Code
                <Pty ID="CME" R="22" />
                                                 ← Carry Firm Exchange
                <Pty ID="456" R="1"/>
                                                 ← Carry Firm
```



```
ACS Allocation Reject Confirm Report to Carry Firm (GCC Rejectt)
<FIXML>
        <AllocRpt
                BizDt="2006-12-26"
                                                  ← Business Date
                MsgEvtSrc="CMESys"
                                                  ← Message Source (CME Systems)
                TxnTm="2006-12-26T10:37:25-06:00" ← Execution Time
                InptDev="API"
                                                  ← API/UI Indicator
                TrdSubTyp="6"
                                                  ← Onset dut to an allocation
                RptTyp="12"
                                                  ← RptType=Complete
                AvgPx="1430.25"
                                                  ← Group Price
                RptID="500562"
                                                  ← Trade ID (to be replaced by TrdID)
                Side="1"
                                                  ← Buy/Sell Indicator
                ID="500562"
                                                 ← Firm Group ID (Firm supplied)
                                                 ← AllocStat=Rejected (in Clearing)
                Stat="1"
                MLegRptTyp="2"
                                                 ← Single Leg of multi-leg trade
                                                 ← AllocTransType=New
                TransTyp="0"
                Qty="9"
                                                 ← Qty
                TrdDt="2006-12-26"
                                                 ← Trade Date
                SesSub="E"
                                                  ← Trade Venue is Electronic
                SesID="RTH">
                                                  ← Session is during RTH
           <Hdr
                Snt="2006-12-26T10:37:25-06:00" ← Message Transmission Time (UTC)
                SID="CME"
                                                  ← Sender ID
                TID="102"
                                                  ← Target ID
                SSub="CME"
                                                 ← Sender Exchange
                TSub="CME"/>
                                                  ← Trader Exchange
           <OrdAlloc
                CIOrdID="0006M1B0"/>
                                                 ← Customer Order
           <Instrmt
                ID="ES"
                                                 ← Product Code
                                                 ← CFI
                CFI="FFICSO"
                MMY="200703"
                                                 ← Product Period
                Exch="CME"/>
                                                  ← Product Exchange
                <Pty ID="CME" R="21"/>
                                                  ← Clearing Exchange
                <Pty ID="CME" R="22"/>
                                                 ← Executing Firm Exchange
                <Pty ID="770" R="1"/>
                                                  ← Executing Firm
                </Ptv>
                <Pty ID="7G2L" R="12"/>
                                                  ← Executing Broker
                <Pty ID="2464" R="44"/>
                                                  ← Executing Operator ID
           <Alloc
                IndAllocID="500563"
                                                  ← ID sent by Clearing (Optional)
                IndAllocID2="500001"
                                                 ← Allocation ID (Clearing system generated)
                CustCpcty="4"
                                                  ← CTI
                Qty="9">
                                                  ← Quantity
                <Pty ID="CME" R="22"/>
                                                  ← Carry Exchange
                <Ptv ID="102" R="1"/>
                                                  ← Carry Firm
                <Pty ID=" 50036933" R="24">
                                                  ← Carry Firm Account
                        <Sub ID="1" Typ="26"/>
                                                  ← Carry Firm Origin
                </Pty>
           </Alloc>
        </AllocRpt>
</FIXML>
```



- All allocation accept or reject confirmations will have "TranTyp" enumeration of "0" (New) and a "Stat" of either "0" (Received) or "1" (Rejected)
- Note that the IndAllocID submitted by the Carry firm is sent back on the confirm.

7.7.4 Claim Alert to Allocating Firm

Once the designated carry firm claims an allocation, the allocating firm will receive an alert message containing all trade and allocation information.

```
Accepted APS Allocation Alert Report (GCA)
<FIXML>
    <AllocRpt
            TransTyp = \mathbf{0}
                                                  ← AllocTransType=New
            Stat="0"
                                                 ← AllocStat=Accepted
            RptTyp="9"
                                                 ← RptType=Accept
                                                 ← Clearing Business Date
            BizDt="2004-05-14"
            RptID="500001"
                                                  ← Rpt ID (Clearing generated Allocation ID)
            TrdDt="2003-01-13"
                                                  ← Trade Date
            Qty="100"
                                                 ← Allocation Qty
            TrdTyp="0"
                                                  ← Trade Type
            TrdSubTyp="8"
                                                  ← Trade Sub Type
            MLegRptTyp="2"
                                                  ← Single Leg of multi-leg trade
            Side="1"
                                                  ← Buy/Sell (Buy)
            SesSub="P"
                                                  ← TradeVenue
            InptDev="API"
                                                  ← API/UI Indicator
            MsgEvtSrc="MQM"
                                                  ← MessageEventSource
                                                  ← AveragePriceInd
            AvgPxInd="2"
                                                  ← Rounded Price
            RndPx="1097.00"
            AvgPx="1097.55625"
                                                  ← Average Price
            TxnTm="2007-02-26T08:15:00" >
                                                  ← Execution Time
        <Hdr
             Snt = "2007-02-26T08:20:00-05:00"
                                                 ← Message Time
             TID = "123"
                                                  ← Target Firm ID
             TSub = "CME"
                                                 ← Target Firm Exchange
             SID="CME" />
                                                 ← Sender ID
          <OrdAlloc
           CIOrdID="A456721" />
                                                  ← Order Number
         <Instrmt
              Exch="CME"
                                                  ← ProductExchange
              ID="SP"
                                                  ← ProductCode
              CFI="FXXXXXX"
                                                 ← ProductPeriod
              MMY="200703"/>
           <Pty ID="CME" R="22"/>
                                                 ← Allocating Firm Exchange
                                                 ← Allocating Firm
           <Pty ID="123" R="1"/>
           <Pty ID="ABC" R="2" />
                                                  ← Executing Broker
            <Pty ID="123456" R="24" >
                                                  ← Customer Account
                  <Sub ID="1" Typ="26"/>
                                                  ← Origin
         <amt Typ="CRES" Amt=".25" Ccy="USD" />
                                                          ← Residual Amount
          <Alloc
              IndAllocID="10001"
                                                 ← Allocation ID (Firm generated sent in GC)
              IndAllocID2="500001"
                                                 ← Allocation ID (Clearing generated)
              Qty="100"
                                                 ← Allocation Qty
              CustCpcty="4">
                                                 ← CTI Code
                                                 ← Carry Firm Exchange
              <Pty ID="CME" R="22" />
              <Pty ID="456" R="1"/>
                                                  ← Carry Firm
```



```
Accepted ACS Allocation Alert Report (GCA)
<FIXML>
    <AllocRpt
            BizDt="2006-12-26"
                                                 ← Clearing Business Date
                MsgEvtSrc="CMESys"
                                                 ← Message Source (CME Systems)
                TxnTm="2006-12-26T10:37:25-06:00"
                                                          ← Execution Time
                InptDev="API"
                                                 ← API/UI Indicator
                TrdSubTyp="5"
                                                 ← 5= Offset due to an allocation
                RptTyp="9"
                                                 ← RptType=Accept
                AvgPx="1430.25"
                                                ← Group Price
                RptID="500562"
                                                ← Trade ID (to be replaced by TrdID)
                TrdID="500562"
                                                ← Trade ID
                Side="2"
                                                ← Buy/Sell
                ID="500562"
                                                ← Firm Group ID (Firm supplied)
                Stat="0"
                                                 ← AllocStat=Accepted
                                                ← AllocTransType=New
                TransTyp="0"
                Qty="9"
                                                 ← Qty
                TrdDt="2006-12-26"
                                                ← Trade Date
                                                ← Trade Venue is Electronic
                SesSub="E"
                SesID="RTH">
                                                ← Session is during ETH
           <Hdr
                Snt="2006-12-26T10:37:25-06:00" ← Message Time
                SID="CME"
                                                 ← Sender ID
                TID="770"
                                                ← Target Firm ID
                SSub="CME"
                                                ← Sending Firm Exchange
                TSub="CME"/>
                                                ← Target Firm Exchange
           <OrdAlloc
                CIOrdID="0006M1B0"/>
                                                 ← Order Number
           <Instrmt
                ID="ES"
                                                 ← ProductCode
                CFI="FFICSO"
                MMY="200703"
                                                 ← ProductPeriod
                Exch="CME"/>
                                                 ← Product Exchange
                <Pty ID="CME" R="21"/>
                                                 ← Allocating Firm Exchange
                <Pty ID="CME" R="22"/>
                                                ← Allocating Firm Exchange
                <Pty ID="770" R="1"/>
                                                ← Carry Firm
                <Pty ID="50036933" R="24">
                                                 ←Carry Firm Customer Account
                        <Sub ID="1" Typ="26"/>
                                                 ← Origin
                </Pty>
                <Ptv ID="7G2L" R="12"/>
                <Pty ID="2464" R="44"/>
           <Alloc
                IndAllocID2="500563"
                                                 ← Allocation ID (Clearing generated)
                CustCpcty="4"
                                                 ← CTI Code
              Qtv="9">
                                                 ← Allocation Qty
                Pty ID="CME" R="22"/>
                                                ← Carry Firm Exchange
                <Pty ID="102" R="1"/>
                                                ← Carry Firm
                                                ← Carry Firm Customer Account
                <Pty ID=" 50036933" R="24">
                <Sub ID="1" Typ="26"/>
                                                ← Carry Firm Origin
                </Pty>
           </Alloc>
        </AllocRpt>
```



7.7.5 Claim (Reject) Alert to Allocating Firm

Once the designated carry firm claims an allocation, the allocating firm will receive an alert message containing all trade and allocation information.

```
Rejected APS Allocation Alert Report (GCA Reject)
<FIXML>
    <AllocRpt
            TransTyp ="0"
                                                 ← AllocTransType=New
            Stat="0"
                                                 ← AllocStat=Accepted
            RptTyp="10"
                                                 ← Allocation Report Type=Reject
            RptID="500001"
                                                 ← Rpt ID (Clearing generated Allocation ID)
            BizDt="2004-05-14"
                                                 ← Clearing Business Date
            TrdDt="2003-01-13"
                                                 ← Trade Date
            Qty="100"
                                                 ← Allocation Qty
            TrdTyp="0"
                                                 ← Trade Type
            TrdSubTyp="8"
                                                 ← Trade Sub Type
            MLegRptTyp="2"
                                                 ← Single Leg of multi-leg trade
            Side="1"
                                                 ← Buy/Sell (Buy)
            SesSub="P"
                                                 ← TradeVenue
            InptDev="API"
                                                 ← API/UI Indicator
            MsgEvtSrc="MQM"
                                                 ← MessageEventSource
            AvgPxInd="2"
                                                 ← AveragePriceInd
            RndPx="1097.00"
                                                 ← Rounded Price
            AvgPx="1097.55625"
                                                 ← Average Price
            TxnTm="2007-02-26T08:15:00" >
                                                 ← Execution Time
        <Hdr
             Snt = "2007-02-26T08:20:00-05:00"
                                                 ← Message Time
             TID = "123"
                                                 ← Target Firm ID
             TSub = "CME"
                                                 ← Target Firm Exchange
             SID="CME" />
                                                 ← Sender ID
         <OrdAlloc
           CIOrdID="A456721" />
                                                 ← Order Number
         <Instrmt
              Exch="CME"
                                                 ← ProductExchange
              ID="SP"
                                                 ← ProductCode
              CFI="FXXXXXX"
              MMY="200703"/>
                                                 ← ProductPeriod
           <Pty ID="CME" R="22"/>
                                                 ← Allocating Firm Exchange
           <Pty ID="123" R="1"/>
                                                 ← Allocating Firm
           <Pty ID="ABC" R="2" />
                                                 ← Executing Broker
            <Pty ID="123456" R="24" >
                                                 ← Customer Account
                 <Sub ID="1" Typ="26"/>
                                                 ← Origin
         <Amt Typ="CRES" Amt=".25" Ccy="USD" />
                                                         ← Residual Amount
         <Alloc
              IndAllocID="10001"
                                                 ← Allocation ID (Firm generated sent in GC)
              IndAllocID2="500001"
                                                 ← Allocation ID (Clearing generated)
              Qty="100"
                                                 ← Allocation Qty
              CustCpcty="4">
                                                 ← CTI Code
              <Pty ID="CME" R="22" />
                                                 ← Carry Firm Exchange
```



```
Rejected ACS Allocation Alert Report (GCA Reject)
<FIXML>
    <AllocRpt
            BizDt="2006-12-26"
                                                 ← Clearing Business Date
                MsgEvtSrc="CMESys"
                                                 ← Message Source (CME Systems)
                TxnTm="2006-12-26T10:37:25-06:00"
                                                          ← Execution Time
                                                 ← API/UI Indicator
                InptDev="API"
                TrdSubTyp="5"
                                                 ← 5= Offset due to an allocation
                RptTyp="10"
                                                 ← RptType=Reject
                AvgPx="1430.25"
                                                 ← Group Price
                RptID="500562"
                                                ← Trade ID (to be replaced by TrdID)
                TrdID="500562"
                                                ← Trade ID
                Side="2"
                                                ← Buy/Sell
                ID="500562"
                                                ← Firm Group ID (Firm supplied)
                Stat="0"
                                                ← AllocStat=Accepted
                TransTyp="0"
                                                ← AllocTransType=Replace
                Qty="9"
                                                ← Allocation Qtv
                TrdDt="2006-12-26"
                                                ← TradeDate
                                                 ← TradeVenue
                SesSub="E"
                SesID="RTH">
                                                ← Session is during RTH
           <Hdr
                Snt="2006-12-26T10:37:25-06:00" ← Message Time
                SID="CME"
                                                 ← Sender ID
                TID="770"
                                                 ← Target Firm ID
                SSub="CME"
                                                  ← Sending Firm Exchange
                TSub="CME"/>
                                                 ← Target Firm Exchange
           <OrdAlloc
                CIOrdID="0006M1B0"/>
                                                 ← Order Number
           <Instrmt
                ID="ES"
                                                  ← ProductCode
                CFI="FFICSO"
              MMY="200703"
                                                 ← ProductPeriod
                Exch="CME"/>
                                                 ← ProductExchange
                                                ← Carry Firm Exchange
                <Pty ID="CME" R="21"/>
                <Pty ID="CME" R="22"/>
                                                ← Carry Firm Exchange
                <Pty ID="770" R="1"/>
                                                ← Carry Firm
                <Pty ID="50036933" R="24">
                                                ← Carry Firm Account
                        <Sub ID="1" Typ="26"/>
                                                ← Origin
                </Ptv>
                <Pty ID="7G2L" R="12"/>
                <Pty ID="2464" R="44"/>
           <Alloc
                IndAllocID2="500563"
                                                 ← Allocation ID (Clearing Assigned
                CustCpcty="4"
                                                 ← CTI Code
                Qty="9">
                                                 ← Allocation Qty
                <Pty ID="CME" R="22"/>
                                                ← Carry Firm Exchange
                <Pty ID="102" R="1"/>
                                                 ← Carry Firm
                                                ←Carry Firm Customer Account
                <Pty ID=" 50036933" R="24">
                <Sub ID="1" Typ="26"/>
            </Ptv>
           </Alloc>
        </AllocRpt>
```



- All allocation accept or reject confirmations will have "TranTyp" enumeration of "0" (New) and an "Stat" of either "0" (Accepted) or "1" (Rejected) and a 'Typ' of either "9" (Accept) or "10" (Reject). All trade information is supplied on an Accepted Allocation Alert.
- The allocation accept or reject alert can be differentiated from a confirm of an accept or reject request by the presence of the "Typ" attribute with an enumeration of either "9" (Accept) or "10" (Reject).



7.8 Update Allocations

7.8.1 Update Allocation Request from Allocating Firm (GA Chg)

The Allocating firm can update an un-accepted or rejected allocation. The Allocating uses the clearing system assigned Allocation ID in the Alloc Block to specify which allocation should be updated and the clearing system assigned Group ID.

```
Allocating Firm Update APS Allocation Request (GA Chg)
<FIXML>
    <AllocInstrctn
             TransTyp ="1"
                                                 ← AllocTransType=Replace
             Typ="2"
                                                 ← Alloc Type=Preliminary
             ID="1000"
                                                 ← Firm Group ID (Firm supplied)
            ID2 ="3001"
                                                 ← Specific Group ID ClearingGenerated
             TrdDt="2004-05-14"
                                                 ← TradeDate
             Qty="100"
                                                  ← Allocation Qty
             TrdTvp="0"
                                                 ← TradeType
             MLegRptTyp="1"
                                                 ← Single Leg of multi-leg trade
             Side="1"
                                                 ← BuySell(Buy)
             SesSub="P"
                                                 ← TradeVenue
             InptDev="API"
                                                 ← API/UI Indicator
            MsgEvtSrc="MQM"
                                                 ← MessageEventSource
                                                 ← AveragePriceInd
             AvgPxInd="2">
        <Hdr
             Snt = "2007-02-26T08:20:00-05:00"
                                                 ← Message Time
             SSub = "CME"
                                                 ← Sending Firm Exchange
             SID="092" />
                                                 ← Sender ID
        <Instrmt
              Exch="CME"
                                                 ← ProductExchange
              ID="SP"
                                                 ← ProductCode
              CFI="FXXXXXX"
              MMY="200703"/>
                                                 ← ProductPeriod
        <Pty ID="CME" R="22" />
                                                 ← GiveupExchange
        <Pty ID="123" R="1" />
                                                 ← GiveupFirm
        <Pty ID="DEF" R="2" />
                                                 ← GiveupBroker
       <Alloc
             IndAllocID="10001"
                                                 ← Allocation ID (Firm supplied)
             IndAllocID2="500001"
                                                 ← Allocation ID (Clearing Assigned
             Qty="100"
                                                  ← Allocation Qty
             CustCpcty="4">
                                                 ← CTI Code
             <Ptv ID="CME" R="22" />
                                                 ← Carry Firm Exchange
             <Ptv ID="789" R="1"/>
                                                 ← Carry Firm
             <Ptv ID="G104A" R="24">
                                                 ← Carry Firm Account
                <Sub ID="1" Typ="26"/>
                                                 ← Origin
        </Alloc>
    </AllocInstrctn>
  </FIXML>
```



```
AvgPx="0.8333"
                                                      ← Group Price
                RptID="500035"
                                                      ← Trade ID (to be replaced by TrdID)
                Side="1"
                                                      ← BuySell(Buy)
                ID="500035"
                                                      ← Carry Firm
                TransTyp="1"
                                                      ← AllocTransType=Replace
                Qty="1"
                                                      ← Allocation Qty
                TrdDt="2007-04-19"
                                                      ← TradeDate
                SesSub="E"
                                                      ← TradeVenue
                SesID="ETH">
                                                      ← Session is during ETH
             <Hdr
                Snt="2007-04-19T15:12:48-05:00"
                                                       ← Message Time
                SID="770"
                                                      ← Sender ID
                                                      ← Sending Firm Exchange
                SSub="CME" />
             <OrdAlloc
                CIOrdID="818C8D2D"/>
             <Instrmt
                ID="E1"
                                                      ← Carry Firm
                CFI="FFCPSO"
              MMY="200706"
                                                      ← ProductPeriod
              Exch="CME"/>
                                                      ← ProductExchange
                                                      ← Allocating Firm Exchange
             <Pty ID="CME" R="21"/>
                                                      ← Allocating Firm Exchange
             <Pty ID="CME" R="22"/>
                                                      ← Carry Firm
             <Pty ID="770" R="1"/>
             <Pty ID="50052039" R="24
                                                     ← GiveupFirm
                <Sub ID="1" Typ="26"/>
             </Pty>
             <Pty ID="7G0L" R="12"/>
             <Pty ID="DAWN-ALR" R="44"/>
             <Alloc
                IndAllocID2="500036"
                                                     ← Allocation ID (Clearing Assigned
                CustCpcty="4"
                                                     ← CTI Code
                Qty="1">
                                                     ← Allocation Qty
                                                     ← Allocating Firm Exchange
             <Pty ID="CME" R="22"/>
             <Pty ID="805" R="1"/>
                                                     ← Carry Firm
             <Pty ID=" CARRY" R="24">
                <Sub ID="1" Typ="26"/>
             </Pty>
           </Alloc>
       </AllocInstrctn>
</FIXML>
```



7.8.2 Update Allocation from Carry Firm (Post Claim) (GC Chg)

The Carry firm can change non-critical fields after they have claimed the allocation. The Carry firm will have to send the Specific Allocation ID and the Firm information that they are referring to.

```
Update Allocation Request from Carry Firm for both APS and ACS (GC Chg)
<FIXML>
    <AllocRptAck
            ID="1000"
            RptID="500102"
                                                 ← Rpt ID (Clearing generated Allocation ID)
            TransTyp ="1"
                                                 ← AllocTransType = Replace
            RptTyp="8"
                                                 ← Allocation Report Type=Request
            Side="1"
                                                 ← Buy/Sell (Buy)
            Qty="100"
                                                 ← Group Quantity
            TrdDt="2003-01-13"
                                                 ← TradeDate
            MsgEvtSrc="MQM">
        <Hdr
             Snt = "2007-02-26T08:20:00-05:00"
                                                 ← Message Time
             SSub="CME"
                                                  ← Sender Firm Exchange ID
             SID="456" />
                                                 ← Sender ID
            <Pty ID="CME" R="22"/>
                                                 ← Allocating Firm Exchange
            <Pty ID="123" R="1"/>
                                                 ← Allocating Firm
         <AllocAck
              IndAllocID2="500102"
              Qty="100"
                                                 ← Allocation Quantity
                                                 ← CTI Code (CTI Change)
              CustCpcty="5">
              <Pty ID="CME" R="22" />
                                                 ← Carry Firm Exchange
              <Pty ID="456" R="1"/>
                                                 ← Carry Firm
              <Pty ID="G104A" R="24">
                                                 ← Carry Account
                   <Sub ID="2" Typ="26"/>
                                                 ← Origin (Origin change from 1 to 2)
               </Ptv>
           </AllocAck>
    </AllocRptAck>
</FIXML>
```



7.8.3 Update Allocation Confirmation to Carry Firm (GCC Chg)

```
Update Allocation Confirmation to Carry Firm for APS and ACS (GCC Chg)
<FIXML>
    <AllocRpt
           RptID="500102"
                                                 ← Rpt ID (Clearing generated Allocation ID)
           ID="1000"
                                                 ← APS Group ID
            TransTyp ="1"
                                                 ← AllocTransType=Replace
            Stat="0"
                                                 ← AllocStat=Accepted
            RptTyp="12"
                                                 ← Allocation Report Type=Complete
            Side="1"
                                                 ← Buy/Sell (Buy)
            BizDt="2004-05-14"
                                                 ← Clearing Business Date
            Qty="100"
                                                 ← GroupQuantity
            TrdDt="2003-01-13"
                                                 ← TradeDate
                                                 ← API/UI Indicator
            InptDev="API"
            MsgEvtSrc="MQM">
        <Hdr
            Snt = "2007-02-26T08:20:00-05:00"
                                                 ← Message Time
             TSub="CME"
                                                 ← Target Firm Exchange ID
            TID="456"
                                                 ← Target Firm ID
             SID="CME" />
                                                 ← Sender ID
         <Instrmt
              Exch="CME"
                                                 ← ProductExchange
              ID="SP"
                                                 ← ProductCode
              CFI="FXXXXXX"
              MMY="200703"/>
                                                 ← ProductPeriod
                                                 ← Allocating Firm Exchange
           <Pty ID="CME" R="22"/>
           <Pty ID="123" R="1"/>
                                                 ← Allocating Firm
         <Alloc
              IndAllocID2="500102"
                                                 ← Carry Firm Individual Alloc ID (Provided
                                                 to them by the Clearing System)
              Qty="100"
                                                 ← Allocation Quantity
                                                 ← CTI Code (CTI Change)
              CustCpcty="5">
              <Pty ID="CME" R="22" />
                                                 ← Carry Firm Exchange
              <Pty ID="456" R="1"/>
                                                 ← Carry Firm
              <Pty ID="G104A" R="24">
                                                 ← Carry Account
                   <Sub ID="2" Typ="26"/>
                                                 ← Origin (Origin change from 1 to 2)
               </Pty>
           </Alloc>
    </AllocRpt>
</FIXML>
```



7.9 Reversing Allocations

The claiming firm can request that an accepted allocation be released on the same day that the allocation is accepted. After the allocation is cleared it can only be released / reversed by a request from the allocating firm. The Clearing System determines if it is a release or a reversal based on the Clearing date and the Trade date and the Allocation Ids.

```
Release Request from Carry Firm (APS/ACS) (GI)
<FIXML>
    <AllocInstrctn
            TransTyp ="6"
                                                ← AllocTransType = Reversal/Release
            Typ="8"
                                                ← Alloc Type=Request
            IĎ="1000"
            Side="1"
                                                 ← Buy/Sell (Buy)
            Qty="100"
                                                 ← Group Quantity
            TrdDt="2003-01-13"
                                                 ← TradeDate
            MsgEvtSrc="MQM">
        <Hdr
            Snt = "2007-02-26T08:20:00-05:00"
                                                 ← Message Time
            SSub="CME"
                                                  ← Sender Firm Exchange ID
             SID="456" />
                                                 ← Sender ID
         <Instrmt
              Exch="CME"
                                                 ← ProductExchange
              ID="SP"
                                                 ← ProductCode
              CFI="FXXXXX"
              MMY="200703"/>
                                                 ← ProductPeriod
            <Pty ID="CME" R="22"/>
                                                 ← Allocating Firm Exchange
            <Pty ID="123" R="1" />
                                                 ← Allocating Firm
         <Alloc
              IndAllocID2="500102"
                                                 ← Clearing Assigned ID
              Qty="100"
                                                 ← Allocation Quantity
              CustCpcty="5">
                                                 ← CTI Code (CTI Change)
              <Pty ID="CME" R="22" />
                                                 ← Carry Firm Exchange
              <Pty ID="456" R="1"/>
                                                 ← Carry Firm
              <Pty ID="G104A" R="24">
                                                 ← Carry Account
                   <Sub ID="1" Typ="26"/>
                                                 ← Origin
               </Pty>
           </Alloc>
   </AllocInstrctn>
</FIXML>
```

```
Reverse Request from Allocating Firm (APS/ACS)(GI)
<FIXML>
        <AllocInstrctn
                 BizDt="2007-04-18"
                                                        ← Clearing Business Date
             TxnTm="2007-04-18T17:01:48-05:00"
                                                        ← Execution Time
             InptDev="API"
                                                        ← API/UI Indicator
             Typ="8"
                                                        ← Alloc Type=Request
             AvgPx="0.09065"
                                                        ← Group Price
             RptID="500196"
                                                        ← Rpt ID (Clearing generated Allocation
             ID)
             Side="2"
                                                        ← Buv/Sell (sell)
             ID="500196"
                                                        ← APS Group ID
                                                        ← AllocTransType = Reversal/Release
             TransTvp="6"
             Qty="22"
                                                        ← Group Quantity
             TrdDt="2007-04-18"
                                                        ← TradeDate
```



```
SesSub="E"
                                                      ← TradeVenue
            SesID="RTH">
                                                      ← Session is during RTH
     <Hdr
            Snt="2007-04-18T17:01:48-05:00"
             SID="505"
                                                      ← Sender ID
            SSub="CME" />
                                                      ← Sender Firm Exchange ID
<OrdAlloc
             CIOrdID="V-15"/>
                                                     ← Order Number
<Instrmt
              ID="MP"
                                                     ← ProductCode
               CFI="FFCPSO"
                                                     ← CFI
              MMY="200706"
                                                     ← ProductPeriod
              Exch="CME"/>
                                                     ← ProductExchange
               <Pty ID="CME" R="21"/>
                                                     ← Carry Firm Exchange
               <Pty ID="CME" R="22"/>
                                                     ← Carry Firm Exchange
               <Pty ID="505" R="1"/>
                                                     ← Carry Firm
               <Pty ID="MFT" R="24">
                                                     ← ProductCode
                <Sub ID="1" Typ="26"/>
                                                     ← Origin
                <Pty ID="VSOP" R="12"/>
                <Alloc
                                                     ← Clearing Assigned ID
                IndAllocID2="500197"
                                                     ← CTI Code (CTI Change)
                CustCpcty="4"
                Qty="22">
                                                     ← Allocation Quantity
                <Pty ID="CME" R="22"/>
                                                     ← Carry Firm Exchange
                <Pty ID="660" R="1"/>
                                                     ← Carry Firm
                                                     ← Carry Account
                <Pty ID="MFT" R="24">
                <Sub ID="1" Typ="26"/>
                                                     ← Origin
               </Pty>
                </Alloc>
       </AllocInstrctn>
</FIXML>
```



7.9.1 Release Request Confirm to Carry Firm (GIC)

```
Release Request Confirm to Carry Firm (GIC)
<FIXML>
    <AllocRpt
            TransTyp ="6"
                                                  ← AllocTransType = Reversal/Release
            Stat="3"
                                                 ← AllocStat=Received
            RptTyp="8"
                                                  ← Alloc Report Type=Request
            RptID="500102"
                                                 ← Report ID
            Side="1"
                                                 ← Buy/Sell (Buy)
                                                 ← Clearing Business Date
            BizDt="2004-05-14"
                                                 ← GroupQuantity
            Qty="100"
            TrdDt="2003-01-13"
                                                  ← TradeDate
                                                 ← API/UI Indicator
            InptDev="API"
            MsgEvtSrc="MQM">
        <Hdr
             Snt = "2007-02-26T08:20:00-05:00"
                                                 ← Message Time
             TID="456"
                                                 ← Target ID
            TSub="CME"
                                                  ← Target Firm Exchange ID
            SID="CME" />
                                                 ← Sender ID
          <Instrmt
              Exch="CME"
                                                 ← ProductExchange
              ID="SP"
                                                 ← ProductCode
              CFI="FXXXXXX"
                                                 ← ProductPeriod
              MMY="200703"/>
           <Pty ID="CME" R="22"/>
                                                 ← Allocating Firm Exchange
           <Pty ID="123" R="1" />
                                                 ← Allocating Firm
         <Alloc
              IndAllocID2="500102"
                                                 ← Carry Firm Individual Alloc ID (Provided
                                                 to them by the Clearing System)
              Qty="100"
                                                 ← Allocation Quantity
              CustCpcty="5">
                                                 ← CTI Code (CTI Change)
              <Pty ID="CME" R="22" />
                                                 ← Carry Firm Exchange
              <Pty ID="456" R="1"/>
                                                 ← Carry Firm
              <Pty ID="G104A" R="24">
                                                 ← Carry Account
                   <Sub ID="1" Typ="26"/>
                                                 ← Origin
               </Ptv>
           </Alloc>
   </AllocRpt>
</FIXML>
```



```
Reverse Request Confirm to Carry Firm (ACS) (GIC)
<FIXML>
       <AllocRpt
                BizDt="2007-04-18"
                                                     ← Clearing Business Date
                MsgEvtSrc="CMESys"
                TxnTm="2007-04-19T17:29:29-05:00"
                                                     ← Execution Time
                InptDev="API"
                                                     ← API/UI Indicator
                TrdSubTyp="5"
                                                      ← 5= Offset due to an allocation
                RptTyp="8"
                                                  ← Alloc Report Type=Request
                AvgPx="0.09065"
                                                 ← Group Price
                RptID="500196"
                                                ← Rpt ID (Clearing generated Allocation ID)
                Side="2"
                                                 ← Buy/Sell (sell)
                ID="500196"
                                                 ← ProductCode
                Stat="3"
                                                 ← AllocStat=Received
                TransTyp="6"
                                                 ← AllocTransType = Reversal/Release
                Qtv="22"
                                                 ← GroupQuantity
                TrdDt="2007-04-18"
                                                 ← TradeDate
                SesSub="E"
                                                 ← TradeVenue
                SesID="RTH">
                                                 ← Session is during RTH
<Hdr
                Snt="2007-04-19T17:29:29-05:00" ← Message Time
                                                 ← Sender ID
                SID="CME"
                TID="505"
                                                 ← Target ID
                SSub="CME"
                                                 ← Sender Firm Exchange ID
                TSub="CME"/>
                                                 ← Target Firm Exchange ID
<OrdAlloc
                CIOrdID="V-15"/>
                                                 ← Order Number
           <Instrmt
                ID="MP"
                                                 ← ID (Firm Group ID)
                CFI="FFCPSO"
                MMY="200706"
                                                  ← ProductPeriod
                Exch="CME"/>
                                                  ← ProductExchange
           <Ptv
                ID="CME"
                                                 ← ProductCode
                                                 ← Allocating Firm Exchange
                R="21"/>
           <Pty
               ID="CME"
                R="22"/>
                                                 ← Allocating Firm Exchange
           <Pty
                ID="505"
                R="1"/>
                                                 ← Allocating Firm Exchange
              ID="MFT"
                                                 ← ProductCode
                R="24">
                                                 ← Allocating Firm Exchange
   <Sub ID="1" Typ="26"/>
                                                 ← Origin
    </Pty>
                <Pty ID="VSOP" R="12"/>
           <Alloc
                IndAllocID2="500197"
                                                 ← Carry Firm Individual Alloc ID
                CustCpcty="4"
                                                 ← CTI Code (CTI Change)
                Qtv="22">
                                                 ← Allocation Quantity
                <Pty ID="CME" R="22"/>
                                                 ← Carry Firm Exchange
                <Pty ID="660" R="1"/>
                                                 ← Carry Firm
                   MFT" R="24">
                                                 ← Carry Account
       Ptv ID="
                       <Sub ID="1" Typ="26"/>
                                                 ← Origin
                </Alloc>
       </AllocRpt>
```



7.10 Sub Allocations/ Third Party Allocations by Carry Firm

7.10.1 Sub Allocation request from Carry Firm

The carry firm communicates sub-allocation or third-party allocation requests using the Allocation Instruction message. The original claiming firm specifies the sub allocating firm / third party information in an allocation block. In the first allocation block the original claim firm identifies the original allocation it claimed. All subsequent allocation blocks are used to indicate the third-party or sub-allocation instructions.

```
Carry Firm Sub Allocates a Claimed Allocation (ACS/APS) (GC)
<FIXML>
     <AllocInstrctn
            TransTyp ="1"
                                                 ← AllocTransType = Replace
            Typ="8"
                                                 ← Alloc Type=Request
            Side="1"
                                                 ← Buy/Sell (Buy)
            ID="1000"
                                                 ← ID (Firm Group ID)
            ID2="1001"
                                                  ← ID2 (Clearing generated APS ID)
            Qty="100"
                                                 ← Group Quantity
            TrdDt="2003-01-13"
            MsgEvtSrc="MQM">
        <Hdr
             Snt = "2007-02-26T08:20:00-05:00"
                                                 ← Message Time
             SSub="CME"
                                                  ← Sender Firm Exchange ID
             SID="456" />
                                                 ← Sender ID
         <Instrmt
              Exch="CME"
                                                 ← ProductExchange
              ID="SP"
                                                 ← ProductCode
              CFI="FXXXXXX"
                                                 ← ProductPeriod
              MMY="200703"/>
            <Pty ID="CME" R="22"/>
                                                 ← Allocating Firm Exchange
            <Pty ID="123" R="1"/>
                                                 ← Allocating Firm
         <Alloc
              IndAllocID2="500102"
                                                 ← Clearing Assigned ID
              Qty="100"
                                                 ← Allocation Quantity
              CustCpcty="5">
                                                 ← CTI Code (CTI Change)
              <Ptv ID="CME" R="22" />
                                                 ← Carry Firm Exchange
              <Pty ID="456" R="1"/>
                                                 ← Carry Firm
              <Pty ID="G104A" R="24">
                                                 ← Carry Account
                   <Sub ID="1" Typ="26"/>
                                                 ← Origin
               </Pty>
           </Alloc>
         <Alloc
              Qty="100"
                                                 ← Allocation Quantity
              CustCpcty="5">
                                                 ← CTI Code (CTI Change)
              <Pty ID="CME" R="22" />
                                                 ← Carry Firm Exchange
              <Pty ID="456" R="1"/>
                                                 ← Carry Firm
              <Pty ID="G104B" R="24">
                                                 ← Carry Account
                   <Sub ID="2" Typ="26"/>
                                                 ← Origin
               </Pty>
           </Alloc>
    </AllocInstrctn>
</FIXML>
```



7.10.2 Sub Allocation request confirm from Clearing System

The clearing firm acknowledges the Sub allocation request with a status of received. The clearing system treats this as a new allocation request. A new group is created and the carry firm is notified. Allocation request confirm is sent to the carry firm and an allocation alert is sent to the sub allocating firm.

```
Clearing System Acknowledges the Sub Allocation request (APS/ACS) (GCC)
<FIXML>
     <AllocRpt
                                                 ← AllocTransType = New
            TransTyp = "0"
            Stat="3"
                                                 ← Alloc Stat=Received
            RptTyp="2"
                                                  ← Alloc Report Type=Preliminary
            Side="1"
                                                 ← Buy/Sell (Buy)
            Qty="100"
                                                 ← Group Quantity
            TrdDt="2003-01-13"
            MsgEvtSrc="MQM"
            RptID = "500102" >
                                                  ← Report ID
        <Hdr
             Snt = "2007-02-26T08:20:00-05:00"
                                                 ← Message Time
             TID = "123"
                                                 ← TargetID
                                                 ← Target Firm Exchange
             TSub = "CME"
             SID="456" />
                                                 ← Sender ID
         <Instrmt
              Exch="CME"
                                                 ← ProductExchange
              ID="SP"
                                                 ← ProductCode
              CFI="FXXXXXX"
              MMY="200703"/>
                                                 ← ProductPeriod
            <Pty ID="CME" R="22"/>
                                                 ← Allocating Firm Exchange
            <Pty ID="123" R="1"/>
                                                 ← Allocating Firm
         <Alloc
              IndAllocID2="500102"
                                                 ← Clearing Assigned ID
              Qty="100"
                                                 ← Allocation Quantity
              CustCpcty="5">
                                                 ← CTI Code (CTI Change)
              <Ptv ID="CME" R="22" />
                                                 ← Carry Firm Exchange
              <Ptv ID="456" R="1"/>
                                                 ← Carry Firm
              <Ptv ID="G104A" R="24">
                                                 ← Carry Account
                    <Sub ID="1" Typ="26"/>
                                                 ← Origin
               </Pty>
           </Alloc>
         <Alloc
              Qty="100"
                                                 ← Allocation Quantity
              CustCpcty="5">
                                                 ← CTI Code (CTI Change)
              <Pty ID="CME" R="22" />
                                                 ← Carry Firm Exchange
              <Pty ID="456" R="1"/>
                                                 ← Carry Firm
              <Pty ID="G104B" R="24">
                                                 ← Carry Account
                   <Sub ID="2" Typ="26"/>
                                                 ← Origin
               </Pty>
           </Alloc>
    </AllocRpt>
</FIXML>
```



7.11 Transfers done thru Clearing UI

7.11.1 Transfer Add Acknowledgement to the executing Firm

The clearing system acknowledges each trade submission from the UI with a Trade Capture Report. This is an add Acknowledgement of a Transfer trade submitted thru the UI to the executing firm.

```
Trade Capture Report Confirm for a Transfer (Add)
<?xml version="1.0" encoding="UTF-8" ?>
<FIXML>
     <TrdCaptRpt
         RptID="10001"
                                                 ← Trade ID for the Executing Firm
         RptTyp="0"
                                                 ← Trade Report Type 0=Submit
         TransTyp="0"
                                                 ← TransTyp=New
         TrdRptStat="0"
                                                 ← Trade Report Status 0=Accepted
         TrdTyp="3"
                                                 ← TradeType 3=Transfer
         MLegRptTyp="1"
         TrnsfrRsn="E"
                                                 ← This is the Order Type in TREX
         MtchStat="1"
                                                 ← MtchStat 1=Unmatched
                                                 ← Trade Price
         LastPx="1098.00"
         TxnTm="2007-02-26T08:15:00"
                                                 ← Execution Time
         LastQty="150"
                                                 ← Trade Quantity
         BizDt="2004-05-14"
                                                 ← Clearing Business Date
         TrdDt="2007-02-26"
                                                 ← Trade Date
         AvaPx="1098.4352"
                                                 ← Average Price (for future use)
                                                 ← MessageEventSource=CME System
         MsgEvtSrc="CMESys">
         <Hdr
              Snt = "2007-02-26T08:20:00-05:00" ← Message Time
              TID="123"
                                                 ← Target Firm ID (Executing Firm)
              TSub="CME"
                                                 ← Target Firm Exchange
              SID="CME" />
                                                 ← Sender ID
          <Instrmt
              Exch="CME"
                                                 ← ProductExchange
              ID="SP"
                                                 ← ProductCode
              CFI="FXXXXXX"
                                                 ← ProductPeriod
              MMY="200703"/>
         <a href="Amt Typ="CRES" Amt=".25" Ccy="USD" />
                                                         ← Residual Amount (Optional)
         <RptSide
              CustCpcty="4"
              Side="1"
              CIOrdID=" A456721"
              SesID="RTH"
                                                 ← Business Cycle
              SesSub="X">
                                                 ← Venue is X-Pit
              <Pty ID="CME" R="21"/>
                                                 ← Clearing Org
              <Pty ID="CME" R="22"/>
                                                 ← Exchange
              <Pty ID="123" R="1">
                                                 ← Executing Firm (Required)
                                                 ← Customer Acct Firm (Required)
              <Pty ID="12345" R="24">
                  <Sub ID="1" Typ="26"/>
                                                 ← Origin (Required)
              <Pty ID="ABC" R="12"/>
                                                 ← Executing Trader (Optional)
              <Pty ID="CME" R="42"/>
                                                 ← Contra Exchange
              <Pty ID="350" R="17"/>
                                                 ← Opposite Firm (Required)
         </RptSide>
    </TrdCaptRpt>
    </FIXML>
```



7.11.2 Transfer Claim Acceptance from the Claim Firm

When the Claim firm accepts the trade thru the Clearing System UI, they receive a TradeCaptRpt acknowledging the Match and Claim.

```
Trade Capture Report Acceptance for a Transfer (Change)
<?xml version="1.0" encoding="UTF-8" ?>
<FIXML>
     <TrdCaptRpt
         RptID="20001"
                                                ← Trade ID
                                                ← Trade Report Type 2=Accept
         RptTyp="2"
         TransTyp="2"
                                                ← TransTyp=Change
         TrdRptStat="0"
                                                ← Trade Report Status 0=Accepted
         TrdTyp="3"
                                                ← TradeType 3=Transfer
         MLegRptTyp="1"
         TrnsfrRsn="E"
                                                ← This is the Order Type in TREX
         MtchStat="0"
                                                ← MtchStat 0=Match
         LastPx="1098.00"
                                                ← Trade Price
         TxnTm="2007-02-26T08:15:00"
                                                ← Execution Time
         LastQty="150"
                                                ← Trade Quantity
         BizDt="2004-05-14"
                                                ← Clearing Business Date
         TrdDt="2007-02-26"
                                                ← Trade Date
                                                ← MessageEventSource=CME System
         MsgEvtSrc="CMESys">
         <Hdr
              Snt = "2007-02-26T08:20:00-05:00" ← Message Time
              TID="350"
                                                ← Target Firm ID (Executing Firm)
              TSub="CME"
                                                ← Target Firm Exchange
              SID="CME" />
                                                ← Sender ID
         <Instrmt
              Exch="CME"
                                                ← ProductExchange
              ID="SP"
                                                ← ProductCode
              CFI="FXXXXXX"
              MMY="200703"/>
                                                ← ProductPeriod
         <Amt Typ="CRES" Amt=".25" Ccy="USD" />
                                                        ← Residual Amount (Optional)
         <RptSide
              CustCpcty="4"
              Side="1"
              CIOrdID=" A456721"
              SesID="RTH"
                                                ← Business Cycle
              SesSub="X">
                                                ← Venue is X-Pit
              <Pty ID="CME" R="21"/>
                                                ← Clearing Org
              <Pty ID="CME" R="22"/>
                                                ← Exchange
              <Pty ID="123" R="1"/>
                                                ← Executing Firm (Required)
                                                ← Customer Acct Firm (Optional)
              <Pty ID="12345" R="24">
                                                ← Origin (Optional)
                  <Sub ID="1" Typ="26"/>
              <Ptv ID="ABC" R="12"/>
                                                ← Executing Trader (Optional)
              <Pty ID="CME" R="42"/>
                                                ← Contra Exchange (Required)
              <Pty ID="350" R="17">
                                                ← Opposite Firm (Required)
              <Ptv ID="67890" R="24">
                                                ← Customer Acct Firm (Required)
                 <Sub ID="2" Typ="26"/>
                                                ← Origin (Required)
              <Ptv ID="BAT" R="37"/>
                                                ← Opposite Trader (Optional)
         </RptSide>
    </TrdCaptRpt>
    </FIXML>
```



7.11.3 Transfer Claim Acceptance Alert to the Executing Firm

When the Claim firm accepts the trade thru the Clearing System UI, the executing firm receives an alert of the Claim.

```
Trade Capture Report Acceptance Alert of the Transfer (Change)
<?xml version="1.0" encoding="UTF-8" ?>
<FIXML>
     <TrdCaptRpt
         RptID="10001"
                                                 ← Trade ID
                                                 ← Trade Report Type 2=Accept
         RptTyp="2"
         TransTyp="2"
                                                ← TransTyp=Change
         TrdRptStat="0"
                                                 ← Trade Report Status 0=Accepted
         TrdTyp="3"
                                                ← TradeType 3=Transfer
         MLegRptTyp="1"
         TrnsfrRsn="E"
                                                ← This is the Order Type in TREX
         MtchStat="0"
                                                ← MtchStat 0=Match
         LastPx="1098.00"
                                                ← Trade Price
         TxnTm="2007-02-26T08:15:00"
                                                ← Execution Time
         LastQty="150"
                                                ← Trade Quantity
         BizDt="2004-05-14"
                                                ← Clearing Business Date
         TrdDt="2007-02-26"
                                                ← Trade Date
                                                ← MessageEventSource=CME System
         MsgEvtSrc="CMESys">
         <Hdr
              Snt = "2007-02-26T08:20:00-05:00" ← Message Time
              TID="123"
                                                ← Target Firm ID (Executing Firm)
              TSub="CME"
                                                ← Target Firm Exchange
              SID="CME" />
                                                ← Sender ID
         <Instrmt
              Exch="CME"
                                                ← ProductExchange
              ID="SP"
                                                ← ProductCode
              CFI="FXXXXXX"
              MMY="200703"/>
                                                ← ProductPeriod
         <Amt Typ="CRES" Amt=".25" Ccy="USD" />
                                                        ← Residual Amount (Optional)
         <RptSide
              CustCpcty="4"
              Side="1"
              CIOrdID=" A456721"
              SesID="RTH"
                                                ← Business Cycle
              SesSub="X">
                                                ← Venue is X-Pit
              <Pty ID="CME" R="21"/>
                                                ← Clearing Org
              <Pty ID="CME" R="22"/>
                                                ← Executing Exchange (Required)
              <Pty ID="123" R="1"/>
                                                ← Executing Firm (Required)
                                                ← Customer Acct Firm (Optional)
              <Pty ID="12345" R="24">
                                                ← Origin (Optional)
                  <Sub ID="1" Typ="26"/>
              <Ptv ID="ABC" R="12"/>
                                                ← Executing Trader (Optional)
              <Pty ID="CME" R="42"/>
                                                ← Contra Exchange (Required)
              <Pty ID="350" R="17">
                                                ← Opposite Firm (Required)
                                                ← Customer Acct Firm (Optional)
              <Ptv ID="67890" R="24">
                  <Sub ID="2" Typ="26"/>
                                                ← Origin (Optional)
              <Pty ID="BAT" R="37"/>
                                                ← Opposite Trader (Optional)
         </RptSide>
    </TrdCaptRpt>
    </FIXML>
```



7.11.4 Transfer Release Acceptance Confirm to the Executing Firm

When and Executing Firm accepts the transfer release from the UI the executing Firm gets a delete and the claim firm gets a

```
Trade Capture Report Release Acceptance Confirm of the Transfer
<?xml version="1.0" encoding="UTF-8" ?>
<FIXML>
     <TrdCaptRpt
         RptID="10001"
                                                 ← Trade ID
                                                 ← Trade Report Type 2=Accept
         RptTyp="2"
         TransTyp="2"
                                                ← TransTyp=Change
         TrdRptStat="0"
                                                 ← Trade Report Status 0=Accepted
         TrdTyp="3"
                                                ← TradeType 3=Transfer
         MLegRptTyp="1"
         TrnsfrRsn="E"
                                                ← This is the Order Type in TREX
         MtchStat="1"
                                                ← 1=Unmatch
         LastPx="1098.00"
                                                ← Trade Price
         TxnTm="2007-02-26T08:15:00"
                                                ← Execution Time
         LastQty="150"
                                                ← Trade Quantity
         BizDt="2004-05-14"
                                                ← Clearing Business Date
         TrdDt="2007-02-26"
                                                ← Trade Date
                                                ← MessageEventSource=CME System
         MsgEvtSrc="CMESys">
         <Hdr
              Snt = "2007-02-26T08:20:00-05:00" ← Message Time
              TID="123"
                                                ← Target Firm ID (Executing Firm)
              TSub="CME"
                                                ← Target Firm Exchange
              SID="CME" />
                                                ← Sender ID
         <Instrmt
              Exch="CME"
                                                ← ProductExchange
              ID="SP"
                                                ← ProductCode
              CFI="FXXXXXX"
              MMY="200703"/>
                                                ← ProductPeriod
         <Amt Typ="CRES" Amt=".25" Ccy="USD" />
                                                        ← Residual Amount (Optional)
         <RptSide
              CustCpcty="4"
              Side="1"
              CIOrdID=" A456721"
              SesID="RTH"
                                                ← Business Cycle
              SesSub="X">
                                                ← Venue is X-Pit
              <Pty ID="CME" R="21"/>
                                                ← Clearing Org
              <Pty ID="CME" R="22"/>
                                                ← Executing Exchange (Required)
              <Pty ID="123" R="1"/>
                                                ← Executing Firm (Required)
                                                ← Customer Acct Firm (Optional)
              <Pty ID="12345" R="24">
                                                ← Origin (Optional)
                  <Sub ID="1" Typ="26"/>
              <Ptv ID="ABC" R="12"/>
                                                ← Executing Trader (Optional)
              <Pty ID="CME" R="42"/>
                                                ← Contra Exchange (Required)
              <Pty ID="350" R="17">
                                                ← Opposite Firm (Required)
                                                ← Customer Acct Firm (Optional)
              <Ptv ID="67890" R="24">
                  <Sub ID="2" Typ="26"/>
                                                ← Origin (Optional)
              <Pty ID="BAT" R="37"/>
                                                ← Opposite Trader (Optional)
         </RptSide>
    </TrdCaptRpt>
    </FIXML>
```



8 Required Fields

8.1 Required Fields on Inbound Allocation Instruction Messages

Element	Attribute	Create	Allocation (GA)	Upda	ate Allocation	Alloc	ation Reversal	Comments	
				(GA Chg)		(GI)			
		Reqd (Y/N)	FIXML Value	Reqd (Y/N)	FIXML Value	Reqd (Y/N)	FIXML Value		
/AllocInstrctn/	@TransTyp	Y	@TransTyp="0" New	Y	@TransTyp="1" Replace	Y	@TransTyp="6" Reversal	The Allocation Trans Type.	
	@Тур	Y	@Typ="2" Preliminary	Y	@Typ="2" Preliminary	Y	@Typ="8" Request	N/A Allocation Type of the allocation. This is not set in messages	
	@Stat	N	N/A	N	N/A	N	N/A	N/A (Attribute is not set on messages sent by firms)	
	@ID	Y	@ID=value	Y	@ID=value	Y	@ID=value	If the firm generated APS ID is not provided it will be set to 0.	
	@ID2	Y	@ID=value	Y	@ID=value	Y	@ID=value	The Clearing System generated	
	@TrdDt	Y	@TrdDt=YYYY- MM-DD	Y	@TrdDt=YYYY- MM-DD	Y	@TrdDt=YYYY- MM-DD	The Trade date of the Trade	
	@TrdTyp	N		N		Y	@TrdTyp=value	This attribute is required if the allocation is a Specific allocation.	
	@TrdSubTyp	N	@TrdSubTyp= value	N	@TrdSubTyp= value	N	@TrdSubTyp= value	The Trade Subtype additionally qualifies the Trade.	
	@MlegRptTyp	N	@MlegRptTyp= value	N	@MlegRptTyp=val ue	N	@MlegRptTyp=val ue	Additionally the trade and instrument.	
	@CustCpcty	N		N		N			



Element	Attribute	Create	Allocation (GA)	Upda	ate Allocation	Alloc	ation Reversal	Comments	
					(GA Chg)		(GI)		
		Reqd (Y/N)	FIXML Value	Reqd (Y/N)	FIXML Value	Reqd (Y/N)	FIXML Value		
	@SesSub	N	@SesSub=valu e	N	@SesSub=value	N	@SesSub=value	This is the venue of the trade. If the allocation is a specific Allocation, it is required. (This is the trade venue). It is a fee specific attribute	
	@SesID	N	@SesID=value	N	@SesID=value	N	@SesID=value	This is te trading session.	
	@Qty	Y	@Qty=value	N	@Qty=value	N	@Qty=value	The allocation Quantity	
	@Side	Y	@Side=value	N	@Side=value	N	@Side=value		
	@MsgEvtSrc	Y	@MsgEvtSrc=" MQM"	Y	@MsgEvtSrc="MQ M"	Y	@MsgEvtSrc="MQ M"	The Source of the Message. The firm send a value of MQM always.	
	@InptDev	Y	@InptDev="API"	Y	@InptDev="API"	Y	@InptDev="API"	If the allocation is sent using an API this is set to "API".	
	@AvgPxInd	Y	1=Incomplete	Y	1=Incomplete	Y	2=Complete	The presence of this attribute implies that this is an APS Allocation.	
	@AvgPx	N	@AvgPx=value	N	@AvgPx=value	N	@AvgPx=value	The firm may provide the Average Price but will be ignored by Clearing	
	@RndPx	N	@AvgPx=value	N	@AvgPx=value	N	@AvgPx=value	The Rounded Average Price	
/AllocInstrctn/Hdr/	@Snt	Y		Y		Y		The firm sends the Message Time. Its is required for Audit purpose. The format is GMT or CST with an Offset.	
	@SID	Y	@SID=Firm ID	Y	SID=Firm ID	Υ	SID=Firm ID	The Firm will send its ID here	



Element	Attribute	Create	Allocation (GA)	Upda	ate Allocation	Alloc	ation Reversal	Comments
	'			((GA Chg)		(GI)	
		Reqd (Y/N)	FIXML Value	Reqd (Y/N)	FIXML Value	Reqd (Y/N)	FIXML Value	
	@SSub	Y	@SSub =Sending Firm Exchange	Y	@SSub =Sending Firm Exchange	Y	@SSub =Sending Firm Exchange	The Exchange of the sending Firm
/Allocinstrctn/instrmt/								Though this element is not required in Change and Reversal messages it is recommended sending it.
	@Exch	Y	@Exch=CME	N		N		The Product Exchange Code
			@Exch="CBT"					
	@ID	Y		N		N		The Product ID (as required by CME)
	@CFI	Y		N		N		Refer to CFI code
	@MMY	Y		N		N		
/AllocIInstrctn/Pty[1]/	@ID, @R	Y	ID ="value", R=22	Y	ID ="value", R=22	Y	ID ="value", R=22	Give-up Exchange
/AllocIInstrctn/Pty[2]/	@ID, @R	Y	ID ="value", R=1	Y	ID ="value", R=1	Y	ID ="value", R=1	Give-up Firm
/AllocIInstrctn/Pty[3]/	@ID, @R	N	ID ="value", R=2	N	ID ="value", R=2	N	ID ="value", R=2	Give-up Broker
/AllocInstrctn/Pty[3]/Sub/	@ID, @Typ	N	ID=value, Typ=26	N	ID=value, Typ=26	N	ID=value, Typ=26	Typ=26 is Account Type
/AllocInstrctn/Amt/		N		N		N		This element is Optional. This is used by the Clearing System to transmit the Residual Price
	@Тур	N	@Typ="CRES"	N	@Typ="CRES"	N	@Typ="CRES"	The Amount Type. The valid value for APS messages is "CRES"



Element	Attribute Create Allocation (GA)			Upda	ate Allocation	Alloc	ation Reversal	Comments
					(GA Chg)		(GI)	
		Reqd (Y/N)	FIXML Value	Reqd (Y/N)	FIXML Value	Reqd (Y/N)	FIXML Value	
	@Amt	N	@Amt=value	N	@Amt=value	N	@Amt=value	The Cash Residual Amount
	@Ссу	N	@Ccy=value	N	@Ccy=value	N	@Ccy=value	
/AllocInstrctn/Alloc/								This block is the Allocation Block.
	@IndAllocID	N	@IndAllocID=val ue	N	@IndAllocID=value	N	@IndAllocID=value	Firm supplied Allocation ID
	@IndAllocID2	N	@IndAllocID2=v alue	Y	@IndAllocID2=valu e	Y	@IndAllocID2=valu e	Clearing System generated Allocation ID
	@Qty	Y		N				
	@CustCpcty							
/AllocInstrctn/Alloc/Pty[1]/	@ID, @R	Y	ID =value, R=22	Y	ID ="value", R=22	Y	ID ="value", R=22	Carry Exchange
/AllocInstrctn/Alloc/Pty[2]/	@ID, @R	Y	ID =value, R=1	Y	ID ="value", R=1	Y	ID ="value", R=1	Carry Firm
/AllocInstrctn/Alloc/Pty[3]/	@ID, @R	N	ID =value, R=24	N	ID ="value", R=24	Y	ID ="value", R=24	Carry Account
/AllocInstrctn/Alloc/Pty[3]/ Sub/	@ID, @Typ	N	ID=value, Typ=26	N	ID=value, Typ=26	Y	ID=value, Typ=26	Typ=26 is Account Type



8.2 Required Fields on Inbound Allocation Report Acknowledgement Messages

•			•		•	J
Element	Attribute		Claim	Rever	rsal Acceptance	Comments
			(GC)		(GI)	
		Reqd (Y/N)	FIXML Value	Reqd (Y/N)	FIXML Value	
/AllocRptAck/	@TransTyp	Y	@TransTyp="0"	Y	@TransTyp="6"	The Allocation Trans Type.
	@RptID	Υ				
	@RptTyp	Υ	@Typ="9"	Υ	@Typ="9"	Accept
			@Typ="10"		@Typ="10"	Reject
	@Stat	N		N		The Status is set only on confirms and Alerts
	@ID	Y	@ID=value	N		If the firm generated APS ID.This is not required
	@ID2	Y	@ID=value	Y	@ID=value	The Clearing System generated Group ID.
	@TrdDt	Y	@TrdDt=YYYY- MM-DD	Y	@TrdDt=YYYY- MM-DD	The Trade date of the Trade
	@TxnTm	Y	@TxnTm=" YYYY-MM- DDTHH:MM:SS. 00"	Y	@TxnTm=" YYYY- MM- DDTHH:MM:SS.00	Format is "YYYY-MM-DDTHH:MM:SS.00"
	@BizDt	N	@BizDt=YYYY- MM-DD	N	@BizDt=YYYY- MM-DD	The Clearing Business date of the Trade
	@Qty	N	@Qty=value	N	@Qty=value	The total allocation Quantity
	@MsgEvtSrc	Y	@MsgEvtSrc=" MQM"	Y	@MsgEvtSrc="MQ M"	The Source of the Message. The firm send a value of MQM always.
	@AvgPxInd	Y	2=Complete	Y	2=Complete	The presence of this attribute implies that this



						is an APS Allocation.
/AllocRptAck/Hdr/	@Snt	Y		Y		The firm sends the Message Time. Its is required for Audit purpose. The format is GMT or CST with an Offset.
	@SID	Y	@SID=value	Y	@SID=value	The Sending Firm ID
	@SSub	Υ	@SSub=value	Υ	@SID=value	The Sending Exchange
/AllocRptAck/Pty[1]/	@ID, @R	Y	ID ="value", R="22"	Y	ID ="value", R="22"	Give-up Exchange
/ AllocRptAck/Pty[2]/	@ID, @R	Y	ID ="value", R="1"	Y	ID ="value", R="1"	Give-up Firm
/AllocRptAck/Pty[3]/	@ID, @R	N	ID ="value", R="2"	N	ID ="value", R="2"	Give-up Broker
/AllocRptAck/AllocAck/						This block is the Allocation Ack Block equivalent to the Allocation Block in the Allocation messages.
	@IndAllocID	N	@IndAllocID=val ue			Firm supplied Allocation ID
	@IndAllocID2	Y	@IndAllocID2=v alue	Y		Clearing System generated Allocation ID
	@Qty	Y	@Qty=value	Y	@Qty=value	Allocation Qty
	@CustCpcty	N	@Qty=value	N	@CustCpcty=value	
/AllocInstrctnAck/AllocAck/ Pty[1]/	@ID, @R	Y	ID =value, R=22	Y	ID =value, R=22	Carry Exchange
/AllocInstrctnAck/Alloc/Ack Pty[2]/	@ID, @R	Y	ID =value, R=1	Y	ID =value, R=1	Carry Firm
/AllocInstrctnAck/AllocAck/ Pty[3]/	@ID, @R	Y	ID =value, R=24	Y	ID =value, R=24	Carry Account
/AllocInstrctnAck/Alloc/Pty[@ID, @Typ	Y	ID=value,	Y	ID=value, Typ=26	Typ=26 is Account Type



3]/Sub/ Typ=26



8.3 APS Routing File to FIXML mapping

Currently the firms receive an APS Routing File at the end of the day on all the APS activity. This is going to be replaced by real-time allocation Confirms/Alerts and real-time Claim Confirms/Alerts, which can be used by the firms to update their books. The Legacy interface and the FIXML confirms do not map one-one.

APS Record Type = 0 (Header record)

The information in APS Header record will be available in all the FIXML confirms and Alerts.

APS Record Type = 1 (Group Status Record)

This will be replaced by the Group Summary Alerts or the Allocation Instruction Alert which notifies the firm of Group Creation and transmits the group ID to be used by them.

APS Record Type 2 & 3 (Trade related information)

No corresponding FIXML message available in the APS API.

APS Record Type 4 & 6 (Allocation and Claim information to Give-up Firm)

The information available in the record types 4 & 6 have been combined into a single FIXML message and is transmitted to the Give-up firm. These would be the allocation confirms (GAC) and the Claim Alerts (GCA). The message used is an Allocation Instruction Acknowledgement.

APS Record Type 5 & 6 (Allocation and Claim information to Carry Firm).

The information available in the record types 5 & 6 have been combined into a single FIXML message and is transmitted to the Carry firm. These would be the allocation Alerts (GAA) and the Claim Confirms (GCC). The message used is an Allocation Instruction Acknowledgement.

Note: A mapping is provided so that the firms can co-relate the Routing file information to real-time FIXML messages



8.3.1 Mapping for Record Type 0 & 1

Field Name	Position		FIXML Element	FIXML Attribute	APS Routing	FIXML Value	Comments					
	From	То			File value							
	Header Record											
File Name Indicator	1	2										
Header Record Indicator	3	3	N/A									
Firm Number	4	6	/AllocInstrctnAlert/Pty/	@ID, @R		@ID=value @R="1"	Mapping to Executing Firm ????					
Record Create Date	48	50	/AllocInstrctnAlert/Hdr/	@Snt								
Record Create Time	51	56	/AllocInstrctnAlert/Hdr/	@Snt								
# of APS Transaction Records	63	68	N/A									
Session Indicator	69	69	/AllocInstrctnAlert /	@SesSub	R	@SesSub="RTH"						
					E	@SesSub="ETH"						
	<u>'</u>	•	Main Ro	outing Transaction Re	ecord							
Transaction Identifier	1	1	N/A									
Action Code	2	2	/AllocInstrctnAlert/	@TransTyp	A=Add	@TransTyp="0"	If new group is created it is 0					
						@TransTyp="1"	If trades are added to an existing group, the TransTyp is set to 1 (Replace)					
Transaction Type	3	3	N/A									
Clearing Firm	4	6	/AllocinstrctnAlert/Pty[1]	@ID, @R		@ID=value, @R=1	If the Executing and the Clearing Firm are the same, use this mapping. Otherwise Clearing Firm is not set on the messages.					
Trade Date	9	14	/AllocInstrctnAlert/	@TrdDt								
Transaction ID	15	19	N/A				Allocation ID not applicable to Group Summary Alert messages.					



Field Name	Posi	tion	FIXML Element	FIXML Attribute	APS Routing	FIXML Value	Comments
	From	То			File value		
Session Indicator	20	20	/AllocInstrctnAlert/	@SesSub	R	@SesSub="RTH"	
					E	@SesSub="ETH"	
Group ID	21	25	/AllocInstrctnAlert/	@ID2		@ID2=value	The Group ID generated by the Clearing System
Exchange ID	26	27	/AllocInstrctnAlert/Instrmt/	@Exch		@Exch="CME"	If this is the Product Exchange use this mapping
						@Exch="CBT"	
			/AllocInstrctnAlert/Pty[2]/	@ID, @R		@ID=value,	If this attribute has the Give-up
						@R=22	Exchange, then use this mapping.
Commodity Code	29	29	/AllocInstrctnAlert/Instrmt/	@ID			Product ID
Put/Call Indicator	33	33	/AllocInstrctnAlert/Instrmt/	@CFI			See CFI Code mapping
Contract Year	34	35	/AllocInstrctnAlert/Instrmt/	@MMY			This attribute replaces
Contract Month	36	37					
Contract Day	38	39					
Strike Price	40	46	/AllocInstrctnAlert/Instrmt/	@StrkPx			Set for Options
Buy Sell Indicator	47	47	/AllocInstrctnAlert/	@Side	1 = Buy		
					2 = Sell		
			Group Sum	mary/Status (Record	Type 1)		
Transaction Quantity	48	52	/AllocInstrctnAlert/	@Qty		@Qty=value	Group Summary Qty
Allocated Quantity	53	57	N/A				
UnAllocated Quantity	58	62	N/A				The Unallocated Quantity is not applicable to this message
Group Mode	63	63	N/A				
Group Status	64	68	/AllocInstrctnAlert/	@Stat	Work=Working	4 = Incomplete	
Group Cash Residual Amount	69	77	/AllocInstrctnAlert/Amt/	@Typ, @Amt, @Ccy		@Typ="CRES" @Amt=value	



Field Name	Posi	tion	FIXML Element	FIXML Attribute	APS Routing File value	FIXML Value	Comments
	From	То			riie value		
						@Ccy=value	
			/AllocInstrctnAlert/	@AvgPx			Additional mapping (True Average Price calculated and sent to firms as trades are added to the group)
			/AllocInstrctnAlert/	@RndPx			Additional mapping (The rounded Price) will also be provided



8.3.2 Mapping for Record Type 0, 4 & 6 (Allocation & Claim information to Give-up Firm)

Field Name	Posi	tion	FIXML Element	FIXML Attribute	APS Routing	FIXML Value	Comments
	From To		File value				
				Header Record			
File Name Indicator	1	2					
Header Record Indicator	3	3	N/A				
Firm Number	4	6	/AllocRpt/Pty/	@ID, @R		@ID=value @R="1"	Mapping to the Executing Firm ???
Record Create Date	48	50	/AllocRpt/Hdr/	@Snt			
Record Create Time	51	56	/AllocRpt/Hdr/	@Snt			
# of APS Transaction Records	63	68	N/A				
Session Indicator	69	69	/AllocRpt/	@SesSub	R	@SesSub="RTH"	
					E	@SesSub="ETH"	
			Main	Routing Transaction Re	cord		
Transaction Identifier	1	1	N/A				
Action Code	2	2	/AllocRpt/	@TransTyp	A=Add	@TransTyp="0"	If new group is created it is 0
						@TransTyp="1"	If trades are added to an existing group, the TransTyp is set to 1 (Replace)
Transaction Type	3	3	N/A				
Clearing Firm	4	6	/AllocRpt/Pty[1]	@ID, @R		@ID=value,	If the Executing and the
						@R=1	Clearing Firm are the same, use this mapping.
							Otherwise Clearing Firm is not set on the messages .
Trade Date	9	14	/AllocRpt/	@TrdDt			
Transaction ID	15	19	/AllocRpt/Alloc/	@IndAllocID2			Allocation ID generated by Clearing System for the Give-up firm



Field Name	Posi	tion	FIXML Element	FIXML Attribute	APS Routing	FIXML Value	Comments
	From	То	1		File value		
Session Indicator	20	20	/AllocRpt/	@SesSub	R	@SesSub="RTH"	
					E	@SesSub="ETH"	
Group ID	21	25	/AllocRpt/	@ID2		@ID2=value	The Group ID generated by the Clearing System for the Generic or Specific Group
Exchange ID	26	27	/AllocRpt/Instrmt/	@Exch		@Exch="CME"	If this is the Product Exchange use this mapping
						@Exch="CBT"	
			/AllocRpt/Pty[2]/	@ID, @R		@ID=value, @R=22	If this attribute has the Give-up Exchange, then use this mapping.
Commodity Code	29	29	/AllocRpt/Instrmt/	@ID			Product ID
Put/Call Indicator	33	33	/AllocRpt/Instrmt/	@CFI			See CFI Code mapping
Contract Year	34	35	/AllocRpt/Instrmt/	@MMY			This attribute replaces
Contract Month	36	37					
Contract Day	38	39					
Strike Price	40	46	/AllocRpt/Instrmt/	@StrkPx			Set for Options
Buy Sell Indicator	47	47	/AllocRpt/	@Side	1 = Buy		
					2 = Sell		
			Group Sur	nmary/Status (Record	Type 4)		
Carrying Firm Code	48	50	/AllocRpt/Alloc/Pty[1]	@ID, @R		@ID=value,	This is the Carry Firm that is
						@R=1	being allocated
Executing Broker (Filling Broker)	53	55	/AllocRpt//Pty[1]	@ID, @R		@ID=value, @R=12	Executing Broker
Transaction Quantity	58	62	/AllocRpt/Alloc/	@Qty		@Qty=value	Allocated Quantity to the Carry Firm
Account Number	63	72	/AllocRpt/Alloc/Pty[2]/	@ID, @R		@ID=value, @R=24	Carry Firm Customer Account



Field Name Position		tion	FIXML Element F	FIXML Attribute	APS Routing	FIXML Value	Comments
	From	То			File value		
Origin Type	73	73	/AllocRpt/Alloc/Pty[2]/Sub/	@ID, @Typ	1=Cust	@ID=1, @Typ=26	Carry Firm Customer Account "Cust" Origin
					,2=Hous	@ID=2,	Carry Firm Customer Account
						@Typ=26	"Cust" Origin
Customer Type Indicator	74	74	/AllocRpt/Alloc/	@CustCpcty			
Clearing Fee Indicator	75	75	N/A				
Give-up Status	76	80	/AllocRpt/	@Stat			
			Average Price /	Residual Price (Reco	rd Type 6)		
Average Price	48	63	/AllocRpt/	@AvgPx		@AvgPx=value	True Average Price
Rounded Price	64	72	/AllocRpt/	@RndPx		@RndPx=value	Rounded Price
Group Cash Residual Amount	73	80	/AllocInstrctnAck/Amt/	@Typ, @Amt, @Ccy		@Typ="CRES" @Amt=value	



8.3.3 Mapping for Record Type 0, 5 & 6 (Allocation & Claim information to Carry Firm)

Field Name	Posi	tion	FIXML Element	FIXML Attribute	APS Routing	FIXML Value	Comments
	From	То			File value		
				Header Record			
File Name Indicator	1	2					
Header Record Indicator	3	3	N/A				
Firm Number	4	6	/AllocRpt/Pty/	@ID, @R		@ID=value @R="1"	Mapping to the Executing Firm ???
Record Create Date	48	50	/AllocRpt/Hdr/	@Snt			
Record Create Time	51	56	/AllocRpt/Hdr/	@Snt			
# of APS Transaction Records	63	68	N/A				
Session Indicator	69	69	/AllocRpt/	@SesSub	R	@SesSub="RTH"	
					E	@SesSub="ETH"	
		•	Mai	n Routing Transaction Rec	cord		
Transaction Identifier	1	1	N/A				
Action Code	2	2	/AllocRpt/	@TransTyp	A=Add	@TransTyp="0"	If new group is created it is 0
						@TransTyp="1"	If trades are added to an existing group, the TransTyp is set to 1 (Replace)
Transaction Type	3	3	N/A				
Clearing Firm	4	6	/AllocRpt/Pty[1]	@ID, @R		@ID=value,	If the Executing and the Clearing Firm are the same, use



Field Name	Posi	tion	FIXML Element	FIXML Attribute	APS Routing	FIXML Value	Comments
	From	То			File value		
						@R=1	this mapping.
							Otherwise Clearing Firm is not set on the messages .
Trade Date	9	14	/AllocRpt/	@TrdDt			
Transaction ID	15	19	/AllocRpt/Alloc/	@IndAllocID2			Allocation ID generated by Clearing System for the Carry firm
Session Indicator	20	20	/AllocRpt/	@SesSub	R	@SesSub="RTH"	
					E	@SesSub="ETH"	
Group ID	21	25	/AllocRpt/	@ID2		@ID2=value	The Group ID generated by the Clearing System for the Generic or Specific Group
Exchange ID	26	27	/AllocRpt/Instrmt/	@Exch		@Exch="CME"	If this is the Product Exchange use this mapping
						@Exch="CBT"	
			/AllocRpt/Pty[2]/	@ID, @R		@ID=value, @R=22	If this attribute has the Give-up Exchange, then use this mapping.
Commodity Code	29	29	/AllocRpt/Instrmt/	@ID			Product ID
Put/Call Indicator	33	33	/AllocRpt/Instrmt/	@CFI			See CFI Code mapping
Contract Year	34	35	/AllocRpt/Instrmt/	@MMY			This attribute replaces
Contract Month	36	37					
Contract Day	38	39					
Strike Price	40	46	/AllocRpt/Instrmt/	@StrkPx			Set for Options
Buy Sell Indicator	47	47	/AllocRpt/	@Side	1 = Buy		
					2 = Sell		
			Group S	ummary/Status (Record	Type 5)		
Executing Firm Code	48	50	/AllocRpt//Pty[1]	@ID, @R		@ID=value,	This is the Executing Firm that is being allocated



Field Name	Posi	tion	FIXML Element	FIXML Attribute	APS Routing File value	FIXML Value	Comments
	From	То			riie value		
						@R=1	
Executing Broker (Filling Broker)	53	55	/AllocRpt//Pty[1]	@ID, @R		@ID=value, @R=12	Executing Broker
Transaction Quantity	58	62	/AllocRpt/Alloc/	@Qty		@Qty=value	Allocated Quantity to the Carry Firm
Account Number	63	72	/AllocRpt/Alloc/Pty[2]/	@ID, @R		@ID=value, @R=24	Carry Firm Customer Account
Origin Type	73	73	/AllocRpt/Alloc/Pty[2]/Sub/	@ID, @Typ	1=Cust	@ID=1, @Typ=26	Carry Firm Customer Account "Cust" Origin
					,2=Hous	@ID=2, @Typ=26	Carry Firm Customer Account "Cust" Origin
Customer Type Indicator	74	74	/AllocRpt/Alloc/	@CustCpcty			
Clearing Fee Indicator	75	75	N/A				
Give-up Status	76	80	/AllocRpt/	@Stat			
			Average Price /	Residual Price (Reco	rd Type 6)		
Average Price	48	63	/AllocRpt/	@AvgPx		@AvgPx=value	True Average Price
Rounded Price	64	72	/AllocRpt/	@RndPx		@RndPx=value	Rounded Price
Group Cash Residual Amount	73	80	/AllocRpt/Amt/	@Typ, @Amt, @Ccy		@Typ="CRES" @Amt=value	Residual Price and Currency



9 Appendix

9.1 Table 8.1 – FIX Value Conversion used in APS API

	FIX Translation Table		
Attribute Name	FIX Value	CME Value	
@TransTyp (used on all the Allocation messages)	0	New (Create)	
	1	Replace (Change)	
	2	Cancel (Delete)	
	6	Reversal	
@Typ (Allocation Type)	2	Preliminary	
	8	Request	
	9	Accept	
	10	Reject	
	11	Accept Pending	
	12	Incomplete Group	
	13	Complete Group	
	14	Reversal Pending	
@Stat (Allocation Status)	0	Accepted and Successfully processed	
	1	Block Level Reject	
	2	Account level Reject	
	3	Received (not yet processed)	
	4	Incomplete	
	5	Rejected by Intermediary	
	6	Allocation Pending	
	7	Reversed	
@RptTyp	2	Request	
	9	Accept	
	10	Reject	
	11	Accept Pending	
	12	Complete	



	14	Reversal Pending
/Pty/Sub/@ID	1	CUST
, and G	2	HOUS
/Pty/@R	1	Executing Firm ID/ Trading Firm ID
	4	Clearing Firm ID
	12	Executing Broker
	17	Contra Firm
	18	Contra Clearing Firm
	21	Clearing Org ID
	22	Exchange ID
	23	Contra Exchange ID
	24	Customer Account
	25	Contra Clearing Org
	26	Contra Broker
	36	Entering Broker / BK Broker
	38	Position Account
	40	3 rd Party Allocating Firm
	41	Contra Position Account
	42	Contra Exchange
	43	Internal Carry Account
/Amt/@Typ	CRES	Cash Residual Amount
CFI for Option		
/Instrmt/@CFI Product Type Col1	0	Product Type - OPT
/Instrmt/@CFI Put/Call – Col2	P C	Option Right - Call Option Right - Put
/Instrmt/@CFI Opt Type - Col3	A E	Option Type - American Option Type - European



/Instrmt/@CFI Underlying - Col4	B=Basket S=Stock-Equities D=Interest rate/notional debt sec T=Commodiites C=Currencies I=Indices O=Options F=Futures W=Swaps M=Other X=Unknown(n/a)	Market Indicator Values SSF Int Curr Ind
/Instrmt/@CFI Delivery Method Col 5	P=Physical C=Cash X=Unknown(n/a)	Phys Cash
/Instrmt/@CFI Standard/Non-Std – Col 6	S=Standardized terms (maturity date, strike price, contract size) N=Non- standardized terms X=Unknown(n/a)	Flexible Indicator 'N' 'Y'
0517 5 1		
CFI for Future		
/Instrmt/@CFI Product Type - Col1	F	Product Type - FUT
/Instrmt/@CFI Group – Col2	F=Financial Futures C=Commodity Futures M=Others X=Unknown(n/a)	



/Instrmt/@CFI Underlying - Col3	A=Agriculture, forestry, and fishing B=Basket S=Stock-Equities (for financial future) or Services (for commodities futures) D=Interest rate/notional debt sec C=Currencies I=Indices (for financial futures) or Industrial Products (for commodities futures) O=Options F=Futures W=Swaps M=Other X=Unknown(n/a)	
/Instrmt/@CFI Delivery Method - Col4	P=Physical C=Cash X=Unknown(n/a)	Phys Cash
/Instrmt/@CFI Standard/Non-Std – Col5	S=Standardized terms (maturity date, strike price, contract size) N=Non- standardized terms X=Unknown(n/a)	Flexible Indicator 'N' 'Y'
@SetSesID	EOD	Cycle Code - RTH
	ITD	Cycle Code - ITD
/AllocInstrctn/@AvgPxIndic ator	0	No Average Pricing



	1	Average Price/Group Incomplete
	2	Average Price / Group Complete
/*/Alloc/@Meth	1	Automatic
	2	Guarantor
	3	Manual
/AllocRpt/@RptTyp	2	Request to Intermediary
	3	SellsideCalculatedUsingPreliminary
	4	SellsideCalculatedWithoutPrelimina ry
	5	WarehouseRecap
	8	RequestToIntermediary
	9	Accept
	10	Reject
	11	Accept Pending
	12	Complete
	14	Reversal Pending