## BMECLEARING

## ClearGate <br> FIX Interface Specifications

Version C1.4
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## Changes made in the latest revision

This document is updated with a new title "ClearGate - FIX Interface Specifications" but with the same content as the previous "MEFFGate Clearing - FIX Interface Specifications".

Content applies to Financial Derivatives and Energy Products cleared by BME Clearing in its current offer, but also to the new cash settled Crypto Derivatives Products that will soon be added in the CCP (to clear LMAX activity). These new products, as common derivative contracts, do not require changes in the document, only a minor modification marked in green.

## Outlined below are the main changes made in the version C1.4 (since the version C1.3 on 27

 September 2010):- Deliveries of the Futures Contract on the Government Bond (new functionality):
- Messages changed:
- Security List:
- Block InstrumentLeg: Added
- Position Maintenance Request:
- PosTransType [709]: Changes in valid values
- PosMaintAction [712]: Changes in valid values and description
- OrigPosReqRefID [713]: Changes in description
- Account [1]: Changes in valid values, format and description
- PosType [703]: Changes in valid values and description
- ShortQty [705]: Added
- Block NestedParties: Added
- LegSymbol [600]: Added
- ContraryInstructionIndicator [719]: Removed
- Position Maintenance Report:
- PosTransType [709]: Changes in valid values and description
- PosMaintAction [712]: Changes in valid values
- OrigPosReqRefID [713]: Changes in description
- Account [1]: Changes in valid values, format and description
- Symbol [55]: Changes in description
- PosType [703]: Changes in valid values and description
- ShortQty [705]: Changes in description
- Block NestedParties: Added
- LegSymbol [600]: Added
- Trade Capture Report Request:
- TrdType [828]: Added
- Trade Capture Report Request:
- Nominal trade value (Par amount): tag EventText [868] when EventType [865] = 101. Added
- Member code acting in market where delivery takes place: tag EventText [868] when EventType [865] = 102. Added
- Counterparty member code in market where delivery takes place: tag EventText [868] when EventType [865] = 103. Added
- A detailed explanation has been included in chapter "13-Deliveries"
- New message flows have been added in chapter 13
- Chapter "3.6-Synchronisation at application level" has been modified
- Tags changed:
- TargetCompID [56] (Header. Messages sent to HF MEFFGate) and SenderCompID [49] (Header. Messages sent by HF MEFFGate): New value XMEF (according to ISO 10383 MIC - Market Identifier Code)
- The tag TransactTime [60] has been removed from the Allocation Instruction Ack message


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## 1. Introduction

### 1.1 Scope of this manual

This document contains the definition of the interface provided by CCP for developing applications related with the clearing scope. The interface is based on version 4.4 of the FIX Protocol standard (Financial Information eXchange). More detailed information about the standard can be found in reference document 1 (see 1.5) or on the website www.fixprotocol.org.

The interface follows the FIX 4.4 specifications, as far as possible. In the majority of cases the structure and semantics of the messages are identical to the standard.

In some cases, the protocol has been extended to cover functions not considered by the standard. These extensions are clearly detailed in the document.

In other cases, the standard is ambiguous or indicates that the details should be mutually defined by the parties. In these cases the manual provides a detailed description to avoid any possible ambiguity.

All annotations and adaptations of the standard have been done in accordance with the recommendations in the standard.

To avoid possible duplication in the sources of information, this document does not include explanations of those matters that comply exactly with the standard. Therefore, the standard documentation should be considered as the main source of information for any matter that is not explicitly covered in this manual.

This is a reference document for those Members and ISVs that wish to develop software that can communicate with the CCP using the ClearGate server FIX interface.

### 1.2 Public and private information

The functions covered by ClearGate are grouped into public and private information.
The following table displays the public functions and their related messages.

| Public function | Related messages | Msg Type |
| :--- | :--- | :--- |
| Obtain information on contracts | Security List Request | x |
|  | Security List | y |
|  | Market Data Request | V |
|  | Market Data Request Reject | Y |
|  | Market Data - Snapshot / Full Refresh | W |

The following table displays the private functions and their related messages.

| Private function | Related messages | Msg Type |
| :---: | :---: | :---: |
| Monitoring and management position | Request For Positions | AN |
|  | Request For Positions Ack | AO |
|  | Position Report | AP |
|  | Trade Capture Report | AE |
|  | Position Maintenance Request | AL |
|  | Position Maintenance Report | AM |
| Request for trades | Trade Capture Report Request | AD |
|  | Trade Capture Report Request Ack | AQ |
|  | Trade Capture Report | AE |
| Trades management | Allocation Instruction | $J$ |
|  | Allocation Instruction Ack | P |
|  | Confirmation | AK |
|  | Confirmation Ack | AU |
|  | Trade Capture Report | AE |
| Exercise instruction | Position Maintenance Request | AL |
|  | Position Maintenance Report | AM |
|  | Request For Positions | AN |
|  | Request For Positions Ack | AO |
|  | Position Report | AP |
|  | Trade Capture Report | AE |
| Send messages to the CCP supervisor and Reception of administrator's messages | News | B |
| Give-up references and filters management | Registration Instructions | 0 |
|  | Registration Instructions Response | p |

### 1.3 Structure of manual

The manual is divided into two parts. The first part, containing the first four chapters, gives a description of generic features of this interface.

This first chapter describes the scope of the document, its structure and introduces the related documents.

Chapter 2 "Implementation decisions" presents those annotations or restrictions arising from the implementation of the protocol defined in this manual.

Chapter 3 "FIX Session" describes those aspects related to the session level, including the detailed description of the corresponding messages.

Chapter 4 "General conventions in application messages" describes in detail specific aspects that affect the majority of the messages described in this manual.

Given the generic nature of the content, which affects all the messages, it is recommended to read chapters 2,3 and 4 before considering other chapters.

The second part of the manual, containing the remainder of the chapters, describes the different functions supported by ClearGate. Each of these chapters deals with a specific function, describing specific matters of interest.

Each of these chapters contains the following sections:

- Introduction. A brief description of the function covered in the chapter
- List of messages. List of the different messages implemented by the function
- Message flow. Description of the different scenarios for message exchange that may arise, with the corresponding message flow diagrams
- Annotations and adaptations of FIX 4.4. Details the annotations and adaptations that has made to the standard protocol to meet its needs
- Definition of messages. Contains a table for each message in the chapter, describing the message fields in detail

Finally, various tables providing information referred to throughout the document are included as appendices.

### 1.4 Format of the message definition tables

As explained in the previous section, a table for each message is included in those chapters where it is necessary, describing the component fields in detail.

These tables contain one field per row and have the following columns:

| Column | Meaning |
| :--- | :--- |
| Tag | Field number. The fields added to the message in this implementation have an asterisk <br> ("*") after the number |
| Name | Name of field according to the FIX standard |
| Req | "Y" indicates that the field is required; "N" means that the field is optional. "Y*" means that <br> the field is required in this implementation, but it is optional in the FIX 4.4 standard |
| Valid values | Accepted values for the field in the context of the message, It may be a list of values, or a <br> range of numeric values, e.g. ">=3, <= 10". The default value for the field is also indicated <br> in this column. <br> To avoid confusions with the terms, the original FIX value description has been respected <br> in the values associated with codes. |
| Format | Type of data in the field. It is one of the types defined by FIX, or one of these types with <br> some additional restriction. String(n) is a String type with a maximum of n characters, or in <br> some cases with exactly n characters. For more information on the String type, See 2.4 |
| Description | Description of the field in the context of the message |

### 1.5 Related documents

| $\#$ | Title | Author | Version |
| :--- | :--- | :--- | :--- |
| 1 | Financial Information Exchange Protocol (FIX) 4.4 with errata 20030618 | FIX Committee | 18 June 2003 |
| 2 | Financial Information Exchange Protocol (FIX) 5.0 Service Pack 2 | FIX Committee | April 2009 |
| 3 | HF MEFFGate - FIX Interface Specifications T3.3 | MEFF | 25 October 2012 |
| 4 | HF MEFFGate - FIX Interface Specifications M3.3 | MEFF | 30 August 2012 |
| 5 | HF MEFFGate - FIX Interface Specifications M3.0 | MEFF | 27 September 2010 |
| 6 | HF MEFFGate - FIX Interface Specifications M2.0 | MEFF | 30 July 2010 |
| 7 | MEFFGate Trading - FIX Interface Specifications T1.2 | MEFF | 30 July 2012 |
| 8 | MEFFGate Clearing - FIX Interface Specifications C1.3 | MEFF | 27 September 2010 |

## 2. Implementation decisions

### 2.1 Description

This chapter presents the implementation decisions made by CCP. Those aspects that the standard leaves open and have been defined in its implementation are detailed here.

### 2.2 Fields ignored

In some cases, the content of certain fields of the entering messages may be ignored by ClearGate. When this is the case, it is clearly stated in the field description.

### 2.3 Unsupported fields

The unsupported fields of a message are not included in its description.
Messages sent to ClearGate should not contain unsupported fields. Messages sent by ClearGate never contain unsupported fields.

No required fields have been declared unsupported.

### 2.4 Length of String type

The FIX standard does not place any restriction on the maximum length of the String type. In this implementation the maximum length is 255 characters.

In some fields, a shorter maximum length has been established. In these cases, the type is presented as String $(\mathrm{n})$, where " n " is the maximum number of characters of the field. In certain cases " n " indicates the exact length of the field, in which case it will be explicitly stated in the valid values column.

### 2.5 Maximum length of message

The maximum length of the messages sent or received by ClearGate is 4096 bytes.

### 2.6 Encryption

ClearGate does not use the encryption defined in the FIX standard (using the SecureData and SecureDataLen fields in the message header). The encryption is implemented through the use of SSL (Secure Socket Layer).

### 2.7 Identification of the ClearGate FIX protocol

ClearGate implements an additional function that allows both parties to agree on the ClearGate FIX version that they are going to use.

It is important to distinguish between the version of the FIX protocol (in this case "4.4") and the version of the ClearGate FIX protocol ("C1.4" in this edition).

The ClearGate FIX protocol is the annotation and adaptation of the standard by CCP to meet the specific needs of its business. All the annotations and adaptations made by CCP have been done in accordance with the recommendations specified in the standard.

More than one version of the ClearGate FIX protocol may exist for the same version of FIX. Similarly, one version of the ClearGate FIX protocol may work with more than one version of the FIX protocol.

The ClearGate FIX protocol version used as default by ClearGate is determined in the ClearGate user configuration. The client program may also indicates which ClearGate FIX protocol version it is going to use in the ProprietaryFixProtocolVersion of the Logon message. This field has been added by CCP and has been implemented as an optional field.

If the version requested by the client program is not available in the ClearGate server in use, it will return a Logout Message with the corresponding explanatory message.

## 3. FIX Session

### 3.1 Introduction

The level of the FIX session guarantees the complete delivery of messages between both parties, without errors. ClearGate implements the majority of the functions of the session level defined in the FIX 4.4 standard.

### 3.2 FIX session and communication session

As explained in the standard, there are two types of session:

- Communication session. This begins when a request to start a session (Logon message) is accepted. It ends when the communication is completed, preferably with the exchange of Logout messages
- FIX session. This is a combination of two-way messages identified by a sequence of consecutive numbers. A FIX session begins when the sequence numbers of both parties are restarted with the value 1. There is no explicit way of ending a FIX session; a session ends when a new one begins. A FIX session can encompass more than one communication session

In addition to the two mentioned types of sessions, the Clearing Contract Group session should also be considered. A Clearing Contract Group session begins each day when the ClearGate server loads the Clearing Contract Group data again and accepts connections for that session, following the procedure defined by CCP.

The client program must begin a new FIX session in the first connection of the Clearing Contract Group session.

Given that ClearGate does not provide 24-hour support for the service, the ResetSeqNumFlag field is not required in the Logon message.

### 3.3 Identification of the FIX session

Once a communication session has been established, ClearGate identifies the associated FIX session using four fields in the Logon message sent by the initiator:

- SenderCompID
- SenderSubID
- TargetCompID
- TargetSubID

SenderCompID identifies the member and SenderSubID identifies the user. TargetCompID together with TargetSubID identify the Clearing Contract Group.

No more than one FIX session can exist at a time with the same values for these four fields.
The SenderCompID, SenderSubID, TargetCompID and TargetSubID fields are present in all the FIX messages. All the messages belonging to the same FIX session must have the same values in these fields. If a message is received with values that do not correspond with those of the session, it will be rejected with a Reject message.

It should be noted that the values of these fields are inverted when the message is sent by ClearGate, with respect to those sent by the client. Suppose that user "001" of member "A001" has a session established with Financial Contract Group at CCP. The messages will be those shown below:

Client message to ClearGate:

$$
\begin{array}{ll}
- & \text { SenderCompID = "A001" } \\
\text { - } & \text { SenderSubID }=\text { "001" } \\
\text { - } & \text { TargetCompID }=\text { "XMEF" } \\
\text { - } & \text { TargetSubID }=\text { "C2" * }
\end{array}
$$

ClearGate message to client:

- SenderCompID = "XMEF"
- SenderSubID = "C2"
- TargetCompID = "A001"
- TargetSubID = "001"

If the same client wants to operate with two Clearing Contract Groups simultaneously, or wishes to make two different connections with the same Clearing Contract Group, he will have to establish various connections as explained in 3.4.

### 3.4 Client software and FIX sessions

A ClearGate client is a software development that connects to CCP through a ClearGate server.
As noted in 3.3, a FIX session is limited to one user and one Clearing Contract Group. A client will be able to establish various FIX sessions simultaneously to access more than one Clearing Contract Group or trade in one Clearing Contract Group with various user codes.

A ClearGate server can provide service to various sessions simultaneously, be they of the same client or various clients.

When a FIX client tries to connect with a Clearing Contract Group that is not available, his Logon message is answered with a Logout message with the appropriate explanation.

### 3.5 Synchronisation of the FIX session

On initiating a communication session (sending Logon message), the client can opt to initiate a new FIX session or continue with a previous session from the same Clearing Contract Group session. The procedure to follow in each case is described below.

- Start a new FIX session. To start a new FIX session the value to be used in the MsgSeqNum field of the Logon message must be 1 .
- Continuation with previous FIX session. To continue a previous FIX session the value to be used in the MsgSeqNum field is the consecutive number to the one used in the last message of the session to be continued.

Note that on starting a new FIX session, it will replace the previous session and therefore it cannot be continued later.

A client application can only continue a FIX session if it connects to the same ClearGate server with which the FIX session had been initiated. In the case that it has to connect to a different ClearGate server a new FIX session will have to be started.

[^0]When a Logon message has a MsgSeqNum other than 1, the number sent might not coincide with the number that ClearGate was expecting for this session (ClearGate expects the consecutive number after the number of the last message received for that session). The different situations that can arise with respect to the sequence number of the Logon message and the message expected by ClearGate are shown below.

- MsgSeqNum is the same as the number expected by ClearGate. There is no discrepancy and ClearGate accepts the connection.
- MsgSeqNum lower than the number expected by ClearGate. ClearGate rejects the connection by sending a Logout message with the sequence number 1. In this case the connection cannot be accepted as the sequence number used in the Logon message was previously used by another message in the same session.
- MsgSeqNum higher than the number expected by ClearGate. ClearGate accepts the connection, and requests that the missing messages between the sequence number expected and the number used by the client be sent. The request to send these messages will be made using one of the following mechanisms:
- Logon message with NextExpectedMsgSeqNum. This method will be used whenever the client has used the NextExpectedMsgSeqNum field in his Logon message
- Resend Request message. In the event that the client has not used the NextExpectedMsgSeqNum field (Logon message), the server will not use it. In this case the server, after the Logon message reply, will notify the client of the sequence error using the Resend Request message

When continuing with a FIX session it is advisable to use the NextExpectedMsgSeqNum field (Logon message), indicating the message number expected to facilitate the synchronisation between both parties. In this way, the server can detect if the client did not receive some of the messages, and proceed to resend them. When this value is not specified, the server continues sending messages from the last number in the sequence sent.

ClearGate uses the NextExpectedMsgSeqNum field in the reply to the Logon message if the client used it in his start message.

ClearGate only uses the Resend Request message as described above, that is, immediately after a Logon request. Any other time when there is a discrepancy between the expected sequence number and the number received, ClearGate assumes that there is a serious problem and closes the connection with a Logout message.

When ClearGate requests a lower sequence number from the client than the one that the client proposes, the client can decide whether to repeat the same messages that he sent with the sequence numbers that are missing, send one or more GapFills, or simply give them a new use. In any case the client must take into account that the messages will be processed by ClearGate in the moment that it is received like any other message. It is recommended to set up controls to prevent orders being sent that could have become obsolete whilst the disconnection lasted.

Like ClearGate, the client can only use the Resend Request message in the case of detecting that the Logon message sent by the server is out of the sequence and does not contain the NextExpectedMsgSeqNum field. If ClearGate receives a Resend Request message at any other moment it will be considered as an error and the connection will be terminated.

Independent of whether it was requested through the Resend Request message or using the NextExpectedMsgSeqNum field of the Logon message, the repetition of messages by the server is limited to messages belonging to the Clearing Contract Group Session underway. The server repeats all the messages requested, except those providing public information. Given the volume of public information that may exist, it cannot be repeated and will be replaced by a "Gapfill" messages. The client must use query functionalities available to get up to date on this information. See section 3.6 for more information on this matter.


When the start of a communications' session is rejected, the server answers with a Logout message. The client application should take into account that this Logout message may come with a sequence number 1 or with the sequence number corresponding to its late communication. The sequence number used by the client in its Logon message is not considered by ClearGate and therefore does not alter the expected sequence number in subsequent communications.

### 3.6 Synchronisation at application level

When a client starts a communication session (Logon message accepted), it receives a series of information related with the current Clearing Contract Group session. The information to be received depends on whether it is the start of a new session or the reconnection to an existing FIX session:

- Start of a FIX session. The client receives all the private messages, not associated to subscriptions, corresponding to the entire Clearing Contract Group session. All or part of these messages may have been previously received in a previous FIX session.
- Reconnection to an existing FIX session. The client receives all the private messages, not associated to subscriptions, corresponding to the current Clearing Contract Group session, not received previously. In this case ClearGate ensures that there is no duplication of messages (except when it is explicitly requested).

The messages that come from an explicit request for repetition (requested using a Resend Request message or a Logon message with NextExpectedMsgSeqNum lower than the last message received) will contain the value " $Y$ " in the PossDupFlag field indicating this situation. This does not apply when it is a new FIX session (start of the session with sequence number 1).

In both cases, both the private information associated with subscriptions and the public information can be requested using the messages that implement the corresponding functionalities.

It should be taken into account that any subscription to information is cancelled when the communication session ends. If this service is required when reconnecting to a FIX session, it must be requested again.

The private messages not associated to subscriptions referred to in this section correspond to these messages:

- News
- Confirmation messages with the SecondaryConfirmStatus [5683] value different that "P" (Pending)
- Position Maintenance Report with PosTransType $=4$ (Delivery)


### 3.7 High availability

To improve the availability of access to CCP there will be various instances of the ClearGate server executing in different computers.

All the instances of ClearGate will be connected with the central systems of CCP. Therefore, they will have all the necessary information.

When a ClearGate server fails, the client can continue working with another ClearGate. In this case, the client must start a new FIX session (beginning with the sequence number 1), as the status of the sessions is not replicated between different ClearGate servers. The client must carry out the necessary processes to synchronise at the application level (see 3.5).

When a client application that has established a FIX session fails, the client application can restart in another computer that continues with the same session (using the same ClearGate server). In this case, the client is responsible for restoring the status of the failed application. If it is not possible to restore this status, it is recommended that a new FIX session be started, although it is possible to maintain the current session and consult all the necessary data at the application level to restore the status.

### 3.8 PossResend field

The implementation of FIX in CCP does not allow the use of the PossResend field (see 3.4 for more information on unsupported fields).

### 3.9 Administrative messages that the FIX client must manage

The FIX client must be able to manage all the administrative messages as described in this chapter, including the Resend Request message. The client can decide whether to respond to this by resending messages or simply sending a GapFill (Sequence Reset message).

### 3.10 List of messages

The functionality at the session level is implemented in FIX 4.4 using seven administrative messages. All these are fully supported by the ClearGate FIX protocol.

| Message | Description |
| :--- | :--- |
| Logon $($ Msg Type $=$ A) | Request or confirmation of the start of a communication <br> session |
| Logout (Msg Type $=5)$ | Request or confirmation of the end of a communication <br> session |


| Heartbeat $($ Msg Type $=0)$ | Periodic notification that the connection continues to be <br> live |
| :--- | :--- |
| Test Request $($ Msg Type $=1)$ | Request to send a Heartbeat message to confirm that the <br> connection is alive |
| Resend Request $($ Msg Type $=2)$ | Request to resend messages that have not been <br> received |
| Sequence Reset $($ Msg Type $=4)$ | Fill a gap in messages re-establishing a higher sequence <br> number |
| Reject $($ Msg Type $=3)$ | Reject a message at session level |

### 3.11 Message flow

## Start of communication session and start of FIX session

A request to start a communication session (Logon message) that is accepted is replied to by the receiver with another Logon message. The initiator must not send another message until it has received this confirmation of acceptance.


## Start of communication session and continuation of FIX session

A request to start a communication session (Logon message) that is accepted is replied to by the receiver with another Logon message. The initiator must not send another message until it has received this confirmation of acceptance.


## Start of communication session rejected

When the start of a communication session (Logon message) is not accepted, ClearGate will reply with a Logout message.

For more details on the behaviour of sequence numbers of both parties see section 3.5 .


## End of a communication session started by the sender

The client can end the communication session by sending a Logout message at any time.


## End of a communication session started by the receiver

In exceptional circumstances, the server can end the communication session with a Logout message.

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## Sending messages with identification fields of session (SenderCompID, SenderSubID, TargetCompID and TargetSubID) with different values from those associated to the current FIX session

All the messages associated to a FIX session must include the same identifying values of the session (SenderCompID, SenderSubID, TargetCompID and TargetSubID). If a message differs from the values indicated in the Logon of the session, it is rejected with a Reject message.


### 3.12 Annotations and adaptations of FIX 4.4

- The optional field ProprietaryFixProtocolVersion has been added to the Logon message to identify the version of the CCP protocol
- The optional field FixEngineName has been added to the Logon message. It contains a descriptive text of the software application
- When a request to start a session (Logon message) is rejected, the receiver (CCP) will always send a Logout message in reply
- The SenderSubID and TargetSubID fields in the header of messages (Standard Message Header) are now required
- The PossResend field is not supported
- The FIX method of encryption is not supported
- ClearGate only accepts the Resend Request message after the Logon message
- The valid values of the ResetSeqNumFlag field in the Logon message are limited to the value "N"


### 3.13 Definition of messages

### 3.13.1 Standard Message Header

| Tag | Name | Req | Valid values | Format | Description |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 8 | BeginString | Y | FIX.4.4 | String | Indicates the start of a new message. Contains the version of the FIX protocol. It is always the first field of the message |
| 9 | BodyLength | Y |  | Int | Length of message in bytes, from the end of this field up to and including the delimiter before the Checksum field. It is always the second field of the message |
| 35 | MsgType | Y | All message types supported by CCP | String | Identifies the type of message. It is always the third field of the message |
| 49 | SenderComplD | Y |  | String | Identifier of the entity that sends the message. <br> When the message is sent by ClearGate: <br> If the FIX session is established with Crypto Contract Group, it will contain "BMCL". <br> If the FIX session is not established with Crypto Contract Group, it will contain "XMEF". It must contain the member code in the messages sent by the client application |
| 56 | TargetComplD | Y |  | String | Identifier of the entity that the message is sent to. <br> When the message is sent to ClearGate: <br> If the FIX session is established with Crypto Contract Group, it will contain "BMCL". <br> If the FIX session is not established with Crypto Contract Group, it will contain "XMEF". <br> Contains the member code in the messages sent by ClearGate |
| 34 | MsgSeqNum | Y |  | Int | Sequence number of the message within the current FIX session |
| 50 | SenderSubID | $Y^{*}$ | See table 11 in document "Codification Tables" for details of the Market codes | String | The messages sent from ClearGate to the client contain the code assigned to the Contract Group with which the connection was established. <br> Messages sent to ClearGate must contain the trader code with which the FIX session was started |
| 57 | TargetSubID | $Y^{*}$ | See table 11 in document "Codification Tables" for details of the Contract Group codes | String | The messages sent from ClearGate contain the code of the trader which it is to be sent to. <br> Messages sent to ClearGate must contain the code of the Contract Group with which the connection was established |
| 43 | PossDupFlag | N | $\mathrm{N}=$ Original message sent (default value) $\mathrm{Y}=$ Duplicate possible | Boolean | Indicates if it is the first time within a FIX session that a message is sent (" N ") or if the same message is being sent again ("Y"), either due to an explicit request from the other |


| Tag | Name | Req | Valid values | Format | Description |
| :--- | :--- | :--- | :--- | :--- | :--- |
|  |  |  |  |  | party or due to uncertainty about the <br> reception of the original message |
| 52 | SendingTime | Y |  | UTC <br> Timestamp | Time message sent |$|$| Time when original message was |
| :--- |
| sent. Required in a resend. |
| A message is considered to be a |
| resend if the field PossDupFlag " "Y" |
| and the field MsgType is not "4" |
| (Sequence Reset) |

### 3.13.2 Standard Message Trailer

Present in all FIX messages.

| Tag | Name | Req | Valid values | Format | Description |
| :--- | :--- | :--- | :--- | :--- | :--- |
| 10 | CheckSum | Y |  | String(3) | Checksum of the message, <br> calculated in accordance with the <br> standard. <br> It is always the last field of the <br> message and its length is exactly 3 <br> bytes |

### 3.13.3 Logon (Msg Type = A)

The Logon message is used to start a session by the client application and to accept it by the ClearGate.

| Tag | Name | Req | Valid values | Format | Description |
| :--- | :--- | :--- | :--- | :--- | :--- |
|  | Standard Header | Y | MsgType = A |  |  |
| 98 | EncryptMethod | Y | $0=$ None | Int | Ignored by ClearGate |
| 108 | HeartBtInt | Y | $>=5$ | Int | Interval at which messages are sent to <br> verify the connection (Heartbeat <br> message) expressed in seconds. |
| 141 | ResetSeqNumFlag | N | N | Boolean | Only allows the value "N", as it is not <br> required in the implementation of the <br> protocol |
| 789 | NextExpectedMsgSe <br> qNum | N |  | restMessagelndicato <br> r | N |
| 464 | Y = Test <br> N = Production <br> (MsgSeqNum) that it expects to receive |  |  |  |  |
| 553 | Username | Boolean | Indicates whether it is a test or <br> production session. <br> The client can use it optionally to <br> indicate if it wants to connect to the <br> production or test environment. The <br> start of a session is accepted only if this <br> environment is valid for the ClearGate <br> If the client does not indicate anything, <br> this parameter is not taken into account. |  |  |
| In any event ClearGate always informs |  |  |  |  |  |
| this field |  |  |  |  |  |$|$

### 3.13.4 Logout (Msg Type = 5)

The Logout message is used by both parties to request the end of a communication session and to accept said request.

| Tag | Name | Req | Valid values | Format | Description |
| :--- | :--- | :--- | :--- | :--- | :--- |
|  | Standard Header | Y | MsgType $=5$ |  |  |
| 58 | Text | N |  | String | Explanatory text |
|  | Standard Trailer | Y |  |  |  |

### 3.13.5 Heartbeat (Msg Type = 0)

The Heartbeat message is used by both parties to indicate that the connection is active.

| Tag | Name | Req | Valid values | Format | Description |
| :--- | :--- | :--- | :--- | :--- | :--- |
|  | Standard Header | Y | MsgType =0 |  |  |
| 112 | TestReqID | N |  | String | If the message is the reply to a <br> Test Request message, it must <br> contain the same value as the <br> original TestReqID field. <br> Otherwise, this field should be <br> omitted. |
|  |  |  |  |  |  |

### 3.13.6 Test Request (Msg Type = 1)

The Test Request message is used by both parties to request that a Heartbeat message be sent.

| Tag | Name | Req | Valid values | Format | Description |
| :--- | :--- | :--- | :--- | :--- | :--- |
|  | Standard Header | Y | MsgType $=1$ |  |  |
| 112 | TestReqID | Y |  | String | Identifier of the request. It must be <br> included in the Heartbeat message <br> reply |
|  | Standard Trailer | Y |  |  |  |

### 3.13.7 Resend Request (Msg Type = 2)

The Resend Request message can be used by both parties to request the resending of messages that have not been received.

ClearGate only makes use of this functionality after a Logon message. In any other case the reception of a message out of sequence is considered a serious error and the connection is terminated.

ClearGate will only accept this type of message immediately after receiving a Logon message in which the NextExpectedMsgSeqNum field has not been specified.

| Tag | Name | Req | Valid values | Format | Description |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | Standard Header | Y | MsgType = 2 |  |  |
| 7 | BeginSeqNo | Y | Valid sequence number | Int | Sequence number of the first message in the range of messages requested to be resent. Its value must be less than the last sequence number received |
| 16 | EndSeqNo | Y | $0=$ Infinite <br> Valid sequence <br> Number | Int | Sequence number of the last message of the range of messages requested to be resent. Its value must be lower than the last sequence number received. If the request is only for one message, then EndSeqNo = BeginSeqNo If the request is for all the messages starting from a given one, then EndSeqNo $=0$ |
|  | Standard Trailer | Y |  |  |  |

### 3.13.8 Sequence Reset (Msg Type = 4)

The Sequence Reset message is used by both parties to fill a gap in the messages that are being sent, by reassigning the sequence number (see 3.5). The FIX standard allows other uses of this message that are not supported by CCP (note that the GapFillFlag field is required and must always contain the value " $Y$ ").

| Tag | Name | Req | Valid values | Format | Description |
| :--- | :--- | :--- | :--- | :--- | :--- |
|  | Standard Header | Y | MsgType $=4$ |  | Note that the PossDupFlag must <br> contain the value " Y " |
| 123 | GapFillFlag | $\mathrm{Y}^{*}$ | $\mathrm{Y}=$ Indicates that <br> the message is to <br> fill a gap | Boolean | More information is available in the <br> FIX 4.4 specifications <br> documentation <br> 36 NewSeqNo |
|  | Y |  | Int | Sequence number of the message <br> that will now be sent |  |
|  | Standard Trailer | Y |  |  |  |

### 3.13.9 Reject (Msg Type = 3)

The Reject message is used by ClearGate to reject a message that does not comply with the FIX protocol specified by CCP.

| Tag | Name | Req | Valid values | Format | Description |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | Standard Header | Y | MsgType = 3 |  |  |
| 45 | RefSeqNum | Y |  | Int | Sequence number of the rejected message |
| 373 | SessionRejectRe ason | N | 0 Invalid tag number <br> 1 Required tag missing <br> 2 Tag not defined for this message type <br> 3 Undefined Tag <br> 4 Tag specified without a value <br> 5 Value is incorrect (out of range) for this tag <br> 6 Incorrect data format for value <br> 9 CompID problem <br> 11 Invalid MsgType <br> 13 Tag appears more than once <br> 14 Tag specified out of required order <br> 15 Repeating group fields out of order <br> 16 Incorrect NumInGroup count for repeating group <br> 17 Non "data" value includes field delimiter (SOH character) 99 Other | Int | Code indicating the rejection motive |
| 58 | Text | N |  | String | Contains a more detailed explanation of the reason for the rejection |
|  | Standard Trailer | Y |  |  |  |

## 4. General conventions in application messages

### 4.1 Trade identification

### 4.1.1 SecondaryExecID

The SecondaryExecID field has the trade register number. This is the code assigned by the central trading system to the trade or cross trade referred to in the message. The period in which the uniqueness of this field is guaranteed is determined by each central trading host.

### 4.1.2 SecondaryTradeReportID

The SecondaryTradeReportID field has the CCP register number. This is the code assigned by the central clearing system to the trade referred to in the message. Both sides to the trade receive the same identifier.

Each trade in the trading system has a corresponding trade in the clearing system, but some trade types are specific to the clearing system, such as assignments, exercise trades, etc.

The SecondaryTradeReportRefID and TrdMatchID fields are also containing a CCP register number of the previous and initial trade respectively.

### 4.2 Parties block

The Parties block (or the NestedParties block) is used in many application messages to specify the parties involved in the transaction.

In the detailed definition of the messages that this block contains, the block is incorporated exactly as shown below. The list of possible values is restricted by the specific characteristics of the message.

| Tag | Name | Req | Valid values | Format | Description |
| :--- | :--- | :--- | :--- | :--- | :--- |
|  | Start <Parties> |  |  |  |  |
| 453 | NoPartyIDs | N |  | NumInGroup |  |
| $\overrightarrow{4}$ <br> 448 | PartyID | N |  | String | Member code assigned by CCP |
| $\overrightarrow{4}$ <br> 447 | PartyIDSource | N | D = Proprietary/ <br> Custom code | Char | Indicates the codification used in <br> the PartyID field. CCP's own <br> codification is always used |
| $\overrightarrow{452}$ | PartyRole | N |  | Indicates the role taken by the <br> party indicated in the PartyID <br> field |  |
|  | End <Parties> |  |  |  |  |

Various roles are used in the messages contained in this manual. The interpretation of the PartyID field depends on the value of the PartyRole, as explained below:

- 1 (Executing Firm)
- Send. The implemented protocol does not allow the use of this role in sending
- Receive. When this value is specified, the PartyID field corresponds to the Executing Broker code of the Give-up treated
- 3 (Give-out Internal Reference)
- Send. When this value is specified, the PartyID field corresponds to the reference assigned by the Executing Broker for internal purposes
- Receive. When this value is specified, the PartyID field corresponds to the Give-out internal reference
- $\mathbf{4}$ (Clearing Firm)
- Send. Used as a selection criteria. When this value is specified, it indicates that only information related to the accounts cleared by the member specified in the PartyID is requested
- Receive. When this value is specified, the PartyID field corresponds to the member code which acts as a clearer of the account treated
- 12 (Executing Trader)
- Send The implemented protocol does not allow the use of this role in sending
- Receive. When this value is specified, the PartyID field corresponds to the user that requested the transfer or Give-up
- 13 (Order Origination Firm).
- Send. Used as a selection criteria. When this value is specified, the request to the member accounts regarding the PartyID field is being restricted
- Receive. When this value is specified, the PartyID field corresponds with the member code of the account being handled
- 14 (Give-up Clearing Firm)
- Send. When this value is specified, the PartyID field corresponds to the Clearing Broker code of the Give-up requested
- Receive. When this value is specified, the PartyID field corresponds to the Clearing Broker code of the Give-up treated
- 24 (Give-up Reference)
- Send. When this value is specified, the PartyID field corresponds to the Give-up reference
- Receive. When this value is specified, the PartyID field corresponds to the Give-up reference
- 33 (Give-up Mnemonic)
- Send. When this value is specified, the PartyID field corresponds to the Give-out mnemonic assigned by the Executing Broker, or the Give-in mnemonic assigned by the Clearing Broker
- Receive. When this value is specified, the PartyID field corresponds to the Give-out mnemonic or Give-in Mnemonic
- 36 (Clearing Broker Trader)
- Send The implemented protocol does not allow the use of this role in sending
- Receive. When this value is specified, the PartyID field corresponds to the user of the Clearing Broker that accepted or rejected the Give-up


### 4.3 Symbol and SecurityID

Symbol and SecurityID tags have different meanings depending on how the user associated to the FIX client has been configurated.

These tags can be included in the Instrument, UnderlyingInstrument and InstrumentLeg blocks.
The two possible configurations are:

| Type of Configuration | Meaning of Symbol | Meaning of SecurityID |
| :--- | :--- | :--- |
| By contract | Contract code | Underlying asset (see Table 14 in <br> "Codification tables" document) |
| By asset | Underlying asset (see Table 14 in <br> "Codification tables" document) | Contract code |

All sections and messages described in this manual refer to type of configuration "By contract".

### 4.4 Instrument block

In some requests, the FIX client may specify selection criteria for the contracts. In these cases, they will only receive information on the contracts that meet these criteria. The possible selection criteria correspond to the fields of the Instrument block. The table below indicates which fields are accepted by CCP and the type of request that can be made.

| Field | Meaning | Contract information <br> request | Price information <br> request |
| :--- | :--- | :--- | :--- |
| CFICode | Coding of financial instruments <br> according to ISO 10962 | X | X |
| SecurityID | Underlying asset | X | X |
| MaturityMonthYear | Contract expiration | X |  |
| Symbol | Contract code | X |  |

The use of these fields is explained in detail in the following sub-sections.

### 4.4.1 CFICode

The CFICode field is the least selective criteria. It identifies the type of contract, such as all the futures or all the options. The values allowed for the CFICode are based on ISO 10962. The character "X" is used as a wildcard. Some examples for the CFICode as selection criteria are shown in the following table. Note that the values must have exactly 6 characters.

| CFICode | Meaning |
| :--- | :--- |
| XXXXXX | All contracts supported by CCP |
| FXXXSX | All futures |
| FFSPSX | All futures with physical delivery |
| FFSCSX | All futures with cash delivery |
| OXXXXS | All options |
| OCXXXS | All call options |
| OPXXXS | All put options |
| MRXXXX | Contracts defined by CCP for the delivery of the underlying <br> security; these are non-tradable |

See table 10 in document "Codification Tables" for a list of values. For further information about the Security List message refer to chapter 6 Contracts Information.

### 4.4.2 Underlying asset (SecurityID field)

This code identifies the underlying asset of a contract (see table 14 in document "Codification Tables").

### 4.4.3 Expiration (MaturityMonthYear field)

For contracts with standard maturities, indicates the month and year when the contract expires. In this case, the format for this field is YYYYMM (e.g. 200812).

For contracts with non-standard maturities, indicates the date when the contract expires. In this case, the format for this field is YYYYMMDD (e.g. 20081219).

For contracts with week standard maturities, the format for this field is YYYYMMwW (e.g. 200312w3).

### 4.4.4 Contract code (Symbol field)

This is the most selective of the criteria, as it refers to a specific contract. It can only be used to request contract information. If you want to use the other selection criteria and do not want to specify a particular contract, complete this field with the value " $[\mathrm{N} / A]$ ", as indicated in the FIX standard specifications. This field is obligatory in the Instrument block.

### 4.4.5 Combination of selection criteria

When various selection criteria are combined, only those contracts that meet all the requirements are selected. When a selection criteria is not specified it is understood that this criteria is to be ignored and no contract will be discarded for this reason.

The following table shows some examples for the Financial Contract Group at CCP.

| CFICode | SecurityID | MaturityMonthYear | Symbol | Meaning |
| :--- | :--- | :--- | :--- | :--- |
| FXXXSX | FIE | (omitted) | $[\mathrm{N} / \mathrm{A}]$ | All futures on IBEX index |
| FFSPXX | BBVA | (omitted) | $[\mathrm{N} / \mathrm{A}]$ | All the BBVA futures contracts with <br> physical delivery |
| (omitted) | FIE | 200703 | $[\mathrm{~N} / \mathrm{A}]$ | All the contracts with IBEX index as <br> underlying, with March 2007 expiration |
| OCXXXS | (omitted) | 200606 | [N/A] | All call options with June 2006 expiration |
| (omitted) | (omitted) | (omitted) | $<$ specific <br> contract> | The contract specified |
| (Omitted) | (Omitted) | (omitted) | [N/A] | All contracts |

### 4.5 Error format (Text Field)

The Text field is used in various messages to include the description of an error. In these cases the format of the field is:
\%MFsXXXXXX-Free text
Where s indicates the importance of the error (I: information, W: warning, E: Error), XXXXXX is the error code, which is followed by an explanation. "\%MF" text is always present.

## 5. Common Application Messages

### 5.1 Introduction

This chapter presents some common messages at the application level that cover two functions: the control of the communication status and the rejection of messages by ClearGate.

### 5.2 Network communication status

ClearGate includes a mechanism to inform the client application of the status of communication between ClearGate itself and the central system. This functionality is achieved using the FIX Network Status messages.

The request can be made on demand or by subscription.

### 5.3 Password change

This functionality allows to change the individual user password used in the connection between the client application and ClearGate.

The new password is valid for all the next future communication sessions between the client application and ClearGate.

### 5.4 Rejection of application messages

When ClearGate receives a supported message with correct syntax in an unsupported situation, but there is no specific rejection message, the Business Message Reject is used. In particular, this is used to reject the Confirmation Ack and Network Counterparty System Status Request messages.

### 5.5 List of messages

| Message | Description |
| :--- | :--- |
| Network Counterparty System Status <br> Request (Msg Type = BC) | Request of connection status between ClearGate and the <br> central systems |
| Network Counterparty System Status <br> Response (Msg Type = BD) | Report on status of connection between ClearGate and <br> the central systems |
| User Request (Msg Type = BE) | Individual user password change request |
| User Response (Msg Type = BF) | Reply to a User Request message |
| Business Message Reject (MsgType = j) | Rejection of message at application level (used when <br> there is no specific message) |

### 5.6 Message flow

Check connection status on demand


## Subscription to connection status



### 5.7 Annotations and adaptations of FIX 4.4

In the User Request message, the Password [554] and NewPassword [925] fields are now required.

### 5.8 Definition of messages

### 5.8.1 Network Counterparty System Status Request (Msg Type = BC)

Message sent by the client application to request information on the status of the connection between ClearGate and the CCP central systems.

| Tag | Name | Req | Valid values | Format | Description |
| :--- | :--- | :--- | :--- | :--- | :--- |
|  | Standard Header | Y | MsgType = BC |  |  |
| 935 | NetworkRequestType | Y | 1 = Snapshot <br> 2 = Subscribe <br> 4 Stop subscribing | Int |  |
| 933 | NetworkRequestID | Y |  | String(10) | Message <br> identifier |
|  | Standard Trailer | Y |  |  |  |

### 5.8.2 Network Counterparty System Status Response (Msg Type = BD)

Message sent by ClearGate as reply to a Network Counterparty System Status Request Message.
It has information about the connectivity between ClearGate and the CCP central systems.

| Tag | Name | Req | Valid values | Format | Description |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | Standard Header | Y | MsgType = BD |  |  |
| 937 | NetworkStatusRespons eType | Y | 1 = Full | Int |  |
| 933 | NetworkRequestID | Y |  | String | Message identifier Network Counterparty System Status Request |
| 932 | NetworkResponselD | Y |  | String | Unique message identifier |
| 936 | NoComplDs | Y | 1 | NumInGr oup |  |
| $\rightarrow 930$ | RefComplD | N |  | String | Contains the same value as the SenderCompID field in the header (see 3.3) This field is always included in the message |
| $\rightarrow 931$ | RefSubID | N | Clearing Contract Group Code. See table 11 in document <br> "Codification <br> Tables" for details of the Clearing Contract Group codes | String | Contains the same value as the SenderSubID field in the header (see 3.3) This field is always included in the message |
| $\rightarrow 928$ | StatusValue | N | 1 = Connected <br> $2=$ Not connected - down expected up <br> 3 = Not connected - down expected down | Int | Connection status <br> This field is always included in the message. <br> The value " 3 " indicates the end of the clearing session. After this moment ClearGate can keep accepting connections and information requests. In this situation the StatusText field contains "\%MFI - End of session" |
| $\rightarrow 929$ | StatusText | N |  | String | Additional information |
|  | Standard Trailer | Y |  |  |  |

### 5.8.3 User Request (Msg Type = BE)

Message sent by the client to modify the password used in their connection to the ClearGate.

| Tag | Name | Req | Valid values | Format | Description |
| :--- | :--- | :--- | :--- | :--- | :--- |
|  | Standard Header | Y | MsgType = BE |  |  |
| 923 | UserRequestID | Y |  | String (10) | Unique identifier for each User <br> Request message |
| 924 | UserRequestType | Y | 3 = Change <br> Password For <br> User | Int |  |
| 553 | Username | Y |  | String | Identifier of the user assigned by CCP. <br> It is currently comprised of the <br> combination of the member code and <br> the user code assigned by CCP |
| 554 | Password | $\mathrm{Y}^{*}$ |  | Old Password |  |
| 925 | NewPassword | $\mathrm{Y}^{*}$ |  | String (10) | String (10) |
|  | Standard Trailer | Y |  | New Password |  |

### 5.8.4 User Response (Msg Type = BF)

Message sent by ClearGate to notify the status of the request initiated with the User Request message.

This message is only sent to the user who made the request.

| Tag | Name | Req | Valid values | Format | Description |
| :--- | :--- | :--- | :--- | :--- | :--- |
|  | Standard Header | Y | MsgType = BF |  |  |
| 923 | UserRequestID | Y |  | String | Identifier assigned by the client in the <br> User Request message |
| 553 | Username | Y |  | String | User identifier |
| 926 | UserStatus | N | 5 = Password <br> Changed <br> $6=$ Other | Int | Status of the User Request message <br> If rejected (value 6) , there is an <br> explanation in the UserStatusText field |
| 927 | UserStatusText | N |  | String | When UserStatus $=6$ there is an <br> explanation of the rejection |
|  | Standard Trailer | Y |  |  |  |

### 5.8.5 Business Message Reject (MsgType = j)

Message sent by ClearGate when it receives a supported message that is syntactically correct in an unsupported situation, and there is no specific rejection message. It is especially used to reject the Confirmation Ack and Network Counterparty System Status Request messages.

| Tag | Name | Req | Valid values | Format | Description |
| :--- | :--- | :--- | :--- | :--- | :--- |
|  | Standard Header | Y | MsgType $=\mathrm{j}$ |  | Int |
| 45 | RefSeqNum | Y |  | MsgSeqNum of the <br> rejected message |  |
| 372 | RefMsgType | Y | $\cdot$ | String | MsgType of the rejected <br> message |
| 379 | BusinessRejectRefID | N |  | Optional Identifier of the <br> rejected message. <br> For a Confirmation Ack <br> message (MsgType=AU) <br> rejected, this field <br> contains the ConfirmID <br> [664]. |  |
| 380 | BusinessRejectReason | Y | 0 = Other <br> 3= Unsupported <br> Message Type | Int | Reason for rejection |
| 58 | Text | Standard Trailer | Y |  |  |

## 6. Contracts Information

### 6.1 Introduction

This chapter distinguishes between the static and the dynamic contract information:

- Static contract information. Definition of contracts
- Dynamic contract information. Settlement price, traded volume and open interest

Each of these groups is covered in a separate section of this chapter. Section 6.4 provides details of the format of the corresponding messages.

### 6.2 Static contract information

### 6.2.1 Description

This functionality allows static contract information to be obtained defined in the CCP.

### 6.2.2 Request contract information

The request for the definition of contracts is made using the Security List Request message, as shown in the following table:

|  | Contracts <br> Snapshot | Contracts <br> Updates |
| :--- | :---: | :---: |
| Security List Request | $\mathbf{X}$ |  |
| Security List Request <br> NewSecuritySubscription $=1$ | $\mathbf{X}$ | $\mathbf{X}$ |

The meaning of each column is explained below:

- Contracts - Snapshot. One or more Security List messages are obtained with the description of the contracts available that meet the selection criteria specified in the request
- Contracts - Update. One Security List message is obtained with information on a new contract when it is introduced into the system. Only information on new contracts that meet the selection criteria indicated in the request is received

Note that the NewSecuritySubscription field has been added to the Security List Request message by CCP to enable the subscription to the definition of contracts created during the session, usually new strikes for options.

CCP recommends the use of the Security List Request message with NewSecuritySubscription = 1 and SubscriptionRequestType $=1$ so that the client application will have the maximum information. In this way information is obtained on all the changes that occur, including the entry of new contracts.

### 6.2.3 Reception of contract definitions

The information on the contract definitions is received in the Security List message. This message gives one contract at a time. The TotNoRelatedSym field gives the total number of contracts that meet the selection criteria and the NoRelatedSym field gives the number of contracts contained in that particular message.

When the current status plus updates is requested, first all the messages associated to the current status are sent and then the updates. This avoids confusion when following the list. It should be noted that the update messages only contain one contract per message.

### 6.2.4 Ending subscriptions

A Security List Request message is used to end a subscription to contract definitions, where the field NewSecuritySubscription $=2$.

### 6.2.5 List of messages

| Message | Description |
| :--- | :--- |
| Security List Request $($ Msg Type $=x)$ | Sent by the client to request the definition of contracts |
| Security List $(M s g$ Type $=y)$ | Sent by the server to provide the contract definitions. It is also used <br> to inform about the rejection of requests for this information |

### 6.2.6 Flow of messages

## Request contract definitions without update

After requesting contract definitions, one or more Security List messages will be received. Each of these messages indicates the total number of contracts that meet the selection criteria in the TotNoRelatedSym field and the number of contracts contained in the particular message in the NoRelatedSym field.


## Request contract definitions with updates

If the request for contract definitions includes the updates (NewSecuritySubscription $=1$ ) in addition to the messages detailed in the case above, when a new contract is entered in the system, a Security List message is received containing information on this contract.


## Request contract definitions, without contracts that meet the selection criteria

When there are no contracts that meet the selection criteria indicated in the contract definition request, ClearGate will reply with a Security List message where the field SecurityRequestResult $=2$. Note that in this case, if the request is made by subscription, that subscription will be active and therefore if new contracts are introduced that meet the selection criteria the corresponding messages will be received.


## Failed contract definition request

When a contract definition request is erroneous, it is answered with a Security List message where the field SecurityRequestResult $=1$.


### 6.2.7 Annotations and adaptations of FIX 4.4

- The NewSecuritySubscription (5682) user field has been added to the Security List Request message to support the functionality of receiving the contract definition when a new contract is entered in the system
- The AccruedInterestAmt [159] has been added to the Security List message
- The UnsolicitedIndicator field has been added to the Security List message


### 6.3 Dynamic contracts information

### 6.3.1 Description

This functionality allows dynamic information to be requested on the prices for a number of contracts.

### 6.3.2 Information request

The request for dynamic information related to prices is made using the Market Data Request message.

A number of contracts can be selected using a combination of fields of the Instrument block as explained in 4.3. As it can be seen in the detailed message description, various Instrument blocks can be included to make more than one selection simultaneously. A contract is considered selected if any of the selection criteria are met.

The types of information offered by CCP are listed below. A client can request a combination of these types of information in the same request.

- Settlement price
- Trade Volume
- Open position at the end of the previous session

The settlement price (Settlement Price field) information provided during the session includes the settlement price of the contract for the previous session. Once the settlement price of the current session has been fixed, this value will be used. The OpenCloseSettleFlag field shows when the closing price has been fixed.

The request may be just the current situation (snapshot) or include updates (snapshot + update).

### 6.3.3 Receipt of information

ClearGate sends the information requested in Market Data Snapshot Full Refresh messages.
If information updates have been requested, a new Market Data Snapshot Full Refresh message will be received every time there is a change. This message contains both the information that has changed as well as the rest of the fields requested in the subscription.

### 6.3.4 List of messages

| Message | Description |
| :--- | :--- |
| Market Data Request (Msg Type = V) | Sent by the client to request price information |
| Market Data Snapshot Full Refresh (Msg Type = W) | Sent by the server to return price information |
| Market Data Request Reject (Msg Type = Y) | Sent by the server to notify that a Market Data Request <br> has been rejected |

### 6.3.5 Message flow

## Dynamic contracts information request with updates

A dynamic contracts information request, without updates, is answered by ClearGate with a message for each of the contracts.


## Request for dynamic contracts information with updates

A request for dynamic contracts information with updates initially receives a series of messages for the selected contracts at the time of the request. From this moment on it receives messages notifying changes that occur.


Note that a request to end the subscription only receives a reply if there is an error.

## Incorrect dynamic contracts information request

When a dynamic contracts information request is incorrect the reply will be a Market Data Request Reject message.


### 6.3.6 Annotations and adaptations of FIX 4.4

- The incremental update is not supported
- In the Market Data Request Reject message, the meaning of the value 0 (invalid symbol) in the MDReqRejReason field has been broadened to indicate an invalid selection criteria


### 6.4 Definition of messages

### 6.4.1 Security List Request (Msg Type = x)

Used by the client to request the contract definitions.

| Tag | Name | Req | Valid values | Format | Description |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | Standard Header | Y | MsgType = x |  |  |
| 320 | SecurityReqID | Y |  | String(10) | Unique identifier for each Security List Request message If SubscriptionRequestType $=$ 2 or NewSecuritySubscription $=2$, it must contain the value of the original request |
| 559 | SecurityListRequestType | Y | $\begin{aligned} & 0=\text { Symbol } \\ & 1=\text { Security type } \\ & \text { and/or CFICode } \end{aligned}$ | Int | Selection criteria used |
|  | Start <Instrument> |  |  |  |  |
| 55 | Symbol | Y | [N/A] or contract code | String(22) | ```Contract code if SecurityListRequestType \(=0\), [ \(N / A\) ] if SecurityList- RequestType \(=1\)``` |
| 48 | SecurityID | N | See table 14 in document "Codification Tables" for a list of possible values | String | Underlying asset <br> Not allowed if <br> SecurityListRequestType $=0$ |
| 22 | SecurityIDSource | N | 8 = Exchange Symbol | String | Required if SecurityID is present. <br> Not allowed if Security- <br> ListRequestType $=0$ |
| 461 | CFICode | N | Exact length. See 4.4.1 for a list of possible values | String(6) | Contract type <br> Not allowed if <br> SecurityListRequestType $=0$ |
| 200 | MaturityMonthYear | N | YYYYMM or YYYYMMDD or YYYYMMwW | Month- <br> Year | Contract expiration <br> Not allowed if <br> SecurityListRequestType $=0$ |
|  | End <Instrument> |  |  |  |  |
| $5682$ | NewSecuritySubscription | N | ```0 = Snapshot (default value) 1= Updates (Subscribe) 2= Unsubscribe``` | Char | Indicates the type of contract definition request |
|  | Standard Trailer | Y |  |  |  |

### 6.4.2 Security List (Msg Type =y)

Message sent by the server to provide the definition of one or more contracts.

| Tag | Name | Req | Valid values | Format | Description |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | Standard Header | Y | MsgType = y |  |  |
| 320 | SecurityReqID | Y |  | String | Identifier of Security List Request message that it is replying to |
| 322 | SecurityResponseID | Y |  | String | Unique identifier for each Security List message |
| 560 | SecurityRequestResult | Y | 0=Valid request 1=Invalid or unsupported request $2=$ No instruments found that match selection criteria $4=$ Instrument data temporarily unavailable $5=$ Request was rejected because the CFICode specified is not supported | Int | Result of request identified by SecurityReqID. <br> If rejected ( $>0$ ) there is an explanation in the Text [58] field |
| 325* | UnsolicitedIndicator | N | $\mathrm{N}=$ The message is part of a snapshot <br> $\mathrm{Y}=$ The message is sent due to an update (new contract) | Boolean | Contains " $Y$ " when the message is sent due to a subscription |
| 393 | TotNoRelatedSym | N |  | Int | Total number of contracts that meet the selection criteria in the request. The number of contracts that the message contains is indicated in the NoRelatedSym field. This field is always present when SecurityRequestResult =0 |
| 893 | LastFragment | N |  | Boolean | Indicates when the message is the last in a sequence in response to a single request. This field is always present when SecurityRequestResult $=0$ |
| 146 | NoRelatedSym | N | 1 | NumInGro up | Indicates the number of elements contained in this message. |
|  | Start < Instrument> |  |  |  |  |
| $\rightarrow 55$ | Symbol | N | [N/A] or contract code | String(22) | Contract code. <br> Present if NoRelatedSym <br> has been specified and <br> SecurityRequestResult [560] $=0$ |
| $\rightarrow 48$ | SecurityID | N | See table 14 in document "Codification Tables" for a list of possible values | String | Underlying asset |
| $\rightarrow 22$ | SecurityIDSource | N | 8 = Exchange Symbol | String |  |
| $\rightarrow 454$ | NoSecurityAltID | N | 1 |  |  |


| Tag | Name | Req | Valid values | Format | Description |
| :---: | :---: | :---: | :---: | :---: | :---: |
| $\rightarrow \rightarrow 455$ | SecurityAltID | N |  | String | ISIN code for the contract |
| $\rightarrow \rightarrow 456$ | SecurityAltIDSource | N | 4 = ISIN number | String |  |
| $\rightarrow 461$ | CFICode | N | Exact length <br> See table 10 in document <br> "Codification <br> Tables" for a list of values | String(6) | Contract type in accordance with the ISO 10962 standard |
| $\rightarrow 200$ | MaturityMonthYear | N | YYYYMM or YYYYMMDD or YYYYMMwW | Month- <br> Year | Contract expiration |
| $\rightarrow 541$ | MaturityDate | N |  | LocalMktD ate | Expiration date |
| $\rightarrow 225$ | IssueDate | N |  | UTCDate | Date contract issued |
| $\rightarrow 202$ | StrikePrice | N |  | Price | Exercise price. Only present for options |
| $\rightarrow 231$ | ContractMultiplier | N |  | Float | Indicates the ratio or multiplier to convert "nominal" units (e.g. contracts) to total units (e.g. shares) |
| $\rightarrow 969$ | MinPriceIncrement | N |  | Float | Minimum amount allowed for price change. This field is always included in the message |
| $\rightarrow 107$ | SecurityDesc | N |  | String | Description of the underlying asset. See table 14 in document "Codification Tables" for a list |
|  | End <Instrument> |  |  |  |  |
| $\rightarrow 711$ | NoUnderlyings | N | 1 | NumInGro up | Present if the contract has another contract as its underlying |
|  | Start <UnderlyingInstrument> |  |  |  |  |
| $\rightarrow \rightarrow 311$ | UnderlyingSymbol | Y |  | String(22) | Symbol for underlying contract |
|  | End <UnderlyingInstrument> |  |  |  |  |
| $\rightarrow 15$ | Currency | N |  | Currency | Currency code. Follows ISO 4217 standard |
| $\rightarrow 555$ | NoLegs | N |  | $\begin{aligned} & \text { NumInGro } \\ & \text { up } \\ & \hline \end{aligned}$ | Present if the contract has deliverable securities |
|  | Start <InstrumentLeg> |  |  |  |  |
| $\rightarrow \rightarrow 600$ | LegSymbol | N |  | String | Symbol for deliverable contract |
| $\rightarrow \rightarrow 603$ | LegSecurityIDSource | N | $8 \text { = Exchange }$ Symbol | String |  |
| $\rightarrow \rightarrow 604$ | NoLegSecurityAItID | N | 1 |  |  |
| $\begin{aligned} & \rightarrow \rightarrow \rightarrow 60 \\ & 5 \end{aligned}$ | LegSecurityAltID | N |  | String | ISIN code for the delivery contract |
| $\begin{aligned} & \rightarrow \rightarrow \rightarrow 60 \\ & 6 \end{aligned}$ | LegSecurityAltIDSource | N | 4 = ISIN number | String |  |
| $\rightarrow \rightarrow 253$ | LegFactor | N |  | Float | Conversion factor for deliverable contract |
| $\rightarrow \rightarrow 599$ | LegInstrRegistry | N | 1 = IBERCLEAR | String | Code of the Central Security Depositary for deliverable contract |
| $\rightarrow \rightarrow$ 159* | AccruedInterestAmt | N |  | Amt | Accrued interest for deliverable contract |
|  | End < InstrumentLeg > |  |  |  |  |
| $\rightarrow 58$ | Text | N |  | String | If SecurityRequestResult |


| Tag | Name | Req | Valid values | Format | Description |
| :--- | :--- | :--- | :--- | :--- | :--- |
|  |  |  |  |  | $[560]>0$ there is an <br> explanation of the rejection |
|  | Standard Trailer | Y |  |  |  |

### 6.4.3 Market Data Request (Msg Type = V)

Used by the client to request price information.

$\left.$| Tag | Name | Req | Valid values | Format | Description |
| :--- | :--- | :--- | :--- | :--- | :--- |
|  | Standard Header | Y | MsgType = V |  | Sring(10) | | Unique identifier for each Market |
| :--- |
| Data Request message. If |
| SubscriptionRequestType $=2$ it |
| must contain the identifier of the |
| original request | \right\rvert\,

### 6.4.4 Market Data Request Reject (Msg Type = Y)

Used by ClearGate to reject a Market Data Request.

| Tag | Name | Req | Valid values | Format | Description |
| :--- | :--- | :--- | :--- | :--- | :--- |
|  | Standard Header | Y | MsgType $=\mathrm{Y}$ |  |  |
| 262 | MDReqID | Y |  | String | Identifier of the request being <br> rejected |
| 281 | MDReqRejReason | N | 0 = Invalid selection criteria <br> 1 = Duplicate MDReqID <br> = Unsupported <br> SubscriptionRequestType <br> 5 = Unsupported MarketDepth <br> = Unsupported <br> MDUpdateType <br> 8 = Unsupported <br> MDEntryType | Char | Reason for rejection. This <br> field is always present in the <br> message |
| 58 | Text |  |  | String | Explanation of rejection <br> motive |
|  | Standard Trailer | Y |  |  |  |

### 6.4.5 Market Data Snapshot Full Refresh (Msg Type = W)

Used by ClearGate to communicate price information requested with a Market Data Request message.

| Tag | Name | Req | Valid values | Format | Description |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | Standard Header | Y | MsgType = W |  |  |
| 262 | MDReqID | Y |  | String | Identifier of the Market Data Request message that is being replied to |
|  | Start <Instrument> |  |  |  |  |
| 55 | Symbol | Y | Contract code | String(22) | Contract code |
|  | End <Instrument> |  |  |  |  |
| 268 | NoMDEntries | Y |  | NumInGroup | Number of entries to follow |
| $\rightarrow 269$ | MDEntryType | Y | 6 = Settlement Price B = Trade Volume (total volume for contract in session) C = Open Interest | Char | Type of information that the present entry contains. |
| $\rightarrow 270$ | MDEntryPx | N |  | Price | Price. Present when the MDEntryType is equal 6 . When it is not present, a zero value should be understood |
| $\rightarrow 271$ | MDEntrySize | N |  | Qty | Volume. Present when the MDEntryType is equal $B$ or $C$ |
| $\rightarrow 286$ | OpenCloseSettleFlag | N | 1 = Session Open / Close / Settlement entry 4 = Entry from previous business day $5=$ Theoretical Price Value | MultipleValue String | When MDEntryType $=6$, the values 1 and 4 are used to indicate if the closing price is from the previous session (value 4) or are the prices for the current session (value 1). |
| $\rightarrow 811$ | PriceDelta | N |  | float | $\begin{aligned} & \text { Maybe present if MDEntryType = } \\ & 6 \end{aligned}$ |
|  | Standard Trailer | Y |  |  |  |

## 7. Monitoring and Management of Positions

### 7.1 Introduction

In this chapter the functionalities related to the open position are covered. This includes as the request as the modification by means of position adjustment.

### 7.2 Request of Open position

The client application can request the open position by account and contract by sending a Request For Positions message.

The open position for an account and contract reflects the situation of that account at the time of the request for the contract in question. CCP provides this information divided into two parts:

- The open position at the beginning of the day
- The combined trades made from the beginning of the day until the time of the query

The open position at the start of the day is the position the account had that was used for the market valuation and calculation of position margins for the previous session. Only are given the account/contract combinations with open position different than zero.

The open position at the beginning of the day is reported by Position Report message.
The information on the trades made from the beginning of the day until the time of the request is reported using Trade Capture Report messages.

In addition to the position at the time of the request, the Request For Positions message allows a subscription to be made, requesting information updates for the open position. The updates of said information are made through the notification of trades made with Trade Capture Report messages. Note that when the update request is made, the trades of all the accounts will be received, whether or not they have positions at the time of the request.

The request can include a series of selection criteria, such as the clearing member, the contract type, the specific instrument, etc. The information received in the reply corresponds only to the accountcontract pairs that meet the criteria specified in the request.

Should the request have been made with a subscription, once the end of the day arrives and the position is definitive, ClearGate sends a Position Report message, for each account included in the request, informing of the open position at that moment. The same message will also be included in the answer to a request without subscription made after the end of day.

### 7.3 Request by trading and/or clearing member

In the request messages Request For Positions allows to make the request by trading member and/or clearing member using the Parties block.

Whether or not a user of clearing member will be able to see the trading activity of a member that it clears will depend on the user permissions.

When these fields are not specified in a request it is considered that the request only refers to the own accounts of the member to which the trader who makes the request belongs.

When a clearing member wishes to query the accounts position that it clears it will have to include its own member code in the PartyID field associated with PartyRole 4 (Clearing Firm). If in addition it wishes to restrict this query per trading member, it can use the PartyID field associated to PartyRole 13 (Order Origination Firm).

In the following table different examples of selections are given and their interpretation. In these examples Member $A$ is a clearing member that makes the query and Member $B$ is a trading member cleared by A .

| Trading Member <br> (parties block with <br> PartyRole = 13) | Clearing Member <br> (parties block with <br> PartyRole = 4) | Interpretation |
| :---: | :---: | :--- |
| - | - | Selection of accounts of Member A |
| Member A | - | Selection of accounts of Member A |
| - | Member A | Selection of accounts cleared by Member A, belonging <br> to any trading member that it clears including its own |
| Member B | Member A | Selection of accounts cleared by Member A, belonging <br> to Member B |
| Member B | - | Erroneous query. If a different code is given other than <br> its trading member code, the clearing member code <br> must be given |
| - | Member B | Erroneous query. <br> If a code other than the own one is given as clearing <br> Member, the trading member should be specified with <br> the self-trading code |

In the following table some examples are given, where the request is done by the trading member B . Some of the Member B accounts have the Member A as clearing member.

| Trading Member <br> (parties block with <br> PartyRole = 13) | Clearing Member <br> (parties block with <br> PartyRole = 4) | - |
| :---: | :---: | :--- |
| - | - | Selection of his own accounts (Member B) |
| Member B | Member A | Selection of his own accounts (Member B) <br> Selection of his own accounts (Member B) with Member <br> A as clearing member |
| Member B | Member A | Erroneous query. If a code other than the own one is <br> given as clearing member, the user member code must <br> be present |
| - |  |  |

### 7.4 Position adjustments

To request a position adjustment, the client application should send a Position Maintenance Request message indicating the account and contract that it wishes to adjust and the number of contracts desired to reduce the position.

ClearGate responds to this request with a Position Maintenance Report message informing of the acceptance or rejection of the request. Irrespective of the acceptance or rejection, this message informs of the position for the account and contract of reference at the moment of emission of the message.

In CCP, the position adjustment is implemented by two closing position trades of opposite sign and the same volume as the adjustment. Users subscribed to the Trade Capture Report messages will receive the messages associated with these trades.

### 7.5 List of messages

| Message | Description |
| :--- | :--- |
| Request For Positions (Msg Type = AN) | Request for information on open position |
| Request For Positions Ack (Msg Type = AO) | Acknowledgement of Request For Positions message |
| Position Report (Msg Type = AP) | Information on open position in the CCP for a contract and <br> account |
| Trade Capture Report (Msg Type = AE) | Information on a trade registered in the CCP |
| Position Maintenance Request (Msg Type = AL) | Request for position adjustment |
| Position Maintenance Report (Msg Type = AM) | Report of an acceptance or rejection of a position adjustment |

### 7.6 Message flow

## Request open position without update

The following example shows the messages corresponding to an account-contract combination. If the selection criteria refer to more than one combination, the same messages for each of them will be received.

ClearGate Client ClearGate Server


## Open position request with updates.

The following example shows the messages corresponding to an account-contract combination. If the selection criteria refer to more than one combination, the same messages for each of them will be received.

ClearGate Clien
ClearGate Server


## Acceptance of a request for position adjustment

Request of a position adjustment for $n$ contracts. When the message is processed by the system the account has $L$ and $N$ contracts bought and sold respectively.
ClearGate Client
PosTransType [709] = 3 (Position Adjustment);
PosType [703] PA (Adjusment Qty);
LongQty [704] = n

Rejection of Request for position adjustment
ClearGate Client
PosTransType [709] = 3 (Position Adjustment);
PosType [703] = PA (Adjusment Qty);
LongQty [704] = n
Position Maintenance Report ("AM")
PosTransType [709] = 3 (Position Adjustment);
PosMaintStatus [722] = 2 (Rejected)

### 7.7 Annotations and adaptations of FIX 4.4

- The ExchangeTradeType [5681] user field has been added to the Trade Capture Report message
- The LeavesQty [151] and PosReqID [710] fields have been added to the Trade Capture Report message
- The LegSymbol [600] field has been added to the Position Maintenance Request and Position Maintenance Report messages
- The Trade Capture Report message only informs on one of the parties involved in the trade. Specifically, it informs on the party that the message is being sent to
- In the Request For Positions message the Parties Block does not have to be included. In this case the trading member's own code will be considered selected.


### 7.8 Definition of messages

### 7.8.1 Request For Positions (Msg Type = AN)

Message sent by the client to request the open position, with or without updates.
It can also be used to request the status of exercise instructions (see chapter 10).

| Tag | Name | Req | Accepted values | Format | Description |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | Standard Header | Y | MsgType = AN |  |  |
| 710 | PosReqID | Y |  | String | Unique identifier for each Request For Positions message |
| 724 | PosReqType | Y | 0 = Positions <br> 2 = Exercises | Int | Indicates the type of transaction request |
| 263 | SubscriptionRequestType | N | 0=Snapshot (default value) 1=Snapshot + Updates 2= Unsubscribe | Char | Request type |
| $\rightarrow$ | Start <Parties> |  |  |  |  |
| $\begin{aligned} & \overrightarrow{453} \end{aligned}$ | NoPartylDs | Y | >0,<=2 | NumInGroup | The Parties block is required by the standard. ClearGate does not require this block to be present. In this case the trading member's own code will be considered selected. |
| $\begin{aligned} & \vec{\rightarrow} \rightarrow \\ & 448 \\ & \hline \end{aligned}$ | PartyID | Y |  | String | Member code |
| $\begin{aligned} & \vec{\rightarrow} \\ & 447 \end{aligned}$ | PartyIDSource | Y | D = Proprietary / Custom code | Char | Required if NoPartyIDs has been specified |
| $\begin{aligned} & \hline \vec{\rightarrow} \\ & 452 \end{aligned}$ | PartyRole | Y | 13 = Order Origination Firm 4 = Clearing Firm | Int | Indicates the role taken by the code specified in PartyID. <br> Required if NoPartyIDs has been specified |
| $\rightarrow$ | End <Parties> |  |  |  |  |
| 1 | Account | Y | Fixed length | String(5) | Account code. The use of the wildcard "?" for the multiple selection is only allowed in the five positions at a time or in the last two positions, in which case it must be used for both at the same time |
| 581 | AccountType | Y | 1 | Int | Ignored by ClearGate |
|  | Start <Instrument> |  |  |  |  |
| 55 | Symbol | Y | [N/A] or contract code | String(22) | Contract code (When PosReqType=2 must refer to an option) |
| 48 | SecurityID | N | See table 14 in document "Codification Tables" for a list of possible values | String | Underlying asset |
| 22 | SecurityIDSource | N | 8 = Exchange Symbol | String | Required if the SecurityID has been specified |
| 461 | CFICode | N | Exact length. See 4.4.1 for a list of | String(6) | Contract type |


| Tag | Name | Req | Accepted values | Format | Description |
| :--- | :--- | :--- | :--- | :--- | :--- |
| 200 | MaturityMonthYear | N | possible values <br> YYYYMM or <br> YYYYMMDD or <br> YYYYMMwW | Month-Year | Contract expiration |
| 715 | End <Instrument> |  |  | LearingBusinessDate | Y |
|  |  | LocalMktDate | Ignored by ClearGate |  |  |
| 60 | TransactTime | Y |  | UTCTimestam <br> p | Time at which request <br> was generated |
|  | Standard Trailer | Y |  |  |  |

### 7.8.2 Request For Positions Ack (Msg Type = AO)

Used by the server to notify the result of a Request For Positions for an open position query. It precedes the information about the position itself.

Given that the Request For Positions message can be used to request the status of the exercise instructions, this message is also used to reply to this request (see chapter 10 for more information about exercise instructions).

| Tag | Name | Req | Accepted values | Format | Description |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | Standard Header | Y | MsgType = AO |  |  |
| 721 | PosMaintRptID | Y |  | String | Unique identifier for each Request For Positions Ack message |
| 710 | PosReqID | N |  | String | Identifier of the Request For Positions message, as specified in the message. This field is always present in the message |
| 727 | TotalNumPosRepo rts | N |  | Int | Number of messages that are going to be received in reply to the corresponding Request For Positions. |
| 728 | PosReqResult | Y | $0=$ Valid Request <br> 1 = Invalid or <br> unsupported Request <br> 2 = No positions <br> found that match <br> criteria <br> 4001 = Duplicate <br> PosReqID <br> $4002=$ Invalid <br> Account or Symbol | Int | Result of the Request For Position |
| 729 | PosReqStatus | Y | $\begin{aligned} & 0=\text { Completed } \\ & 2=\text { Rejected } \end{aligned}$ | Int | Request status |
| 1 | Account | Y | Fixed length | String(5) | Contains the same value as indicated in the request |
| 581 | AccountType | Y | 1 | Int | Contains the same value as indicated in the request |
| 58 | Text | N |  | String | Explanation if there is an error |
|  | Standard Trailer | Y |  |  |  |

### 7.8.3 Position Report (Msg Type = AP)

Message that notifies the open position for an account and contract, in reply to a Request For Positions message with the field PosReqType $=0$ (request of open position).

This message is also used to notify the exercise instructions, in reply to a Request For Positions message with the field PosReqType $=2$ (request of exercise instructions). See chapter 10 for more information on exercise instructions.

| Tag | Name | Req | Valid values | Format | Description |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | Standard Header | Y | MsgType = AP |  |  |
| 721 | PosMaintRptID | Y |  | String | Unique identifier for each Position Report message |
| 710 | PosReqID | N |  | String | Identifier of the Request For Positions message, as specified in the message. This field is always present in the message |
| 724 | PosReqType | N | 0 = Positions <br> 2 = Exercises | Int | Contains the same value as indicated in the request |
| 325 | UnsolicitedIndicator | N | $\mathrm{N}=$ The message is part of a snapshot $\mathrm{Y}=$ The message is sent as the result of a subscriptcion | Boolean | Contains " $Y$ " when the message is sent as the result of a subscription |
| 727 | TotalNumPosReports | N |  | Int | Number of account-contract pairs on which information is provided. Note that no information is provided for accounts without positions or exercise requests |
| 728 | PosReqResult | Y | 0 = Valid Request | Int | Result of Request For Positions. Note that erroneous requests are answered with a Request For Positions Ack message |
| 715 | ClearingBusinessDate | Y |  | LocalMktDate | The content of this field should not be considered, and is included as requirement of the standard |
|  | Start <Parties> |  |  |  |  |
| 453 | NoPartylDs | N |  | NumInGroup | Number of participants to be informed |
| $\begin{aligned} & \overrightarrow{448} \end{aligned}$ | PartyID | N |  | String | Member code |
| $\begin{aligned} & \hline \overrightarrow{447} \end{aligned}$ | PartyIDSource | N | D = Proprietary/ Custom code | Char |  |
| $\overrightarrow{452}$ | PartyRole | N | $\begin{aligned} & \hline 13=\text { Order } \\ & \text { Origination Firm } \end{aligned}$ | Int | Indicates the role taken by the code specified in PartyID |
|  | End <Parties> |  |  |  |  |
| 1 | Account | Y | Fixed length | String(5) | Account code on which information is provided |
| 581 | AccountType | Y | 1 | Int | Contains the same value as indicated in the request |
|  | Start < Instrument> |  |  |  |  |
| 55 | Symbol | Y | Contract code | String(22) | Contract on which information is provided |
|  | End <Instrument> |  |  |  |  |
| 730 | SettlPrice | Y |  | Price | Closing price of the contract. It contains the value from the previous session until the value for the current session has been determined. The field SettIPriceType allows to differentiate between these two cases |


| Tag | Name | Req | Valid values | Format | Description |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 731 | SettlPriceType | Y | $\begin{aligned} & \hline 1=\text { Final } \\ & 2=\text { Theoretical } \end{aligned}$ | Int | Indicates if the SettIPrice fields refers to the previous session (value 2) or the current session (value 1) |
| 734 | PriorSettIPrice | Y |  | Price | Previous closing price in respect to SettIPrice |
|  | Start <PositionQty> |  |  |  |  |
| 702 | NoPositions | Y |  | NumInGroup |  |
| $\begin{aligned} & \overrightarrow{703} \end{aligned}$ | PosType | Y | $\begin{aligned} & \text { SOD = Start of Day } \\ & \text { Position } \\ & \text { FIN = End-of-Day } \\ & \text { Qty } \\ & \text { EX = Option } \\ & \text { Exercise Qty } \\ & \text { TOT = Total } \\ & \text { Transaction Qty } \end{aligned}$ | String | SOD or FIN is used when the message is a reply to open positions report request. <br> EX and TOT both are used when the message is a reply to a request for report on exercise instructions. <br> SOD will be present in the message that reports the open position at the beginning of the day. <br> FIN will be present in the message that reports the open position at the end of the day |
| $\begin{aligned} & \overrightarrow{704} \end{aligned}$ | LongQty | N | >=0, no decimals | Qty | When PosType = SOD or FIN, it indicates the number of contracts that make up the long position of the position being reported. <br> When PosType = EX it indicates the number of options to exercise. <br> When it is not present and PosType = EX the message informs of the cancellation of an exercise instruction. <br> When PosType = TOT, it indicates the number of contracts that make up the long position at the time the message is sent. Only present if there is a long position. |
| $\begin{aligned} & \vec{\rightarrow} \\ & 705 \end{aligned}$ | ShortQty | N | > 0 , no decimals | Qty | When PosType = SOD or FIN, it indicates the number of contracts that make up the short position of the position being reported. <br> Not used when PosType = EX. <br> When PosType = TOT, it indicates the number of contracts that make up the short position at the time the message is sent. Only present if there is a short position. |
|  | End <PositionQty> |  |  |  |  |


| Tag | Name | Req | Valid values | Format | Description |
| :--- | :--- | :--- | :--- | :--- | :--- |
|  | Start <br> <PositionAmountData> |  |  |  | The content of this block should <br> only be considered in Mark-to- <br> Market contracts |
| 753 | NoPosAmt | N |  | NumInGroup |  |
| 707 | PosAmtType | N | SMTM = Start-of- <br> Day Mark-to-Market <br> Amount <br> FMTM = Final <br> Mark-to-Market <br> Amount | String |  |
| $\overrightarrow{708}$ | PosAmt | N |  | Amt | When PosAmtType = SMTM is <br> the Start-of-Day Mark-to-Market <br> position amount. <br> When PosAmtType $=$ FMTM is |
|  | End <br> <PositionAmountData> |  |  |  | the Final Mark-to-Market <br> position amount. |
|  | Standard Trailer | Y |  |  |  |

### 7.8.4 Trade Capture Report (Msg Type = AE)

Message containing data on a CCP trade. This message can be a reply to a Trade Capture Report Request message or a Request For Positions message.

When the message is a reply to a Request For Positions and it corresponds to a trade from a previous trading session, some of the compulsory fields may contain values that should not be considered; this is due to the fields being compulsory but the information not being available to populate these fields. The explanations given for these fields below warn of this situation.

| Tag | Name | Req | Valid values | Format | Description |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | Standard Header | Y | MsgType = AE |  |  |
| 571 | TradeReportID | Y |  | String | Unique identifier for each Trade Capture Report message |
| 568 | TradeRequestID | N |  | String | Identifier of the request. Present when the request is a Trade Capture Report Request message |
| 710* | PosReqID | N |  | String | Identifier of the request. Present when the request is a Request For Positions message |
| 150 | ExecType | N | F = Trade | Char | Trade type |
| 912 | LastRptRequested | N |  | Boolean | Indicates if it is the last message of the snapshot reply to a request made with a Trade Capture Report Request message |
| 325 | UnsolicitedIndicator | N | $\mathrm{N}=$ The message is part of a snapshot $\mathrm{Y}=$ The <br> message is sent as result of an update | Boolean | Contains " $Y$ " when the message is sent as the result of a subscription |
| 881 | SecondaryTradeReportRefID | N |  | String | Contains the CCP trade number of the original trade |
| 818 | SecondaryTradeReportID | N |  | String | CCP register number. This field is always present in the message |
| 820 | TradeLinkID | N |  | String | Primary original trade <br> reference. <br> For repos, it's the common <br> reference for both legs. |
| 880 | TrdMatchID | N |  | String | Contains the CCP trade number of the initial trade |
| 17 | ExeclD | N |  | String | Secondary original trade reference. <br> For repos, it refers to one of its legs. |
| 527 | SecondaryExecID | N |  | String | Trade register number of the initial trade. <br> Coincides with the SecondaryExecID field of the Execution Report message. |
| 5681* | ExchangeTradeType | N | See table 12 in document <br> "Codification <br> Tables" for details of the <br> Trade Type | String | Trade type |


| Tag | Name | Req | Valid values | Format | Description |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | codes |  |  |
| 570 | PreviouslyReported | Y | Y | Boolean | Indicates if the trade was notified to the counterparty |
|  | Start <Instrument> |  |  |  |  |
| 55 | Symbol | Y | Contract code | String(22) | Contract code |
| $\rightarrow 864$ | NoEvents | N |  | NumInGroup |  |
| $\begin{aligned} & \rightarrow \rightarrow 86 \\ & 5 \end{aligned}$ | EventType | N | 101 = Nominal trade value (Par amount) <br> $102=$ Member code acting in market where delivery takes place <br> $103=$ <br> Counterparty member code in market where delivery takes place | Int |  |
| $\begin{aligned} & \vec{\rightarrow} \rightarrow 86 \\ & 8 \end{aligned}$ | EventText | N |  | String | If EventType = 101, it contains the Nominal trade value (Par amount). <br> Present in all spot trades (deliveries) <br> If EventType = 102, it contains the Member code acting in market where delivery takes place. Present in spot trades broken down by member (deliveries) <br> If EventType = 103, it contains the Counterparty member code in market where delivery takes place. Present in spot trades broken down by member (deliveries) |
|  | End <Instrument> |  |  |  |  |
| 32 | LastQty | Y | $\begin{aligned} & \hline>=0, \text { no } \\ & \text { decimals } \end{aligned}$ | Qty | Volume bought/sold in the trade described. |
| 151* | LeavesQty | N |  | Qty | Alive volume of the trade. Only present when the message is the answer to a alive trades request |
| 31 | LastPx | Y |  | Price | Price of trade described. |
| 75 | TradeDate | Y |  | LocalMktDat e | Local date of the market, where trade was made. |
| 60 | TransactTime | Y |  | UTCTimesta mp | Date and time, in UTC format, when transaction was made. |
|  | Start <TrdRegTimestamps> |  |  |  |  |
| 768 | NoTrdRegTimestamps | N | 1 | NumInGroup | Number of TrdRegTimestamps entries |
| $769$ | TrdRegTimestamp | N |  | UTCTimesta mp | Timestamp when the initial trade was made in the Trading System |


| Tag | Name | Req | Valid values | Format | Description |
| :---: | :---: | :---: | :---: | :---: | :---: |
| $\begin{aligned} & \vec{y} \\ & 770 \end{aligned}$ | TrdRegTimestampType | N | 3 = Time Out | Int |  |
|  | End <TrdRegTimestamps> |  |  |  |  |
| 63 | SettIType | N | $\begin{aligned} & \hline 0=\text { Regular } \\ & \text { (default value) } \\ & 2=\text { Next Day (T } \\ & +1) \\ & \hline \end{aligned}$ | Char | Indicates the settlement type for the trade |
| 552 | NoSides | Y | 1 | NumInGroup | Always 1 as it only includes the buyer or seller part, depending whom the message is sent to. |
| $\rightarrow 54$ | Side | Y | $\begin{aligned} & 1=\text { Buy } \\ & 2=\text { Sell } \end{aligned}$ | Char | Position that the party takes in the trade |
| $\rightarrow 37$ | OrderID | Y |  | String | Order number, unique per trading operator. <br> Contains "NONE" when the trade is not the result of the execution of an order |
| $\overrightarrow{198}$ | SecondaryOrderID | N |  | String | Unique identifier of the order of the initial trade as assigned by the trading venue. |
| $\rightarrow$ | Start <Parties> |  |  |  |  |
| $\rightarrow 453$ | NoPartyIDs | N | 1 | NumInGroup | Number of parties. Contains 1, as it always notifies the member to which the associated account belongs |
| $\begin{aligned} & \vec{\rightarrow} \\ & 448 \end{aligned}$ | PartyID | N |  | String | Member code |
| $\begin{aligned} & \rightarrow \vec{~} \\ & 447 \end{aligned}$ | PartyIDSource | N | D = Proprietary/ Custom code | Char | Present if NoPartyIDs has been specified |
| $\begin{aligned} & \rightarrow \rightarrow \\ & 452 \end{aligned}$ | PartyRole | N | $\begin{aligned} & 13=\text { Order } \\ & \text { Origination Firm } \end{aligned}$ | Int | Indicates the role taken in the PartyID code specified. Present if NoPartyIDs has been specified |
|  | End <Parties> |  |  |  |  |
| $\rightarrow 1$ | Account | N |  | String(5)/(3) | 5 characters: Account associated with the trade. Present in subscriptions that are not using the specific option TrdType [828] = 15 in the Trade Capture Report Request message. <br> 3 characters (only for deliveries. See section 13.4 for more details): Holder associated with the trade. Used in spot trades broken down by holder (deliveries). Present in subscriptions that are using the specific option TrdType [828] = 15 in the Trade Capture Report Request message. <br> Not informed (only for deliveries. See section 13.4 for more details): Used in spot trades broken down by member (deliveries). |


| Tag | Name | Req | Valid values | Format | Description |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  | Present in subscriptions that are using the specific option TrdType [828] = 15 in the Trade Capture Report Request message. |
| $\rightarrow 381$ | GrossTradeAmt | N |  | Amt | Nominal/Effective amount traded |
| $\rightarrow 77$ | PositionEffect | N | $\begin{aligned} & \text { "O" }=\text { Open } \\ & \text { "C" }=\text { Close } \\ & \hline \end{aligned}$ |  | It indicates if the trade opens or closes the position |
| $\rightarrow 58$ | Text | N |  | String | When this trade comes from a market order, contains the text entered as a reference for the order. <br> When this trade comes from a cross-order, contains the text entered as a reference by the broker. <br> When this trade is an allocation of daily account or a transfer, contains the same text as the original trade |
| $\rightarrow 136$ | NoMiscFees | N | 0, 1, 2 | NumlnGroup |  |
| $\begin{aligned} & \vec{\rightarrow} \rightarrow \vec{~} \\ & 137 \end{aligned}$ | MiscFeeAmt | N |  | Amt | Fees amount. Contains a positive value when it is a payment from the Member to the Market. <br> Contains a negative value when it is a payment form the Market to the Member |
| $\begin{aligned} & \vec{\rightarrow} \\ & 138 \end{aligned}$ | MiscFeeCurr | N |  | Currency | Currency in which fees are Codified according to Standard 4217 |
| $\begin{aligned} & \vec{\rightarrow} \\ & 139 \end{aligned}$ | MiscFeeType | N | $\begin{aligned} & \text { 4=Exchange } \\ & \text { Fees } \\ & \text { 7=Other } \end{aligned}$ | Char | Fee type. <br> It contains value 4 when it is a trading fee. <br> It contains value 7 when it is a clearing fee. |
| $\underset{891}{\overrightarrow{8}}$ | MiscFeeBasis | N | 0 = Absolute | Int |  |
|  | Standard Trailer | Y |  |  |  |

### 7.8.5 Position Maintenance Request (Msg Type = AL)

Message used by the client application to give an adjustment instruction on an account and contract.
This message also allows the client application to give an exercise instruction on an account and contract, or to cancel instructions given. Sending a new instruction can be done to replace previous instructions.

Also is used to send a delivery notice.

| Tag | Name | Req | Valid values | Format | Description |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | Standard Header | Y | MsgType = AL |  |  |
| 710 | PosReqID | Y |  | String | Unique identifier for each Position Maintenance Request message |
| 709 | PosTransType | Y | 1 = Exercise 3 = Position Adjustment 4 = Delivery | Int | Indicates the transaction type for the position |
| 712 | PosMaintAction | Y | $\begin{aligned} & 1=\text { New } \\ & 2=\text { Replace } \\ & 3=\text { Cancel } \end{aligned}$ | Int | In the case of the exercise instructions indicating a specified request the value $=1$ or should the request indicate a return to the automatic behaviour the value $=3$. <br> In the case of a position adjustment the value must always $=1$. <br> In the case of a delivey the value must always $=2$. Please note the last message completely replaces the previous one. |
| 713 | OrigPosReqRefID | N |  | String | When PosTransType [709] = 4 (Delivery): Reference to the PosReqID [710] of a previous maintenance request that is being replaced. <br> When PosTransType [709] = 1 or 3: Ignored by ClearGate |
| 715 | ClearingBusinessDate | Y |  | LocalMktDat e | Ignored by ClearGate |
| 1 | Account | Y |  | String(5)/(3) | Account code for adjustment position or exercise. <br> When deliveries, only the holder is informed (first three positions of the CCP member account) |
| 581 | AccountType | Y | 1 | Int | Ignored by ClearGate |
|  | Start <lnstrument> |  |  |  |  |
| 55 | Symbol | Y |  | String(22) | Contract code for adjustment position, exercise or delivery notice. In case of exercise instruction should refer to an option contract |
|  | End <Instrument> |  |  |  |  |
| 60 | TransactTime | Y |  | UTCTimest amp | Ignored by ClearGate |
|  | Start <PositionQty> |  |  |  |  |
| 702 | NoPositions | N |  | NumInGrou | This block is required except |


| Tag | Name | Req | Valid values | Format | Description |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  | p | for PosMaintAction [712] =3 (Cancel) |
| $\begin{aligned} & \overrightarrow{703} \end{aligned}$ | PosType | N | EX = Option Exercise Qty $\mathrm{PA}=$ Adjustment Qty DN = Delivery Notice Qty | String | It should contain "EX" when PosTransType = 1, "PA" when PosTransType $=3$ and "DN" when PosTransType $=4$. Required if NoPositions has been specified |
| $\begin{aligned} & \hline \overrightarrow{704} \end{aligned}$ | LongQty | N | $>0$, no decimals | Qty | When PosType=EX contains the maximum volume to exercise. The value 999999999 means "exercise all" and this is the default value. <br> When PosType=PA contains the number of contracts to adjust position. |
| $\begin{aligned} & \overrightarrow{705} \end{aligned}$ | ShortQty | N | > 0 , no decimals | Qty | When PosType = DN, it indicates the number of contracts that are delivered |
|  | Start <NestedParties> |  |  |  |  |
| $\begin{aligned} & \hline \overrightarrow{539} \end{aligned}$ | NoNestedPartylDs | N |  | NumInGrou p | Number of participants to be informed |
| $\begin{aligned} & \vec{\rightarrow} \\ & 524 \end{aligned}$ | NestedPartyID | N |  | String | See NestedPartyRole [538] |
| $\begin{aligned} & \rightarrow \rightarrow \\ & 525 \end{aligned}$ | NestedPartyIDSource | N | D = Proprietary/ Custom code | Char |  |
| $\begin{aligned} & \vec{\rightarrow} \\ & 538 \end{aligned}$ | NestedPartyRole | N | 13 = Order Origination Firm 4 = Clearing Firm $21=$ Clearing Organization | Int | When 13 indicates a delivery notice made by the Trading Member. <br> When 4 indicates a delivery notice made by the Clearing Member. <br> When 21 indicates a delivery notice made by the Clearing House. |
|  | End < NestedParties > |  |  |  |  |
| $\begin{aligned} & \vec{~} \mathbf{6 0 0}^{*} \end{aligned}$ | LegSymbol | N |  | String | Symbol for deliverable contract |
|  | End <br> <PositionQty> |  |  |  |  |
|  | Standard Trailer | Y |  |  |  |

### 7.8.6 Position Maintenance Report (Msg Type = AM)

Sent by ClearGate to inform on the result of a Position Maintenance Request message.
This message is only sent to the user that makes the request. To monitor both the position adjustments, the exercise instructions and the delivery notices, the Request For Positions message with subscription, should be used.

| Tag | Name | Req | Valid values | Format | Description |
| :--- | :--- | :--- | :--- | :--- | :--- |
|  | Standard Header | Y | MsgType = AM |  | String |
| 721 | PosMaintRptID | Y |  | Unique identifier for <br> each Position <br> Maintenance Request <br> message |  |
| 709 | PosTransType | Y | $1=$ Exercise <br> $3=$ Position <br> Adjustment <br> $4=$ Delivery | Int | Contains the same <br> value as specified in the <br> request |
| 710 | PosReqID | Y |  |  | String |
| 712 | PosMaintAction | Y | $1=$ New <br> $2=$ Replace <br> $3=$ Cancel | Identifier assigned by <br> the client in the Position <br> Maintenance Request <br> message |  |
| 722 | PosMaintStatus | Y |  | $0=$ Accepted <br> $2=$ Rejected | Int |


| Tag | Name | Req | Valid values | Format | Description |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | End < Instrument> |  |  |  |  |
| 60 | TransactTime | Y |  | UTCTimestam p | This field should not be considered. Its inclusion is a requirement of the standard |
|  | Start <PositionQty> |  |  |  |  |
| 702 | NoPositions | Y |  | NumInGroup |  |
| $\rightarrow 703$ | PosType | Y | EX = Option Exercise Qty <br> PA = Adjustment Qty <br> DN = Delivery Notice <br> Qty <br> DLV = Total Delivery <br> Qty <br> TOT = Total <br> Transaction Qty | String | The EX value is only included when it is an answer to an exercise instructions. <br> Value PA is only included when it is an answer to a request of position adjustment. <br> Values DN and DLV are only included when it is an answer to a request of deliveries. |
| $\rightarrow 704$ | LongQty | N |  | Qty | When PosType=EX contains the number of contracts requested to exercise. <br> When PosType=PA contains the number of contracts requested to adjust. <br> When PosType=TOT contains the number of bought contracts that make the current position. In case of a request of adjustment of accepted position, this one is the value after the adjustment |
| $\rightarrow 705$ | ShortQty | N |  | Qty | When PosType = DN, it indicates the number of contracts that are delivered. <br> When PosType = DLV, it indicates the number of contracts to be delivered. <br> When PosType=TOT. It contains the number of sold contracts that make the current position. In case of a request of adjustment of accepted position, this one is the value after the adjustment. |
|  | Start <NestedPartie |  |  |  |  |
| $\rightarrow 539$ | NoNestedPartyIDs | N |  | NumInGroup | Number of participants to be informed |


| Tag | Name | Req | Valid values | Format | Description |
| :---: | :---: | :---: | :---: | :---: | :---: |
| $\begin{aligned} & \vec{\rightarrow} \\ & 524 \\ & \hline \end{aligned}$ | NestedPartyID | N |  | String | See NestedPartyRole [538] |
| $\begin{aligned} & \rightarrow \rightarrow \\ & 525 \end{aligned}$ | NestedPartyIDSource | N | D = Proprietary/ Custom code | Char |  |
| $\begin{aligned} & \rightarrow \rightarrow \\ & 538 \end{aligned}$ | NestedPartyRole | N | 13 = Order Origination Firm 4 = Clearing Firm $21=$ Clearing Organization | Int | When 13 indicates a delivery notice made by the Trading Member. <br> When 4 indicates a delivery notice made by the Clearing Member. <br> When 21 indicates a delivery notice made by the Clearing House. |
|  | End < NestedParties > |  |  |  |  |
| $\rightarrow 600$ * | LegSymbol | N |  | String | Symbol for deliverable contract |
|  | End <br> <PositionQty> |  |  |  |  |
|  | Start <PositionAmountData> |  |  |  |  |
| 753 | NoPosAmt | Y | 0 | NumInGroup | This field should not be considered, and it is included as requirement of the standard |
|  | End <br> <PositionAmountData> |  |  |  |  |
| 58 | Text | N |  |  | Explanation. Provided if PosMaintResult is not 0 |
|  | Standard Trailer | Y |  |  |  |

## 8. Trades Report

### 8.1 Introduction

This chapter describes the mechanisms offered by CCP FIX interface to request the trades registered in the CCP.

The client application can request to query on the trades registered with a Trade Capture Report Request message.

The whole trades reported are determined by the following selection:

- Parties Block. Allows to select by clearing member and trading member.
- TradeDate field. Allows to indicate the period of reference:
- Session trades. In this case the request message should not contain this field.
- All the trades with live volume, independent of the clearing date. In this case the message should contain the value "19800101" in TradeDate field.
- Side field. If this field is included in the request message, its value indicates if buying or selling trades are requested.

In reply to this request a Trade Capture Report message is received for each trade that meets the selection criteria. If there are no trades that meet the criteria, a Trade Capture Report Request Ack message is received indicating this.

The request can be made in two ways, as indicated in the SubscriptionRequestType field:

- SubscriptionRequestType $=\mathbf{0}$ (Snapshot). A message is received for each trade that meets the selection criteria, registered up until when the request is made
- SubscriptionRequestType $=1$ (Snapshot plus update). The same messages as the Snapshot request are received and from this moment on a new message for each trade that occurs that meets the selection criteria

Each message received has a unique CCP register number in the SecondaryTradeReportID field. When the trade being reported arises from a previous trade, the SecondaryTradeReportRefID field has the CCP trade number of the original trade. The CCP trade register is the same for the two parties to the trade. That is, if both the buyer and seller positions are taken, you must wait to receive two Trade Capture Report messages with the same SecondaryTradeReportID.

For transactions that result from trading, there are the SecondaryExecID, OrderID and SecondaryOrderID fields to make the front-to-back reconciliation.

When the Trade Capture Report message is the result of executing a cross trade, it will be related to the corresponding Execution Report message by the SecondaryExecID field in both, which will contain the same value.

### 8.2 Request by trading and/or clearing member

The Trade Capture Report Request message allows the making of a request by a trading member and/or clearing member using the Parties block.

Whether or not a user of clearing member will be able to see the trading activity of a member that it clears will depend on the user permissions.

When these fields are not specified in a request, it is considered that the request only refers to the trades of own accounts of the member that belong to the user who makes the request.

When a clearing member wants to query the trades of the accounts that it clears it will have to include its own member code in the PartyID field associated to PartyRole 4 (Clearing Firm). If in addition it wishes to restrict this query by trading member, it can use the PartyID field associated to PartyRole 13 (Order Origination Firm).

In the following table different examples of selection and the corresponding interpretations are given. In these examples Member A is a clearing member that makes the query and Member B is a trading member cleared by A.

| Trading Member <br> (parties block with <br> PartyRole = 13) | Clearing Member <br> (parties block with <br> PartyRole = 4) | - |
| :---: | :---: | :--- |
| - | - | Selection of trades in accounts of Member A |
| Member A | Member A | Selection of trades in accounts of Member A <br> Selection of trades of accounts cleared by Member A <br> belonging to any trading member that it clears including <br> its own |
| - | Member A | Selection of trades of accounts cleared by Member A <br> belonging to Member B |
| Member B | - | Erroneous query. If a different code is given other than <br> its trading member code, the clearing member code <br> must be given |
| Member B | Member B | Erroneous query. <br> If a code other than the own one is given as clearing <br> Member, then the trading member should be specified <br> with the self trading code |
| - |  |  |

In the following table some examples are given, where the request is done by the trading member B . Some of the Member B accounts have as clearing member the Member A.

| Trading Member <br> (parties block with <br> PartyRole = 13) | Clearing Member <br> (parties block with <br> PartyRole = 4) | - |
| :---: | :---: | :--- |
| - | - | Selection of trades on own accounts (Member B) |
| Member B | Selection of trades on own accounts (Member B) |  |
| Member B | Member A | Selection of trades on own accounts (Member B) with <br> Member A as clearing member |
| - | Erroneous query. If a code other than the own one is <br> given as clearing member, then the user member code <br> must be present |  |

### 8.3 List of messages

| Message | Description |
| :--- | :--- |
| Trade Capture Report Request (Msg Type = AD) | Request for CCP trades |
| Trade Capture Report Request Ack (Msg Type = AQ) | Acknowledgement of Trade Capture Report Request <br> message |
| Trade Capture Report (Msg Type = AE) | Information on a trade registered in the CCP |

### 8.4 Message flow

## Request CCP trades with update subscription, followed by subscription cancellation

After the request to receive the messages corresponding to the trades registered up to that moment (snapshot) and to receive the new trades as they are registered from that point on.


Request CCP trades without update subscription, without trades that meet selection criteria

When there are no trades that meet the selection criteria, the server sends a Trade Capture Report Request Ack message to notify the result of the request, with the value 0 in the TotNumTradeReports field.

ClearGate Client ClearGate Server

Trade Capture Report Request ("AD")
SubscriptionRequestType [263] = 0 (Snapshot)

Trade Capture Report Request Ack ("AQ")
TotNumTradeReports [748] = 0
TradeRequestStatus [750] = 1 (Completed)

## Request invalid CCP trades

When the CCP trade request (Trade Capture Report Request message) is invalid, the request is rejected in a Trade Capture Report Request Ack message.


### 8.5 Annotations and adaptations of FIX 4.4

- The Trade Capture Report Request message only allows some of the selection criteria covered by the standard.


### 8.6 Definition of messages

### 8.6.1 Trade Capture Report Request (Msg Type = AD)

Message sent by the client to request information on CCP trades; allows requests with or without new trade updates.

| Tag | Name | Req | Valid values | Format | Description |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | Standard Header | Y | MsgType = AD |  |  |
| 568 | TradeRequestID | Y |  | String (10) | Identifier of the request assigned by the user. It must be a unique value when it is a new request, and the value previously assigned when it is for an unsubscription |
| 569 | TradeRequestType | Y | $0=$ All trades that match criteria | Int |  |
| 263 | SubscriptionRequestType | N | 0=Snapshot (default value) 1=Snapshot + Updates 2= Unsubscribe | Char | Indicates if it is a request with or without updates or the cancellation of a previous request |
| 818 | SecondaryTradeReportID | N |  | String | CCP register number |
| 828 | TrdType | N | 15 = Deliveries | Int | Only included in the specific request of the purchase/sale trades to carry out in IBERCLEAR as a result of the delivery procedure |
|  | Start <Parties> |  |  |  |  |
| 453 | NoPartylDs | N | $>0,<=2$ | NumInGroup | Number of selection criteria defined in the Parties block |
| $\begin{aligned} & \overrightarrow{4} \\ & 448 \end{aligned}$ | PartyID | N |  | String | Member code or user. Required if NoPartyIDs has been specified |
| $\begin{aligned} & \hline \overrightarrow{447} \end{aligned}$ | PartyIDSource | N | D = Proprietary/ Custom code | Char | Required if NoPartyIDs has been specified |
| $\begin{aligned} & \vec{~} \\ & 452 \end{aligned}$ | PartyRole | N | $\begin{aligned} & 13=\text { Order } \\ & \text { Origination Firm } \\ & 4=\text { Clearing Firm } \end{aligned}$ | Int | Indicates the role that taken by the code specified in the PartyID. <br> Required if NoPartyIDs has been specified |
|  | End <Parties> |  |  |  |  |
| 580 | NoDates | N | 1 | NumInGroup |  |
| $\rightarrow 75$ | TradeDate | N | "19800101" | LocalMktDat e | Only included in the request of all trades with live volume not 0 . In this case must contain the special value "19800101" |
| 54 | Side | N | $\begin{aligned} & 1=\text { Buy } \\ & 2=\text { Sell } \end{aligned}$ | Char | Optional selection criteria. Allows only those trades made on the buyer side or the seller side to be obtained |
|  | Standard Trailer | Y |  |  |  |

### 8.6.2 Trade Capture Report Request Ack (Msg Type = AQ)

Message sent by ClearGate to notify that a Trade Capture Report Request message is invalid or no trade meets the selection criteria.

| Tag | Name | Req | Valid values | Format | Description |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | Standard Header | Y | MsgType = AQ |  |  |
| 568 | TradeRequestID | Y |  | String | Identifier specified in the corresponding Trade Capture Report Request message |
| 569 | TradeRequestType | Y |  | Int | Same value as specified in the request |
| 263 | SubscriptionRequestType | N | 0=Snapshot (default value) 1=Snapshot + Updates 2= Unsubscribe | Char | Same value as specified in the request |
| 748 | TotNumTradeReports | N | 0 | Int | Number of transactions that meet the selection criteria. The value is always 0 as this message is only sent when the request is invalid or there are no transactions which meet the selection criteria |
| 749 | TradeRequestResult | Y | $\begin{aligned} & \hline 0=\text { Successful } \\ & 2=\text { Invalid } \\ & \text { TradeRequestTyp } \\ & e \\ & 99=\text { other } \\ & \hline \end{aligned}$ | Int | Result of request When the value is 99 , there is an explanation in the Text field |
| 750 | TradeRequestStatus | Y | $\begin{aligned} & 1=\text { Completed } \\ & 2=\text { Rejected } \end{aligned}$ | Int | Request status. When an error is notified the value is 2 . When there are no trades that meet the selection criteria the value is 1 |
| 58 | Text | N |  | String | An explanation of the rejection reason is given |
|  | Standard Trailer | Y |  |  |  |

## 9. Trades Management

### 9.1 Introduction

This chapter covers the functionalities associated with the full or partial transfer of a trade from one account to another.

CCP classifies this procedure according to the source account type and the destination account type.

| CCP term | Source | Destination |
| :--- | :--- | :--- |
| Allocation of daily account | Daily account | Standard account <br> (same member) |
| Transfer | Standard account | Standard account <br> (same member) |
| Give-up | Daily or standard <br> account | Another member |

CCP only allows the transfer of orders that have been executed (i.e. trades).
In the following sections the different procedures are described.

### 9.2 Allocation of Daily Account and Transfer

From FIX interface point of view, an allocation of Daily account and transfer work in the same way. The only difference is the type of origin account and this attribute is implicit in the account and therefore it is not necessary to specify it in the message.

The request is made through the Allocation Instruction message, indicating the trade to transfer data and the destination account.

ClearGate notifies of the status of the request, to the user who made the request, via the Allocation Instruction Ack messages.

On the other hand, ClearGate informs all the users within the Executing Broker, including the one which initiates the allocation, of the Give-up data and of the different statuses that are communicated via the Confirmation messages.

### 9.3 Give-up (Executing Broker)

The Give-up operation is always started by the Member holder of the account associated with the trade being transferred. In this document, this figure is referred as Executing Broker.

The Executing Broker can request the performing of a Give-up through the Allocation Instruction message. This message should contain the trade to transfer data and the Clearing Broker, and a reference for the Clearing Broker.

Before the Give-up is accepted by the Clearing Broker, any user from the Executing Broker can cancel the request with a new Allocation Instruction message.

ClearGate notifies the reception of Allocation Instruction message through an Allocation Instruction Ack message only to the user who started the request.

In addition, ClearGate informs all the Executing Broker users of the Give-up data and the different status that happen by Confirmation messages.

### 9.4 Give-up (Clearing Broker)

The Clearing Broker is chosen by the Executing Broker in the request message as a receiver of the trade being transfer.

Once the Give-up request is processed by the central systems, it can be automatically accepted or to be left of acceptance by the Clearing Broker.

The fact that a Give-up is automatic depends on the CCP rules and the possible filters configured by the Clearing Broker.

In case of the Give-up is left without acceptance, ClearGate sends a Confirmation message to all users of the Clearing Broker informing of the Give-up data and requesting the acceptance or rejection of it. If the Clearing Broker had a destination account defined for the reference introduced in the request message, this account will be present in the message.

The acceptation or rejection of a Give-up is made by a Confirmation Ack message. In case of acceptance the message should indicate the destination account of the Give-up, irrespective of whether or not the information regarding the account associated with the reference was received.

If the Clearing Broker clears the selected account; its acceptance is enough for the performing of the Give-up. If the Clearing Broker does not clear the selected account, acceptance will be necessary by the Clearing Member of the destination account to perform the Give-up.

If acceptance by the Clearing Member of the destination account is necessary, once the Give-up has been accepted or rejected by the Clearing Member, ClearGate sends a Confirmation message informing the status of the Give-up.

In the case of a Clearing Member refusing the Give-up, it will be returned to a pending state with the Clearing Broker, who may opt to refuse it definitively or specify an account another time. Both actions are carried out via the Confirmation Ack message as described above

### 9.5 Give-up (Clearing Member)

When the Clearing Broker of a Give-up is not a clearer of its operation, acceptance will be necessary by the Clearing Member of the destination account to perform the Give-up.

As it happens in the Clearing Broker case, this acceptation can be made automatically by CCP central systems from the possible filters defined by the Clearing Member.

When a Give-up is left pending acceptance by the Clearing Member of the destination account, ClearGate sends a Confirmation message to all users of that member informing of the Give-up data and requesting the acceptance or rejection of it. This acceptance or rejection is made by a Confirmation Ack message.

In the case of a Clearing Member refusing the Give-up, it will remain awaiting update on the part of the Clearing Broker. The Clearing Member will only receive a further message relating to this Give-up when the Clearing Broker opts to further select accounts that are also cleared by the same Clearing Member.

### 9.6 AllocID

The field AllocID, present in a request initiated by an Allocation Instruction message, is the identifier that allows the cancellation of that request (only in Give-up), as it relates to the request with Confirmation messages of the status of allocations and Give-ups.

The field AllocID assigned by the client should be ten characters length. If length is inferior, ClearGate complete with spaces to achieve that length. ClearGate also expects that messages sent by the client use an AllocID of 30 length, in this case only the last ten positions can be fixed free, since the 20 first should coincide with the format explained below.

Message sending with AllocID unprefixed


Message sending with AllocID prefixed


- Assigning of the prefix to the AllocID identifier -

A process in the ClearGate of assigning a prefix to the AllocID field is performed to avoid duplicates in this identifier.

The AllocID assigned by ClearGate in the reply message has the format AAMMDDMmmmTttMmmmTttNnnnnnnnnn, made by the following codes:

- AAMMDD. It is the date of the CCP session
- MmmmTtt. Contains the member and user code of connection from which the request was made
- Nnnnnnnnnn. It is the value assigned by the client application to AllocID in the original message

In the case of Give-up, this identifier is also present in the Confirmation messages received by the Executing Broker, which are generated as a result of a Give-up request.

This way, a user of the Executing Broker who wants to cancel a Give-up, must use this identifier in the field RefAllocID of the Allocation Instruction request message.

### 9.7 SecondaryAllocID Field

The SecondaryAllocID field is the unique identifier of each allocation performed at CCP, be it a Giveup, assignment of the daily account or an actual allocation.

This field is present in the Confirmation messages which the client application receives informing of the status of the allocation.

In this way all messages relating to the same Give-up will contain the same value in this field, irrespective of the role of the receiver. This value allows the identification of the Give-up in an univocal manner by the CCP and the other participants.

### 9.8 Monitoring of trades by Trade Capture Report messages

In CCP, the operation to transfer totally or partially a trade from one account to another is made by the making two new trades; the first one on the origin account with the opposite sign to the original trade and the second one on the destination account with the same sign as the original trade. The volume of both trades is the number of contracts that are transferred from the original trade.

Once made the transfer process, being an allocation on daily account, a transfer or a Give-up, those users who are subscribed will receive the Trade Capture Report messages of corresponding the trade or trades.

In the case of the trade coming transfer, the Trade Capture Report message contains a series of relevant fields for the reconciliation of the information and monitoring of the trades:

- SecondaryAllocID. Contains the identifier assigned by the system to the corresponding allocation operation. This same field will be found in the related Confirmation messages, as explained in the above section.
- PositionEffect. Indicates if the trade opens or close the position. From the trades coming from a transfer, the one made on the origin account will contain " C " (Close), and the one made on the destination account "O" (Open).
- SecondaryTradeReportRefID. Contains the CCP register number of the origin trade.
- SecondaryTradeReportID. Contains the CCP register number of the new trade. This same field will be found in the related Confirmation messages that informs about the acceptance of the transfer.
- TrdMatchID. Contains the CCP trade number of the initial trade.


### 9.9 List of messages

| Message | Description |
| :--- | :--- |
| Allocation Instruction (Msg Type = J) | Request for a transfer, an allocation from daily account or a <br> Give-up |
| Allocation Instruction Ack (Msg Type = P) | Acknowledgement of Allocation Instruction message. Contains <br> the request status |
| Confirmation (Msg Type = AK) | Report of the state of transfer, allocation from daily account or <br> a Give-up. Also used for requesting the acceptation or <br> rejection of a Give-up |
| Confirmation Ack (Msg Type = AU) | Message of acceptation or rejection of a Give-up |
| Trade Capture Report (Msg Type = AE) | Report on execution of transfer. Sent to clients involved that <br> are subscribed |

### 9.10 Message flow

Given that its behaviour with respect to message flow is identical, in this section the term "allocation" will be used to refer to the allocation from the daily account and the transfer.

In the following diagrams the use of two arrows indicates that the message goes to all the users of the member

## Allocation request accepted

The client sends the request through an Allocation Instruction message. It first receives the Allocation Instruction Ack message with the field AllocStatus = 3, indicating that ClearGate has received the message and sent it to the central systems. Subsequently an Allocation Instruction Ack message is received with the field AllocStatus $=0$, indicating that the message has been accepted by the central system.

When the allocation has been made, a confirmation message is sent to all the client applications of the Member informing of the data associated with the request.

In addition, a Trade Capture Report is sent to the client applications subscribed to this type of message, for each trade derived from the allocation made.


## Allocation request rejected by central systems

The client sends the request through an Allocation Instruction message. It first receives the Allocation Instruction Ack message with the field AllocStatus = 3, indicating that ClearGate has received the message and it has sent it to the central systems. Finally it receives an Allocation Instruction Ack message with the field AllocStatus = 1, indicating that the allocation has been rejected by the central systems.


## Allocation request rejected by the ClearGate server

The client sends the request through an Allocation Instruction message. The message is rejected by ClearGate which responds with an Allocation Instruction Ack message with the field AllocStatus $=1$.


Request of an accepted Give-up which Clearing Broker is not the clearer of its own operative

(... continues from previous page)


## Give-out cancelled by the Executing Broker



## Give-up registration or cancellation request rejected

When a request to register or cancel a Give-up is not valid, it will be rejected via the corresponding Allocation instruction Ack message. In this case, an associated Confirmation message does not exist since the request is not processed.

Executing Broker ClearGate server


## Send of message Confirmation Ack rejected

When a Confirmation Ack message is not valid, either due to the data or the status of the Giveup reference, it will be rejected by a Business Message Reject message.

[^1]ClearGate server


### 9.11 Annotations and adaptations of FIX 4.4

- Only some of the functionalities defined by FIX related to the Allocation Instruction message are supported. Transfers are only allowed post-trade, based on trades and not orders. Accordingly, certain fields related with orders that are required by the standard are ignored by ClearGate.
- FIX allows the assignment of various trades in a single message and allows allocation to various accounts. These functionalities are not supported by ClearGate. An Allocation Instruction message is related with a single trade and destination account.
- The NoExecs (124), LastQty (32), LastPx (31), AllocAccount (79) and AllocQty (80) fields are now required in the Allocation Instruction message.
- The SecondaryTradeReportID (818) field has been added to the Allocation Instruction message.
- The SecondaryTradeReportID (818) and SecondaryTradeReportRefID (881) fields have been added to the Confirmation message.
- The user field SecondaryConfirmStatus (5683) has been added to the Confirmation message
- The AllocAcount (79) and SecondaryAllocID (793) fields have been added to the Confirmation Ack message.


### 9.12 Definition of messages

### 9.12.1 Allocation Instruction (Msg Type = J)

Message sent by the client to request a transfer, an allocation from the daily account or a Give-up request.

| Tag | Name | Req | Valid values | Format | Description |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | Standard Header | Y | MsgType = J |  |  |
| 70 | AlloclD | Y |  | String(30) | Unique identifier for each Allocation Instruction message |
| 71 | AllocTransType | Y | $\begin{aligned} & 0=\text { New } \\ & 2=\text { Cancel } \end{aligned}$ | Char | It indicates if the message is a transfer or a cancellation request The cancellation can only be made on a transfer of Give-up that is pending of acceptance on the Clearing Broker |
| 626 | AllocType | Y | $1 \text { = Buyside }$ Calculated | Int |  |
| 72 | RefAlloclD | N |  | String(30) | Identifier of the Give-up to cancel. <br> Required if AllocTransType contains 2 |
| 796 | AllocCancReplaceReason | N | ```1 = Original details incomplete/incorr ect 99 = Other``` | Int | Required if AllocTransType contains 2. Ignored by ClearGate. |
| 857 | AllocNoOrdersType | Y | $0=$ Not specified | Int |  |
| 124 | NoExecs | $\mathrm{Y}^{*}$ | 1 | NumlnGro up | Indicates the number of trades that are going to be allocated |
| $\rightarrow 32$ | LastQty | $Y^{*}$ | >0, no decimals | Qty | Trade volume |
| $\rightarrow 31$ | LastPx | $Y^{*}$ |  | Price | Trade price |
| $\begin{array}{\|l\|} \hline \overrightarrow{818^{*}} \end{array}$ | SecondaryTradeReportID | $\mathrm{Y}^{*}$ |  | String | CCP register number of the trade that is going to be transferred |
| 54 | Side | Y | $\begin{aligned} & 1 \text { = Buy } \\ & 2=\text { Sell } \end{aligned}$ | Char | Indicates if the trade to be transferred is buyer side or seller side |
|  | Start <Instrument> |  |  |  |  |
| 55 | Symbol | Y | Contract code | String(22) | Contract code |
|  | End <Instrument> |  |  |  |  |
| 53 | Quantity | Y | $>0$, | Qty | Amount of contracts to be transferred |
| 6 | AvgPx | Y |  | Price | Resulting trade price. Must contain the same value as the LastPx field |
| 75 | TradeDate | Y |  | LocalMktD ate | Ignored by ClearGate |
| 78 | NoAllocs | $\mathrm{Y}^{*}$ | 1 | NumlnGro up | Number of destinations. ClearGate only accepts a single destination |
| $\begin{aligned} & \overrightarrow{79} \\ & \hline 79 \end{aligned}$ | AllocAccount | $\mathrm{Y}^{*}$ | Exact length | String(5) | Destination account Ignored by ClearGate when it is a Give-up request |
| $\begin{array}{\|l\|} \hline \vec{~} \\ \hline 80 \\ \hline \end{array}$ | AllocQty | $\mathrm{Y}^{*}$ |  | Qty | Amount to be transferred. Must be equal to the Quantity field |
| $\rightarrow$ | Start <NestedParties> |  |  |  |  |
| $\rightarrow 539$ | NoNestedPartylDs | N |  | $\begin{aligned} & \text { NumInGro } \\ & \text { up } \end{aligned}$ | Required if it is a Give-up request |
| $\begin{aligned} & \vec{\rightarrow} \\ & 524 \end{aligned}$ | NestedPartyID | N |  | String | Give-out internal reference, Clearing Broker member code, Give-up reference or Give-out mnemonic. |


| Tag | Name | Req | Valid values | Format | Description |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  | For the Give-out internal reference (NestedPartyRole=3) this tag has a maximum lengh of 18 characters. <br> For the Give-up Clearing Firm (NestedPartyRole=14) the length for this tag is 4 alphanumeric characters. <br> For the Give-up reference (NestedPartyRole=24) this tag has a maximum lengh of 18 characters. <br> For the Give-up mnemonic (NestedPartyRole=33) this tag has a maximum lengh of 10 characters. <br> Required if NoNestedPartyIDs is specified |
| $\begin{aligned} & \vec{\rightarrow} \\ & 525 \end{aligned}$ | NestedPartyIDSource | N | D = Proprietary/ Custom code | Char | Required if NoNestedPartyIDs is specified |
| $\begin{aligned} & \vec{\rightarrow} \\ & 538 \end{aligned}$ | NestedPartyRole | N | 3 = Give-out internal reference 14 = Give-up Clearing Firm 24 = Give-up Reference 33 = Give-up mnemonic | Int | Required if NoNestedPartyIDs is specified. <br> Value 3 indicates the value specified in NestedPartyID is the reference assigned by the Executing Broker for internal purposes. It is associated to a Give-out mnemonic and it can be not unique. Need not be provided. <br> Value 14 indicates the value specified in NestedPartyID is the Give-up Clearing Broker. <br> Value 24 indicates the value specified in NestedPartyID is the Give-up reference. <br> Value 33 indicates the value specified in NestedPartyID is the Give-out mnemonic. |
| $\rightarrow$ | End <NestedParties> |  |  |  |  |
|  | Standard Trailer | Y |  |  |  |

### 9.12.2 Allocation Instruction Ack (Msg Type = P)

Message used by ClearGate to indicate the status of the request initiated with the Allocation Instruction message.

This message is only sent to the user who made the request.

| Tag | Name | Req | Valid values | Format | Description |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | Standard Header | Y | MsgType = P |  |  |
| 70 | AlloclD | Y |  | String(30) | Identifier assigned by the client in the Allocation Instruction message |
| 75 | TradeDate | N |  | LocalMkt Date |  |
| 87 | AllocStatus | Y | 0 = Accepted <br> 1 = Rejected <br> 3 = Received not <br> yet processed | Int | Request status <br> The value 0 indicates the message has been accepted by the central system. <br> The value 1 indicates that the transfer or allocation has been rejected. The value 3 indicates that the message has been received by the ClearGate server |
| 88 | AllocRejCode | N | 0 = Unknown account <br> 1 = Incorrect quantity <br> 7 = Other <br> $8=$ Incorrect <br> allocated quantity | Int | Identifies the reason for rejection. Only present when AllocStatus = 1 If it contains the value 7 , the Text field has an explanation of the reason for the rejection |
| 58 | Text | N |  | String | Explanation of reason for rejection |
|  | Standard Trailer | Y |  |  |  |

### 9.12.3 Confirmation (Msg Type = AK)

Message used by ClearGate to notify of the status of a daily account allocation, transfer or Give-up. Also used to request the acceptance or rejection of a Give-up.

In the description of fields of this message, the term "transfer" will be used to refer to a daily account allocation, the Give-up or the transfer itself.

| Tag | Name | Req | Valid values | Format | Description |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | Standard Header | Y | MsgType = AK |  |  |
| 664 | ConfirmID | Y |  | String | Unique identifier for each Confirmation message |
| 772 | ConfirmReflD | N |  | String | Identifier of Confirmation message being replace by this message. Included when ConfirmTransType $=1$ |
| 666 | ConfirmTransType | Y | $\begin{aligned} & \hline 0=\text { New } \\ & 1=\text { Replace } \\ & \hline \end{aligned}$ | Int |  |
| 773 | ConfirmType | Y | $\begin{array}{\|l\|} \hline 1=\text { Status } \\ 2=\text { Confirmation } \end{array}$ | Int | Indicates if the message is a Give-up acceptance request ( $2=$ Confirmation) or a Give-up status notification ( $1=$ Status) |
| 665 | ConfirmStatus | Y | 1 = Received | Int | The content of this field should not be considered. It is included to meet requirements of the standard |
|  | Start <Parties> |  |  |  |  |
| 453 | NoPartyIDs | N |  | NumInGr oup |  |
| $\begin{aligned} & \hline- \\ & 448 \end{aligned}$ | PartyID | N |  | String | Member, User code or Give-up reference |
| $\begin{aligned} & \overrightarrow{447} \end{aligned}$ | PartyIDSource | N | D = Proprietary / custom code | String | Required if NoPartyIDs is specified |
| $\begin{aligned} & \overrightarrow{452} \end{aligned}$ | PartyRole | N | 1 = Executing Firm <br> 3 = Give-out <br> internal reference <br> 4 = Clearing Firm <br> $12=$ Executing <br> Trader <br> 14 = Give-up <br> Clearing Firm <br> 24 = Give-up <br> Reference <br> $33=$ Give-up <br> mnemonic <br> $36=$ Clearing <br> Broker Trader | Int | Required if NoPartyIDs is specified <br> Value 1 is present in messages to the Executing and Clearing Broker of a Give-up informing who the Executing Broker is. <br> Value 3, when present, informs the internal reference to the Executing Broker of a Give-up. <br> Value 4 is present in messages to the Clearing Broker when the message contains an account in field 79, informing who the Clearing Member of the account is. This value is present too in the messages to the Clearing Member. <br> Value 12 is present in messages to the users of Member who made the transfer request, as well as to the users of the Clearing Broker, informing which trader started the request. Value 14 is present in all messages related with Give-ups, informing who the Clearing Broker is. <br> Value 24 , when present, informs the Give-up reference <br> Value 33, when present, informs the Give-out mnemonic to the Executing Broker and the Give-in mnemonic to the Clearing Broker. <br> Value 36, when present, informs who the user of the Clearing Broker that accepted or rejected the Give-up is |
|  | End <Parties> |  |  |  |  |


| Tag | Name | Req | Valid values | Format | Description |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 70 | AlloclD | N |  | String(30) | Allocation Instruction message identifier related. Only present when the message goes to the Member of the trader who started the allocation |
| 793 | SecondaryAllocID | N |  | String(10) | Transfer unique identifier |
| 60 | TransactTime | Y |  | UTCTime stamp | Time in which the transaction is made, in UTC format |
| 75 | TradeDate | Y |  | LocalMkt Date | Date in which the transaction is made |
|  | Start <Instrument> |  |  |  |  |
| 55 | Symbol | Y |  | String(22) | Contract code |
|  | End <Instrument> |  |  |  |  |
| 711 | NoUnderlyings | Y | 0 | NumlnGr oup | The content of this field should not be considered. It is included to meet requirements of the standard |
| 555 | NoLegs | Y | 0 | NumlnGr oup | The content of this field should not be considered. It is included to meet requirements of the standard |
| 80 | AllocQty | Y | $>0$, no decimal places | Qty | Give-up volume |
| 54 | Side | Y | $\begin{aligned} & 1=\text { Buy } \\ & 2=\text { Sell } \end{aligned}$ | Char | Indicates the sign of the trade to be transfer |
| 862 | NoCapacities | Y | 0 | Int | The content of this field should not be considered. It is included to meet requirements of the standard |
| 79 | AllocAccount | Y |  | String(5) | Destination account. <br> When it is a Give-up this field is only informed when the message goes to a Clearing Broker or Clearing Member. It contains " $[\mathrm{N} / \mathrm{A}]$ " otherwise. |
| 6 | AvgPx | Y |  | Price | Trade price |
| 381 | GrossTradeAmt | Y |  | Amt | Nominal/Effective amount traded |
| 118 | NetMoney | Y | 0 | Price | The content of this field should not be considered. It is included to meet requirements of the standard |
| 818* | SecondaryTradeRep ortID | N |  | String | CCP register number of the new trade. Only present when the field SecondaryConfirmStatus = "A". |
| 881* | SecondaryTradeRep ortRefID | N |  | String | CCP register number of trade to be transferred. <br> Only included if the message goes to the Executing Broker |
| $5683$ | SecondaryConfirmSt atus | N | $\begin{aligned} & \text { "P" = Pending } \\ & \text { "N" = Accepted by } \\ & \text { the Clearing } \\ & \text { Broker } \\ & \text { ""R" = Rejected by } \\ & \text { the Clearing } \\ & \text { Broker } \\ & \text { "A" = Accepted by } \\ & \text { the Clearing } \\ & \text { Member } \\ & \text { "L" = Rejected by } \\ & \text { the Clearing } \\ & \text { Member } \\ & \text { "C" = Cancelled by } \\ & \text { the Executing } \\ & \text { Broker } \\ & \text { "S" = Cancelled by } \\ & \text { the system } \\ & \text { "H" = Not valid } \\ & \text { request } \end{aligned}$ | Char | Describes the Give-up state |


| Tag | Name | Req | Valid values | Format | Description |
| :--- | :--- | :--- | :--- | :--- | :--- |
|  |  |  | " X " $=$ Rejected <br> request |  |  |
|  | Standard Trailer | Y |  |  |  |

### 9.12.4 Confirmation Ack (Msg Type = AU)

Message used by the client to accept or reject a Give-up.

| Tag | Name | Req | Valid values | Format | Description |
| :--- | :--- | :--- | :--- | :--- | :--- |
|  | Standard Header | Y | MsgType = AU |  |  |
| 664 | ConfirmID | Y |  | String | Identifier of Confirmation request <br> message |
| 75 | TradeDate | Y |  | LocalMkt <br> Date | ClearGate does not process this <br> field and it is included to meet <br> requirements of the standard |
| 60 | TransactTime | Y |  | UTCTime <br> Stamp | ClearGate does not process this <br> field and it is included to meet <br> requirements of the standard |
| 940 | AffirmStatus | Y | 2= Confirm <br> rejected, i.e. not <br> affirmed <br> $3=$ Affirmed | Int |  |
| $79^{*}$ | AllocAccount | N | Exact length | String(5) | Give-in destination account. <br> Required if it is an acceptance <br> message of the Give-up by the <br> Clearing Broker |
| $793^{*}$ | SecondaryAllocID | Y |  | String(10) | Give-up unique identifier which is <br> being referred. |
|  |  |  |  |  |  |

### 9.12.5 Business Message Reject (MsgType = j)

This message is sent by ClearGate to reject a Confirmation Ack invalid message. The description of this message can be found in section 5.8.5.

## 10. Exercise Instructions

### 10.1 Introduction

The functionality of an exercise instruction allows a FIX client to request the exercise at the end of the day for a combination of options associated to a specific account and contract.

The client must specify the contract code of the option to exercise and the account in which the position is held. The contract code must refer to an option contract that accepts the exercise instruction; otherwise the instruction will be rejected.

An exercise instruction implicitly indicates that the other options are not to be exercised.
ClearGate does not implement a method to indicate the number of options not to be exercised (where it is understood that the other options will be exercised). When a client does not want to exercise any option in a position (only allowed on the expiration day), he has to send an exercise instruction with volume 0.

The early exercise instruction (before the expiration date) can be rejected, whereby it will return to its original status, and consequently no option would be exercised.

Exercise instructions sent on the expiration date can also be rejected; whereby the default procedure will take place (only in-the-money options will be exercised based on the closing price of the underlying in Market Data message).

When more than one exercise instruction is sent for the same account and contract, the last instruction cancels any previous instruction, with the volume to exercise being the amount indicated in this last instruction.

There are two scenarios for exercise instructions depending on the expiration date, which are described in the following sections.

In both scenarios, options are exercised at the end of the trading session. During the day, a FIX client can consult through ClearGate the pending exercise instructions for the end of the day. This consultation can be made using various selection criteria as detailed in the corresponding message description (Request For Positions).

The trades that are generated when options are exercised can be queried using the Trade Capture Report Request message, as described in chapter 7 Monitoring and Management of Positions.

### 10.2 Scenario 1: American options, before expiration date

An exercise instruction, in this scenario, becomes effective at the end of the session. During the session, the exercise instruction can be replaced by sending a new exercise instruction or cancelling it with the corresponding message.

If at the end of the session the account does not have the number of contracts indicated in the exercise instruction, only the available contracts will be exercised, with the rest of the instruction being cancelled.

### 10.3 Scenario 2: Expiration date

This scenario includes both American options and European option. On the expiration day there are three alternatives:
a. Send an exercise instruction as explained in scenario 1. This instruction can be replaced or revoked. At the end of the session the total volume available will be exercised until the specified amount is met. The remaining position will not be
exercised and it will expire. If the instruction is revoked the default procedure will be followed as explained in point c
b. Send an exercise instruction to exercise 0 contracts. At the end of the session, no options will be exercised and all contracts will expire. This petition can be replaced by another or revoked, with a or c applying as appropriate
c. Do nothing and opt for default procedure. The default procedure is to exercise the position if it is in-the-money and not to exercise it if it is at-the-money or out-of-themoney. Note that the default procedure can only be applied to the full position once. This is the only alternative for contracts that do not accept exercise instructions

### 10.4 List of messages

| Message | Description |
| :--- | :--- |
| Position Maintenance Request (Msg Type = AL) | Sent by the FIX client to request the exercise of a <br> contract |
| Position Maintenance Report (Msg Type = AM) | Sent by ClearGate to indicate the acceptance or <br> rejection of an exercise instruction |
| Request For Positions (Msg Type = AN) | Used by the FIX client to request the exercise petitions <br> that are pending on its accounts |
| Request For Positions Ack (Msg Type = AO) | Sent by ClearGate as reply to Request For Positions <br> message. It precedes the Position Report messages (if <br> there are any) |
| Position Report (Msg Type = AP) | Sent by ClearGate as reply to an accepted Request <br> For Positions message. Notifies the active exercise <br> instructions (but not realised) for a specific account and <br> contract |
| Trade Capture Report (Msg Type = AE) | Sent by ClearGate to notify that an option has been <br> exercised. Only sent to related clients subscribed to <br> this type of message |

### 10.5 Message flow

## Early exercise instruction

The client sends an instruction to exercise an American option before its expiration date. ClearGate replies with a message accepting the instruction. The next exercise instruction sent on the same account and contract substitutes the previous order. At the end of the day, the volume indicated in the last instruction, or the volume available, if this is less, is exercised and the corresponding Trade Capture Report is received notifying this, if this type of message has been subscribed to. If no position is present in the account, no option is exercised and therefore no associated Trade Capture Report is generated.


## Exercise instruction and subsequent cancellation

Any exercise instruction can be cancelled with a Position Maintenance Request message with the field PosMaintAction = 3. Once it is cancelled the default procedure is followed, which means there is no early exercise and the option will be exercised on the expiration date if it is in-the-money.

In the example below, the options are considered to be in-the-money on the expiration day, so the options are exercised.


## Exercise instruction rejected by the system

If the FIX client sends an invalid exercise instruction, on an European option prior to expiration, for example, it will be rejected with a Position Maintenance Report message with the field PosMaintStatus $=2$. A rejected exercise instruction will not alter an exercise instruction sent previously.


## Request status of pending exercise instructions

The client can request the status of exercise instructions on a series of accounts and contracts. As a result he will obtain a Position Report message for each account-contract that has an exercise instruction.

This system implements the Snapshot and Update mechanism, and allows the client to receive updates as they occur, if required.


### 10.6 Annotations and adaptations of FIX 4.4

No annotations or adaptations have been made to the messages in this chapter.

### 10.7 Definition of messages

The Position Maintenance Request and Position Maintenance Report messages mentioned in this chapter are also used for the position adjustment. The definition can be found in section 7.8.5 and 7.8.6 of chapter 7 .

The Request For Positions, Request For Positions Ack, Position Report and Trade Capture Report messages mentioned in this chapter are also used for the position monitoring. The definition can be found in sections 7.8.1, 7.8.2, 7.8.3 and 7.8.4.

## 11. Communication of Events

### 11.1 Introduction

This chapter describes two functionalities based on the News message:

- Relay information from the CCP supervisor
- Send messages from a client application to the CCP supervisor

In both cases the information transferred has a free text format.
A client program does not need to subscribe to receive these messages. Every client is implicitly subscribed from the start of the session.

There is no way of checking that the message has reached its destination.
On establishing a communications connection, if the client continues the FIX session he will receive all the pending News messages from the time of disconnection. When the client opts to begin a new FIX session, he receives all the News messages addressed to him that have been generated from the start of the session.

### 11.2 List of messages

| Message | Description |
| :--- | :--- |
| News $($ Msg Type $=B)$ | Used to receive text messages from the CCP supervisor. <br> Also used to send text messages to the CCP supervisor |

### 11.3 Message flow

## Message reception

## ClearGate Client <br> ClearGate Server



Sending message

ClearGate Client ClearGate Server


### 11.4 Annotations and adaptations of FIX 4.4

- Only one line of up to 78 characters per message is allowed.


### 11.5 Definition of messages

### 11.5.1 News (Msg Type = B)

| Tag | Name | Req | Valid values | Format | Description |
| :--- | :--- | :--- | :--- | :--- | :--- |
|  | Standard Header | Y | MsgType = B |  |  |
| 61 | Urgency | N | 0 = Normal <br> = Flash <br> 2 Background | Char | The default value is 0 |
| 148 | Headline | Y |  | String | Message header. Ignored by <br> ClearGate |
| 33 | LinesOfText | Y | 1 | NumInGroup | Number of lines of text. Only one <br> line allowed |
| $\rightarrow 58$ | Text | Y |  | String(78) | One line of text |
|  | Standard Trailer | Y |  |  |  |

## 12. Give-up References and Filters Management

### 12.1 Introduction

Give-up references and filters management covers various functions. From the perspective of a FIX client these are:

- Give-out references management by the Executing Broker
- Give-in references management by the Clearing Broker
- Give-in filters management by the Clearing Broker
- Give-in filters management by the Clearing Member
- Automatic Give-out requests management
- Give-up references and filters report

Each of these functions is explained in a separate section, including a description of the method of use, the list of related messages, the message flow, the additions or annotations incorporated in this implementation for each function and a detailed description of the messages.

### 12.2 RegistID

The field RegistID, present in a request initiated by a Registration Instructions message, is the identifier that relates to the request with Registration Instructions Response messages.

The field RegistID assigned by the client should be ten characters length. If length is inferior, ClearGate complete with spaces to achieve that length. ClearGate also expects that messages sent by the client use an RegistID of 30 length, in this case only the last ten positions can be fixed free, since the 20 first should coincide with the format explained below.

## Message sending with RegistID unprefixed



Message sending with RegistID prefixed


- Assigning of the prefix to the RegistID identifier -

A process in the ClearGate of assigning a prefix to the RegistID field is performed to avoid duplicates in this identifier.

The RegistID assigned by ClearGate in the reply message has the format AAMMDDMmmmTttMmmmTttNnnnnnnnnn, made by the following codes:

- AAMMDD. It is the date of the Clearing Contract Group session
- MmmmTtt. Contains the member and user code of connection from which the request was made
- Nnnnnnnnnn. It is the value assigned by the client application to AllocID in the original message

A user who wants to modify or cancel a reference or a Give-up filter, must use this identifier in the field RegistRefID of the Registration Instructions request message.

### 12.3 Give-out References management by the Executing Broker

### 12.3.1 Description

The FIX client uses this function for the maintenance of the references used by the Executing Broker when a Give-out request is sent.

These references will be common for all the Member's traders and can be modified in realtime.
In the Give-out request, the Executing Broker must indicate a reference that enables the Clearing Broker to uniquely identify the source of the Give-in (together with the code of the Executing Broker). This is the "Give-up Reference".

The Executing and Clearing Brokers should make an agreement to establish this common reference.
To facilitate the sending of a Give-out and internal management, Mnemonic Reference and Internal Reference can be created. These codes will be defined by the Executing Broker and they do not require the agreement of the Clearing Broker.

### 12.3.2 List of messages

| Message | Description |
| :--- | :--- |
| Registration Instructions (Msg Type = o) | Used by the client to request the Give-out references <br> management by the Executing Broker |
| Registration Instructions Response (Msg Type = p) | Sent by ClearGate to notify or reject the Give-out <br> references management by the Executing Broker |

### 12.3.3 Message flow

Give-out references management


Incorrect Give-out references management


### 12.3.4 Annotations and adaptations of FIX 4.4

- In the Registration Instructions message, the fields NoPartyIDs (453) and NoPartySubIDs (802) are now required
- The field Text (58) has been added to the Registration Instructions Response message


### 12.3.5 Definition of messages

12.3.5.1 Registration Instructions (Msg Type = o)

Message sent by the client to manage the Give-out references.

| Tag | Name | Req | Valid values | Format | Description |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | Standard Header | Y | MsgType = 0 |  |  |
| 513 | RegistID | Y |  | String (30) | Unique identifier for each Registration Instructions message |
| 514 | RegistTransType | Y | $\begin{aligned} & \hline 0=\text { New } \\ & 1=\text { Replace } \\ & 2=\text { Cancel } \\ & \hline \end{aligned}$ | Char |  |
| 508 | RegistRefID | N |  | String (30) | Reference identifier for the RegistID (513) with Cancel and Replace RegistTransType (514) transaction types. <br> Required if RegistTransType $=1$ or 2 |
|  | Start <Parties> |  |  |  |  |
| 453 | NoPartyIDs | $Y^{*}$ |  | NumInGroup |  |
| $\overrightarrow{448}$ | PartyID | Y |  | String | Member code or reference. <br> For the Give-out internal Referencia (PartyRole=3) the maximum length for this field is 18 alphanumeric characters. <br> For the Clearing Broker (PartyRole $=$ 14) the exact length for this field is 4 alphanumeric characters. <br> For the Give-up reference (PartyRole = 24) the maximum length for this field is 18 alphanumeric characters. <br> For the Give-out mnemonic (PartyRole $=33$ ) the maximum length for this field is 10 alphanumeric characters. |
| $\begin{aligned} & \overrightarrow{447} \end{aligned}$ | PartyIDSource | Y | D = Proprietary / Custom code | String |  |
| $452$ | PartyRole | Y | 3 = Give-out internal reference 14 = Give-up Clearing Firm 24 = Give-up Reference $33=$ Give-up Mnemonic | Int | Value 3 is for Give-out internal reference <br> Value 14 is the Clearing Broker. <br> Value 24 is for Give-up reference. <br> Value 33 is for Give-out mnemonic. |
| $\begin{aligned} & \vec{~} \\ & 802 \end{aligned}$ | NoPartySubIDs | $Y^{*}$ | 1 | NumInGroup |  |
| $\begin{aligned} & \vec{\rightarrow} \\ & \overrightarrow{523} \end{aligned}$ | PartySubID | Y | GOR = Give-out references | String |  |
| $\begin{aligned} & \vec{\rightarrow} \\ & 803 \end{aligned}$ | PartySubIDType | Y |  | Int | This field is required by the standard. ClearGate does not require this field to be present |
|  | End <Parties> |  |  |  |  |
|  | Standard Trailer | Y |  |  |  |

### 12.3.5.2 Registration Instructions Response (Msg Type $=\mathbf{p}$ )

Message used by ClearGate to indicate the status of the request initiated with the Registration Instructions message.

This message is only sent to the user who made the request.

| Tag | Name | Req | Valid values | Format | Description |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | Standard Header | Y | MsgType = P |  |  |
| 513 | RegistID | Y |  | String (30) | Identifier assigned by the client in the Registration Instructions message |
| 514 | RegistTransType | Y | $\begin{aligned} & \hline 0=\text { New } \\ & 1=\text { Replace } \\ & 2=\text { Cancel } \end{aligned}$ | Char |  |
| 508 | RegistRefID | N |  | String (30) | Identifier of Registration Instructions message which is replaced or cancelled by this message. Included when RegistTransType $=1$ or 2 |
|  | Start <Parties> |  |  |  |  |
| 453 | NoPartylDs | N |  | NumInGroup |  |
| $\begin{aligned} & \hline \overrightarrow{4} \\ & 448 \end{aligned}$ | PartyID | N |  | String | Member code or reference. |
| $\rightarrow 447$ | PartyIDSource | N | D = Proprietary / Custom code | String |  |
| $\rightarrow 452$ | PartyRole | N | 3 = Give-out internal reference 14 = Give-up Clearing Firm 24 = Give-up Reference 33 = Give-up Mnemonic | Int | Value 3 for Give-out internal reference <br> Value 14 is the Clearing Broker. <br> Value 24 is for Give-up reference. <br> Value 33 is for Give-out mnemonic. |
| $\begin{aligned} & \hline \vec{~} \\ & 802 \end{aligned}$ | NoPartySubIDs | N | 1 | NumInGroup |  |
| $\begin{aligned} & \vec{\rightarrow} \\ & 523 \end{aligned}$ | PartySubID | Y | GOR = Give-out references | String |  |
| $\begin{aligned} & \vec{\rightarrow} \\ & 803 \end{aligned}$ | PartySubIDType | Y |  | Int | The content of this field should not be considered. It is included to meet requirements of the standard |
|  | End <Parties> |  |  |  |  |
| 506 | RegistStatus | Y | $\begin{aligned} & \mathrm{A}=\text { Accepted } \\ & \mathrm{R}=\text { Rejected } \end{aligned}$ | Char | Status of the Registration Instructions request message. <br> If it contains the value " $R$ ", there is an explanation for the rejection in the Text field |
| 58* | Text | N |  | String | If RegistStatus = " $R$ " there is an explanation of the rejection |
|  | Standard Trailer | Y |  |  |  |

### 12.4 Give-in References Management by the Clearing Broker

### 12.4.1 Description

The FIX client uses this function for the maintenance of the references used by the Clearing Broker when a Give-in acceptance is requested.

These references will be common for all the Member's traders and can be modified in realtime.
In the Give-out request, the Executing Broker must indicate a reference that enables the Clearing Broker to uniquely identify the source of the Give-in (together with the code of the Executing Broker). This is the "Give-up Reference".

The Executing and Clearing Brokers should make an agreement to establish this common reference.
To facilitate the acceptance of a Give-in, a mnemonic reference can be created. This code will be defined by the Clearing Broker and its does not require the agreement of the Executing Broker.

### 12.4.2 List of messages

| Message | Description |
| :--- | :--- |
| Registration Instructions (Msg Type = o) | Used by the client to request the Give-in references management by <br> the Clearing Broker |
| Registration Instructions Response (Msg <br> Type $=$ p) | Sent by ClearGate to notify or reject the Give-in references <br> management by the Clearing Broker |

### 12.4.3 Message flow

## Give-in references management



Incorrect Give-in references management


### 12.4.4 Annotations and adaptations of FIX 4.4

- In the Registration Instructions message, the fields NoPartyIDs (453), NoPartySubIDs (802) and Account (1) are now required
- The field Text (58) has been added to the Registration Instructions Response message


### 12.4.5 Definition of messages

12.4.5.1 Registration Instructions (Msg Type =o)

Message sent by the client to manage the Give-in references.

| Tag | Name | Req | Valid values | Format | Description |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | Standard Header | Y | MsgType = 0 |  |  |
| 513 | RegistID | Y |  | String (30) | Unique identifier for each Registration Instructions message |
| 514 | RegistTransType | Y | $\begin{aligned} & \hline 0=\text { New } \\ & 1=\text { Replace } \\ & 2=\text { Cancel } \end{aligned}$ | Char |  |
| 508 | RegistReflD | N |  | String (30) | Reference identifier for the RegistID (513) with Cancel and Replace RegistTransType (514) transaction types. <br> Required if RegistTransType $=1$ or 2 |
|  | Start <Parties> |  |  |  |  |
| 453 | NoPartyIDs | $Y^{*}$ | 3 | NumInGroup |  |
| $\overrightarrow{448}$ | PartylD | Y |  | String | Member code or reference. <br> For the Executing Broker (PartyRole = <br> 1) the maximum length for this field is <br> 4 alphanumeric characters. <br> For the Give-up reference (PartyRole = <br> 24) the maximum length for this field is <br> 18 alphanumeric characters. <br> For the Give-in mnemonic (PartyRole <br> $=33$ ) the maximum length for this field <br> is 10 alphanumeric characters. |
| $\begin{aligned} & \overrightarrow{447} \end{aligned}$ | PartyIDSource | Y | D = Proprietary / Custom code | String |  |
| $\overrightarrow{452}$ | PartyRole | Y | $\begin{aligned} & 1=\text { Executing } \\ & \text { Firm } \\ & 24=\text { Give-up } \\ & \text { Reference } \\ & 33=\text { Give-up } \\ & \text { Mnemonic } \end{aligned}$ | Int | Value 1 is the Executing Broker. Value 24 is for Give-up reference. Value 33 is for Give-in mnemonic. |
| $\begin{aligned} & \hline \overrightarrow{802} \end{aligned}$ | NoPartySubIDs | $Y^{*}$ | 1 | NumInGroup |  |
| $\begin{aligned} & \vec{\rightarrow} \\ & 523 \end{aligned}$ | PartySubID | Y | GIR = Give-in references | String |  |
| $\begin{aligned} & \vec{\rightarrow} \\ & 803 \end{aligned}$ | PartySubIDType | Y |  | Int | This field is required by the standard. ClearGate does not require this field to be present |
|  | End <Parties> |  |  |  |  |
| 1 | Account | $Y^{*}$ |  | String (5) | Give-in destination account |
|  | Standard Trailer | Y |  |  |  |

### 12.4.5.2 Registration Instructions Response (Msg Type $=\mathbf{p}$ )

Message used by ClearGate to indicate the status of the request initiated with the Registration Instructions message.

This message is only sent to the user who made the request.

| Tag | Name | Req | Valid values | Format | Description |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | Standard Header | Y | MsgType = P |  |  |
| 513 | RegistlD | Y |  | String | Identifier assigned by the client in the Registration Instructions message |
| 514 | RegistTransType | Y | $\begin{aligned} & \hline 0=\text { New } \\ & 1=\text { Replace } \\ & 2=\text { Cancel } \end{aligned}$ | Char |  |
| 508 | RegistRefID | N |  | String | Identifier of Registration Instructions message which is replaced or cancelled by this message. Included when RegistTransType $=1$ or 2 |
|  | Start <Parties> |  |  |  |  |
| 453 | NoPartyIDs | N |  | NumlnGroup |  |
| $\begin{aligned} & \hline \vec{~} \\ & 448 \end{aligned}$ | PartyID | N |  | String | Member code or reference. |
| $\rightarrow 447$ | PartyIDSource | N | D = Proprietary / Custom code | String |  |
| $\rightarrow 452$ | PartyRole | N | 1 = Executing Firm 24 = Give-up Reference 33 = Give-up Mnemonic | Int | Value 1 is the Executing Broker. Value 24 is for Give-up reference. Value 33 is for Give-in mnemonic. |
| $\begin{aligned} & \hline \overrightarrow{ } \\ & 802 \\ & \hline \end{aligned}$ | NoPartySubIDs | N | 1 | NumInGroup |  |
| $\begin{aligned} & \rightarrow \rightarrow \\ & 523 \end{aligned}$ | PartySubID | Y | GIR = Give-in references | String |  |
| $\begin{aligned} & \vec{\rightarrow} \\ & 803 \end{aligned}$ | PartySubIDType | Y |  | Int | The content of this field should not be considered. It is included to meet requirements of the standard |
|  | End <Parties> |  |  |  |  |
| 1 | Account | N |  | String | Give-in destination account |
| 506 | RegistStatus | Y | A $=$ Accepted $R=$ Rejected <br> $R=$ Rejected | Char | Status of the Registration Instructions request message. <br> If it contains the value " $R$ ", there is an explanation for the rejection in the Text field |
| 58* | Text | N |  | String | If RegistStatus = " $R$ " there is an explanation of the rejection |
|  | Standard Trailer | Y |  |  |  |

### 12.5 Give-in Filters Management by the Clearing Broker

### 12.5.1 Description

The FIX client uses this function to configure the filters that allow for the automatic acceptance of trades.

The acceptance of a Give-in can be automated using certain filters defined by the Clearing Broker and/or Clearing Member, where any Give-in that does not pass those filters is left pending to be manually accepted or rejected.

### 12.5.2 List of messages

| Message | Description |
| :--- | :--- |
| Registration Instructions (Msg Type = 0) | Used by the client to request the Give-in filters management by the <br> Clearing Broker |
| Registration Instructions Response (Msg <br> Type $=$ p) | Sent by ClearGate to notify or reject the Give-in filters management <br> by the Clearing Broker |

### 12.5.3 Message flow

Give-in filters management by Clearing Broker


Incorrect Give-in filters management by Clearing Broker


### 12.5.4 Annotations and adaptations of FIX 4.4

- In the Registration Instructions message, the fields NoPartyIDs (453) and NoPartySubIDs (802) are now required
- The field Text (58) has been added to the Registration Instructions Response message


### 12.5.5 Definition of messages

12.5.5.1 Registration Instructions (Msg Type = o)

Message sent by the client to manage the Give-in filters by the Clearing Broker.

| Tag | Name | Req | Valid values | Format | Description |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | Standard Header | Y | MsgType = 0 |  |  |
| 513 | RegistID | Y |  | String (30) | Unique identifier for each Registration Instructions message |
| 514 | RegistTransType | Y | $\begin{aligned} & \hline 0=\text { New } \\ & 1=\text { Replace } \\ & 2=\text { Cancel } \end{aligned}$ | Char |  |
| 508 | RegistReflD | N |  | String (30) | Reference identifier for the RegistID (513) with Cancel and Replace RegistTransType (514) transaction types. <br> Required if RegistTransType $=1$ or 2 |
|  | Start <Parties> |  |  |  |  |
| 453 | NoPartyIDs | $Y^{*}$ | 2 | NumInGroup |  |
| $\begin{aligned} & \overrightarrow{448} \end{aligned}$ | PartyID | Y |  | String | Member code or reference. <br> For the Executing Broker (PartyRole = <br> 1) the maximum length for this field is <br> 4 alphanumeric characters. <br> For the Give-up reference (PartyRole = <br> 24) the maximum length for this field is <br> 18 alphanumeric characters. |
| $\begin{aligned} & \hline \overrightarrow{447} \end{aligned}$ | PartyIDSource | Y | D = Proprietary / Custom code | String |  |
| $\begin{aligned} & \hline \overrightarrow{452} \end{aligned}$ | PartyRole | Y | ```1 = Executing Firm 24 = Give-up Reference``` | Int | Value 1 is the Executing Broker. Value 24 is for Give-up reference. <br> The use of the wildcard "?" is only allowed in all the Executing Broker positions or in all the Give-up reference positions (but not in both fields simultaneously). |
| $\overrightarrow{802}$ | NoPartySubIDs | $Y^{*}$ | 1 | NumInGroup |  |
| $\begin{aligned} & \vec{\rightarrow} \\ & 523 \end{aligned}$ | PartySubID | Y | GIF = Give-in <br> filters | String |  |
| $\begin{aligned} & \vec{\rightarrow} \\ & 803 \end{aligned}$ | PartySubIDType | Y |  | Int | This field is required by the standard. ClearGate does not require this field to be present |
|  | End <Parties> |  |  |  |  |
|  | Start <Stipulations> |  |  |  |  |
| 232* | NoStipulations | Y | 2 | NumInGroup |  |
| $\begin{aligned} & \overrightarrow{233^{*}} \end{aligned}$ | StipulationType | Y | TAL = <br> Transaction Amount Limit SAL = Session Amount Limit | String |  |
| $\begin{aligned} & \overrightarrow{234^{*}} \end{aligned}$ | StipulationValue | Y | [N/A] <br> or an numeric value $>=0$ and <= 999999999 | String | When StipulationType = TAL, contains the maximum amount for a Give-in that will be accepted automatically for this Executing Broker and reference. <br> When StipulationType = SAL, contains the maximum amount per session of Give-ins that will be accepted automatically for this Executing Broker and reference. <br> Must contain [ $N / A$ ] when there is no a maximum amount to validate. |


| Tag | Name | Req | Valid values | Format | Description |
| :--- | :--- | :--- | :--- | :--- | :--- |
|  | End <Stipulations> |  |  |  |  |
|  | Standard Trailer | Y |  |  |  |

### 12.5.5.2 Registration Instructions Response (Msg Type = p)

Message used by ClearGate to indicate the status of the request initiated with the Registration Instructions message.

This message is only sent to the user who made the request.

| Tag | Name | Req | Valid values | Format | Description |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | Standard Header | Y | MsgType = p |  |  |
| 513 | RegistID | Y |  | String | Identifier assigned by the client in the Registration Instructions message |
| 514 | RegistTransType | Y | $\begin{aligned} & \hline 0=\text { New } \\ & 1=\text { Replace } \\ & 2=\text { Cancel } \end{aligned}$ | Char |  |
| 508 | RegistRefID | N |  | String | Identifier of Registration Instructions message which is replaced or cancelled by this message. Included when RegistTransType $=1$ or 2 |
|  | Start <Parties> |  |  |  |  |
| 453 | NoPartyIDs | N |  | NumInGroup |  |
| $\begin{aligned} & \vec{~} \\ & 448 \end{aligned}$ | PartyID | N |  | String | Member code or reference. It is possible to use the wildcard "?" character. |
| $\begin{aligned} & \hline \vec{~} \\ & 447 \end{aligned}$ | PartyIDSource | N | D = Proprietary / Custom code | String |  |
| $\begin{aligned} & \hline \overrightarrow{ } \\ & 452 \end{aligned}$ | PartyRole | N | ```1= Executing Firm 24 = Give-up Reference``` | Int | Value 1 is the Executing Broker. Value 24 is for Give-up reference. |
| $\begin{aligned} & \hline \overrightarrow{ } \\ & 802 \\ & \hline \end{aligned}$ | NoPartySubIDs | N |  | NumInGroup |  |
| $\begin{aligned} & \rightarrow \rightarrow \\ & \vec{~} \end{aligned}$ | PartySubID | Y | GIF = Give-in filters | String |  |
| $\begin{aligned} & \vec{\rightarrow} \\ & 803 \end{aligned}$ | PartySubIDType | Y |  | Int | The content of this field should not be considered. It is included to meet requirements of the standard |
|  | End <Parties> |  |  |  |  |
|  | Start <Stipulations> |  |  |  |  |
| 232* | NoStipulations | N |  | NumInGroup |  |
| $\begin{aligned} & \overrightarrow{233^{*}} \end{aligned}$ | StipulationType | N | TAL=Transaction Amount Limit SAL = Session Amount Limit | String |  |
| $\begin{aligned} & \overrightarrow{234^{*}} \end{aligned}$ | StipulationValue | N |  | String | When StipulationType = TAL, contains the maximum amount for a Give-in that will be accepted automatically for this Executing Broker and reference. <br> When StipulationType = SAL, contains the maximum amount per session of Give-ins that will be accepted automatically for this Executing Broker and reference. <br> This field contains [ $N / A$ ] when there is no a maximum amount to validate. |
|  | End <Stipulations> |  |  |  |  |
| 506 | RegistStatus | Y | $\begin{aligned} & \hline A=\text { Accepted } \\ & R=\text { Rejected } \end{aligned}$ | Char | Status of the Registration Instructions request message. <br> If it contains the value " $R$ ", there is an explanation for the rejection in the Text field |
| 58* | Text | N |  | String | If RegistStatus = " $R$ " there is an explanation of the rejection |


| Tag | Name | Req | Valid values | Format | Description |
| :--- | :--- | :--- | :--- | :--- | :--- |
|  | Standard Trailer | Y |  |  |  |

### 12.6 Give-in Filters Management by the Clearing Member

### 12.6.1 Description

The FIX client uses this function to configure the filters that allow for the automatic acceptance of trades.

The acceptance of a Give-in can be automated using certain filters defined by the Clearing Broker and/or Clearing Member, where any Give-in that does not pass those filters is left pending to be manually accepted or rejected.

### 12.6.2 List of messages

| Message | Description |
| :--- | :--- |
| Registration Instructions (Msg Type = 0) | Used by the client to request the Give-in filters management by the <br> Clearing Member |
| Registration Instructions Response (Msg <br> Type = p) | Sent by ClearGate to notify or reject the Give-in filters management <br> by the Clearing Member |

### 12.6.3 Message flow

Give-in filters management by Clearing Member


Incorrect Give-in filters management by Clearing Member


### 12.6.4 Annotations and adaptations of FIX 4.4

- In the Registration Instructions message, the fields NoPartyIDs (453) and NoPartySubIDs (802) are now required
- The field Text (58) has been added to the Registration Instructions Response message
- The block Stipulations has been added to the Registration Instructions Response message


### 12.6.5 Definition of messages

12.6.5.1 Registration Instructions (Msg Type = o)

Message sent by the client to manage the Give-in filters by the Clearing Member.

| Tag | Name | Req | Valid values | Format | Description |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | Standard Header | Y | MsgType = 0 |  |  |
| 513 | RegistID | Y |  | String (30) | Unique identifier for each Registration Instructions message |
| 514 | RegistTransType | Y | $\begin{aligned} & \hline 0=\text { New } \\ & 1=\text { Replace } \\ & 2=\text { Cancel } \end{aligned}$ | Char |  |
| 508 | RegistReflD | N |  | String (30) | Reference identifier for the RegistID (513) with Cancel and Replace RegistTransType (514) transaction types. <br> Required if RegistTransType $=1$ or 2 |
|  | Start <Parties> |  |  |  |  |
| 453 | NoPartyIDs | $Y^{*}$ | 1 | NumInGroup |  |
| $\begin{aligned} & \overrightarrow{448} \end{aligned}$ | PartyID | Y |  | String (4) | Clearing Broker code |
| $\begin{aligned} & \overrightarrow{4} \\ & 447 \end{aligned}$ | PartyIDSource | Y | D = Proprietary / Custom code | String |  |
| $\begin{aligned} & \vec{~} \\ & 452 \end{aligned}$ | PartyRole | Y | $14 \text { = Give-up }$ Clearing Firm | Int |  |
| $\begin{aligned} & \vec{~} \\ & 802 \end{aligned}$ | NoPartySubIDs | $Y^{*}$ | 1 | NumInGroup |  |
| $\begin{aligned} & \vec{\rightarrow} \\ & 523 \end{aligned}$ | PartySubID | Y | GIFCM = Give-in filters of clearing member | String |  |
| $\begin{aligned} & \vec{\rightarrow} \\ & 803 \end{aligned}$ | PartySubIDType | Y |  | Int | This field is required by the standard. ClearGate does not require this field to be present |
|  | End <Parties> |  |  |  |  |
| 1 | Account | $Y^{*}$ |  | String (5) | Give-in destination account. The use of the wildcard "?" is only allowed in all the five positions. |
|  | Start <Stipulations> |  |  |  |  |
| 232* | NoStipulations | Y | 2 | NumInGroup |  |
| $\begin{aligned} & \overrightarrow{233^{*}} \end{aligned}$ | StipulationType | Y | TAL=Transaction Amount Limit SAL = Session Amount Limit | String |  |
| $\begin{aligned} & \overrightarrow{234^{*}} \end{aligned}$ | StipulationValue | Y | [N/A] <br> or an numeric value $>=0$ and <= 999999999 | String | When StipulationType = TAL, contains the maximum amount for a Give-in that will be accepted automatically for this Clearing Broker and account. <br> When StipulationType = SAL, contains the maximum amount per session of Give-ins that will be accepted automatically for this Clearing Broker and account. <br> Must contain [ $N / A$ ] when there is no a maximum amount to validate. |
|  | End <Stipulations> |  |  |  |  |
|  | Standard Trailer | Y |  |  |  |

### 12.6.5.2 Registration Instructions Response (Msg Type = p)

Message used by ClearGate to indicate the status of the request initiated with the Registration Instructions message.

This message is only sent to the user who made the request.

| Tag | Name | Req | Valid values | Format | Description |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | Standard Header | Y | MsgType = p |  |  |
| 513 | RegistID | Y |  | String | Identifier assigned by the client in the Registration Instructions message |
| 514 | RegistTransType | Y | $\begin{aligned} & \hline 0=\text { New } \\ & 1=\text { Replace } \\ & 2=\text { Cancel } \end{aligned}$ | Char |  |
| 508 | RegistRefID | N |  | String | Identifier of Registration Instructions message which is replaced or cancelled by this message. Included when RegistTransType $=1$ or 2 |
|  | Start <Parties> |  |  |  |  |
| 453 | NoPartyIDs | N |  | NumInGroup |  |
| $\begin{aligned} & \hline \overrightarrow{4} \\ & 448 \end{aligned}$ | PartylD | N |  | String | Clearing Broker code |
| $\overrightarrow{447}$ | PartyIDSource | N | D = Proprietary / Custom code | String |  |
| $\begin{aligned} & \hline \overrightarrow{452} \end{aligned}$ | PartyRole | N | $14 \text { = Give-up }$ Clearing Firm | Int |  |
| $\begin{aligned} & \hline \vec{~} \\ & 802 \end{aligned}$ | NoPartySublDs | N | 1 | NumInGroup |  |
| $\begin{aligned} & \vec{\rightarrow} \\ & 523 \end{aligned}$ | PartySubID | Y | GIFCM = Give-in filters of clearing member | String |  |
| $\begin{aligned} & \vec{\rightarrow} \\ & 803 \end{aligned}$ | PartySubIDType | Y |  | Int | The content of this field should not be considered. It is included to meet requirements of the standard |
|  | End <Parties> |  |  |  |  |
| 1 | Account | N |  | String | Give-in destination account. It is possible to use the wildcard "?" character. |
|  | Start <Stipulation |  |  |  |  |
| 232* | NoStipulations | N |  | NumInGroup |  |
| $\begin{aligned} & \overrightarrow{233^{*}} \end{aligned}$ | StipulationType | N | TAL=Transaction Amount Limit SAL = Session Amount Limit | String |  |
| $\begin{aligned} & \overrightarrow{234^{*}} \end{aligned}$ | StipulationValue | N |  | String | When StipulationType = TAL, contains the maximum amount for a Give-in that will be accepted automatically for this Clearing Broker and account. <br> When StipulationType = SAL, contains the maximum amount per session of Give-ins that will be accepted automatically for this Clearing Broker and account. <br> This field contains [ $N / A$ ] when there is no a maximum amount to validate. |
|  | End <Stipulations |  |  |  |  |
| 506 | RegistStatus | Y | $\begin{aligned} & \mathrm{A}=\text { Accepted } \\ & \mathrm{R}=\text { Rejected } \end{aligned}$ | Char | Status of the Registration Instructions request message. <br> If it contains the value " $R$ ", there is an explanation for the rejection in the Text field |
| 58* | Text | N |  | String | If RegistStatus = "R" there is an |


| Tag | Name | Req | Valid values | Format | Description |
| :--- | :--- | :--- | :--- | :--- | :--- |
|  |  |  |  |  | explanation of the rejection |
|  | Standard Trailer | Y |  |  |  |

### 12.7 Automatic Give-out Requests Management

### 12.7.1 Description

The FIX client uses this function to configure the automatic give-out initiation, based on the account code, for trades originated in the trading engine (order matching and cross orders).

### 12.7.2 List of messages

| Message | Description |
| :--- | :--- |
| Registration Instructions (Msg Type = o) | Used by the client to request the automatic Give-out management |
| Registration Instructions Response (Msg <br> Type $=\mathrm{p})$ | Sent by ClearGate to notify or reject the automatic Give-out request <br> management |

### 12.7.3 Message flow

## Automatic Give-out request management



Incorrect automatic Give-out request management


### 12.7.4 Annotations and adaptations of FIX 4.4

- In the Registration Instructions message, the fields NoPartyIDs (453) and NoPartySubIDs (802) are now required
- The field Text (58) has been added to the Registration Instructions Response message


### 12.7.5 Definition of messages

12.7.5.1 Registration Instructions (Msg Type $=0$ )

Message sent by the client to manage the automatic Give-out requests.

| Tag | Name | Req | Valid values | Format | Description |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | Standard Header | Y | MsgType = 0 |  |  |
| 513 | RegistID | Y |  | String (30) | Unique identifier for each Registration Instructions message |
| 514 | RegistTransType | Y | $\begin{aligned} & \hline 0=\text { New } \\ & 1=\text { Replace } \\ & 2=\text { Cancel } \end{aligned}$ | Char |  |
| 508 | RegistReflD | N |  | String (30) | Reference identifier for the RegistID (513) with Cancel and Replace RegistTransType (514) transaction types. <br> Required if RegistTransType $=1$ or 2 |
|  | Start <Parties> |  |  |  |  |
| 453 | NoPartyIDs | $Y^{*}$ | 1 | NumInGroup |  |
| $\begin{aligned} & \overrightarrow{448} \end{aligned}$ | PartyID | Y |  | String(10) | Give-out mnemonic |
| $\begin{aligned} & \vec{~} \\ & 447 \end{aligned}$ | PartyIDSource | Y | D = Proprietary / Custom code | String |  |
| $\begin{aligned} & \vec{~} \\ & 452 \end{aligned}$ | PartyRole | Y | $33 \text { = Give-up }$ Mnemonic | Int |  |
| $\begin{aligned} & \vec{~} \\ & 802 \end{aligned}$ | NoPartySubIDs | $Y^{*}$ | 1 | NumInGroup |  |
| $\begin{aligned} & \rightarrow \rightarrow \\ & 523 \end{aligned}$ | PartySubID | Y | AGR = Automatic Giveout request | String |  |
| $\begin{aligned} & \vec{\rightarrow} \\ & 803 \end{aligned}$ | PartySubIDType | Y |  | Int | This field is required by the standard. ClearGate does not require this field to be present |
|  | End <Parties> |  |  |  |  |
| 1 | Account | $Y^{*}$ |  | String (5) | Give-out account |
|  | Standard Trailer | Y |  |  |  |

### 12.7.5.2 Registration Instructions Response (Msg Type $=\mathbf{p}$ )

Message used by ClearGate to indicate the status of the request initiated with the Registration Instructions message.

This message is only sent to the user who made the request.

| Tag | Name | Req | Valid values | Format | Description |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | Standard Header | Y | MsgType = p |  |  |
| 513 | RegistID | Y |  | String | Identifier assigned by the client in the Registration Instructions message |
| 514 | RegistTransType | Y | $\begin{aligned} & \hline 0=\text { New } \\ & 1=\text { Replace } \\ & 2=\text { Cancel } \end{aligned}$ | Char |  |
| 508 | RegistRefID | N |  | String | Identifier of Registration Instructions message which is replaced or cancelled by this message. Included when RegistTransType $=1$ or 2 |
|  | Start <Parties> |  |  |  |  |
| 453 | NoPartyIDs | N |  | NumInGroup |  |
| $\begin{aligned} & \vec{~} \\ & 448 \end{aligned}$ | PartyID | N |  | String | Give-out mnemonic |
| $\begin{aligned} & \vec{~} \\ & 447 \end{aligned}$ | PartyIDSource | N | $\mathrm{D}=\text { Proprietary / }$ Custom code | String |  |
| $\begin{aligned} & \hline \overrightarrow{452} \end{aligned}$ | PartyRole | N | $\begin{array}{\|l\|} \hline 33=\text { Give-up } \\ \text { Mnemonic } \\ \hline \end{array}$ | Int |  |
| $\begin{aligned} & \vec{~} \\ & 802 \\ & \hline \end{aligned}$ | NoPartySubIDs | N | - | NumInGroup |  |
|  | PartySubID | Y | AGR = <br> Automatic Giveout request | String |  |
| $\begin{aligned} & \vec{\rightarrow} \\ & 803 \end{aligned}$ | PartySubIDType | Y |  | Int | The content of this field should not be considered. It is included to meet requirements of the standard |
|  | End <Parties> |  |  |  |  |
| 1 | Account | N |  | String | Give-out account |
| 506 | RegistStatus | Y | $\begin{aligned} & \hline A=\text { Accepted } \\ & R=\text { Rejected } \end{aligned}$ | Char | Status of the Registration Instructions request message. <br> If it contains the value " $R$ ", there is an explanation for the rejection in the Text field |
| 58* | Text | N |  | String | If RegistStatus = " $R$ " there is an explanation of the rejection |
|  | Standard Trailer | Y |  |  |  |

### 12.8 Give-up References and Filters Report

### 12.8.1 Description

The client application can request a query of the Give-up references and filters with a Registration Instructions message.

In reply to this request a Registration Instructions Response message is received for each Give-up reference and filter available at this moment.

### 12.8.2 List of messages

| Message | Description |
| :--- | :--- |
| Registration Instructions (Msg Type = 0) | Used by the client to request the Give-up references and filters <br> report |
| Registration Instructions Response (Msg <br> Type $=\mathrm{p}$ ) | Sent by ClearGate to notify or reject the Give-up references and <br> filters report |

### 12.8.3 Message flow

## Give-up references and filters information request

ClearGate Client ClearGate Server

| Registration Instructions ("o") |
| :---: |
| SubscriptionRequestType $=0$ (Snaphot) |
| Registration Instructions Response ("p") |
| One mensaje per every reference <br> and/or Give-up filter |

Incorrect Give-up references and filters information request
ClearGate Client ClearGate Server

| Registration Instructions ("o") |
| :---: |
| SubscriptionRequestType $=0$ (Snaphot) |
| Registration Instructions Response ("p") |
| RegistStatus[506] = R (Rejected) |

### 12.8.4 Annotations and adaptations of FIX 4.4

- The field SubscriptionRequestType (263) has been added to the Registration Instructions message
- The fields LastRptRequested (912) and Text (58) have been added to the Registration Instructions Response message


### 12.8.5 Definition of messages

12.8.5.1 Registration Instructions (Msg Type = 0)

Message sent by the client to request the Give-up references and filters report.

| Tag | Name | Req | Valid values | Format | Description |
| :--- | :--- | :--- | :--- | :--- | :--- |
|  | Standard Header | Y | MsgType $=0$ |  | String (10) |
| 513 | RegistID | Y |  | Unique identifier for each Registration <br> Instructions message |  |
| 514 | RegistTransType | Y |  | Ignored by ClearGate when <br> SubscriptionRequestType[263] is <br> specified |  |
| $263^{*}$ | SubscriptionReques <br> tType | N | $0=$ Snasphot | Char | If this tag is specified indicates this is a <br> request for all the existing references <br> and filters. In this case ClearGate <br> ignores the rest of the fields. |
|  | Standard Trailer | Y |  |  |  |

### 12.8.5.2 Registration Instructions Response (Msg Type = p )

Message used by ClearGate to indicate the status of the request initiated with the Registration Instructions message.

This message is only sent to the user who made the request.

| Tag | Name | Req | Valid values | Format | Description |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | Standard Header | Y | MsgType = p |  |  |
| 513 | RegistlD | Y |  | String (10) | Identifier assigned by the client in the Registration Instructions message |
| 514 | RegistTransType | Y | 0 = New | Char |  |
| 912* | LastRptRequested | N | $\begin{array}{\|l\|} \hline \mathrm{Y}=\text { Last } \\ \text { message } \\ \mathrm{N}=\text { Not last } \\ \text { message } \\ \hline \end{array}$ | Boolean |  |
|  | <Parties> Account <Stipulations> |  |  |  | Spefific infomation depending on the register type. |
| 506 | RegistStatus | Y | $\begin{aligned} & \hline A=\text { Accepted } \\ & R=\text { Rejected } \end{aligned}$ | Char | Status of the Registration Instructions request message. <br> If it contains the value " $R$ ", there is an explanation for the rejection in the Text field |
| 58* | Text | N |  | String | If RegistStatus = " $R$ " there is an explanation of the rejection |
|  | Standard Trailer | Y |  |  |  |

## 13. Deliveries of the Futures Contract on the Government Bond

### 13.1 Introduction

The deliveries functionality allows a FIX client to:
a) Obtain the published deliverables, via the Security List message, in the block InstrumentLeg
b) Inform, during the period of notification of deliverables, what references, from the list of deliverables, will be delivered for each sold position. This is communicated through the Position Maintenance Request messages
c) Be informed of operations to be made in IBERCLEAR. These operations are communicated via Trade Capture Report messages received via a specific subscription using a Trade Capture Report Request message with TrdType [828] = 15

Below each of these phases is described in more detail.

### 13.2 List of deliverable securities

The list of deliverable securities and conversion factors are informed in the InstrumentLeg of the Security List message. The most relevant information would be:

- Derivatives contract: Symbol [55]
- Delivery security code: LegSymbol [600]
- ISIN delivery security code: LegSecurityAltID [605]
- Conversion factor: LegFactor [253]
- Accrued interest: AccruedInterestAmt [159]


### 13.3 Delivery notice

Delivery commences for Members with short positions, for which CCP provides a delivery notification period during which each Member will inform CCP of which references from the delivery securities list (see 13.2 - List of deliverable securities) it will deliver for each short position. When this period has finished, if there are any short positions for which CCP has not been notified of the reference to be delivered, the Clearing Member must perform notificattion to CCP. Finally, if there are still any positions for which the deliverable reference has not been notified, CCP will assign the reference itself, selecting the cheapest to deliver in preference.

This delivery notification is used through the Position Maintenance Request message. The most relevant information would be:

- PosTransType [709] = 4 (Delivery)
- Symbol [55] = Derivatives contract
- Account [1] = Holder
- PosType [703] = DN (Delivery Notice Qty)
- ShortQty [705]: Number of contracts to deliver
- NestedPartyRole [538] = 13 (when the notification is made by the Trading Member or 4 (when the notification is made by the Clearing Member)
- LegSymbol [600]: Reference to deliver

Please note that whenever Position Maintenance Request modification is submitted, the last one completely replaces the old one. So, every time it is necessary to send all delivery notification information.

For more information, please see "13.3 - Delivery notice".

### 13.4 Purchase/sale trades to carry out

The operations to be made in IBERCLEAR are communicated via Trade Capture Report messages received via a specific subscription using a Trade Capture Report Request message with TrdType [828] = 15. There are 2 different levels of information:

- Spot trades broken down by holder. The Account [1] field is 3 characters long (Holder associated with the trade)
- Spot trades by member. The Account [1] field is not informed


### 13.5 List of messages

| Message | Description |
| :--- | :--- |
| Security List (Msg Type = y) | Sent by ClearGate to inform the list of deliverable <br> securities and conversion factors |
| Position Maintenance Request (Msg Type = AL) | Sent by the FIX client to inform, during the period of <br> notification of deliverables, what references, from the list <br> of deliverables, will be delivered for each sold position |
| Position Maintenance Report (Msg Type = AM) | Sent by ClearGate to indicate the acceptance or rejection <br> of a delivery notice |
| Trade Capture Report Request (Msg Type = AD) | Specific request for delivery trades via the specific option <br> TrdType [828] = 15 |
| Trade Capture Report Request Ack (Msg Type = AQ) | Acknowledgement of Trade Capture Report Request <br> message |
| Trade Capture Report (Msg Type = AE) | Sent by ClearGate to inform the operations to be made in <br> IBERCLEAR as the delivery process result. Only sent to <br> related clients subscribed to this type of message via the <br> specific option TrdType [828] = 15 |

### 13.6 Message flow

## List of deliverable securities request



## Delivery notice

Initially, ClearGate sends an unsolicited Position Maintenance Report message with PosTransType [709] = 4 (Delivery), PosMaintAction [712] = 1 (New), PosReqID [710] informed, PosType [703] = DLV (Total Delivery Qty) and ShortQty [705] informed with the number of contracts to be delivered.

Then the client sends a delivery notice using the Position Maintenance Request message with PosTransType [709] = 4 (Delivery), PosMaintAction [712] = 2 (Replace), PosType [703] = DN (Delivery Notice Qty) and ShortQty [705] informed with the number of contracts that are delivered.

ClearGate replies with a message accepting the instruction. The next delivery notice sent completely substitutes the previous order.


## Delivery notice rejected by the system

If the FIX client sends a selivery notice instruction, it will be rejected with a Position Maintenance Report message with the field PosMaintStatus $=2$. A rejected delivery notice will not alter a delivery notice sent previously.


## Delivery spot trades

The delivery sport trades are communicated via Trade Capture Report messages received via a specific subscription using a Trade Capture Report Request message with TrdType [828] = 15. There are 2 different levels of information:

- Spot trades broken down by holder. The Account [1] field is 3 characters long (Holder associated with the trade)
- Spot trades by member. The Account [1] field is not informed



### 13.7 Annotations and adaptations of FIX 4.4

- The LegSymbol [600] field has been added to the Position Report, Position Maintenance Request and Position Maintenance Report messages.


### 13.8 Definition of messages

The Security List mentioned in this chapter is also used for the static contract information. The definition can be found in section 6.4.2 of chapter 6.

The Position Maintenance Request, Position Maintenance Report and Trade Capture Report messages mentioned in this chapter are also used for the monitoring and management of positions. The definition can be found in section 7.8.5, 7.8.6 and 7.8.4 of chapter 7 .

The Trade Capture Report and Request Trade Capture Report Request Ack messages mentioned in this chapter are also used for the trades report. The definition can be found in sections 8.6.1 and 8.6.2 of chapter 8 .

## Appendix A User Fields

The following table shows the user fields that are found in the messages of this manual.

| Tag | Name | Format | Description |
| :--- | :--- | :--- | :--- |
| 5680 | ProprietaryFixProtocolVersion | String | Exact identification of the version of the protocol used <br> and expected by the initiator |
| 5679 | FixEngineName | String | Contains a descriptive chain of software used by the <br> client for the FIX connection. Only used for informative <br> purposes |
| 5681 | ExchangeTradeType | String | Exchange trade type (see table 12 in document <br> "Codification Tables") |
| 5682 | NewSecuritySubscription | Char | Field to request subscription to the definition of new <br> contracts |
| 5683 | SecondaryConfirmStatus | Char | Describes the Give-up state |


[^0]:    "See table 11 in document "Codification Tables" for a list of available Clearing Contract Groups

[^1]:    Clearing Broker /
    Clearing Member

