



Clara External Interface Derivatives

Version 1.0

External

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1.0 Document overview

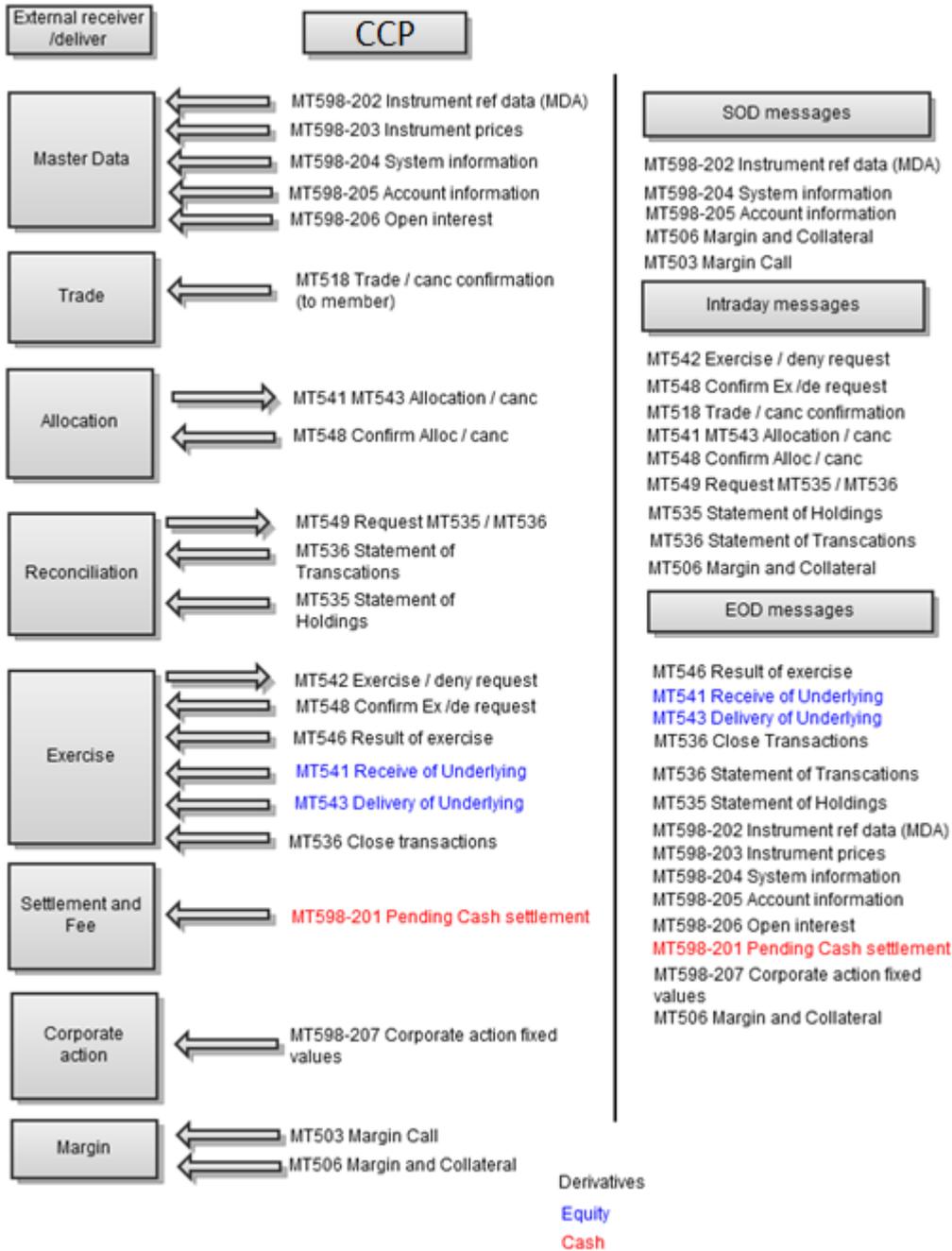
This document describes the external interface for the derivatives supported by the clearing system CLARA.

It contains the following sections:

1. Document overview
2. Functional descriptions
3. Message details
4. Appendix 1 – Error codes

2.0 Functional descriptions

This section will give a functional description on how to use MT messages. For details on the content of each message see section “Message Details” in this document.



2.1 Generic message flow

All MT messages that are updating the clearing system will receive an MT548 message as an acknowledge/response. For MT messages requesting information, the relevant response message will be defined. If the MT message sent to the clearing system results in an error, then a negative MT548 will be sent if possible.

Error codes are defined in Appendix 1 to this document.

2.2 Master data (static data)

All master (static) data will be sent out End-Of-Day to those that have set up a subscription. We have used the generic MT598 message since there are no pre-defined ISO messages for these messages.

- **MT598 – 202 Instrument Reference Data (MDA)**. This message will include all active instruments.
- **MT598 – 203 Instrument Values**. This message will for each active instrument show prices (closing, fixing, margin) calculated in the clearing system.
- **MT598 – 204 System information**. This message will be sent at start and end of day and show the status of our clearing system. It will be either OPEN (available for receiving MT messages) or CLOSED. In addition, it will also be sent with other relevant statuses.
- **MT598 – 205 Account information**. This message will contain account information for accounts owned by the clearing member.
- **MT598 - 206 Instrument Open Interest**. This message will for each active instrument show open interest calculated in the clearing system.

2.3 Trade

A MT518 confirmation message is sent from the clearing system to the relevant member when a trade or cancel is accepted in the clearing system.

2.4 Allocation

Allocations can occur automatically if the trade from the marketplace contains information of the sub-account.

The member can also send an allocation instruction in an MT541 or MT543 message. MT541 must be used to allocate a short position and MT543 to allocate a long position. It is also possible to cancel an allocation the same day as the message has been sent.

An allocation will be confirmed with an MT548 message.

2.5 Reconciliation

Different messages are used for reconciliation purposes. MT549 messages can be used by the member to request a list of transactions or holdings on a specified account for the production date. The result will be returned in:

- MT536 message - return a list of all transactions.
- MT535 message - return a list of all positions.

The MT535 and MT536 will also be sent as an end-of-day message for those that have set up a subscription.

2.6 Exercise

A member can during the day send requests for exercise or deny. If several messages on the same account and instrument are sent, the last message confirmed by the system will be the valid request. There will be no balance check on the request since the position can change during the day. If the value requested (or denied) is higher than the actual holding, the whole position will be exercised (or denied). Errors will be returned in a MT548 message.

The MT542 message is used for exercise request or denies:

- A cancel on a previous request is done by sending a CANC message with the same format and indicating the original sender's reference in PREV.
- For an exercise or deny "all" message, set the highest possible value.

An MT548 message will be used to confirm the exercise/deny request. Please note that no balance check will be performed.

After the exercise procedure is run at end-of-day, the result will be published in an MT546 message. Also, a MT598-20x message will be sent and show all closed derivative series after exercise. In addition, MT541/MT543 messages will be sent to instruct the receipt or delivery of the underlying instrument.

2.7 Settlement and fees

At end-of-day, an "MT598 - 201 Pending cash settlement" can be sent for each of the settlement types defined below. New settlement types can be added. It will show all calculated cash settlements and one message will be sent per account.

- FEE (Fee types depending on CCP fee set-up)
- M2M
- INTEREST
- EXPIRATION
- PREMIUM

2.8 Corporate actions

A corporate action (CA) is defined in the clearing system according to rules defined by the marketplace. All adjustment information (factors etc.) will be published at end-of-day in an MT598-207 message. New series will be published in the ordinary instrument MT598-202 message. The CA will be executed after the normal end-of-day processing.

3.0 Message details

3.1 SWIFT message block structure

ISO 15022 interface

BLOCK 1 and BLOCK 2 must be completed correctly in accordance with the standard format. The following paragraphs provide an explanation of these blocks together with examples. If these blocks are not completed correctly, the transaction will be refused. Please note that the contents of the blocks will differ depending on whether the message is sent to the clearing system or is sent from the clearing system.

A message will always comprise the following blocks:

- **Block 1** - Basic Header Block
- **Block 2** - Application Header Block
- **Block 4** - Text Block

Format example:

```
{1:Block 1}{2:Block 2}{4:
Block 4
-}
```

3.1.1 Description of the blocks – messages sent to the clearing system

In the case of messages sent to the clearing system, the blocks must be completed as follows:

Block 1 Basic Header Block

- | | |
|--------------------------|---|
| - Block Identifier | - '1'. Must be completed |
| - Application Identifier | - 'F'. Must be completed |
| - Service Identifier | - '01'. Must be completed |
| - CCP BIC code | - 8 alphanumeric. Must be completed |
| - Logical Terminal Code | - 'X'. Must be completed |
| - Branch code | - 3 alphanumeric (if unavailable use XXX) |
| - Session Number* | - 4 numeric. Must be completed |
| - Sequence Number* | - 6 numeric. Must be completed |

Example of block 1: {1:F01CCPBICBIXX0001000006}

* No validation of the content is carried out by the clearing system except for checking that only numeric characters are entered in fields defined as numeric etc.

Block 2 Application Header Block

- Block Identifier - '2'. Must be completed.
- Input/output Identifier - 'O'. Must be completed.
- Message Type - 3 alphanumeric e.g. 540. Must be completed

Input Time* - HHMM. Must be completed

Message Input Reference comprises:

- Date - YYMMDD. Must be completed.
- Sender's BIC code - 8 alphanumeric. Must be completed.
- Logical Terminal Code - 'X'. Must be completed.
- Branch code - 3 alphanumeric (if unavailable use XXX)
- Session Number * - 4 numeric. Must be completed.
- ISN* - 6 numeric, internal sequence number. Must be completed.
- Output Date* - YYMMDD. Must be completed.
- Output Time* - HHMM. Must be completed.
- Message Priority - 'N' must be completed.

Example of block 2:

```
{2:O5421732041022SPRONO22XXXX12341234560410221732N}
```

* No validation of the content is carried out by the clearing system except for checking that only numeric characters are entered in fields defined as numeric etc.

Block 3 User Header Block

Not currently used

Block 4 Text Block

This block contains the content of the ISO 15022 message.

3.1.2 Description of the blocks – messages received from the clearing system

In the case of messages sent from the clearing system, the blocks will be completed as follows:

Block 1 Basic Header Block

- Block Identifier - '1'. Must be completed.
- Application Identifier - 'F'. Must be completed.
- Service Identifier - '01'. Must be completed.

- CCP BIC code - 8 alphanumeric. Must be completed.
- Logical Terminal Code - 'X'. Must be completed.
- Branch code - 3 alphanumeric (if unavailable use XXX)
- Session Number* - 4 numeric. Must be completed.
- Sequence Number* - 6 numeric. Must be completed.

Example of block 1:

{1:F01CCPBICBIAXXX0001000006}

* No validation of the content is carried out on receipt except for checking that only numeric characters are entered in fields defined as numeric etc.

Block 2 Application Header Block

- Block Identifier - '2'. Must be completed.
- Input/output Identifier - 'I'. Must be completed.
- Message Type - 3 alphanumeric e.g. 544. Must be completed.
- Receiver's BIC the - 8 alphanumeric. Must be completed. BIC code for recipient.
- Logical Terminal Code - 'X'. Must be completed.
- Branch code - 3 alphanumeric (if unavailable use XXX)
- Message Priority - 'N'. Must be completed.

Example of block 2:

{2:I547NDEANOKKXXXXN}

Block 3 User Header Block

Not currently used.

Block 4 Text Block

This block contains the content of the ISO 15022 message.

3.1.3 The format of block 4 field tags

:nna:

nn = Numbers

a = Optional letter, which may be present on selected tags

The length of a field is as follows:

nn = Maximum length

nn! = Fixed-length

nn-nn = Minimum and maximum length

nn * nn = Maximum number of lines times maximum line length

The format of the data is as follows:

n = Digits
 d = Digits with decimal comma
 h = Uppercase hexadecimal
 a = Uppercase letters
 c = Uppercase alphanumeric
 e = Space
 x = SWIFT character set
 N = Negative sign.
 [...] = Brackets indicate an optional element

For example:

4!c[/30x] - This is a fixed 4 uppercase alphanumeric, optionally followed by a slash and up to 30 SWIFT characters.

ISIN!e12!c - This is a code word followed by a space and a 12 fixed uppercase alphanumeric.

Certain fields may contain sub-fields, in which case there is no CRLF between them. Validation is not supported.

Certain fields have different formats that depend on the option that is chosen. The option is designated by a letter after the tag number, for example:

:32A:000718GBP1000000,00 → Value Date, ISO Currency, and Amount
 :32B:GBP1000000,00 → ISO Currency and Amount

The SWIFT standards for amount formats are: no thousand separators are allowed (10,000 is not allowed, but 10000 is allowed); use a comma (not a decimal point) for a decimal separator (1000,45 = one thousand and forty-five hundredths).

3.2 SWIFT character set

It is a requirement that all free text fields and character fields are submitted using the SWIFT character set (X Character set).

S.W.I.F.T. Character Set X:

abcdefghijklmnopqrstuvwxyz
 ABCDEFGHIJKLMNOPQRSTUVWXYZ
 0 1 2 3 4 5 6 7 8 9
 V - ? : () . , ' + { }
 CrLf Space character

Although part of the character set, the curly brackets are permitted as delimiters and cannot be used within the text of user-to-user messages.

CrLf is used as line separator.

3.3 MT598 - 201 Pending cash settlement

This message will be sent at end-of-day and shows all calculated cash settlements. One message is sent per account subscribing. It will be shown at account level, for related instruments if applicable, and marked with settlement date.

Block	MT598 - 201	Pending cash settlement	ISO format
	:20:semeref	Senders reference	16x
	:12:201	Message type	3!n
	:77E:9999/ONLY/MORE/LAST	Page # and Continuation indicator	73x / [n*78x]
A	:16R:GENL	General information	GENL
	:23G:NEWM	Function of the message	4!c
	:98C::PREP//YYYYMMDDTTTT	Preparation date/time	:4!c//8!n6!n
	:22F::CODE//COMP	Complete	:4!c//4!c
	:22F::SFRE//DAIL	Daily frequency	:4!c//4!c
	:95R::ACOW//IDENT/memberid	Member Id	:4!c/8c/34x
	:97A::SAFE//account	Clearing account	:4!c//35x
	:17B::ACTI//Y or N	Flag (N= No holdings)	:4!c//1!a
	:16S:GENL		GENL
C*	:16R:SETTRAN		SETTRAN
	:35B:ISIN	Related instrument isin	[ISIN1!e12!c]
		Related instrument ticker	[4*35x]
	:70C::PACO//settlement	SETTLECLIENT or SETTLEMEMBER	:4!c//35x
	:19A::SETT//[N]	Settlement Amount (N if debit amount)	:4!c//[N]3!a15d
	:98A::SETT//YYYYMMDD	Settlement date	:4!c//8!n
	:70E::FIAN//attributetext	Instrument Attribute Narrative.	:4!c//10*35x
	:98A::PROC//YYYYMMDD	Calculation date	:4!c//8!n
	:16S:SETTRAN		SETTRAN

*Contents of 70E::FIAN will be according to the list below, but also depending on CCP fee set-up:

- TRADEFEE
- EXPIRYFEE
- SLFEE
- SLESTAB (loan establishment fee)
- M2M
- INTEREST
- EXPIRATION
- PREMIUM

3.4 MT598 – 202 Instrument Reference Data (MDA)

This message will include all active and suspended derivative instruments and underlying equities.

Intraday generated series will be sent to all subscribers as soon as they are created.

Block B is repetitive.

Block	M/O	MT598 - 202	Instrument reference data	ISO format
	M	:20:semeref	Senders reference	16x
	M	:12:202	Message type	3!n
	M	:77E:9999/ONLY/MORE/LAST	Page # and Continuation indicator	73x / [n*78x]
A	M	:16R:GENL	General information	GENL
	M	:23G:NEWM	Function of the message	4!c
	M	:98C::PREP//YYYYMMDDTTTTTT	Preparation date/time	:4!c//8!n6!n
	M	:16S:GENL		GENL
B	M	:16R:SUBSAFE		SUBSAFE
	M	:35B:ISIN	Instrument isin	[ISIN1!e12!c]
	M		Instrument ticker	[4*35x]
	M	:35B:ISIN	Underlying isin	[ISIN1!e12!c]
	M		Underlying ticker	[4*35x]
	M	:70C::PACO//Y or N or NONREF	Derivatives: Yes or No, or NONREF	:4!c//4*35x
	M	:70C::SECO//instrument type	EQ,ETF, IX,SL, FU, FW, OP	:4!c//4*35x
	M	:94B::TRAD//EXCH/mic	Place of listing (MIC)	:4!c//4!c[/30x]
	M	:11A::DENO//	Currency	:4!c//3!c
	M	:98A::STRT//YYYYMMDD	Start date	:4!c//8!n
	M	:98A::LAST//YYYYMMDD	Last trade date	:4!c//8!n
	M	:98A::EXPI//YYYYMMDD	Expiration date	:4!c//8!n
	M	:36B::SIZE//UNIT/quantity	Contract size	:4!c//4!c/15d
	M	:12C::CLAS//cficode	CFI code (appendix 2)	:4!c//6!c
	M	:70E::FIAN//div.adj	Div. adjustment(STD, NODIV, FULLDIV)	:4!c//10*35x
	O	:90B::EXER//ACTU/price,	Strike price	:4!c//4!c/3!a15d
	M	:STATUS:ACTIVE	Instrument status (active, suspended)	
	M	:16S:SUBSAFE		SUBSAFE

90B::EXER - Only mandatory for instrument type OPTIONS (OP). For other instruments this field must be excluded.

For Equity instruments the "underlying isin" and ticker will be the same as "instrument isin" and ticker.

70C::PACO is only applicable for equity, ETF and index. The field will show if CCP allows derivative series on the underlying. For derivatives series 70C::PACO will always show NONREF.

3.5 MT598 – 203 Instrument Prices

This message will show prices in the clearing system. Block B is repetitive.

Block	MT598 - 203	Instrument values	ISO format
	:20:semeref	Senders reference	16x
	:12:203	Message type	3!n
	:77E:9999/ONLY/MORE/LAST	Page # and Continuation indicator	73x / [n*78x]
A	:16R:GENL	General information	GENL
	:23G:NEWM	Function of the message	4!c
	:98C::PREP//YYYYMMDDTTTTTT	Preparation date/time	:4!c//8!n6!n
	:98A::STAT//YYYYMMDDTTTTTT	Business date	:4!c//8!n6!n
	:22F::SFRE//indicator	DAIL = End of day, ADHO = request	:4!c//4!c
	:16S:GENL		GENL
B	:16R:SUBSAFE		SUBSAFE
	:35B::ISIN	Instrument isin	[ISIN1!e12!c]
		Instrument ticker	[4*35x]
*	:FIXING//ACTU/	Fixing price	:6!c//4!c/3!a15d
*	:CLOSING//ACTU/	Closing price	:7!c//[N]3!a15d

*	:LMARGIN//ACTU/	Long margin price	:7!c//[N]3!a15d
	:SMARGIN//ACTU/	Short margin price	:7!c//[N]3!a15d
	:16S:SUBSAFE		SUBSAFE

*If there is no price available, only "null," will be visible.

Example:

:LMARGIN//ACTU/null,

3.6 MT598 – 204 System information

This message will be sent from the system to the subscribing member. Status codes will follow the list below.

Block	MT598 - 204	System information	ISO format
A	:20:semeref	Senders reference	16x
	:12:204	Message type	3!n
	77E:9999/ONLY/MORE/LAST	Page # and Continuation indicator	73x / [n*78x]
	:16R:GENL	General information	GENL
	:20C::SEME//semeref	Unique sender's reference	:4!c//16x
	:23G:NEWM	Function of the message	4!c
	:98C::PREP//YYYYMMDDTTTTT	Preparation date/time	:4!c//8!n6!n
	:98A::STAT//YYYYMMDD	Business date	:4!c//8!n
	:STATUS//status	Status code (see description below)	
	:16S:GENL		GENL

Status codes from the system:

OPEN

- Clearing system is open for incoming messages.

CLOSED

- Clearing system is closed for incoming messages.

EXERCISE COMPLETE

- Confirmation that exercise is complete and all relevant messages have been sent.

CAADJUST COMPLETE

- Corporate action adjustment is completed. Message will be sent every day, even if there is nothing to adjust

EOD COMPLETE

- End-of-day is complete and all end-of-day messages have been sent

3.7 MT598 – 205 Account information

This proprietary message will contain account information. All active clearing and trading accounts will be sent for the subscribing member. The clearing system account structure contains 3 fields, separated with space character. Operator = Clearing member, Owner = Clearing member or non-clearing members and accounts. The maximum size of field 77E

is limited to 9800 characters. If the message exceeds this number, it will be divided into several messages and this be shown in the page # and Continuation indicator.

Block	MT598 - 205	Account information	ISO Content
A	:20:semeref	Senders reference	16x
	:12:number	Message type	3!n
	:77E:9999/ONLY/MORE/LAST	Page # and Continuation indicator	[n*78x]
		Further description on 77E below	

Description of 77E:

Repetitiv field	Explanation
:98A::STAT//YYYYMMDD	Business date
TSTGCM	Operator (GCM / ICM)
TSTNCM	Owner (ICM / NCM)
TRTSTACC	Account
Test account	Account name
TR / CL	Account type Trading/Clearing
ID / N.A.	Trading member ID (only applicable on TR account)
H / C / M	House/Client/Market Maker

Example MT598 - 203

```
:20:semeref
:12:205
:77E:1/ONLY
20130124
TSTGCM/TSTNCM/TRTSTACC1/TestAccount/TR/NCM/C/
TSTGCM/TSTNCM/CLTSTACC2//CL/N.A./C/
TSTGCM/TSTNCM/CLTSTACC3/Test Account3/CL/N.A./C/
```

N.A. = Not applicable.

3.8 MT598-206 Open interest

This message will show open interest in the clearing system. Block B is repetitive

Block	MT598 - 206	Instrument values	ISO format
	:20:semeref	Senders reference	16x
	:12:206	Message type	3!n
	:77E:9999/ONLY/MORE/LAST	Page # and Continuation indicator	73x / [n*78x]
A	:16R:GENL	General information	GENL
	:23G:NEWM	Function of the message	4!c
	:98C::PREP//YYYYMMDDTTTTT	Preparation date/time	:4!c//8!n6!n
	:98A::STAT//YYYYMMDD	Business date	:4!c//8!n
	:22F::CODE//indicator	COMP=Complete, DELT=Intra day	:4!c//4!c
	:16S:GENL		GENL
B	:16R:SUBSAFE		SUBSAFE
	:35B::ISIN	Instrument isin	[ISIN1!e12!c]
		Instrument ticker	[4*35x]
	:93B::AGGR//UNIT/quantity	Open interest	:4!c//15d
	:16S:SUBSAFE		SUBSAFE

3.9 MT598 – 207 Corporate Action fixed values

This message will be sent from the clearing system to the subscribing member at end-of-day when the corporate action is registered in the clearing system. The message includes all adjustment factors necessary to perform an adjustment. It also connects the adjusted instrument to the original instrument. New instruments will be sent in the MT598-202 message.

Block	MT598-207	Corporate action	ISO format
	:20:semeref	Senders reference	16x
	:12:207	Message type	3!n
	:77E:9999/ONLY/MORE/LAST	Page # and Continuation indicator	73x / [n*78x]
A	:16R:GENL	General information	GENL
	:23G:NEWM	Function of the message	4!c
	:98C::PREP//YYYYMMDDTTTT	Preparation date/time	:4!c//8!n6!n
	:98A::STAT//YYYYMMDD	Adjustment date	:4!c//8!n
	:17B::ACT//Y or N	Flag (N = No adjustment)	:4!c//1!a
	:16S:GENL		GENL
B	:16R:SUBSAFE		SUBSAFE
	:35B:ISIN	Old instrument isin	[ISIN1!e12!c]
		Old instrument ticker	[4*35x]
	:35B:ISIN	New instrument isin	[ISIN1!e12!c]
		New instrument ticker	[4*35x]
	:OPERATOR//0, 1, 2, 3 or 4	Contract size Operator	8!c//1d
	:92D::NEWO//0,1/1,	Contract size adjustment factor	:4!c//15d/15d
	:36B::SIZE//UNIT/quantity	Old contract size	:4!c//4!c/15d
	:36B::SIZE//UNIT/quantity	New contract size	:4!c//4!c/15d
	:OPERATOR//0, 1, 2, 3 or 4	Strike price operator	8!c//1d
	:92D::NEWO//0,1/1,	Strike price adjustment factor	:4!c//15d/15d
	:90B::EXER//ACTU/price,	Old Strike price	:4!c//4!c/3!a15d
	:90B::EXER//ACTU/price,	New Strike price	:4!c//4!c/3!a15d
	:OPERATOR//0, 1, 2, 3 or 4	Deal price operator	8!c//1d
	:92D::NEWO//0,1/1,	Deal price adjustment factor	:4!c//15d/15d
	:OPERATOR//0, 1, 2, 3 or 4	Number of contracts Operator	8!c//1d
	:92D::NEWO//0,1/1,	Number of contracts adjustment factor	:4!c//15d/15d
	:16S:SUBSAFE		SUBSAFE

Operator description:

- 0 = N.A. (not relevant for this instrument)
- 1 = + (addition)
- 2 = - (minus)
- 3 = / (divide)
- 4 = * (multiply)

3.10 MT518 - Trade confirmation

This message will be sent from the clearing system to the member as soon as a trade or cancellation is received and accepted by the clearing system. The clearing account received in 97A::SAFE will be where the trade is booked. This will be on either a main account or sub-account if the trade is received with an auto-allocation.

Block	MT518	New Trades	ISO format
A	:16R:GENL	General info	GENL
	:20C::SEME//semeref	Senders Reference	:4!c//16x

	:23G::NEWM or CANC	Function of the message	4!c
	:98C::PREP//YYYYMMDDTTTTT	Preparation date/time	:4!c//8!n6!n
	:22F::TRTR//TRAD	Trade indicator	:4!c//4!c
	:16R::LINK		LINK
	:20C::TRRF//traderf	Reference to trade code	:4!c//16x
	:16S::LINK		LINK
	:16S::GENL		GENL
B	:16R::CONFDET		CONFDET
	:98A::SETT//YYYYMMDD	Settlement date	:4!c//8!n
	:98C::TRAD//YYYYMMDDTTTTT	Trade date/time	:4!c//8!n6!n
	:90B::DEAL//ACTU/Currency amount	Deal price	:4!c//4!c/3!a15d
	:94B::TRAD//EXCH/mic	Place of trade (MIC)	:4!c//4!c/30x]
	:19A::SETT//NOK/amount	Settlement amount	:4!c//[N]3!a15d
	:22H::BUSE//BUYI or SELL	Buy / Sell indicator	:4!c//4!c
	:22H::PAYM//APT	Payment indicator	:4!c//4!c
	:11A::FXIS or FXIB//	Currency code	:4!c//3!c
	:16R::CONFPRTY		CONFPRTY
	:95P::BUYR//memberbic	BIC trading member	:4!c//4!a2!a2!c[3!c]
	:97A::SAFE//account	Trading member account	:4!c//35x
	:22F::TRCA//AGEN or PRIN or MKTM	Client, House or Market Maker	:4!c//4!c
	:70C::PACO//traderid	Free text from Exchange	:4!c//4*35x
	:16S::CONFPRTY		CONFPRTY
	:16R::CONFPRTY		CONFPRTY
	:95P::BUYR or SELL//	CCP BIC	:4!c//4!a2!a2!c[3!c]
	:16S::CONFPRTY		CONFPRTY
	:16R::CONFPRTY		CONFPRTY
	:95P::CLBR//memberbic	BIC clearing member	:4!c//4!a2!a2!c[3!c]
	:97A::SAFE//account	Clearing account	:4!c//35x
	:70C::PACO//main		
	:16S::CONFPRTY		CONFPRTY
	:95P::ETC1//	CCP BIC	:4!c//4!a2!a2!c[3!c]
	:16S::CONFPRTY		CONFPRTY
	:36B::CONF//UNIT/quantity	Traded contracts	:4!c//4!c/15d
	:35B::ISIN	Isin information	[ISIN1!e12!c]
		Ticker	[4*35x]
	:16S::CONFDET		CONFDET
C*	:16R::SETDET		SETDET
	:22F::SETR//code	Details below.	:4!c//4!c
	:16R::SETPRTY		SETPRTY
	:95P::REAG or DEAG//bic	BIC Settlement agent	:4!c//4!a2!a2!c[3!c]
	:16S::SETPRTY		SETPRTY
	:16R::SETPRTY		SETPRTY
	:95P::PSET//csd bic	CSD BIC	:4!c//4!a2!a2!c[3!c]
	:16S::SETPRTY		SETPRTY
	:16S::SETDET		SETDET

*Block C is only available for equity trades and pool loans.

22F::SETR:

TRAD = Cash Equity trades

SECL = Securities Lending

SECB = Securities Borrowing

3.11 MT541/MT543 Position allocation

This message is used when allocating from one account to another. It is possible to cancel an allocation the same day as the message has been sent. MT541 must be used

to allocate a short position (use 95Q::DEAG) and MT543 to allocate a long position (use 95Q::REAG).

Block	M/O	MT541/MT543	Position allocation	ISO Content
A	M	:16R:GENL		GENL
	M	:20C::SEME//semeref	Senders reference	:4!c//16x
	M	:23G:NEWM or CANC		4!c
	O	:16R:LINK		LINK
	O	:20C::TRRF//dealref	Reference to trade	:4!c//16x
	O	:16S:LINK		LINK
	M	:16R:LINK		LINK
	M	:20C::PREV//prevsemeref	Previous sent semeref	:4!c//16x
	M	:16S:LINK		LINK
	M	:16S:GENL		GENL
B	M	:16R:TRADDET		TRADDET
	M	:98A::SETT//YYYYMMDD	Settlement date (today)	:4!c//8ln
	M	:90B::DEAL//ACTU/Currency price	Deal price	:4!c//4!c/3!a15d
	M	:35B:ISIN	Instrument Isin	[ISIN1!e12!c]
	M	:16S:TRADDET	Instrument ticker	[4*35x]
C	M	:16R:FIAC		FIAC
	M	:36B::SETT//UNIT/quantity	Contracts to be allocated	:4!c//4!c/15d
	M	95R::ACOW/IDENT/memberid	Member Id	:4!c//8c/34x
	M	:97A::SAFE//account	Delivering Clearing acc	:4!c//35x
	M	:16S:FIAC		FIAC
E	M	:16R:SETDET		SETDET
	M	:22F::SETR//TRAD		:4!c//4!c
	M	:16R:SETPRTY		SETPRTY
	M	:95Q::REAG or DEAG//memberid	Receiving memberid	:4!c//4!a2!a2!c[3!c]
	O	:97A::SAFE//account	Clearing account	:4!c//4!c/35x
	O	:70C::PACO//freetext	Freetext	:4!c//4*35x
	O	:20C::PROC//GU	GU = Give UP/ TU = Take UP	:4!c//4*35x
	M	:16S:SETPRTY		SETPRTY
	M	:16R:SETPRTY		SETPRTY
	M	:95P::PSET//	CCP BIC	:4!c//4!a2!a2!c[3!c]
	M	:16S:SETPRTY		SETPRTY
	M	:16R:AMT		AMT
	M	:19A::SETT//currency amount	Settlement amount	:4!c//3!a15d
	M	:16S:AMT		AMT
M	:16S:SETDET		SETDET	

*Is only mandatory if 23G is CANC. 20C::PREV must contain SEMEREF from previous MT541/543 NEW. If 23G is NEWM then the fields marked * must be excluded from the message

3.12 MT549 - Request for Statements of Holdings or Transactions

This message is used by the clearing member to request the various. The statement requested is generated immediately after receipt of an MT549 message.

The following statements can be requested:

- MT535 - Statements of Holdings
- MT536 - Statements of Transactions

Block	M/O	MT549	Detailed Field Name	ISO Content
A	M	:16R:GENL	General information	GENL

M	:20C::SEME//semeref	Sender's reference	:4!c//16x
M	:23G:NEWM		4!c
M	:98A::STAT//YYYYMMDD	Statement Date	:4!c//8!n
M	:13A::REQU//messagetype	Request message type	:4!c//3!c
M	95R::ACOW/IDENT/memberid	MemberID	:4!c/8c/34x
M	:97A::SAFE//account	Clearing account	:4!c//35x
M	:16S:GENL		GENL

- 13A:REQU: must contain either "535" or "536"

Note that MT535 and MT536 are only for reconciliation purposes.

3.13 MT535 - Statements of Holdings

The clearing system will send MT535 messages immediately after receipt of a MT549 request or in the end-of-day procedures. 22F::SFRE//ADHO = on request, and 22F::SFRE//DAIL = end of day. This message shows all current holdings in the account.

End-of-day message will contain NONREF in 20C::RELA.

Block	MT535	Statement of holdings	ISO format
A	:16R:GENL	General information	GENL
	:28E:9999/ONLY/MORE/LAST	Page # and Continuation indicator	5n/4!c
	:20C::SEME//semeref	Unique sender's reference	:4!c//16x
	:23G:NEWM	Function of the message	4!c
	:98C::PREP//YYYYMMDD	Preparation date	:4!c//8!n6!n
	:98A::STAT//YYYYMMDD	Statement date	:4!c//8!n
	:22F::SFRE//ADHO or DAIL	Statement frequency	:4!c//4!c
	:22F::CODE//COMP	Complete indicator	:4!c//4!c
	:22F::STTY//CUST	Statement type - Custody	:4!c//4!c
	:22F::STBA//SETT	Statement basis - settled	:4!c//4!c
	:16R:LINK		LINK
	:20C::RELA//relaref or NONREF	semeref from MT549	:4!c//16x
	:16S:LINK		LINK
	95R::ACOW/IDENT/memberid	MemberID	:4!c/8c/34x
	:97A::SAFE//account	Clearing account	:4!c//35x
	:17B::ACTI//Y or N	Flag (N= No holdings)	:4!c//1!a
:17B::CONS//N	Fixed N value	:4!c//1!a	
:16S:GENL		GENL	
B*	:16R:SUBSAFE	Start of block	SUBSAFE
	:16R:FIN		FIN
	:35B:ISIN	Isin number	[ISIN1!e12!c]
		Ticker	[4*35x]
	:93B::AGGR//UNIT/N100,	Aggregated Net Balance (N if neg)	:4!c//4!c/[N]15d
	:16R:SUBBAL		SUBBAL
	:93B::PEND//UNIT/200,	Gross position Long	:4!c//4!c/15d
	:70C::SUBB//LONG	Long indicator	:4!c//4*35x
	:16S:SUBBAL		SUBBAL
	:16R:SUBBAL		SUBBAL
	:93B::PEND//UNIT/N300,	Gross positions short (N = neg)	:4!c//4!c/[N]15d
	:70C::SUBB//SHORT	Short indicator	:4!c//4*35x
	:16S:SUBBAL		SUBBAL
	:16R:SUBBAL		SUBBAL
	:93B::BLOK//UNIT/quantity	Pending giveup positions	:4!c//4!c/15d
:16S:SUBBAL		SUBBAL	
:16S:FIN		FIN	

:16S:SUBSAFE	SUBSAFE
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*Only applicable if there is a pending give up on the position reported.

3.14 MT536 Statements of Transactions

The clearing system will send MT536 gross transactions immediately after receipt of an MT549 request or in the end-of-day procedures. 22F::SFRE//ADHO = on request, and 22F::SFRE//DAIL = end-of-day. This message shows all trades on the specified account today. Only ADHOC messages will include related references to MT549. End-of-day messages will contain NONREF in 20C::RELA.

Block	MT536	Statement of holdings	ISO format
A	:16R:GENL	General information	GENL
	:28E:9999/ONLY/MORE/LAST	Page # and Continuation indicator	5n/4!c
	:20C::SEME//semeref	Unique sender's reference	:4!c//16x
	:23G:NEWM	Function of the message	4!c
	:98C::PREP//YYYYMMDDTTTTT	Preparation date/time	:4!c//8!n6!n
	:69A::STAT//date/date	Statement periode	:4!c//8!n/8!n
	:22F::SFRE//ADHO or DAIL	Statement frequency	:4!c//4!c
	:22F::CODE//COMP	Complete indicator	:4!c//4!c
	:22F::STBA//TRAD	Statement basis - trade	:4!c//4!c
	:95R::ACOW/IDENT/memberid	Memberid	:4!c/8c/34x
	:97A::SAFE//account	Clearing account	:4!c//35x
	:17B::ACT//Y or N	Flag (N= No transactions)	:4!c//1!a
	:17B::CONS//N	Flag sub_account	:4!c//1!a
:16S:GENL		GENL	
B	:16R:SUBSAFE	Start of block	SUBSAFE
	:16R:FIN		FIN
	:35B:ISIN	Isin number	[ISIN1!e12!c]
		Ticker	[4*35x]
	:90B::MRKT//ACTU/currency price	Deal price	:4!c//4!c/3!a15d
	:16R:TRAN		TRAN
	:16R:LINK		LINK
	:20C::RELA//NONREF	CCP reference	:4!c//16x
	:16S:LINK		LINK
	:16R:LINK		LINK
	:20C::TRRF//traderref	Deal ref from exchange	:4!c//16x
	:16S:LINK		LINK
	:16R:TRANSDET		TRANSDET
	:94B::TRAD//EXCH/mic	Place of trade (MIC)	:4!c/[8c]/4!c/[30x]
	:36B::PSTA//UNIT/quantity	Number of contracts	:4!c//4!c/15d
	:19A::PSTA//Currency amount	Settlement amount	:4!c//[N]3!a15d
	:22F::TRAN//SETT	Transaction type indicator	:4!c/[8c]/4!c
	:22H::REDE//DELI or RECE	Receive / deliver indicator	:4!c//4!c
	:22H::PAYM//APMT	Payment indicator	:4!c//4!c
	:98A::ESET//YYYYMMDD	Effective settlement day	:4!c//8!n
	:98C::TRAD//YYYYMMDDTTTTT	Trade date/time	:4!c//8!n6!n
	:70E::TRDE//freetekst	Freetext from the trade	:4!c//10*35x
	:16R:SETPRTY		SETPRTY
	:95P::REAG or DEAG//memberbic	BIC settlement agent	:4!c//4!a2!a2!c[3!c]
	:16S:SETPRTY		SETPRTY
	:16R:SETPRTY		SETPRTY
	:95P::BUYR or SELL//memberbic	BIC trading member	:4!c//4!a2!a2!c[3!c]
	:97A::SAFE//account	Trading account	:4!c//35x

:16S:SETPRTY		SETPRTY
:16R:SETPRTY		SETPRTY
:95P::BUYR or SELL//	CCP BIC	:4!c//4!a2!a2!c[3!c]
:16S:SETPRTY		SETPRTY
:16R:SETPRTY		SETPRTY
:95P::PSET//	CCP BIC	:4!c//4!a2!a2!c[3!c]
:16S:SETPRTY		SETPRTY
:16S:TRANSDDET		TRANSDDET
:16S:TRAN+B38		TRANS
:16S:FIN		FIN
:16S:SUBSAFE		SUBSAFE

3.15 MT536 - Close transactions

MT536 Close transactions will list the positions that are closed in the exercise/expiry procedures. The message will be created one per account and show all series that have either been exercised (option), assigned (option), knocked (denied ITM or OTM option) or expired (forward or future).

Block	MT536	Statement of holdings	ISO format
A	:16R:GENL	General information	GENL
	:28E:9999/ONLY/MORE/LAST	Page # and Continuation indicator	5n/4!c
	:20C::SEME//semeref	Unique sender's reference	:4!c//16x
	:23G:NEWM	Function of the message	4!c
	:98C::PREP//YYYYMMDDTTTTT	Preparation date/time	:4!c//8!n6!n
	:69A::STAT//date/date	Statement periode	:4!c//8!n/8!n
	:22F::SFRE//DAIL	Statement frequency	:4!c//4!c
	:22F::CODE//COMP	Complete indicator	:4!c//4!c
	:22F::STBA//SETT	Statement basis - trade	:4!c//4!c
	:95R::ACOW/IDENT/memberid	Memberid	:4!c/8c/34x
	:97A::SAFE//account	Clearing account	:4!c//35x
	:17B::ACTI//Y or N	Flag (N= No transactions)	:4!c//1!a
	:17B::CONS//N	Flag sub account	:4!c//1!a
	:16S:GENL		GENL
B	:16R:SUBSAFE	Start of block	SUBSAFE
	:16R:FIN		FIN
	:35B:ISIN	Series Isin number	[ISIN1!e12!c]
		Series Ticker	[4*35x]
	:90B::MRKT//ACTU/Currencyprice	Fixing price	:4!c//4!c/3!a15d
	:16R:TRAN		TRAN
	:16R:LINK		LINK
	:20C::RELA//NONREF	Fixed NONREF	:4!c//16x
	:16S:LINK		LINK
	:16R:TRANSDDET		TRANSDDET
	:36B::PSTA//UNIT/quantity	Number of contracts	:4!c//4!c/15d
	:19A::PSTA//currency amount	Settlement amount	:4!c//[N]3!a15d
	:22F::TRAN//SETT	Transaction type indicator	:4!c/[8c]/4!c
	:22H::REDE//DELI or RECE	Receive / deliver indicator	:4!c//4!c
	:22H::PAYM//APMT	Payment indicator	:4!c//4!c
	:22F::STCO//closetype	EXER, KNOC, ASGN or EXPI	:4!c//4!c
	:98A::ESET//YYYYMMDD	Effective settlement day	:4!c//8!n
	:16S:TRANSDDET		TRANSDDET
	:16S:TRAN		TRAN
	:16S:FIN		FIN
	:16S:SUBSAFE		SUBSAFE

3.16 MT542 - Request Exercise or Deny exercise

This message can be sent to the clearing system both on the expiration day and any other day with a request to exercise an American option. It will be effected on the same day the message has been received by the clearing system. An MT542 request exercise or deny exercise will be confirmed by an MT548 message. If the request is denied, an error code will follow the message.

Block	M/O	MT542 -Exercise request or deny exercise	ISO Format	
A	M	:16R:GENL	General info	GENL
	M	:20C::SEME//semeref	Sender's reference	:4!c//16x
	M	:23G:NEWM or CANC	Message type	NEWM
	M	:98C::PREP//YYYYMMDDTTTTT	Preparation date/time	:4!c//8!n6!n
	M	:16S:GENL		GENL
B	M	:16R:TRADDET	Trade details	TRADDET
	M	:98A::SETT//YYYYMMDD	Settlement date	:4!c//8!n
	M	:35B:ISIN	Isin	[!ISIN1!e12!c]
	M		Ticker	[4*35x]
	M	:16S:TRADDET		TRADDET
C	M	:16R:FIAC	Financial instrument	FIAC
	M	:36B::SETT//UNIT/quantity	Quantity of exercise or deny	:4!c//4!c/15d
	M	:95R::ACOW/IDENT/memberid	Memberid	:4!c/8c/34x
	M	:97A::SAFE//account	Clearing account	:4!c//35x
	M	:16S:FIAC		FIAC
	M	:16R:SETDET	Settlement details	SETDET
	M	:22F::STCO//EXER or KNOC	Exercise or deny	:4!c//4!c
	M	:22F::SETR//TRAD	Trade indicator	:4!c//4!c
	M	:16R:SETPRTY		SETPRTY
	M	:95Q::REAG//memberid	memberid	:4!c//4*35x
	M	:16S:SETPRTY		SETPRTY
	M	:16R:SETPRTY		SETPRTY
	M	:95P::PSET//oc bic	CCP BIC	:4!c//4!a2!a2!c[3!c]
	M	:16S:SETPRTY		SETPRTY
	M	:16S:SETDET		SETDET

3.17 MT546 – Result of exercise

This message will be sent from the clearing system to subscribers with the result of the exercise. MT546 result of exercise will be sent both after general exercise and if there has been a manual exercise request. It will be one message for each exercise/assignment.

Block	MT546	Result of exercise	ISO Content
A	:16R:GENL	General info	GENL
	:20C::SEME//semeref	Senders reference	:4!c//16x
	:23G:NEWM	Function of the message	4!c
	:98C::PREP//YYYYMMDDTTTTT	Preparation date/time	:4!c//8!n6!n
	:16R:LINK		LINK
	:20C::RELA//NONREF	Fixed value. Always NONREF	:4!c//16x
	:16S:LINK		LINK
	:16S:GENL		GENL
B	:16R:TRADDET		TRADDET
	:98A::ESET//YYYYMMDD	Settlement date	:4!c//8!n

	:90B::DEAL//ACTU/	Strike price	:4!c//4!c/3!a15d
	:35B:ISIN	Isin	[ISIN1!e12!c]
		Ticker	[4*35x]
	:22F::PROC//CLOP	Close of position	:4!c//4!c
	:16S:TRADEDET		TRADEDET
C	:16R:FIAC		FIAC
	:36B::ESTT//UNIT/quantity	Number of contracts exercised	:4!c//4!c/15d
	:95R::ACOW/IDENT/memberid	Memberid	:4!c/8c/34x
	:97A::SAFE//account	Clearing Account	:4!c//35x
	:16S:FIAC		FIAC
E*	:16R:SETDET		SETDET
	:22F::SETR//TRAD		:4!c//4!c
	:22F::STCO//EXER or ASGN	Result after exercise	:4!c//4!c
	:16R:SETPRTY		SETPRTY
	:95Q:REAG//memberID	Member ID	:4!c//4!a2!a2!c[3!c]
	:16S:SETPRTY		SETPRTY
	:16R:SETPRTY		SETPRTY
	:95P::PSET//	CCP BIC	:4!c//4!a2!a2!c[3!c]
	:16S:SETPRTY		SETPRTY
	:16S:SETDET		SETDET

*EXER = Exercised

*ASGN = Assigned

95Q :: will always be REAG in this message. The result of the exercise will be shown in 22F::STCO as either EXER (Exercise) or ASGN (Assing).

3.18 MT541 Receive of Underlying and MT543 Delivery of Underlying

A delivery/receive after an expiration or exercise will result in an MT543 or MT541 message.

Block	MT541/MT543	Delivery instruction	ISO Content
A	:16R:GENL		GENL
	:20C::SEME//semeref	Senders reference	:4!c//16x
	:23G:NEWM		4!c
	:98C::PREP//YYYYMMDDTTTTT	Preparation date/time	:4!c//8!n6!n
	:16S:GENL		GENL
B	:16R:TRADEDET		TRADEDET
	:98A::SETT//YYYYMMDD	Settlement date	:4!c//8!n
	:98A::TRAD//YYYYMMDD	Trade date	:4!c//8!n
	:35B:ISIN	Delivering isin	[ISIN1!e12!c]
		Delivering ticker	[4*35x]
	:16S:TRADEDET		TRADEDET
C	:16R:FIAC		FIAC
	:36B::SETT//UNIT/quantity	Nmbr shares to deliver/receive	:4!c//4!c/15d
	:97A::SAFE//CSDID	Clearing member CSDid	:4!c//35x
	:16S:FIAC		FIAC
E	:16R:SETDET		SETDET
	:22F::SETR//TRAD	Settlement of trade.	:4!c//4!c
	:16R:SETPRTY		SETPRTY
	:95R::REAG or DEAG/	CCP CSDid	:4!c//4!a2!a2!c[3!c]
	:16S:SETPRTY		SETPRTY
	:16R:SETPRTY		SETPRTY
	:95P::BUYR or SELL//	CCP BIC	:4!c//4!a2!a2!c[3!c]
	:16S:SETPRTY		SETPRTY

:16R:SETPRTY		SETPRTY
:95P::PSET//	Place of settlement	:4!c//4!a2!a2!c[3!c]
:16S:SETPRTY		SETPRTY
:16R:AMT		AMT
:19A::SET//	Settlement amount	:4!c//[N]3!a15d
:16S:AMT		AMT
:16R:AMT		AMT
:19A::LOCO//Currency0,	Fixed value	:4!c//[N]3!a15d
:16S:AMT		AMT
:16R:AMT		AMT
:19A::CHAR//Currency0,	Fixed value	:4!c//[N]3!a15d
:16S:AMT		AMT
:16S:SETDET		SETDET

3.19 MT548 Status message

This message will be sent as an acknowledgement for various MT messages as defined for each message. If the message is accepted then 25D::IPRC= PACK. If the message is rejected then 25D::IPRC= REJT. An error code and text will follow in the status message.

Block	MT548	Confirmation MT548	ISO Content
A	:16R:GENL	General Info	GENL
	:20C::SEME//SEMEREf	Senders reference	:4!c//16x
	:23G:INST or CAST	Transaction Status	4!c
	:98C::PREP//YYYYMMDDTTTTT	Preparation date/time	:4!c//8!n6!n
	:16R:LINK		LINK
	:20C::RELA//relaref	Semeref from MTxxx	:4!c//16x
	:16S:LINK		LINK
	:16R:STAT		STAT
	:25D::IPRC//PACK or REJT	Accept or rejection code	:4!c//4!c
*	:16R:REAS		REAS
*	:24B::REJT//NARR	Reason defined by CCP	:4!c//4!c
*	:70D::REAS//reason	error number + Error text	:4!c//6*35x
*	:16S:REAS		REAS
	:16S:STAT		STAT

*Only available if :25D::IPRC = REJT.

If 25D::IPRC=PACK then these tags will be excluded.

4.0 Appendix 1 – Error codes

Error text
Deny request on short positions not possible
Member not active
Underlying not active
Sell ID not active
Buy ID not active
Both sell ID and by ID not active
Expiry date not a business day
Insufficient holdings

Deliver account does not exist
Instrument not active or does not exist
Trade or settlement day not allowed
System is not in correct status

5.0 Appendix 2 - CFI Codes

The clearing system use CFI codes to identify the financial instruments. The CFI consists of six alphabetical characters. The sequence of categories and groups are given in ISO standard 10962. Second edition 2001-05-01. (4. Codes and Definitions") helps with the classification of ambiguous instruments. A financial instrument for which the definition of several categories or groups is correct should be classified under the first possible category or group. (1st = E-Equities, 2nd = D-Debt, 3rd = R-Entitlements, 4th = O-Options, 5th F-Futures, 6th = M-Others).

NONREF will be shown for all instruments other than options, futures or forwards.