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JSE Interest Rates and Currency Derivatives API Specification

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1. References

Document	Author	Version	Issue Date

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2. Version Control

Version	Author	Date	Reason for Changes
Ver.3 Rev.01	A. Murrell	19 January 2009	Creation of Document – The following are updates to the existing Nutron API Specification: Client Loading Structure - pg 93 and 49 Client Download Structure - pg 93 and 49 Deal Origin definitions - pg 29 Instrument Structure - pg 67 Positions Structure - pg 76 Unconfirmed and Unsettled downloads - pg 72 Completed Order structure - pg 74 Active Order Structure - pg 72 Bid Message - pg 37 Edit Suspended Order message - pg 40 Unmatched Message descriptions - pg 65 pg 43 Contract Name definitions - pg 27 Excel File Downloads - pg 103 Industry Download - pg 102 Guarantee message - pg 58 CPI Index Download Structure - pg 103 JNote Download - pg 104
Ver.3 Rev.02	A. Murrell	26 February 2009	Added Futures Close Out Iterations (pg 108) Added Early Valuations (pg 106) Client Detail Data Download (pg 101) Client Loading Structure (pg 54) Changed Unmatched Deal Entry (pg 46) Changed Unmatched Deal Data Download (pg 70) Client Data Download (pg 84) History Request Message (pg 59) Login Reply Message (pg 60) Instrument Data Download (pg 72) Instrument Types Updated (pg 73) Indicated YieldX Specifics in Blue
Ver.3 Rev.03	A. Murrell	5 May 2009	Added Days History Download (pg 108) Updated Client Loading Structure (pg 56) Updated Client Download Structure (pg 104)
Ver.3 Rev.04	A. Murrell	6 June 2009	Modified description of Buy Or Sell field in unmatched data download. (pg 69) Added new field to Daily Rates download data message (pg 89)
Ver.3 Rev.05	A. Murrell	9 July 2009	Update Instrument Data download to mark unused field as Linked to Floating Rate (pg 74) Updated Instrument Data download to shorten description to 58, and to use 4 bytes for JNote Maturity Months (pg 74) Updated Origin and Reasons (pg 33)

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Version	Author	Date	Reason for Changes
Ver.3 Rev.06	A. Murrell	15 August 2009	Update unused field on instrument to indicate margining type (pg 74) IMPORTANT NOTE: Quantity fields on trade transactional data has been changed from 4-byte integers to 8-byte integers to allow for the trading of bond products which may trade in excess of 4.3 billion quantity. Affected messages can be found on pages: 43, 45, 64, 67, 81, 84, 86, 90, 98, 100, 107
Ver.3 Rev.07	A. Murrell	26 August 2009	Added setting of limits per instrument. (pg 53, pg 90) Added multiplication factor on client download data 12 (pg 89)
Ver.3 Rev.08	A. Murrell	3 November 2009	Added download and insert of client margin multiplier data. (pg 63, pg 111) Corrected layout for Client Verification Message (pg 60) Corrected price field description in unmatched messages (pg 51) Updated Instrument Types (pg 80) Corrected Unmatched Data length (pg 77)
Ver.3 Rev.09	A. Murrell	15 December 2009	Changed the contract date download data structure (pg 80)
Ver.3 Rev 10	A. Murrell	7 April 2010	Update Unsettled Order to include Counter Party (pg 88) Added Reject Un Matched message type 155 (pg 54) Included previously unused fields to the unmatched message structure for Equal and Opposite Trades on the bond market (pg 50)
Ver.3 Rev 12	A. Murrell	27 July 2010	Added additional instrument type (pg 80) Added note for Price Contribution instruments (pg 25) Added not for reporting Equal and Opposite Trades (pg 47) Corrected examples for Carry and Repo contracts (pg 34) Changed Completed Orders / Unconfirmed Orders / Unsettled Orders message layout (pg 90) Added note for reporting Roll over trades (pg 48)
Ver.3 Rev 13	A. Murrell	13 September 2010	Added Options Concentration Risk Download (pg 118) Added Incoming Unmatched trades download (pg 118) Added STRATE Code to client download structure (pg 94) Added note for reporting same day settlement trades (pg 48) Added market announcement messages for same day settlement trades (pg 131)
Ver.3 Rev.14	M. Kempgen	02 February 2011	Added W, X and Y to Origin table in Section 6.1

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Version	Author	Date	Reason for Changes
Ver.3 Rev15	M. Kempgen	11 February 2011	Corrected layout error on Instruments Data Download. Ordering of Coupon Rate, Number of periods, Coupon Dates and Books closed date documented incorrectly
Ver.3 Rev 16	A. Murrell	30 March 2011	Added Closing Rate to MTM Download data structure (pg 86) Added new instrument type for Any day expiry (pg 82) Added last active date to client data download (pg 96)
Rev.3.1 Rev.01	A. Murrell	3 October 2011	Added not for Market Shard implementation (pg 26) Added note to login process (pg 29) Corrected login message description (pg 40) Added filed to re-request message (pg 40) Corrected definition of password change message (pg 41) Added contract name to delete order message (pg 44) Added contract name to resubmit order message (pg 44) Added contract name to split deal message (pg 49) Added contract name to cume deal message (pg 49) Added contract name to unmatched deal delete (pg 56) Changed option exercise and abandon messages (pg 57) Added contract name to unmatched deal accept message (pg 58) Added contract name to reject unmatched deal message (pg 59) Added contract name to guarantee trade message (pg 70) Removed client margin multiplication facto edit message (pg 70) Updated description display update message (pg 74) Added failure messages (pg 77) Updated unused field instruments data (pg 86) Changed position data definition (pg 98)
Ver.3.1 Rev.03	A. Murrell	16 March 2012	Added Cross-currency split/Multi-report-only structure (section 7.4.13) Updated Contract Dates download to include Option Premium Format (pg 91)

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Version	Author	Date	Reason for Changes
Ver.3.1 Rev.04	A. Murrell	5 Jul 2012	Added Edit Order By Sequence Number (pg 48) Added Edit Order By Reference Number (pg 48) Added Cancel Order By Reference Number (pg 49) Updated Reason definitions (pg 37) Updated Origin definitions (pg 37) Updated Contract Types (pg 33) Added counterparty to deals structure (pg 99) Added new field to Create Client Message (pg 68) Added new field to Client Data download (pg 102) Added new field to Client Detail Data download (pg 121) Increased reference length bid message (pg 45) Increased reference length split deal message (pg 51) Increased reference length unmatched trade (pg 55) Increased reference length option exercise (pg 58) Increased reference length option abandon (pg 59) Increased reference length multi-report only (pg 62) Increased reference length on order reject (pg 78) Increased reference length on unmatched data (pg 84) New instrument types listed (pg 90) Increased reference length on active orders data (pg 95) Increased reference length on completed orders data (pg 97) Increased reference length on deals data (pg 100) Increased reference length on trace deals data (pg 106) Added new field to Daily Account Summary download (pg 118)
Ver.3.1 Rev.05	A. Murrell	19 February 2013	Updated login reply message and added note (pg 74) Updated Origin descriptions (pg 37) Updated deals structure (pg 100) Added note for trading of forward forward contracts (pg 54)

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Version	Author	Date	Reason for Changes
Ver.3.1 Rev.06	A. Murrell	19 February 2013	Removed field from Client Structure and added new field (pg 67) Removed field from client details structure and added new field (pg 124) Updated instruments structure (pg 88) Added note for instruments (pg 89) Added fields to instrument structure (pg 92) Updated Unmatched structure (pg 54) Updated Unmatched data download (pg 84) Updated Client Data download (pg 108) Added note to unmatched data download for spot bonds (pg 84) Added field to unmatched structure (pg 85) Added note for the loading of spot bond client information (pg 65) Added fields to client loading structure (pg 70) Added field to login message (pg 41) Added note for bond instruments (pg 94) Added field for contract dates (pg 96) Changed holiday data structure (pg 99) Changed member data structure (pg 108) Added RFQ data types (pg 74) Added RFQ Data download (pg 134) Added RFQ Quote Data download (pg 135) Added RFQ and RFQ Quote message types (pg 75) Updated Origin table (pg 37)
Ver.3.1 Rev.07	A. Murrell	14 April 2014	Added download of additional margins (pg 137) Added download of intraday margin MTM rates (pg 138) Added download of intraday margin deals (pg 138) Added information message (pg 140)
Ver.3.1 Rev.08	A. Murrell	6 March 2015	Updated contract date download (pg 99) Updated Reason on Deals (pg 108) Updated Reason on Completed Orders (pg 106) Updated Reason on Unmatched (pg 60, 93) Updated Reason on Trace Deals (pg 115) Added Forward Forward instrument type (pg 97) Added Companion Bond and Spread on Unmatched (pg 60, 93) Added Companion Bond and Spread on Orders (pg 106) Added Companion Bond and Spread on Deals (pg 108) Added download of Swap Detail (pg 142) Updated Reason descriptions (pg 40) Updated Instrument Structure (pg 97)
Ver.3.1 Rev.09	A. Murrell	3 July 2015	Updated Contract Dates Download (pg 100) Updated Fee download (pg 119)

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Version	Author	Date	Reason for Changes
Ver.3.1 Rev.10	A. Murrell	28 August 2015	Updated Unmatched Message (pg 89, 55) Updated RFQ Capture message (pg 77) Updated RFQ Quote message (pg 79) Updated Deals message (pg 109) Added new Deal Origin (pg 38) Updated Instrument message (pg 95) Updated Fee Data (pg 117) Updated Contract Date (pg 103, 104)
Ver.3.1 Rev.11	A. Murrell	29 March 2016	Added new deal origins (pg 39) Updated Client Details (pg 70, 114, 133)
Ver.3.1 Rev.12	H. Shibambo	10 July 2017	Rejected changes to (pg 70, 114, 133)
Ver.3.1 Rev.13	C. Marais	26 June 2024	Added bond repos classic and triparty messages and Activity. New sections: • **4.11.15**: Classic Repo Activity • **4.11.16**: Repo Interest Payment Activity. • **4.11.17**: Triparty Repo Activity • **7.12**: Classic Repo Messages • **7.13**: Repo Interest Payment Messages • **7.14**: Triparty Repo Messages • **9.61**: Master Repo – Number 138 • **9.62**: Repo Collateral – Number 139 • **9.63**: Unmatched Repo – Number 140 • **9.64**: Pending Repo Interest Payment – Number 141 • **9.65**: Repo Interest Payment – Number 142 • **9.66**: Projected Repo Close – Number 143 • **9.67**: Unmatched Triparty Repo – Number 144 • **9.68**: Triparty Deal – Number 145 • **9.69**: Collateral Basket – Number 146 • **9.70**: Repo Rate – Number 147 Added: • Error Messages No. 122 – 143 in **10.2**.
Ver.3.1 Rev.14	C. Marais	12 July 2024	Added: • Reject Unmatched Repo Request in **4.11.15**. • **4.11.16**: Repo Interest Payment Activity. • Edit Unmatched Triparty Repo Request in **4.11.17**. • Additional values for Status in **9.62**. • Error Messages No. 122 – 143 in **10.2**. Changed: • Status = 'T' to 'E' in **9.63** and **9.64**. Removed: • Triparty Deal Action from **9.68**.

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Version	Author	Date	Reason for Changes
Ver.3.1 Rev.15	C. Marais	27 August 2024	Added: • Consideration and Trade Date fields in: **7.12.1:** Initiate Repo, **7.12.4:** Edit Unmatched Repo. • Consideration field in: 7.12.5: Substitute Repo Collateral. • Trade Date fields in: 7.14.1: Initiate Triparty Repo, 7.14.2: Edit Unmatched Triparty Repo, 9.63: Unmatched Repo, 9.67: Unmatched Triparty Repo, 9.68: Triparty Deal.

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3. Intended Audience

This document is intended for review by relevant JSE internal departments as well as external/market review by:

- Equity Derivative Members;
- Currency and Interest Rate Derivative and Spot Bond Members;
- Agricultural Products Members;
- Clearing Members;
- Public Information Subscribers;
- Software Providers

Please note that this document is equally important for trading and clearing member firms and their software providers, as well as Information Subscribers.

4. System Description

4.1 Introduction

The new JSE Derivatives Trading System is an exchange layer of markets that allow for the trading and dissemination of multiple product types using one system, through a common API. These products can be diverse, each containing their own set of values. Products are further separated into different markets.

Products do contain links between them to facilitate the trading of spreads and switches (also called splits).

4.2 Connecting to a Market

The system consists of several server programs. A set of server programs constitutes a market. Each market has an interface which allows external systems to communicate with it. The protocol used to interface to the system is TCP/IP. Each market may have its own IP Address and Port number.

The programmer who wishes to use this API specification must first ensure that they can establish a streamed TCP/IP permanent socket connection to the appropriate port.

From this point onwards, all communication is done using message packets. Every message packet, either in or out, must carry a **Transport Header**, which consists of 4 bytes. A description of the transport header can be found in **Table 1.1**.

The transport header is followed by a **Message Header**. The message header contains the indication of who the user is, the details of the transaction performed, etc. A description of the Message Header can be found in **Table 1.2**.

4.3 TCP/IP Transport System

The TCP/IP transport system may or may not send a message in its entirety. Due to the nature of the routers, carriers, etc, it is likely that in some cases a message that consists of large number bytes is transmitted in smaller pieces, the length of each being random. The API

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programmer must ensure the receipt of not only a complete and valid transport header, but also a complete number of message bytes before acting on the contents of the message.

4.4 Field Formats

Throughout the document the following **field types** will be referred to:

- I: Intel Integer format; the length is defined
- U: Intel unsigned integer; the length is defined
- D: Intel/IEEE floating point; 8-byte format
- P: Pascal type string with leading length byte, maximum length is the defined length – 1. All strings are represented in this manner.

  Example:

  A string representation of the word MITS into a 6 long field would be sent in the following manner:

0	1	2	3	4	5
4	M	I	T	S	

  The system will validate the string only in this context using the byte 0 as the length.
- B: The field is made up of 1 or more bytes of type U
- C: Single character; ASCII equivalent

A **field description** will also be given which describes the contents:

- A: Alpha only
- N: Numeric only - Default for types I.U.D
- AN: Alpha numeric

Time Format

- All times given in this document are given as 4-byte values in the following format:

  Byte 0 = Hours
  Byte 1 = Minutes
  Byte 2 = Seconds
  Byte 3 = 0

PLEASE NOTE: Mandatory fields in this specification are market with an asterisk (*). All non-mandatory fields which are not going to be filled in should be sent with 0 for numeric values, and empty strings or padded with null (0) for alpha fields.

4.5 Message Headers

Table 1.1 Transport Header

Name	Length	Comment
Byte 1*	1	255 or FF
Byte 2*	1	Low byte of the message length **(not including the 4-byte transport header)**

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Name	Length	Comment
Byte 3*	1	High byte of the message length **(not including the 4-byte transport header)**
Byte 4*	1	XOR of bytes 2 and 3
Total Length	4	

Table 1.2 Message Header

Name	Length	Type	Description	Case	Example	Comment
Sequence Number	4	I	N	n/a	123	Used for message trace purposes. This is a sequence number per socket and is incremented with each message sent.
User Code*	6	P	AN	U	ABMN	Logged in Member Code. This is the member code the user used to log into the system.
User Dealer*	4	P	AN	U	JOE	Dealer code of logged in dealer. This is the dealer code the user used to log into the system.
User Number*	4	I	N	n/a	66	Any user integer. This is kept by the system and returned to the user unchanged.
Market Number*	1	B	N	n/a	3	See Table 1.3
Time*	4	B	N	n/a	11, 56, 55, 0	Time Format: Hours, Minutes, Seconds, 0
Message Type*	1	B	N	n/a	36	Message Number.
Member Code*	6	P	AN	U	ABMN	This is the member code that would be referred to when the exchange handles the message. For information subscribers this must be set to ‘DATA’.
Dealer Code/User Code*	4	P	AN	U	JOE	This is the dealer code that would be referred to when the exchange handles the message. For information subscribers this must be set to the user code supplied.
Total Length	34 Bytes					

NOTE: The Member Code and Dealer Code may differ from the User Code and User Dealer, for example: A Clearing Member acting on behalf of a Member.

Data in the message portion of the packet will then follow the Message Header.

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Name	Length	Type	Description	Case	Example	Comment
Message	MAX - 5466	B	AN	n/a		Defined or compressed message.

The messages are defined in two groups:

- Input Messages sent by the API user.
- Output Messages sent to the API user.

These defined groups contain message types that can be defined into two further groups:

- **Private Messages**
  - These are messages that contain confidential information that is specific for an individual dealer or an individual member firm. An example of this is the 123 Message with deal update/insert indicator.
- **Public Messages**
  - These are non-confidential messages that contain information that is market specific and available to all users who subscribe to public data. For example: a last price change on a contract would be received by the whole market. Information Subscribers will be key users of these messages.

These messages are Asynchronous; therefore, they may be received in any order.

All header messages contain a market indicator number; **Table 1.3** contains market numbers.

Table 1.3 Market Number

Market Number	Market Abbreviation	Full Market Name
1	EDM	Equity Derivatives Market
2	APD	Agricultural Product Division
3	Currency and Interest Rate Derivatives	Currency and Interest Rate Derivative and Spot Bond Market

4.6 Compression

A large number of the messages contain data which is considered amenable to compression. Therefore, this data is compressed using the LZH algorithm. The data contains an LZH header defining the decompression criteria, and once a complete compressed data string of bytes has been received, it must be decompressed. The structure of the DECOMPRESSED data is given in this document.

Details of the LZH decompression algorithm can be found at the following URL:

http://www.programmersheaven.com/download/2215/download.aspx

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4.7 Large Data Transmission

Message Packet (Message Type 123 and 36)

Transport Header 4 Bytes	Message Header 34 Bytes	Message Sub Header 14 Bytes (Section 9.1)	Data Section Max 5000 Bytes

Message Packet (Message Type 59)

Transport Header 4 Bytes	Message Header 34 Bytes	Message Sub Header 1 Byte (Section 8.3)	Data Section Max 5000 Bytes

All Data Sections transmitted to users will have a maximum size of 5000 bytes. When the compressed data buffer is greater than 5000 bytes the system will split this data buffer into a series of Data Sections. These Data Sections will all have a length of 5000 bytes, except the last Data Section which will contain the remainder of the data.

Each data section will then be sent with its own transport header, message header and message sub-header. The message sub-header will indicate if this is the final message of a series. The data will inevitably be in compressed format. Upon receipt of the final message, all Data Sections can be appended and decompressed as a whole.

Only messages 36 (data retrieval), 59 (contract update) and 123 (data update) are compressed, all other messages are not compressed.

4.8 Subscription to Instrument Update Messages

The system works on a subscriber basis for all instrument and depth updates. The user will have to send a subscription request message to subscribe to a contract. The list of all configured and active contracts is available through the API specification using a 36 type message (section **6.6 Market Display Data**).

In order to subscribe to a contract, the user would send a type 99 message. This message would contain all the contracts for which the user would like to receive updates. In order to unsubscribe from a contract, the user would send in a type 42 message. This message would contain a list of the contracts from which the user would like to unsubscribe.

The result of sending a type 99 message is a type 59 message containing all the details of the instruments the user subscribed to. When an order is added to the Instrument, or any depth of the instrument changes the user would receive a type 59 message on the instrument with the updated details automatically. Thus, the user only has to subscribe to the instrument once and thereafter they would receive all updates to the instrument. This must be done for each session.

Subscription is per instrument, date, and expiry and not on the instrument alone. For example, the user has to subscribe to DEC 2010 FBWC and not just the FBWC instrument. For more information on contracts see section **6.6 Instrument, Date and Strike Sequences**.

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4.9 Acknowledgement of Messages

The system is transactional and asynchronous. This means that no ACK or NACK is sent on the application layer to confirm the receipt of messages. Instead, a transaction response is sent when a message has been processed by the system.

There are three types of transaction responses:

- **123 Message** (Data update)
  This is the positive response to the transaction. The data in the message informs the user of the data change and the action taken on the data i.e. Insert, Update or Delete.

- **59 Message** (Contract update)
  This is the positive response to the transaction. The data in the message contains the updated instrument information and depth on the instrument.

- **125 Message** (Error and information messages).
  These responses are either negative or positive. A list of common messages can be found in **Section 10**.

In all these message types, the Sequence Number in the message header is incremented by each send to the specific socket.

4.10 Complex Instruments

Complex instruments are two contracts that are grouped together to make up one contract. The following Complex Instruments can be traded:

- **Spread**
  - A Spread is a contract that constitutes one instrument and two expiries.
  - Example: a spread can be traded between the **DEC 2007 FBWC** and the **FEB 2008 FBWC** contracts

- **Switches**
  - A Switch consists of 2 different instruments with the same expiry date.
  - Example: a switch is contract that is traded between the **DEC 2007 FBWC** and **DEC 2007 ALSI** contracts.

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4.11 Process Flow

4.11.1 The Login Process

API Application		Orion System
User Establishes TCP Connection.	→	
	←	Message Type 16 with daily key is sent.
User sends Message Type 0.	→	
	←	Message Type 1 **OR** Message Type 125.

4.11.2 I'm Alive from Orion System

API Application		Orion System
	←	Message Type 10 is sent at regular intervals.

4.11.3 Heartbeat to the Orion System

API Application		Orion System
User sends Message Type 84.	→	

4.11.4 Changing Password

API Application		Orion System
User sends Message Type 88.	→	
	←	Message Type 125 is returned.

4.11.5 Requesting Data

API Application		Orion System
User sends Message Type 36	→	
	←	Message Type 36 **OR** 125 is returned.

4.11.6 Subscribing to Contract Display Updates

API Application		Orion System
User sends Message Type 99 **OR** 67	→	
	←	Message Type 59 **OR** Message Type 125 is returned. Subsequent Display Updates are sent.

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4.11.7 Un-Subscribing from Contract Display Updates

API Application		Orion System
User sends Message Type 42	→	
	←	Display updates for supplied contracts will no longer be sent. A Message Type 125 may be returned.

4.11.8 Re-Request of Display Updates

API Application		Orion System
User sends Message Type 3	→	
	←	One or more Message Type 59 messages **OR** Message Type 125 will be returned

4.11.9 Onscreen Activity

API Application		Orion System
User sends Message Type 56 **OR** Message Type 8 **OR** Message Type 27 **OR** Message Type 85 **OR** Message Type 104	→	
	←	The following messages may be returned: Message Type 125 Message Type 123 Message Type 59

4.11.10 Report Only Activity

API Application		Orion System
User sends Message Type 29 **OR** Message Type 26 **OR** Message Type 30 **OR** Message Type 40	→	
	←	One or more File Update (123) Message are returned **OR** Message Type 125

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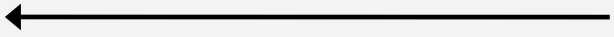
4.11.11 Post Deal Management Activity

API Application		Orion System
User sends Message Type 22 **OR** Message Type 24 **OR** Message Type 31 **OR** Message Type 33 **OR** Message Type 62 **OR** Message Type 64 **OR** Message Type 115		
		One or more File Update (123) Messages are returned **AND/OR** Message Type 59 **OR** Message Type 125

4.11.12 Entity Administration Activity

API Application		Orion System
User sends Message Type 6 **OR** Message Type 7 **OR** Message Type 102 **OR** Message Type 109 **OR** Message Type 120 **OR** Message Type 124		
		File Update (123) Message is returned **OR** Message Type 125

4.11.13 Agricultural Physical Delivery and Silo Certificate Activity

API Application		Orion System
User Sends Message Type 128 **OR** Message Type 129 **OR** Message Type 131 **OR** Message Type 136		
		One or more File Update (123) Messages are returned **OR** Message Type 125

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4.11.14 Auto Quote Activity

API Application		Orion System
User Sends Message Type 98	→	
	←	Message Type 60 **OR** Message Type 125 is returned. Subsequent Equity Price updates are sent.

API Application		Orion System
User Sends Message Type 42	→	
	←	Equity Price Updates for supplied contracts will no longer be sent. A Message Type 125 may be returned.

API Application		Orion System
User Sends Message Type 121	→	
	←	Any Price Update for the contract specified will be returned as Message Type 59

4.11.15 Classic Repo Activity

Input	Operation	Output	Message Type Number	File Identifier	Action	Status	Recipient
Initiate Repo Request (includes messages: 180, 183, 184, 185, 186)	Success	Unmatched Repo	123	140	Insert	Pending	Initiator
		Unmatched Repo	123	140	Insert	Active	Counterparty
	Failed	Announcement	125	-	-	-	Initiator
Reject Unmatched Repo Request (includes messages: 182, 187, 188)	Success	Unmatched Repo	123	140	Update	Pending	Initiator

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Input	Operation	Output	Message Type Number	File Identifier	Action	Status	Recipient
		Unmatched Repo	123	140	Update	Active	Counterparty
	Failed	Announcement	125	-	-	-	Initiator
Accept Repo (181)	Successful Initiation	Master Repo	123	138	Insert	-	Initiator
		Repo Collateral	123	139	Insert	-	Initiator
		Projected Close (if late leg is unknown)	123	143	Insert	-	Initiator
		Completed Order (Early Leg)	123	7	Insert	-	Initiator
		Deal (Early Leg)	123	8	Insert	-	Initiator
		Completed Order (Late Leg – if known)	123	7	Insert	-	Initiator
		Deal (Late Leg – if known)	123	8	Insert	-	Initiator
		Unmatched Repo	123	140	Update	-	Initiator
		Master Repo	123	138	Insert	-	Counterparty
		Repo Collateral	123	139	Insert	-	Counterparty
		Projected Close (if late leg is unknown)	123	143	Insert	-	Counterparty
		Completed Order (Early Leg)	123	7	Insert	-	Counterparty
		Deal (Early Leg)	123	8	Insert	-	Counterparty
		Completed Order (Late Leg – if known)	123	7	Insert	-	Counterparty
		Deal (Late Leg – if known)	123	8	Insert	-	Counterparty
		Unmatched Repo	123	140	Update	-	Counterparty
	Failed	Announcement	125	-	-	-	Initiator

4.11.16 Repo Interest Payment Activity

Input	Operation	Output	Message Type Number	File Identifier	Action	Status	Recipient
Initiate Repo Interest Payment Request (includes messages: 189)	Success	Pending Repo Interest Payment	123	141	Insert	Pending	Initiator

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Input	Operation	Output	Message Type Number	File Identifier	Action	Status	Recipient
		Pending Repo Interest Payment	123	141	Insert	Active	Counterparty
	Failed	Announcement	125	-	-	-	Initiator
Reject Repo Interest Payment Request (includes messages: 191, 192)	Success	Pending Repo Interest Payment	123	141	Update	Pending	Initiator
		Pending Repo Interest Payment	123	141	Update	Active	Counterparty
	Failed	Announcement	125	-	-	-	Initiator
Accept Repo Interest Payment Request (includes messages: 190)	Success	Pending Repo Interest Payment	123	141	Update	Accepted	Initiator
		Pending Repo Interest Payment	123	141	Update	Accepted	Counterparty
		Repo Interest Payment	123	142	Insert	Active	Initiator
		Repo Interest Payment	123	142	Insert	Active	Counterparty
	Failed	Announcement	125	-	-	-	Initiator

4.11.17 Triparty Repo Activity

Input	Operation	Output	Message Type Number	File Identifier	Action	Status	Recipient
Initiate Triparty Repo Request (Includes messages: 193, 198)	Success	Unmatched Triparty Repo	123	144	Insert	Pending	Initiator
		Unmatched Triparty Repo	123	144	Insert	Active	Counterparty
	Failed	Announcement	125	-	-	-	Initiator
Edit Unmatched	Success	Unmatched Triparty Repo	123	144	Update	Pending	Initiator

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Input	Operation	Output	Message Type Number	File Identifier	Action	Status	Recipient
Triparty Repo Request (Includes messages: 194, 195, 197)							
		Unmatched Triparty Repo	123	144	Update	Active	Counterparty
	Failed	Announcement	125	-	-	-	Initiator
Accept Triparty Repo (196)	Successful Initiation	Unmatched Triparty Repo	123	144	Update	Pending Strate	Initiator
		Unmatched Triparty Repo	123	144	Update	Pending Strate	Counterparty
	Failed	Announcement	125	-	-	-	Initiator
Acknowledgement from Strate	Strate Accepted	Unmatched Triparty Repo	123	144	Update	Strate Accepted	Initiator
		Unmatched Triparty Repo	123	144	Update	Strate Accepted	Counterparty
		Triparty Deal	123	145	Insert or Update	Confirmed	Initiator
		Triparty Deal	123	145	Insert or Update	Confirmed	Counterparty
	Strate Rejected	Unmatched Triparty Repo	123	144	Update	Strate Rejected	Initiator
		Unmatched Triparty Repo	123	144	Update	Strate Rejected	Counterparty

4.12 Authorisation of Messages and Initial Margin Limits

This section does not apply to information subscribers, as the exchange will authorise subscription to messages for information subscribers.

The system contains levels of authorisation that defines which messages are accepted by entities. (Please see Message Type 7.) It also contains authorisation for initial margin limits for each entity. (Please see Message Type 6.)

The levels of authorisation are as follows starting from the top entity:

- **The Exchange**
  - The exchange can control all the entities and set all entities' limits and access rights.

- **The Clearing Member**
  - The Clearing Member limits are set by the exchange; they can lessen the limits set by the exchange but cannot exceed the limits.

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- The Clearing Member can set limits for all members and member branches that belong to this clearing house.

- **The Member / Member Branch**
  - The compliance officer for this member can set limits for all dealers on his trading floor.
  - The compliance officer cannot increase any dealer limits higher than their own.

- **The Dealer**
  - The dealer can set their own limits lower than what was assigned to them, but not higher.

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Limits include messages that are allowed to be sent to the exchange and initial margin limits.

Example A:

1. The exchange sets a clearing members initial margin limit at R100.
2. The clearing member can alter the limits of his members to R50 each. He cannot set it higher than his limits of R100.
3. The compliance officer can set each of the dealers on the floors limits to R30, but not higher than his limit of R50.

Example B:

1. The exchange sets the limits for a clearing member and allows him to insert and verify the loading of a client.
2. The clearing member does not want his members' dealers to verify clients as he would like to do this himself but does allow them to insert the client.
3. He thus restricts his members' dealers to only use the insert client message and not the verify message.

4.13 Market Data Levels on 59 and 99 Messages

This section only applies to Information Subscriber users.

The system allows for 2 levels of subscription for the screen update message (59).

- Level 1 – Best Bid or Offer (Allows the user to only see the top of the depth)
- Level 2 – Full Depth (Allows the user to see the full depth on a contract)

These levels are set up by the Exchange on the subscription profile of the user. The message received by the user is the same in both cases only the number of depth items changes.

4.14 Principal Agency Indicator

Each deal must contain a Principal/Agency indicator. This indicator shows the intention of the deal booked. This indicator has to be sent through in all insert messages of orders and report only deals.

The rule for Principal and Agency is the following.

- An 'A' – Agency or 'P' – Principal has to be specified on inserting an active order, and on the report only deal entry.
- Agency and Principal deals cannot be accumulated together.
- On Agency trades the price cannot be changed when assigning a deal.
- On Principal trades the price can be changed when assigning a deal.

4.15 Servicing Message from TCP IP

Under high amounts of volume, it is imperative that users service the messages from their TCP/IP socket in an efficient manner. The exchange system has controls in place to ensure that users who are not servicing messages in an efficient manner, and thus causing their queue on the communications layer of the exchange system to build up, are disconnected to avoid a buildup of pending messages.

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A recommended solution to this would be to remove messages from the socket as soon as they arrive and create an application resident queue of messages. This application resident queue can then be used to process messages. This will then send acknowledgement of receipt of the message to the exchange system as soon as messages arrive and avoid the potential of being disconnected.

4.16 Anonymous Trading

Some instruments will be listed as anonymously traded instruments. The Contract Date download message (Download Message Number 3) includes flags (Future Anonymous and Options Anonymous) to identify the anonymously traded instruments.

The Display Update Messages (59's) published on these instruments will be flagged as anonymous, and the member codes previously displayed will not be published.

The member codes on these display updates will be replaced with uniquely identifiable numbers. Each user will be assigned a number upon login, and this same number will be present in the display update messages. This will allow users to identify their own orders in the market depth.

To cater for anonymously traded instruments user will need to cater for changes to the following messages:

- Change to login response message (Message 1)
- Change to display update message (Message 59)
- Change to contract dates data download message (Message 3 download structure)

4.17 Changes between Nutron APD and EDM API and the Nutron Currency and Interest Rate Derivatives API

The following tables outline the changes made to the API to accommodate Currency and Interest Rate Derivatives. The First Table (New Fields which affect APD and EDM API messages) is of particular interest as this details changes made to existing API messages which required additional space to be allocated to the message length to accommodate these changes.

The other changes specified make mention of previously unused fields and new messages. These do not require any specific code changes, unless the user wishes to make use of these messages specifically for Currency and Interest Rate Derivatives.

4.17.1 New Fields which affect APD and EDM API Messages

Change	Details of Change	Nutron APD and EDM API	Currency and Interest Rate Derivatives API
Order Insert Message	BDA Account Number Added	--	Added BDA Account Number to the API document for Currency and Interest Rate Derivatives (pg 38)
Edit Suspended Order Message	BDA Account Number Added	--	Added BDA Account Number to the API document for

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Change	Details of Change	Nutron APD and EDM API	Currency and Interest Rate Derivatives API
			Currency and Interest Rate Derivatives (pg 41)
Insert Report Only Message	Unused fields made available and BDA Account Number Added	Fields were unused in the Report Only Message	Fields have now been made available, and the BDA Account Number added to this message structure (pg 46)
Enter Client Message	New fields added	--	New fields have been added to the Currency and Interest Rate Derivatives API specification (pg 53)
Days History Request	Format of message changed	Contract was sent as Instrument Sequence, Contract Sequence and Strike Sequence	Contract Name now passed in this message (pg 59)
Unmatched Data Download	Unused fields made available and BDA Account Number Added	Fields were unused in the Unmatched Data Download	Fields previously unused have been made available. BDA Account number field added (pg 70)
Client Data Download	New Field Added		New filed added for IsVerified at Unexcor to the Client Data Download (pg 85)

4.17.2 New fields which don't affect APD and EDM API messages

Change	Details of Change	Nutron APD and EDM API	Currency and Interest Rate Derivatives API
Login Response Message	Unused fields made available	Fields were unused in the Login Response Message	Fields previously unused have been made available (pg 60)
Instruments Data Download	Unused fields made available	Fields were previously unused in the Instrument Data Download	Fields previously unused have been made available (pg 73)
Instrument Type Table	New Instrument Types added		New Instrument Types have been added to the Currency and Interest Rate Derivatives specification (pg 74)
Contract Dates Data Download	Unused fields made available	Fields were previously unused in the Contract Dates Data Download	Fields previously unused have been made available (pg 75)
Active Orders Data Download	Unused fields made available	Fields were previously unused in the Active Orders Data Download	Fields previously unused have been made available (pg 79)

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Change	Details of Change	Nutron APD and EDM API	Currency and Interest Rate Derivatives API
Completed Orders Data Download	Unused fields made available	Fields were previously unused in the Completed Orders Data Download	Fields previously unused have been made available (pg 79)
Positions Data Download	Unused fields made available	Fields were previously unused in the Positions Data Download	Fields previously unused have been made available (pg 84)
Trade Deal Data Download	Unused fields made available	Fields were previously unused in the Trace Deals Data Download	Fields previously unused have been made available (pg 89)
Client Details Data Download	New Fields Added		New Fields added to the Currency and Interest Rate Derivatives API specification for client details data download (pg 102)

4.17.3 New Messages for Currency and Interest Rate Derivatives

Change	Details of Change	Nutron APD and EDM API	Currency and Interest Rate Derivatives API
Guarantee Trade Message	New Message	Not in this version of the API	Added to the Currency and Interest Rate Derivatives API message type 141 to guarantee spot market trades. (pg 59)
CPI Index, JNote Curve and Industry Code Data Downloads	New Downloads Added		New Downloads added to Currency and Interest Rate Derivatives specification (pg 105)
Excel File Downloads	New Downloads Added		New Excel File Downloads added to Currency and Interest Rate Derivatives specification (pg 106)

4.18 Note for Receiving and Processing Price Contributions

As part of the BESA integration initiative, a price contribution display mechanism has been created to display contributions made my members on bond products.

An instrument type (pg 80) has been added which will indicate the list of instruments on which price contributions will be published. The price contribution will be published using the normal Display Update message (Message Type 59). For example, an instrument with short name “Q153” may be created to display price contributions made on the R153 bond.

These price contributions are indicative only and cannot be traded. Volume and Open Interest will never be published on these instruments.

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Price contributions will be identified by using the Instrument Type indicator which forms part of the Instrument Data Download. Instruments with type number of 32 (Price Contribution Instrument). The price contribution may for example have a short name of e.g. Q153 which may represent the R153 Government Bond. The mapping for this can be determined by the Display Name field on the instrument data. For example, an instrument with a short name of Q153 will have a Display Name of R153 to indicate its relationship to the actual R153 tradable instrument.

4.19 Market Shard Implementation – from Version 3.1

In order to cater for higher order throughput on the NUTRON exchange system, multiple instances of the trading system will be deployed. As a result, multiple trading engine shards per market will host different instruments. This has no impact to message processing for the user, besides the impact to the depth re-request message (message type 3).

The market depth data message (Display Update Message Type 59) currently contains a Global Sequence Number. This is a sequential message for display updates for a particular market. With the introduction of market shards, this global sequence number changes its scope to **be sequential per market shard**.

The depth re-request message allows the user to re-request market depth data for a market. With the introduction of multiple shards, this now means that data will be returned per market shard, and the re-request message is required to change to facilitate the request per market shard.

The market shard number in the re-request message will identify the market subset on which particular contracts can be found. This will match up with the market shard number on the Instrument Data download, and therefore Instruments can be mapped accordingly to a particular market shard.

PLEASE NOTE: The exchange may at any time change the market shard definition of an instrument, and it is the users responsibility to handle this change without prior notice by the exchange, by referring to the correct shard number in the Instruments Data Download. A change like this will typically be facilitated overnight with relevant notification given.

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5. Log In Process Message

5.1 Establish a Connection to the Market

Refer to section **4.2** for protocol details.

The user must create a TCP/IP socket and attach this to the listening market, using the appropriate IP Address and Port number. This connection must be maintained throughout the life cycle of the session. Any break in this connection would be seen as an irregularity in the system and the user would be removed from the market at the exchange's end.

5.2 Market Encryption Key

When the system accepts a new connection a message (type 16) will be generated and sent to the user who established the connection. This message contains the normal headers. The data part of the message contains a key for the session.

5.3 Sending the Login Message

When the session key is obtained the user can send their login message. The structure of this message is defined in section **7.1.2** (**Log in Message – Message Type 0**). An example of this log on message is provided in table 2.1.

Table 2.1

Field	Example	Description
Working Directory	C:\Derivtrading\	The working/running directory of the application. This is used for tracking and user assistance.
Company Code*	API USER	The code of the company developing the software that is logging in. The exchange will assign this code to the developing software company after conformance test.
Version*	1.0.0.1	The version number of the application. This is user defined.
View All Dealer Data*	1	Compliance officers of a member firm can use this to get information on data for other dealers in the firm. If this is set to true the user logging in will receive all deals, orders, completed orders and unmatched deals from all dealers in the member firm.
Delete Orders on lost connection**	1	If this field is set, the system will delete all orders when a socket error is received from the user. * This is not needed for Information subscribers.
Encrypted password*	#@$#@$	See description below.
Active Directory User Name*	APIUSER	See description below.
Domain*	JSE	See description below.

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5.3.1 Encrypted Password, User Name and Domain

- The Encryption Key Buffer is made up of:
  - *Session key + Member code + Dealer code + Password*
- The Data Buffer is made up of:
  - *Member code + Dealer code + Session Key)*
- The encryption key is used to encrypt the data, which is then sent in the **Encrypted Password** field.
- The system will reply with a login acceptance message. (Refer to Message type 1) if authentication succeeds.
- If the system does not authenticate the user an error message will be sent. The user is then restricted to only changing their password. After the user has done this successfully, they can login again using the same session key.

When encrypting the password, it is important that the buffers used to hold the key and data are 0 filled for unused characters, as the blowfish algorithm uses block sizes of 8 bytes. Thus, a password of length 11 will encrypt to 16 bytes, and the 5 unused bytes need to be null or 0. **No string encoding should be performed on either the Encryption Key Buffer, Data Buffer or resulting Encrypted Data Buffer – these should be maintained as raw arrays of bytes at all times.**

Please note that the member code and dealer code / user code are applicable to all API users, not only to trading participants. In the message header, the member code field for Information Subscribers must be 'DATA', the user code that the Exchange supplies must be filled into the user code field in the login message.

The password must comply with the following standards:

- Minimum length – 8 characters
- Complexity: Any three of the following four:
  - Uppercase
  - Lowercase
  - Numeric
  - Special character

5.4 I'm Alive

The system will transmit to the API user an '*I'm alive'* message (message 10, **section 8.7**). This will only be transmitted if no message has been sent from the system to the user in the last 45 seconds, or a pre-configured amount of time set by the Exchange.

The API user must send a Heartbeat message (message 84, **section 7.9**) to the system if there has not been a message sent from the user in the last 45 seconds, or a pre-configured amount of time set by the Exchange.

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6. Data Sources

Data can be requested from the system by sending a request message (see **6.4 Requesting Data**). A series of compressed message packets will be sent to the user in response to the request. Each of these packets will be preceded with a Transport Header, Message Header and Request Data Header. (See **section 4.7** for the handling of the response.)

In the Request Data Header (**section 9.1**) the Data Type defines the structure of the data. The size of the decompressed data will be a multiple of the size of the defined structure. This decompressed data can therefore be type-cast into a series of records.

Example:

1. Request data for MTM File (Type 16)
2. Received a complete data buffer of 414 bytes (After decompression).
3. Number of records contained = Length of Decompressed Buffer (414) / Size of MTM Structure (46) = 9
4. 9 Records returned by Download.

6.1 Historical Data

Data can be requested for the previous business day. The Data Request message contains a date parameter and must be set to download data for the required date.

Table 4.1 contains a reference to data sets available for historical data retrieval.

6.2 Error and Information Messages

IT IS SUGGESTED THAT THE API USER ENSURES THAT THE ERROR AND INFORMATION MESSAGE (TYPE 125) HAS BEEN CATERED FOR AND HANDLED.

These messages are sent to users specifically when;

- An error occurs as a result of a message sent
- When a requested process cannot be completed,
- When the exchange wishes to make an announcement of any sort.

Certain announcement messages are generated automatically by the system, for example, warnings on market open, auction start, etc. These messages contain an integer field indicating the error number, this is followed by a byte field indicating if the message is an error message or an information message. These fields are followed by the messages in text format. The exact text of the message may vary as the message may include contract information.

(Refer to **Error and Information Messages** see section **10**.)

6.3 DOS Date Format

This format is the compressed DOS 2-byte date (ISO 8601 MS theta-1980) consisting of 16 bits where the day is stored in bits 0-4, the month in bits 5-8, and the year, with base of 1980, is stored in the remaining bits.

0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
Day					Month				Year						

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This is the equivalent of a small integer (date).

The standard formula for calculating a DOS date format is:

```
todaydate = ((Year - 1980) * 512) + (Month * 32) + (Day);
```

The formula for decoding the dos date is:

```
int day = date & 0x1F;
int month = (date & 0x1E0) >> 5;
int year = ((date & 0xFE00) >> 9) + 1980;
```

6.4 Requesting Data

There are several different data retrievals that have a data type associated with them. Once the data has been requested a 36 message(s) is returned with the requested data. See **section 4.7.**

To obtain a data download, 256 is added to the Data Type field. For example, referring to the 36 message above, the Data Type for Active Orders is a 5. A 36 request for a Data Type 261 will be sent to download the Active Orders data.

6.5 123 Messages vs. 36 Messages

The 123 and 36 Messages are received when downloading or receiving private and public data from the exchange.

Updates or inserts are received intra-session with message type 123, which always contains only one record.

When an input message 36 is sent; messages containing multiple records can be received.

NOTE: Data retrieved when input message 36 is sent is identified by the Data Type + 256, whereas Data received via the 123 message is identified by Data Type without the 256 addition.

Example:

When a 36 Message is sent to the exchange containing data set Number 257 (Market Display), multiple records will be received.

During the trading session a 123 Message (Data Update) can be received containing data type indicator Number 1 (Market Display). This will only contain one record, an insert, update or delete for the display data.

Example:

On a Report only Deal insert message, the user would receive a 123 message with indicator set to unmatched and action set to insert.

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6.6 Market Display Data

To facilitate the ease of trading, a data set is available through the API specification that contains the entire set of contracts available for real-time trading on each market. The Market Display data contains all relevant links of each contract (Instrument, Date and Strike Sequences. See **section 6.6**). The market display data also contains the information for that contract that is relevant for trading of the contract in the current market session.

The data set structure is available for retrieval as a Message 36 in Request Data Header – Message Type 36 and 123.

6.7 Instrument, Date and Strike Sequences

The system defines contracts by an Instrument, Date and Strike Sequence. These are all linked (Display Data Set) and together define a contract. Each sequence refers to a specific record within a data set that holds information about a specific Contract. For example, the instrument sequence number can be linked to the instrument data set, and the instrument data set contains all the relevant information of that instrument.

Each combination of instrument, date and strike sequences is an individual and unique contract.

The **Instrument** refers to the underlying type. These values contain information about the instrument.

The **Date** refers to the expiry in the Contract. This contains information that is specific to this expiry date.

The **Strike** refers to the option on the Contract. If the strike sequence is zero the contract is a Future, otherwise the contract is an Option. The strike contains the information for the option or delta.

Example table of instrument, date and strike sequences used:

Key
IS – Instrument Sequence
CS – Contract Date Sequence
SS – Strike Sequence

Instrument	**Date**	**Strike**	**Contract Code**	**Description**
ALSI **IS 1**	DEC 2006 **CS 1**	**SS 0**	FZ615 ALSI	Future
ALSI **IS 1**	DEC 2006 **CS 1**	1500 Put **SS 1**	YZ615 ALSI 1500 P	Option
ALSI **IS 1**	DEC 2007 **CS 2**	1500 Call **SS 2**	YZ715 ALSI 1500 C	Option
ALSI **IS 1**	DEC 2007 **CS 2**	**SS 0**	FZ715 ALSI	Future
FBWC **IS 2**	DEC 2006 **CS 3**	**SS 0**	FZ615 FBWC	Future
FBWC **IS 2**	DEC 2006 **CS 3**	1500 Put **SS 3**	YZ615DFBWC 1500 P	Delta Option

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Instrument	Date	Strike	Contract Code	Description
FBWC **IS 2**	DEC 2007 **CS 4**	1500 Call **SS 3**	YZ715DFBWC 1500 C	Delta Option
FBWC **IS 2**	DEC 2007 **CS 4**	**SS 0**	FZ715 FBWC	Future

The date sequence 1 is connected to the ALSI instrument and is a date of the ALSI. The FBWC instrument will have its own set of date sequences. Data sequences are not interchangeable on instruments as they contain information relating to an instrument for the expiry.

Complex instruments are linked in a similar fashion. An extra set of sequence numbers is available in the Market Display data set called Second Instrument Sequence and Second Date Sequence, using the table below and the following complex instruments will be created by the system:

Instrument	Second Instrument	Date	Second Date	Strike	Contract Code	Description
ALSI **IS 1**	ALSI **IS 1**	DEC 2006 **CS 1**	DEC 2007 **CS 2**	**SS 0**	ZZ6Z7 ALSI	Spread between DEC 2006 and DEC 2007 ALSI
FBWC **IS 2**	FBWC **IS 2**	DEC 2006 **CS 3**	DEC 2007 **CS 4**	**SS 0**	ZZ6Z7 FBWC	Spread between DEC 2006 and DEC 2007 FBWC
ALSI **IS 1**	FBWC **IS 2**	DEC 2006 **CS 1**	DEC 2006 **CS 3**	**SS 0**	XZ6Z6 ALSI/FBWC	Switch between DEC 2006 ALSI and FBWC
ALSI **IS 1**	FBWC **IS 2**	DEC 2007 **CS 2**	DEC 2007 **CS 4**	**SS 0**	XZ7Z7 ALSI/FBWC	Switch between DEC 2007 ALSI and FBWC

Contract **Inheritance** flows from the instrument to strike. Thus, the valuation date on the strike will override the expiry date on the contract date.

The contracts available on the market and the sequence numbers that make up the contract are available in the Market Display Data.

6.8 Entity Codes

The following Entities used currently exist in the system:

- Member
  - Members are 5-byte long Pascal type strings
  - Example: **ABCD**
- Dealer
  - Dealers are 4-byte long Pascal type strings
  - Example: **JOE**

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- Clients
  - Clients are 7-byte long Pascal type strings. 3 Alpha, followed by 3 numeric characters
  - Example: **CLI001**
- Sub-Accounts
  - Sub-accounts are 6-byte long Pascal type strings, that do not end in 'C'
  - Example: **SUB99**
- Clearing Members
  - Clearing members are 6 long Pascal type strings
  - Clearing members always end with a character C in byte 5
  - Example: **ABCDC**

6.9 Contract Character Convention

6.9.1 Type Convention

Character	Contract	Position	Example
F	Future	1	**F**G427 ALSI
Y	Option	1	**Y**G427 ALSI 12.13 C
Z	Spread	1	**Z**G4H4 ALSI
X	Split / Switch	1	**X**G4G4 ALSI/INDI
G	Bond	1	**G**F721 R153
R	Repo	1	**R**FAGA R153
Q	Reverse Repo	1	**Q**FAGA R153
W	Nominal Switch	1	**W**R153 R157
V	Rand Per Point Switch	1	**V**153 R157
S	Swap	1	**S**F921 J201
T	Notional Swap	1	**T**F921 JN02
N	Fixed Rate Derivative	1	**N**F921 JFIX 12.5

6.9.2 Year Convention

Numeral	Year	Position	Example
7	2007	3	JG**7**30 JBAR
8	2008	3	FG**8**27 R153
9	2009	3	HG**9**27 JROD
A	2010	3	FG**A**27 ALSI
B	2011	3	FG**B**12 FINI
C	2012	3	FH**C**01 GOVI
…	…	3	FH#01 FBWC
Z	2035	3	FHZ01 FBWC
[	2036	3	FH[01 FBWC
****	2037	3	FH\01 FBWC
]	2038	3	FH]01 FBWC
^	2039	3	FH^01 FBWC
_	2040	3	FH_01 FBWC
‘	2041	3	FH’01 FBWC
a	2042	3	FHa01 FBWC

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Numeral	Year	Position	Example
b	2043	3	FHb01 FBWC
…	…	3	FH#01 FBWC

6.9.3 Month Convention

Character	Month	Position	Example
F	January	2 (+ 4 Spreads)	F**F**427 ALSI
G	February	2 (+ 4 Spreads)	Y**G**527 ALSI 15000 C
H	March	2 (+ 4 Spreads)	F**H**627 ALSI
J	April	2 (+ 4 Spreads)	F**J**730 ALSI
K	May	2 (+ 4 Spreads)	F**K**827 ALSI
M	June	2 (+ 4 Spreads)	F**M**927 ALSI
N	July	2 (+ 4 Spreads)	Y**N**527 ALSI 15000 C
Q	August	2 (+ 4 Spreads)	F**Q**730 ALSI
U	September	2 (+ 4 Spreads)	F**U**404 ALSI
V	October	2 (+ 4 Spreads)	F**V**404 ALSI
X	November	2 (+ 4 Spreads)	F**X**427 ALSI
Z	December	2 (+ 4 Spreads)	F**Z**721 ALSI

6.9.4 Day Convention

NOTE: When the contract code refers to a complex instrument (referring to 2 contracts), the 'day' field is not used. This is retrieved from the underlying contract dates that make up the complex instrument.

Character	Day	Position	Example
XX (where XX equal days of the month and XX is <= to 31)	27	4 & 5	FG4**27** ALSI

For Bond Products the Day Code on Carry and Repo Types are represented as follows:

Character	Day	Position	Example
1-9	1-9	3 or 5	RF1G1 R153 (1 Jan – 1 Feb)
A-X	10-31	3 or 5	RFAFH R153 (10 Jan – 17 Jan)

6.9.5 Contract Code Description and Implementation

The contract code will be presented in the following format in all contract code fields. The format is given as:

0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19
%	T	M	Y	D	D	d	C	C	C	C	S	S	S	S	S	S	S	S	c

% – Length of the contract code string
T – Instrument Type (See **6.9.1**)
M – Month Character (See **6.9.3**)
Y – Year Character (See **6.9.2**)

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D – Day Characters (See **6.9.4**)
d – Delta Option indicator
C – Instrument Name
S – Strike Value
c – Call or Put Indicator

The following are some examples:

6.9.5.1 Future Contract (May 2007 ALSI)

0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19
10	F	K	7	2	1		A	L	S	I									

6.9.5.2 Naked Option Contract (May 2007 ALSI 26 000 Call)

0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19
19	Y	K	7	2	1		A	L	S	I	2	6	0	0	0	.	0	0	C

6.9.5.3 Naked Option Contract (May 2007 TKGQ 2.53 Put)

0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19
19	Y	K	7	2	1		T	K	G	Q	2	.	5	3	0	0	0	0	P

6.9.5.4 Delta Option Contract (May 2007 CDAG 25 603.65 Put)

0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19
19	Y	K	7	2	1	D	C	D	A	G	2	5	6	0	3	.	6	5	P

6.9.5.5 1 Week Carry on R153 (1 January 2009 – 7 January 2009)

0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19
10	R	F	1	F	7		R	1	5	3									

6.9.5.6 1 Week Repo on R153 (12 January 2009 – 19 January 2009)

0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19
10	Q	F	C	F	J		R	1	5	3									

6.9.5.7 Nominal Switch on R153 – R157 for T+3 Settlement

0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19
10	W	R	1	5	3		R	1	5	7									

6.9.5.8 Rand Per Point Switch on R153 – R157 for T+3 Settlement

0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19
10	V	R	1	5	3		R	1	5	7									

6.10 Origin Field Descriptions

The Origin field is an indicator of the process that was followed which caused an unmatched trade, trade or completed order. For example, if the origin is Accumulate it then indicates that the trade is the result of an accumulation.

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Name	Character	Description
None	‘ ‘ – byte 32	No activity recorded on trade.
Accumulate	A	Trade Accumulation occurred with this trade as result.
Principal Change	D	A trade was split with a change in the Principal from the original.
Assign Send	Q	This trade has been assigned This trade can’t be accumulated, assigned or split again.
Assign Receive	F	This trade is a result of a trade that was assigned to another party, and this is the opposite leg generated.
Rolling forward position	R	This trade is a result of a roll forward on a position.
Tripartite Receive	T	This trade is the result of a tripartite allocation forward leg.
On Screen	O	This trade is the result of an On-Screen trade
Report Only	P	This trade is the result of report only trade that occurred.
Sub Account Modification	S	This trade is the result of a sub-account modification.
Option Exercise	E	This trade is the result of an option exercise.
Option Abandon	B	This trade is the result of an option abandon.
Tripartite Send	W	This trade was allocated to the client of another member. This trade cannot be assigned, accumulated, split or used in another tripartite allocation.
Allocate Send	L	The trade was used in a split transaction. This trade cannot be accumulated, split again, used in a tripartite allocation or assigned.
Allocate Receive	M	This trade is the client’s leg of a split or allocation. This trade cannot be split again.
Corporate Action	C	This trade is the result of a corporate action.
Sub Account Change	H	This indicates that a sub account has been changed on a trade leg.
Allocation Error	G	This indicates that this trade has been corrected as the client was incorrect.
Allocation Correction	I	This indicates that this trade is a correction trade for a client trade which was booked incorrectly.
Transfer Trade	K	This indicates that this trade is a result of a transfer.
Principal Correction	N	This indicates that this trade is a correction trade for a client trade that was booked incorrectly and subsequently moved back to the member’s account.
Rand Per Point Switch	U	This indicates that this deal is from a Rand Per point switch transaction.
Nominal Switch	V	This indicates that this deal is from a Nominal Switch transaction.
Report Only Repo Leg One	Z	This indicates that this deal is the first leg of a Report only carry transaction.
Report Only Repo Leg Two	1	This indicates that this deal is the second leg of a report only carry transaction.

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Name	Character	Description
Report Only Reverse Repo Leg One	2	This indicates that this deal is the first leg of a report only repo transaction.
Report Only Reverse Repo Leg Two	3	This indicates that this deal is the second leg of a report only repo transaction.
Scrip Lending Borrowing	4	This indicates that this deal is from a scrip lending or borrowing transaction.
Close out Trade	5	Indicates that this trade was booked as a result of a close out.
Guarantee Trade	6	Indicates that this trade was booked as a result of a clearing member guaranteeing a bond trade.
Forward Forward	7	Indicates that this trade was booked as a Forward Forward transaction.
Tripartite Send	W	Indicates that this trade was a tripartite send.
On Screen Repo Leg One	X	Indicates that this was the first leg of an onscreen carry trade.
On Screen Repo Leg Two	Y	Indicates that this was the second leg of an onscreen carry trade.
Shariah RFQ	J	Indicates if this trade originated from a Shariah RFQ.
Reverse Substitution	*	Indicates the trade was a Reverse substitution.
Voluntary Give Up	-	Indicates the trade was a Voluntary Give up.
Compulsory Give Up	|	Indicates the trade was a Compulsory Give up.

6.11 Reason Field Descriptions

The Reason field is an indication of why an unmatched trade is booked.

Name	Character
Correction Trade	A
Mis-deal	B
Mis-match	C
Structured Trade	D
Normal Trade	N or byte 32 (space)
Corporate Action	R
Allocation Correction	L
Exchange For Physical	E
Scrip Lending and Borrowing	S
Money Lending	M
Money Lending Return	O
Cancel Trade	T
Late Allocation	I
Give Up	G
Free of Value	F
Option Exercise	X
Tap Issue	V

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Name	Character
Primary trade	W
Book Over	Z
Prime Broker	1

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7. Input Messages

7.1 Connection Messages

7.1.1 Encryption

The encryption method used is Blowfish. The following URL can be referenced for example and explanations for the blowfish encryption methodology.

http://www.schneier.com/blowfish-download.html

Encryption is required in the following two scenarios:

- When the API user sends a Login Message (Message Type 0)
- When the API user sends a Password Change Message (Message Type 88)

The encryption algorithm uses the following values:

- Hash Mode: Sha1
- Cipher Mode: Blowfish is a variable-length key block cipher
- Block size: 8 bytes – 64 bits
- Max key: 56 bytes – 448 bits

Test vectors are available on the following website for testing purposes:

http://www.schneier.com/code/vectors.txt

Some samples from this website include:

Key Used	Bytes Encrypted	Encrypted Bytes
0000000000000000	0000000000000000	4EF997456198DD78
FFFFFFFFFFFFFFFF	FFFFFFFFFFFFFFFF	51866FD5B85ECB8A
3000000000000000	1000000000000001	7D856F9A613063F2
1111111111111111	1111111111111111	2466DD878B963C9D
0123456789ABCDEF	1111111111111111	61F9C3802281B096
1111111111111111	0123456789ABCDEF	7D0CC630AFDA1EC7
0000000000000000	0000000000000000	4EF997456198DD78
FEDCBA9876543210	0123456789ABCDEF	0ACEAB0FC6A0A28D
7CA110454A1A6E57	01A1D6D039776742	59C68245EB05282B

7.1.2 Log in Message – Message Type 0

Name	Length	Type	Description	Case	Example	Comment
Working Directory	255	P	AN	UL	C:\API	Current Working directory of application.
Company Code*	20	P	AN	UL	APIUSER	Company Code assigned to you by the exchange.
Version*	10	P	AN	U	1.0.0.1	Version number accepted as current version of API solution, as agreed with exchange.
View All Dealer Data*	1	B	N	n/a	1 – True 0 – False	The logged in user can see all other dealers data (only master dealer).

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Name	Length	Type	Description	Case	Example	Comment
Delete Orders on lost connection*	1	B	N	n/a	1 – True 0 – False	Delete the dealer's order if he disconnects or loses connection from the exchange.
Encrypted password*	24	B	AN	n/a	"@!#%@#"	See description below
Active Directory User Name*	255	P	AN	n/a	APIUSER	The Active Directory username assigned to you by the exchange
Domain*	254	P	AN	n/a	JSE	The domain name assigned to you by the exchange.
Action for orders on Log out	1	B	N	n/a	A – Remain active S – Suspend D – Delete	This action indicates what should happen to your orders when a log out message is sent. **PLEASE NOTE**: The "Delete orders on lost connection" applies to lost connection, and this action applies to a user initiated log out.
Total Length	821 Bytes					

Encrypting the password:

- The **Encryption Key Buffer** is made up of:
    - *Session key* + *Member code* + *Dealer code* + *Password*
- The **Data Buffer** is made up of:
    - *Member code* + *Dealer code* + *Session key*
- The encryption key is used to encrypt the data, which is then sent in the **Encrypted Password** field.

7.1.3 Log out Message – Message Type 4

- This message does not contain any details.
- The exchange will log the user out of the market, and if "Delete Orders on Lost Connection" is selected in the login message, all active orders on the market would be deleted.

7.1.4 Re Request – Message Type 3

Re Request of 59 messages. The Display Update (Message Type 59) contains the sequence numbers required to facilitate this request. The From Sequence and To Sequence are both inclusive in the result set. The exchange will reply in result sets of 100 sequences at a time, for the supplied sequence number range.

When the user is disconnected, and re-connects they are advised to re-request missing messages starting with the last global sequence number received. This is to ensure that any updates to the last global sequence number received are taken into account.

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The user is also advised that live messages should be received in conjunction with the response to re-requests. This is to avoid missing live messages whilst re-requests are being received.

It is also advised that if a sequence number is received out of order, the user should build functionality that manages any triggers for re-request. This functionality could potentially make use of a counter that only after 3 checks, triggers a re-request for a missing sequence number. This will cater for the possibility that a sequence number is received out of order due to message routing or other factors and allow the user to ensure all data is received in good order.

The market shard number will identify the market subset on which particular contracts can be found. This will match up with the market shard number on the Instrument Data download, and therefore Instruments can be mapped accordingly to a particular market shard.

PLEASE NOTE: The exchange may at any time change the market shard definition of an instrument, and it is the users responsibility to handle this change without prior notice by the exchange.

Name	Length	Type	Description	Case	Example	Comment
From Sequence*	4	I	N	n/a	12	From this sequence number
To Sequence*	4	I	N	n/a	112	To this sequence number
Market Shard Number	4	I	N	n/a	1	Indicates the market shard number on which you would like to re-request data from.
Total Length	12 Bytes					

7.1.5 Password Change Message – Message Type 88

The password encryption works similarly to the login password except that the new and old passwords are the encrypted data that is transferred.

The following are NOT length prefixed:

- Session Key
- Member Code
- Dealer Code
- Old Password
- New Password
- Key Buffer
- Data Buffer
- Encrypted Result

The process is as follows for encrypting the old password.

- Key Buffer: Session key + member code + dealer code + old password
- Data Buffer: old password
- The encrypted result is then sent in the Old Password field.

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The process is as follow for encrypting the new password.

- Key Buffer: Session key + member code + dealer code + old password
- Data Buffer: new password
- The encrypted result is then sent in the New Password field.

Name	Length	Type	Description	Case	Example	Comment
Old Password*	24	B	AN	n/a	@@#*%	The previous password in encrypted format.
New Password*	24	B	AN	n/a	%%@&$	The new password in encrypted format.
Active Directory User Name*	255	P	AN	n/a	APIUSER	The Active Directory username assigned to you by the exchange.
Domain*	255	P	AN	n/a	JSE	The domain name assigned to you by the exchange.
Total Length	558 Bytes					

7.2 Subscription Messages

7.2.1 Unsubscribe Contract – Message Type 42

To inform the system that the user no longer wants to receive Display Updates on a particular contract, a user must send a Message Type 42 with the list of contracts that they wish to unsubscribe from. This message caters for up to 40 contracts per message. To unsubscribe to all options on the market, the message can be sent with a quantity of 1 and an empty list of contracts.

Name	Length	Type	Description	Case	Example	Comment
Quantity*	2	I	N	n/a	3	Number of contracts to unsubscribe from.
Contracts to unsubscribe*	40*20	P	AN	U	FG603 ALSI, FG603 INDI, FG603 FINI	List of contracts names to unsubscribe from
Total Length	802 Bytes					

7.2.2 Option Contract Subscription – Message Type 67

Sending this message type will result in the API user receiving Display Updates (Message Type 59) on the contracts listed in the Option Contract Subscription Message.

The following scenarios are catered for:

- If the message contains the future contract – the user will be subscribed to all option strikes' depths on the future expiry.
- If the message is empty all the options on the market on which an order has been placed, will be subscribed to.
- If a single option is specified only this contract will be subscribed to.

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When subscribing to a contract using the 67 message, further updates will be sent when activity is recorded on that contract. To receive an initial state of the contract in terms of market statistics the display file will contain the latest information for this contract. It is advised that the information in the display data download is used as an initial state of the contract, and that the 67 message is used to subscribe to further updates.

Name	Length	Type	Description	Case	Example	Comment
Contract Name*	20	P	AN	U	FG503 ALSI	See explanation above for implementation.
Total Length	20 Bytes					

7.2.3 Future Contract Subscription – Message Type 99

Sending this message type will result in the API user receiving Display Updates (Message Type 59) on the contracts listed in the Future Contract Subscription Message. Up to 40 contracts are catered for in this message.

Name	Length	Type	Description	Case	Example	Comment
Quantity*	2	I	N	n/a	2	The number of contracts for request.
Contracts Requested For Display*	40*20	P	AN	U	FG625 ALSI, FG612 INDI	This field displays all the contract names that have been requested.
Total Length	802 Bytes					

7.2.4 Option Statistics Request – Message Type 135

The Option Statistics Request allows a user to receive a Display Update (Message Type 59) which will include information for all option contracts traded since the beginning of the trading session. Therefore, statistics included in the Display Update Message such as volume, last price, days high and days low will be filled with the details for option contracts traded.

The contract name field of this message should be left empty when sending this request.

Name	Length	Type	Description	Case	Example	Comment
Contract Name*	20	P	AN	U		See explanation above for implementation.

Note regarding subscription and global sequence number

When subscribing to an update on a contract, the resulting 59 message will contain a global sequence number of the last global sequence number sent and will not increment. Therefore 59 messages received as a reply to a subscription message (message type 99) should not be used as part of any global sequence number processing, as these updates do not fall in line with the normal sequence number series. Any subsequent 59 messages, after subscription has been processed, will continue with the normal global sequence number series.

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7.3 Order Insert/Suspend/Cancel Messages

7.3.1 Suspend/Delete Active Order Message – Message Type 8

The Suspend Order message informs the system to either suspend or delete the order with the specified exchange order sequence. The activity (suspend or delete) is controlled by the suspend / delete flag in the message. This message should be used for suspending or deleting orders which are currently on the order book as active.

Name	Length	Type	Description	Case	Example	Comment
Exchange Order Sequence*	4	I	N	n/a	2563	Sequence number of order to suspend or delete
Contract Name*	20	P	AN	U	FG503 ALSI	Name of contract on which order will be suspended. Only used for suspending an order.
Buy or Sell*	1	C	A	U	B	Indicates whether the order being suspended/deleted is a Buy(B) or Sell(S)
Suspend/Delete Flag*	1	C	A	U	S	S – Suspend, D - Delete
Total Length	26 Bytes					

7.3.2 Delete Order Message – Message Type 15

The Delete Order message allows the user to delete an order with the specified exchange order sequence which are either currently suspended or active. This message should be used for deleting orders which are currently suspended. This message cannot be used to delete orders which are currently active.

Name	Length	Type	Description	Case	Example	Comment
Exchange Order Sequence*	4	I	N	n/a	6262	Order Sequence number of order to delete
Contract Name*	20	P	AN	U	FK506 R153	Contract code on the order to be deleted
Total Length	24 Bytes					

7.3.3 Resubmit Order Message – Message Type 27

The Resubmit Order Message allows a user to resubmit a particular order with the specified order sequence number. This will submit the order onto the live trading screen, and a subsequent display update will be returned, if an error does not occur.

Name	Length	Type	Description	Case	Example	Comment
Order Sequence number*	4	I	N	n/a	100015	Order Sequence number of suspended order to be resubmitted. This will make the suspended order an active order.
Contract Name*	20	P	AN	U	FK503 R153	Name of the contract on the order to be resubmitted

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Name	Length	Type	Description	Case	Example	Comment
Total Length	24 Bytes					

7.3.4 Order Insert Message – Message Type 56

- Order messages are stacked and 11 orders can be inserted on different contracts in one message.
- The message is preceded with a number of orders and a first order message, followed by the other orders that can be inserted.
- The following fields apply to all orders:
    - Order Principal
    - Order Type
    - User Member
    - User Dealer
    - Order Timeout
    - Cancel Flag
- The number of orders indicates the total orders to be inserted including the first order.

Exception Handling:

- When processing multiple order entries in this message, each order will be validated individually and processed. Order rejection messages (message type 126) will be returned for each order which is rejected, with an indication of the order reference and the error number and message. Orders which are successfully processed will be acknowledged with the appropriate file update message (message type 123).

Order message makeup

Name	Length	Type	Description	Case	Example	Comment
Number of orders (NOB)*	1	B	N	n/a	2	Only values 1 – 11 are valid.
First Order*	Size of First Order	First Order	n/a	n/a		First Order structure
Other Orders	10 * Size of Other Order	Other Order	n/a	n/a		Can handle up to 10 items of Other Orders structures.
Total Length	752 Bytes					

First Order Structure

Name	Length	Type	Description	Case	Example	Comment
Contract Name*	20	P	AN	U	FG503 ALSI	Name of contract on which the order will be inserted.
Buy Or Sell*	1	C	A	U	B, S	This indicates whether the order being inserted is a Buy(B) or Sell(S).
Order Value*	8	D	N	n/a	19543.00	Quoted value of order.

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Name	Length	Type	Description	Case	Example	Comment
Quantity*	4	I	N	n/a	10	This field indicates the number of contracts involved in the order message.
Iceberg Quantity	4	I	N	n/a	10	This field indicates the number of contracts in total if the order is of type Iceberg. **NOTE: This functionality will only be available in a future release. For initial implementation this field should be set to 0.**
Order Principal*	8	P	AN	U	AAAA / ABC678	This field displays the code of the Principal to the deal
Order Type*	1	B	N	n/a	0	0 – Normal; 1 – Take or Kill; 2 – Fill or Kill; 4 – Iceberg; 8 – Stop Order; 16 – At Best Order; 32 – All or Nothing Order; 128 – At Close Order
User Reference*	25	P	AN	U	FFS2232S	Reference number to appear on order message.
User Dealer*	4	P	A	U	XXZ	Dealer code of intended dealer.
Order timeout	4	I	N	n/a	45	This field displays the number of seconds until the order expires
User Member*	6	P	AN	U	AAAA	Member code of intended member.
Cancel Flag	4	I	N	n/a	1	See Explanation below for implementation.
Unused	4	B	n/a	n/a		
Unused	4	B	n/a	n/a		
Hold Over Date	3*4	I	N	n/a	2007, 5, 15	Date until which the order is good for. This order will be resubmitted at the start of trading until this order is satisfied. **NOTE: This functionality will only be available in a future release. For initial implementation this field should be set to 0,0,0.**
Principal Agency*	1	C	A	U	‘P’ or ‘A’	Principal Agency indicator
BDA Account Number	11	P	AN	n/a	ABCV3453	BDA Account Number for this order
Total Length	121 Bytes					

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Other Order Structure

Name	Length	Type	Description	Case	Example	Comment
Contract Name*	20	P	AN	U	FG503 ALSI	Name of contract on which order will be inserted.
Buy Or Sell*	1	C	A	U	B, S	Buy/Sell field of the order being inserted.
Order Value*	8	D	N	n/a	19426.45	The quoted value of the order.
Quantity*	4	I	N	n/a	10	This field displays the number of contracts involved in the deal.
Unused	4	B	n/a	n/a		
Principal Agency*	1	C	A	U	'P' or 'A'	Principal Agency indicator.
User Reference*	25	P	AN	U	FFS2232S	Reference number to appear on order message.
Total Length	63 Bytes					

Cancel Flag	Description
0	No cancel
1	Cancel all orders for this dealer currently on this contract, on the specified buy or sell stack
2	Cancel all orders for this Principal currently on this contract, on the specified buy or sell stack

Order Type Definitions

- **Iceberg Order** – The bid message has place for a quantity and Iceberg Quantity. When the Iceberg Order Type is selected an order with Quantity 10 and Iceberg Quantity 100, an order will be place on screen for a quantity of 10, and when hit, an order will automatically be submitted for a further 10 contracts, when this is hit another order will be submitted automatically etc. until the Iceberg Quantity of 100 is reached.

- **At Best Order** – This order takes no price, and an order will be submitted onto the exchange automatically at the best price on top of the stack. The order price will follow the best price until completely satisfied.

- **Stop Order** – This is an At Best Order and will follow the best price. If the market price goes below the stop price specified in the price field of the order message, the order will automatically be pulled.

- **All Or Nothing** – This is an order which must be completely satisfied before it is removed from the stack. An order can therefore be submitted onto the system and will remain until completely satisfied.

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- **At Close Order** – This order is placed onto the system and only appears at market close. At the close of on-screen trading period, all at close order orders are submitted onto the market and matched if possible.

7.3.5 Cancel All Active Orders Message – Message Type 85

The Cancel All Active Orders Message allows a user to delete all active orders currently on the market. There are various options for cancelling all orders which are detailed in the Cancel Flag description.

Name	Length	Type	Description	Case	Example	Comment
Contract Name	20	P	AN	U	FG503 ALSI	Name of contract to be cancelled. Applicable only when Cancel Flag 0, 1, 2, 3
Cancel Flag*	2	I	N	n/a	4	See explanation below for implementation.
Buy Sell	1	C	A	U	B or S	Buy or sell side to cancel. Applicable only if Cancel Flag not 4.
Total Length	23 Bytes					

Name	Cancel Flag
Top Bid or Offer on Contract	0
All Bids or Offers on Contract	1
All Bids or Offers on all Expiries for Instrument	2
All Bids or Offers on Contract's market sector	3
All Bids and Offers on market	4

7.3.6 Reduce Active Order Quantity – Message Type 104

The reduce order allows the user to decease the quantity of an order without changing the place in the stack.

Name	Length	Type	Description	Case	Example	Comment
Exchange Order Sequence*	4	I	N	n/a	53335	Exchange Order Sequence of order to be reduced.
Future contract name*	20	P	AN	U	FG503 ALSI	Name of contract on which order will be reduced
Quantity*	4	I	N	n/a	10	New Quantity of order.
Buy Or Sell*	1	C	A	U	B, S	This field indicates whether the order being reduced is a Buy(B) or Sell(S)
Total Length	29 Bytes					

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7.3.7 Edit Suspended Order – Message Type 118

The Edit Suspended Order Message allows a user to edit the details of a particular suspended order with the specified order sequence.

Name	Length	Type	Description	Case	Example	Comment
Contract Name*	20	P	AN	n/a	FG625 ALSI	Contract of order to be suspended.
Buy Or Sell*	1	C	A	U	B, S	This indicates whether the suspended order being edited is a Buy(B) or Sell(S)
Order Value*	8	D	N	n/a	19232.00	This indicates the value of the order in Rand terms.
Quantity*	4	I	N	n/a	10	This field displays the number of contracts.
Principal*	8	P	AN	U	ABC343	Principal for new order.
User Reference*	25	P	AN	U	RFW3422	Reference number for new order.
Dealer Code*	4	P	AN	U	ABC	Dealer code for new order
Member Code*	6	P	AN	U	AABB	Member code for new order
Order Sequence*	4	I	N	n/a	5322	Suspended order to be edited.
BDA Account Number	11	P	AN	n/a	ACSD3455	BDA Account Number to be edited
Total Length	91 Bytes					

7.3.8 Edit Active Order By Active Order Sequence Number – Message Type 160

The edit active order by active order sequence number message allows users to edit the details of an existing active order with a single message. The exchange will automatically replace the details of the active order with the details supplied in this message.

Name	Length	Type	Description	Case	Example	Comment
Contract Name*	20	P	AN	n/a	FG625 ALSI	Contract of order to be edited. This must remain the same as the original order.
Buy Or Sell*	1	C	A	U	B, S	This indicates whether the suspended order being edited is a Buy(B) or Sell(S). This must remain the same as the original order.
Order Value*	8	D	N	n/a	19232.00	This indicates the value of the order in Rand terms.
Quantity*	4	I	N	n/a	10	This field displays the number of contracts.
Principal*	7	P	AN	U	ABC343	Principal for new order.
User Reference*	25	P	AN	U	RFW3422	Reference number for new order.

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Name	Length	Type	Description	Case	Example	Comment
Dealer Code*	4	P	AN	U	ABC	Dealer code for order. This must remain the same as the original.
Member Code*	6	P	AN	U	AABB	Member code for the order. This must remain the same as the original order.
Order Sequence*	4	I	N	n/a	5322	Suspended order to be edited.
BDA Account Number	11	P	AN	n/a	ACSD3455	BDA Account Number to be edited

Total Length: 90 Bytes

7.3.9 Edit Active Order By User Reference Number – Message Type 161

The edit active order by user reference number message allows users to edit the details of an existing active order with a single message. The exchange will automatically replace the details of the active order with the details supplied in this message.

Note that the order sequence number is not required in this message, and therefore allows the user to edit the details of an active order without requiring the acknowledgement from the exchange of the active order.

Name	Length	Type	Description	Case	Example	Comment
Contract Name*	20	P	AN	n/a	FG625 ALSI	Contract of order to be edited. This must remain the same as the original order
Buy Or Sell*	1	C	A	U	B, S	This indicates whether the suspended order being edited is a Buy(B) or Sell(S). This must remain the same as the original order.
Order Value*	8	D	N	n/a	19232.00	This indicates the value of the order in Rand terms.
Quantity*	4	I	N	n/a	10	This field displays the number of contracts.
Principal*	7	P	AN	U	ABC343	Principal for new order.
Dealer Code*	4	P	AN	U	ABC	Dealer code for order. This must remain the same as the original.
Member Code*	6	P	AN	U	AABB	Member code for the order. This must remain the same as the original order.
User Reference*	25	P	AN	U	RFW3422	Reference number of the order that the user wants to edit.
BDA Account Number	11	P	AN	n/a	ACSD3455	BDA Account Number to be edited

Total Length: 86 Bytes

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7.3.10 Cancel Order By User Reference Number– Message Type 162

The cancel order by user reference number message allows the user to cancel an active order by sending the user reference number of this order as the index. This allows users to cancel active orders without requiring the acknowledgement from the exchange of the active order.

Name	Length	Type	Description	Case	Example	Comment
Contract Name*	20	P	AN	n/a	FG625 ALSI	Contract of order to be cancelled. This must remain the same as the original order
Buy Or Sell*	1	C	A	U	B, S	This indicates whether the order being cancelled is a Buy(B) or Sell(S). This must remain the same as the original order.
Dealer Code*	4	P	AN	U	ABC	Dealer code for order. This must remain the same as the original.
Member Code*	6	P	AN	U	AABB	Member code for the order. This must remain the same as the original order.
User Reference*	25	P	AN	U	RFW3422	Reference number of the order that the user wants to cancel.

Total Length: 56 Bytes

7.4 Report Only Messages

7.4.1 Split Deal Message – Message Type 22

The Split Deal Message allows a user to allocate a particular portion of a deal to a specified Principal and/or sub account. The User Reference field allows the user to indicate what the user reference the resultant deals should have. It is important to consider the rules regarding Principal / agency deals when allocating a deal. Deal legs with a Principal (P) capacity can be allocated at a different price to the original deal, however, deal legs with an Agency (A) capacity cannot.

It should be noted that the Split Deal Message is used for client or subaccount allocations. The Assign Deal Message is to be used for assigning trades to other members in the market.

Name	Length	Type	Description	Case	Example	Comment
Deal Sequence*	4	I	N	n/a	3633	The deal sequence number to be allocated.
Quantity*	8	I	N	n/a	5	The quantity to be allocated.
Principal*	8	P	AN	U	ABC242	The principal to which the deal is allocated.
Dealer*	4	P	AN	U	ABC	The dealer who has done the allocation.
Price*	8	D	N	n/a	19345.50	The price at which the allocation is done.
Sub account	6	P	AN	U	ABC23	Sub account code to record the allocation with.
User Reference*	25	P	AN	U		Allows for a user reference to be allocated to the allocated deals
Contract Name*	20	P	AN	U	FK503 R153	Name of the contract on the deal which is to be split.

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Name	Length	Type	Description	Case	Example	Comment
Total Length	83 Bytes					

7.4.2 Cumulate Deal Message – Message Type 24

The Cumulate Deal Message allows a user to accumulate deal legs with the same Principal, Contract, Buy Sell, Principal Agency fields. The Cumulate Deal Message allows for up to 100 deals to be accumulated.

Name	Length	Type	Description	Case	Example	Comment
Number Of Orders*	2	I	N	n/a	5	Number of deals to be accumulated.
Contract Name*	20	P	AN	U	FK503 R153	Name of the contract on the deals which will be accumulated.
Deal References To Cumulate*	(100 * 4) 100 sequence numbers of type I 4 long	I	N	n/a	2422, 2522, 2622, 2422, 5255	List of Deal Sequences to be accumulated (Maximum 100)
Total Length	422 Bytes					

7.4.3 Edit Report Only Deal – Message Type 26

- Please see 7.4.4 for the structure of this message. This structure is the same as the unmatched deal structure, with the unmatched sequence being the unmatched deal sequence already booked. The details captured in this message will be used to modify the existing details of the specified unmatched sequence.

7.4.4 Insert Report Only Deal – Message Type 29

The Insert Report Only Deal Message allows a user to capture a Report Only trade onto the market. A few important notes are to be considered with regards to the Counter party field on this message:

- If the counterparty field is a client code. The opposite leg of this transaction will automatically be booked, and matched.
- If the counterparty field is another member code, the opposite leg of this transaction will automatically be booked and sent to the counterparty if the indicator “Single Leg” has been set to false. In this scenario the counterparty will receive a leg which is equal and opposite to that which the user captured, however, the price and rate fields of this leg will be 0. The counterparty will need to edit the unmatched leg (Message Type 26) before the match will take place. This allows the counterparty and user to agree on the price and/or rate of the transaction.

To confirm the entry of the unmatched trade before a match takes place, the Buy Sell field can be sent with a lowercase b or s. This will allow the user to first accept (Message Type 40) the trade, before the match takes place.

The exchange has a limitation on the time in which 2 legs of a reported trade should match. This is usually in the region of 6 minutes.

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Reporting Allocation Corrections

Allocation corrections allow a user to correct the Principal code on a trade when the Principal is a client code. This gives the user the opportunity to book a reported trade to move the trade to the correct client, or back to the member's account without incurring additional booking fees.

To report a trade which is an allocation correction the user must supply the following fields:

a. Assign Sequence – This must be filled with the Deal Sequence number of the trade to be corrected.
b. Reason – This must be filled with the reason code 'L' – Allocation Correction.

This will update the original trade with a deal origin of 'G' – Allocation Error and will capture a new trade with the deal origin of 'I' – Allocation Correction. The Principal supplied should be the client code on the trade which you wish to correct, and the Counterparty supplied should be the client to which the trade should belong to. If you wish to move the trade to the members account, the Principal supplied should be the member's account, and the Counterparty supplied should be the client code which you wish to correct. The remainder of the fields should be captured as normal when reporting a trade to the exchange.

Reporting Equal and Opposite Trades

On the bond market equal and opposite trades can be booked to reverse trades. When booking equal and opposite trades the following fields are required:

1. **Equal and Opposite Trade Leg Number** – This field should be populated with the Trade Leg Number of the trade to be reversed.
2. **First Leg Carry Equal and Opposite Trade Leg Number** – If the trade you are reversing is the second leg of a carry/repo (R2), then this field should be populated with the Trade Leg Number of the first leg of the carry/repo (R1).
3. **Equal and Opposite Settlement Date** – This field should be populated with the settlement date of the trade you are reversing.
4. **Reason** – This field should be populated with 'T' – Cancel Trade to indicate that this trade is an equal and opposite trade.

When reporting an equal and opposite trade, the normal process flow for reported trade applies. The above fields should be populated accordingly. It is important to note that when reporting an equal and opposite trade for a carry/repo, that the R2 leg is reversed first, and then the R1 leg.

Only trades with valid Trade Leg Numbers can be reversed.

Reason usage for Bond Trades

The following reasons should be noted for reporting bond market trades:

1. 'D' – Structure Trade (This indicates a trade which is outside market parameters)
2. 'F' – Free of value (This indicates a trade which is free of value. When handling this reported trade type, the system will zero the consideration field.)
3. 'N' – Normal
4. 'T' – Cancel Trade (This indicates that the trade capture is an equal and opposite trades).

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Reporting Roll Over Trades

If the user would like to report a rollover trade, i.e. a trade which reports a leg on the current expiry, and the opposite leg on a later expiry, the report only trade message can be used for these purposes.

It is important to note the difference between the “Roll Position” and this “Roll Over Trade” functionality. In the “Roll Over Trade” functionality there is no need to specify the link to an existing position. The “Roll Over Trade” functionality works as follows:

1. A report only trade is captured for the current expiry against a selected counterparty. This trade is captured as any other normal report only trade. To indicate that this is a “Roll Over Trade”, the Origin field in the message should be populated with the Origin “R” – Rolling Position.
2. A report only trade is then captured for the later expiry against a selected counterparty. This trade is captured as any other normal report only trade, and the origin should be “8” – Report Only After Roll.
   PLEASE NOTE: This origin must be used to report the forward leg of the roll over. By using this origin, the minimum contract size rule for report only trades will not be applied to this leg. It is also important to note that the Origin “Report Only After Roll” is only for input use. The resulting trade confirmation message will indicate “P” – Report Only.

It is important to note that the Origin “R” – Rolling Position, will only be accepted on the current expiry.

Booking of same day trades

When reporting trades on Spot Bond products, it is important to note the implementation of the Same Day Settlement window. This window provides a time at which same day settlement trades will only be accepted.

Any reporting of trades with a settlement date of today, can only be reported within the start and end time of this window. Any trades reported outside of these times will be rejected when matched. It is important to note that unmatched trade entries can still be reported at any time but cannot be matched until the window is open.

The following should be noted in terms of reporting trades as a Single Leg or Not:

1. Single Leg set to True – The capturing of the initial unmatched trade will be allowed at any time of the day. The capturing of the matching leg will be rejected if it is not within the same day settlement window. This would then require a recapture of the matching leg when the window has opened.
2. Single Leg set to False – The capturing of the initial unmatched trade will be allowed at any time of the day. This will then also automatically create the counterparties leg of the unmatched trade. When the counterparty edits their leg to confirm the price outside of the same day settlement window, the edit transaction will be rejected. This will leave the unmatched trades of both the initiator and counterparty unmatched. The counterparty will then need to edit the unmatched trade again, once the window is open.

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Reporting of Forward Forward contracts

A forward forward transaction is a transaction in which 2 forward forward currency future contracts are reported in 2 report only trades, in order to trade the difference in forward points between 2 expiries. This transaction can be reported using the Insert Report Only Trade message by setting the origin of the message to '7' (Forward Forward). Please note that the contracts which can be used in this type of transaction are Forward Forward Currency Futures.

Name	Length	Type	Description	Case	Example	Comment
Unmatched Sequence Number	4	I	N	n/a	12	Sequence number of the unmatched record. Not used for new entries.
Single Leg	1	B	N	n/a	1 – True 0 – False	If this field is true, the opposite leg will NOT be sent to the counterparty
Status	1	C	A	U	I – Inserted E – Edited D – Deleted	Indicates to the initiator or the counterparty of the trade that this unmatched record has been inserted, edited or deleted by the initiator or counterparty
Is Physically Settled	1	N	N	n/a	1 – True 0 – False	Indicates if this trade is physically settled
Unused	5	B	n/a	n/a		
Enter Time*	4	B	N	n/a	10, 59, 56, 0	The time of entry of unmatched order
User Member*	6	P	AN	n/a	AAAA	Member Code of logged in member
User Dealer*	4	P	A	n/a	XXZ	Dealer Code of logged in dealer.
Clearing Member	6	P	A	n/a	ABZAC	Clearing Member code of the reporting member
Deals Member*	6	P	AN	n/a	AAAA	Member Code of unmatched deal
Deals Dealer*	4	P	A	n/a	XXZ	Dealer Code of unmatched deal.
Deals Principal*	8	P	AN	n/a	AAAA / ABC678	This field displays the code of the Principal to the deal.

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Name	Length	Type	Description	Case	Example	Comment
Buy Or Sell*	1	C	A	n/a	B, S, b, s	Buy/Sell field of the unmatched order. Lower case b and s can be used to mark this unmatched trade as unconfirmed. The Accept (40) message can be used to confirm the unmatched trade.
Unused	1	B	n/a	n/a		
Quantity*	8	I	N	n/a	10	This field displays the number of contracts involved in the trade
Contract*	20	P	AN	n/a	R153 AUG04	Contract for this leg of the trade.
Rate*	8	D	N	n/a	12.00000	Rate at which the report only entry was done. Used for volatility for option contracts or should be set to the same value as price. This field is mandatory when reporting option trades.
User Reference*	25	P	AN	n/a	My Code	User Reference code.
Suffix Code	2	I	A	n/a	1	Suffix of entry.
Portfolio	8	P	AN	n/a		Portfolio code to record the unmatched deal with.
Profit Centre	6	P	AN	n/a		Profit centre code to record the unmatched deal with.
Sub Account	6	P	AN	n/a	ABC01	Sub account code for the deal.
Counter Party*	8	P	AN	n/a	SSQM	This field displays the code of the counterparty to the deal.

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Name	Length	Type	Description	Case	Example	Comment
Assign Sequence	4	I	N	n/a	12	For Assigning deals, this is the sequence number of the deal to be assigned.
Origin	1	C	A	U	A, F etc.	See table in section **6.10**.
Enter Date	2	I	N	n/a	11223	The date which the trade was entered.
Trade Date	2	I	N	n/a	11425	The date which the trade was traded.
Trade Time	4	B	N	n/a	10, 55, 59 ,0	The time the trade was done
Booking Fee Flag	1	C	A	U	'Z' – Zero Fees-	This flag indicates the fee status on the trade. **NOTE**: Only the exchange can set this value.
Reason	10	P	A	U	NR etc,	See table in section **6.11**. This field must be populated with 'T" – Cancel Trade, when capturing an equal and opposite. Note this may include multiple reasons.
Unused	2	B	n/a	n/a		
First Settlement Date	2	I	N	n/a	12546	For bond products indicates the first settlement date of the reported trade.
Deal Price*	8	D	N	n/a	124.001	The Price for this leg of the reported trade. This field is used to capture the premium when reporting an option trade and is always mandatory.
First Consideration	8	D	N	n/a	1254845.36	For bond products is the consideration for the first leg.

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Name	Length	Type	Description	Case	Example	Comment
First Yield	8	D	N	n/a	12	For bond products is the yield for the first leg.
Second Yield	8	D	N	n/a	12.124	For bond carry or repo products is the yield for the second leg.
Second Settlement Date	2	I	N	n/a	12456	For bond carry or repo products is the settlement date for the second leg.
Second Consideration	8	D	N	n/a	1254786.36	For bond carry or repo products is the consideration for the second leg.
Unused	2	B	n/a	n/a		
Equal and Opposite Trade Leg Number	10	P	N	n/a	012345678	Indicates the trade leg number of the trade to be equal and opposite.
First Leg Carry Equal and Opposite Trade Leg Number	10	P	N	n/a	012345678	If the trade you are doing an equal and opposite trade on is the second leg of a carry/repo, this field must be populated with the trade leg number of the first leg.
Equal And Opposite Settlement Date	2	I	N	n/a	12545	Indicates the DOS date of the settlement date on which the equal and opposite trade will settle.
Price Reference	8	D	N	n/a	124.001	This field can be used as a reference field to indicate to the counterparty at what price the unmatched trade was booked against.
Unused	6	B	n/a	n/a		
Future Price*	8	D	N	n/a	23560	The future price used when capturing report

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Name	Length	Type	Description	Case	Example	Comment
						only option trades. This field is mandatory when reporting option trades.
Unused	2	B	n/a	n/a		
Second Leg Price	8	D	N	n/a	125.63	For bond carry or repo products is the price for the second leg.
Unused	3	B	n/a	n/a		
Bond Spread	8	D	N	n/a	0.25	Bond spread from the companion bond.
Position Sequence to Roll Forward	4	I	N	n/a	14	Used for Roll forwards, contains the sequence number of position to roll forward.
Roll Forward Price	8	D	N	n/a	118.2	Price at which the late leg of roll forward must be captured.
Unused	11	B	n/a	n/a		
Companion Bond	5	P	A	U	R201	Name of the companion bond for this report only trade.
Principal Agency*	1	C	A	U	'P' or 'A'	Principal Agency indicator.
BDA Account Number	10	P	AN	n/a	ABCSD12	BDA Account Number to be used for this reported trade.

Total Length: 319 Bytes

7.4.5 Unmatched Deal Delete – Message Type 30

The Unmatched Deal Delete Message allows the user to delete a specified unmatched deal record.

Name	Length	Type	Description	Case	Example	Comment
Unmatched deal Sequence number*	4	I	N	n/a	1000015	Unmatched sequence number of unmatched deal to be deleted.
Contract Name*	20	P	AN	U	FK503 R153	Name of the contract on the unmatched deal to be deleted.

Total Length: 24 Bytes

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7.4.6 Option Exercise – Message Type 31

The Option Exercise Message allows a user to exercise a position in an option contract.

Name	Length	Type	Description	Case	Example	Comment
Closing position*	8	D	N	n/a	-25	The amount of the position to exercise.
Dealer*	4	P	A	U	ABC	Dealer code of logged in user.
User Reference*	25	P	AN	U	A0031311A	Reference Number which will appear in resulting order's reference number field.
Principal*	8	P	AN	U	ABC231	Principal to which the option will be exercised.
Contract Name*	20	P	AN	U	YK503 R153 7.5 C	Name of the contract on the position which will be exercised.
Action*	2	I	A	n/a	0	0 – Exercise

Total Length: 67 Bytes

7.4.7 Option Abandon – Message Type 33

The Option Abandon Message allows a user to abandon a position in an option contract.

Name	Length	Type	Description	Case	Example	Comment
Closing position*	8	D	N	n/a	-25	
Dealer*	4	P	A	U	ABC	Dealer code of logged in user.
User Reference*	25	P	AN	U	A0031311A	Reference Number which will appear in resulting order's reference number field.
Principal*	8	P	AN	U	ABC231	Principal to which the option will be abandoned.
Contract Name*	20	P	AN	U	YK503 R153 7.6 C	Name of the contract on the position to be abandoned.
Action*	2	I	A	n/a	0	2 – Abandon

Total Length: 67 Bytes

7.4.8 Unmatched Deal Accept – Message Type 40

The Unmatched Deal Accept Message allows a user to accept a specified unmatched deal record. A deal must either have a lower case Buy Sell field for it to be accepted. When an unmatched deal is accepted and matches the counterparties leg of the unmatched deal, the unmatched deal will be deleted, and the relevant deal, completed order and position updates will be received. If the unmatched has not been matched, only an update will be received.

Name	Length	Type	Description	Case	Example	Comment
Unmatched deal Sequence number*	4	I	N	n/a	1000015	Unmatched deal sequence number of unmatched deal to be accepted
Contract Name*	20	P	AN	U	FK503 R153	Name of the contract on the unmatched deal to be accepted.

Total Length: 24 Bytes

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7.4.9 Tri-part Deal Entry – Message Type 62

Please refer to **7.4.4** for the message structure.

The purpose of this message is to allocate a deal to a client of another member. The unmatched message structure filled for this operation should be filled with the following specific information:

- Assign Sequence – This should be the Deal Sequence number of the deal which is to be allocated.
- Counterparty – This field should be filled with the client code of the other member to which the deal specified in the Assign Sequence is to be allocated to.

The unmatched message structure should therefore be filled with the information of the selected deal, specified by the deal sequence. The price and rate field allow the user to allocate the deal at a defined price and/or rate. The message also allows for the user to specify a new reference number for the resultant trade legs.

The deal specified in the Assign Sequence will be updated with an Origin of Tripartite Send. Once the counterparty's member accepts the trade, new trade legs will be booked with Origin Tripartite Send.

7.4.10 Assign Deal – Message Type 64

Please refer to **7.4.4** for the message structure.

The Assign Sequence of this structure must be filled with the Deal Sequence of the deal which the user wants to assign.

The purpose of this message is to assign a deal leg to another member. The unmatched message structure filled for this operation should be filled with the following specific information:

- Assign Sequence – This should be the Deal Sequence number of the deal which is to be assigned.
- Counterparty – This should be filled with the Member Code of the counterparty to which the deal will be assigned to.

The unmatched message structure should therefore be filled with the information of the selected deal, specified by the deal sequence. The price and rate field allow the user to assign the deal at a defined price and/or rate.

The deal specified in the Assign Sequence will be updated with an Origin of Assign Send. Once the counterparty accepts the trade, new trade legs will be booked with Origin Assign Send. The message also allows for the user to specify a new reference number for the resultant trade legs.

7.4.11 Position Roll Forward – Message Type 115

Please refer to **7.4.4** for the message structure.

The Position Sequence to Roll Forward of this structure must be filled with the Position Sequence of the position the user wants to roll forward. The Deal Price field of this structure must be filled with the price the user wants to close the current position at, and the Roll Forward Price field of this structure must be filled with the price the user wants to open the next position on. The Contract field of this structure must be filled with the Contract the user wants to open the next position on, (or Roll the position to).

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The unmatched message should be filled with the following specific information other than that specified above:

- Quantity – The amount of the current position which should be rolled to the later expiry.
- Buy or Sell – The action to be performed on the current expiry. To roll a negative (short) current position. The buy or sell field should be filled with a B (Buy). This will indicate your intention to buy some of your short position and sell into the later expiry.
- Counterparty – This should be a member or client in the market which has indicated the intention to be the counterparty to this transaction.

The trades captured to close the current position on the existing expiry will be marked with the Origin “Rolling forward position”. The trades captured to open the position on the later expiry will be market with the Origin “Report Only”.

7.4.12 Reject Unmatched – Message Type 155

This message allows users to indicate to the counterparty of the unmatched trade as to the reason why the user is not willing to accept this unmatched trade captured against them. The user will specify the unmatched record sequence number which they are not happy with, and a reason as to why. In response the counterparty will receive an Announcement message indicating that the unmatched trade that they captured is not acceptable to the counterparty.

Name	Length	Type	Description	Case	Example	Comment
Unmatched deal Sequence number*	4	I	N	n/a	1000015	Unmatched deal sequence number of unmatched deal to be rejected.
Reason	200	P	AN	n/a	Yield is incorrect	Allows user to specify the reason why this unmatched trade cannot be accepted.
Contract Name*	20	P	AN	U	FK503 R153	Name of the contract on the unmatched deal to be rejected.

Total Length: 224 Bytes

7.4.13 Multi-Report-Only (Cross-currency split trades) – Message Type 134

Effecting a cross-currency split trade

A cross-currency split trade is effected by populating the details of the two legs of the split trade into a multi-report-only message (see structure definition below). The first deal’s details is populated into a structure of message type 29 (see section **7.4.4**), with the deal origin field populated as “Cross-currency Split” (‘9’).

The specifics of the second deal are populated into the Additional Report-Only structure (see structure definition below) :

1. The contract name
2. The buy-sell field
3. The Price
4. The Quantity
5. The origin set to “Cross-currency Split” (‘9’)
6. The user reference number.

On the multi-report-only structure, set the number of deals field to 2.
The populated multi-report-only structure, submitted as a message of type 134, will submit the cross-currency split trade.

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Message structures

Multi-Report-only structure

The Multi-Report-Only message allows multiple report-only trades to be booked in a single message. Please note that the only deal origin (section 6.10) supported is “Cross-currency Split”. The multi-report-only message consists of the following structures:

Name	Length	Type	Description	Case	Example	Comment
Number of Deals	4	I	N	n/a	1	Number of deals in the message*
First Deal	295	Report-Only	AN	U		A message of type Message 29.
Other Report-Only	62 * 10	Additional Report-Only	AN	U		List of Additional Report Only structures.

Total Length: 919 Bytes

* Valid numbers are 1 through 11.

Additional Report-Only structure

Name	Length	Type	Description	Case	Example	Comment
Contract	20	P	N	n/a	FGC19 ZAAD	Name of the contract on which this deal is booked.
Buy Or Sell	1	C	A	n/a	B, S, b, s	Buy/Sell field of the unmatched order. Lower case b and s can be used to mark this unmatched trade as unconfirmed. The Accept (40) message can be used to confirm the unmatched trade.
Deal Price	8	D	N	n/a	124.001	The Price for this leg of the reported trade. This field is used to capture the premium when reporting an option trade and is always mandatory.
Quantity	4	I	N	n/a	10	This field displays the number of contracts involved in the trade.
Origin*	1	C	A	U	A, F etc.	See table in section **6.10**.
Yield	8	D	N	n/a	124.001	The yield value for this trade – reserved for future use.
Settlement Date	2	I	N	n/a	11425	The settlement date for this trade – reserved for future use.
Consideration	8	D	N	n/a	124.001	The Consideration value for this trade – reserved for future use.
User Reference*	25	P	AN	n/a	My Code	User Reference code

Total Length: 77 Bytes

* Only valid origin currently supported is “Cross-currency Split”.

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7.5 Entity Administration Messages

7.5.1 Change Member Message Subscription – Message Type 7

Please see Section 4.12 for details on the rules for using this message type.

The Change Member Message Subscription allows the user to control access to the system for a particular dealer. Only dealers with Master Dealer privileges will be able to set the subscription of other dealers in the member firm.

Name	Length	Type	Description	Case	Example	Comment
Message Subscription Sequence	4	I	N	n/a	0	Not used for input purposes.
Member Code*	6	P	AN	U	AAAA	Member code of logged in user.
Dealer Code*	4	P	AN	U	ABC	Dealer code of logged in user.
Message Number*	4	I	N	n/a	56	The message number sent by user
Is Subscribing*	1	B	N	n/a	1 – True 0 – False	Indicates if this user is able or unable to send this message type.
Is Allowed to Change*	1	B	N	n/a	1 – True 0 – False	Indicates if this user is able or unable to change the subscribing field.
Effective Group*	1	B	N	n/a	1 – True 0 – False	

Total Length: 21 Bytes

7.5.2 Change Member Limits – Message Type 6

Please see section **4.12** for details on the rules for using this message type.

The Change Member Limits Message allows users to edit the limits used for trading. Only dealers with Master Dealer privileges will be able to set the subscription of other dealers in the member firm.

PLEASE NOTE: If a blanket limit for a particular instrument type is submitted, any previous instrument specific limits will be removed from the exchange and replaced with an entry for the instrument type. When this occurs, the user is required to reconcile their limits with the exchange. To do this, please submit a File Download Request (Message Type 36) for type 24 (Dealer Risk Value Limits).

Name	Length	Type	Description	Case	Example	Comment
Sequence number of Risk value limits	4	I	N	n/a	12	Sequence number of Risk value limits.
Member Code*	6	P	AN	U	AAAA	Member code of logged in user.
Dealer Code*	4	P	A	U	ABC	Dealer code of logged in user.
Instrument Type Code*	10	P	A	n/a	“AGRIF”	The instrument type to which this limit applies.

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Name	Length	Type	Description	Case	Example	Comment
Instrument Short Name	5	P	A	n/a	“WMAZ”	The instrument name to which this limit applies. This can be used to specify a specific limit on a particular instrument.
Limits On-Screen*	8	D	N	n/a	32.00	Limit for on screen transactions.
Limits Options*	8	D	N	n/a	15.00	Limit for option transactions both on screen and off screen.
Limits Report Only*	8	D	N	n/a	74.00	Limit for Report Only transactions.
Total Length	53 Bytes					

7.5.3 Create Client Message – Message Type 102

The Create Client Message allows a user to create client accounts or client sub accounts. To create a client sub account, the Master Client’s sequence number is filled into the Master Client Sequence field of this structure. This message can also be used to update the details of an existing client. To update a client, the Client Sequence Number is filled in with the particular client, and the Is An Update field set to true (1).

NOTE: In order to load a client for spot bond trading, a STRATE Client Code is required to be entered. This STRATE code must be a registered client code at STRATE. The exchange system will attempt to load a client with the same JSE Code, but if this client code is already reserved on the system, a new client code will be generated on your behalf. The new client code will therefore have a Client Code with a unique value, and STRATE Client Code populated with the client code entered.

Name	Length	Type	Description	Case	Example	Comment
Client Sequence	4	I	N	n/a	2422	For Updates the sequence number of the client is required
Master Client Sequence	4	I	N	n/a	6223	If this client is a sub account for another client, that client’s sequence number is required.
Member Sequence*	4	I	N	n/a	267	The sequence number of the member.
Member Code*	6	P	AN	U	ABMN	The member code of the member to which this client is registered.
Foreign Client*	1	B	N	n/a	1 – True 0 – False	Indicates if this is a foreign client or not.
Client Code	7	P	AN	U	ABC123	Client code for updates to client details. Not used for new client.
Unused	8	B	n/a	n/a		
ID Number*	15	P	AN	n/a	5504122775089	The ID Number of the client, if this client is an individual.

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Name	Length	Type	Description	Case	Example	Comment
Passport Number	15	P	AN	n/a	1441267	Passport Number for foreign client
VAT Registration Number	51	P	AN	n/a	23-555531-232	VAT Registration number for non-individuals, example companies.
Client Name*	51	P	AN	n/a	Joe Soap	Name of client.
Client Second Name	53	P	AN	n/a	Private Investment Services	Second name of client.
Postal Address Postal Code*	11	P	AN	n/a	2411	Postal Code of the address supplied for postal address.
Physical Address Postal Code*	11	P	AN	n/a	4162	Postal Code of the address supplied for physical address.
Telephone Number*	25	P	AN	n/a	(011)222-3341	Telephone number at which the client can be contacted.
Alternate Telephone Number	25	P	AN	n/a	(011)335-6331	An alternate telephone number at which the client can be contacted.
Fax Number	25	P	AN	n/a	(011)452-2221	Fax number at which the client can be contacted.
Physical Address*	51	P	AN	n/a	4 Exchange Square	First line of physical address.
Physical Address Line 2	51	P	AN	n/a	Gwen Lane	Second line of physical address.
Physical Address Suburb	21	P	AN	n/a	Sandton	Suburb of physical address.
Physical Address City*	31	P	AN	n/a	Johannesburg	City of physical address.
Postal Address*	51	P	AN	n/a	4 Exchange Square	First line of postal address.
Postal Address Line 2	51	P	AN	n/a	Gwen Lane	Second line of postal address.
Postal Address Suburb	21	P	AN	n/a	Sandton	Suburb of postal address.
Postal Address City*	31	P	AN	n/a	Johannesburg	City of postal address.
Email Address*	51	P	AN	n/a	joesoap@jse.com	Email address where client can be contacted.
Compliance Officer Name	51	P	AN	n/a	Joe Soap	Name of the compliance officer for the member firm.
Discretionary Managed	1	B	N	n/a	1 – True 0 – False	Indicates if this client is discretionarily managed or not.
Date Of Birth*	3*4	I	N	n/a	2006,8,24	Date of birth in format: YYYY, MM, DD

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Name	Length	Type	Description	Case	Example	Comment
Client's Bank Account Number	19	P	AN	n/a	241122	Bank account number for client.
Multiplication Factor	4	I	N	n/a	100	Multiplication factor for foreign clients.
Swift Code	13	P	AN	n/a	2411-23	Swift code used by client. BIC Code.
Registration Number	21	P	AN	n/a	34223-443	Registration number for non-individuals e.g. CCs
Income TAX Number	21	P	AN	n/a	42551-533	Income tax number of client.
Is an Update*	1	B	N	n/a	1 – True 0 – False	Indicates if this record is an update, or not.
Is an Individual*	1	B	N	n/a	1 – True 0 – False	Indicates if this client is an individual or not.
Electronic Account Number	30	P	AN	n/a	4224666	Electronic account number used on delivery notice system for agricultural deliveries.
Is Electronic	1	B	N	n/a	1 – True 0 – False	Indicates if this client can receive electronic delivery notices or not.
Proof of Residence Supplied*	1	B	N	n/a	1 – True 0 – False	Indicates if proof of residence has been supplied by client, or not.
Proof of Registration Supplied*	1	B	N	n/a	1 – True 0 – False	Indicates if proof of registration has been supplied by client.
Unused	24	B	n/a	n/a		
Is Staff Account*	1	B	N	n/a	1 – True 0 – False	Indicates true or false if this client is a staff account.
STRATE Client code	9	P	AN	U	ABC123	The client code of the client at STRATE.
Settlement Agent STRATE Code	9	P	AN	U	SETT	The STRATE code of the settlement agent to which the client belongs.
Funds Account Number	19	P	AN	n/a	AABB-223	The account number at STRATE which will be used for this client.
Scrip Account Number	19	P	AN	n/a	BBTT-2233	The account number at STRATE which will be used for this client.
Funds Account Branch Code	9	P	AN	n/a	AA444	The branch code applicable to the Funds Account Number.

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Name	Length	Type	Description	Case	Example	Comment
Scrip Account Branch Code	9	P	AN	n/a	22332	The branch code applicable to the Scrip Account Number.
Client Type	3	P	AN	n/a	MM – Member Managed MS – Member Settled GP – General Purpose	The client type must be one of the 3 options mentioned.
Industry Code	11	P	AN	n/a	RETAIL	Please use one of the Industry Codes specified in the Industry Data Download
Trading Role	3	P	AN	n/a	PT	The trading role code as specified by STRATE.
Can Trade Derivatives	1	B	n/a	n/a	1 – true 0 – false	Not used for input purposes.
Is Existing at STRATE	1	B	n/a	n/a	1 – true 0 – false	Indicates if this client loading transaction is for a new STRATE client, or for an existing STRATE client.
Is a Spot Bond Client	1	B	n/a	n/a	1 – true 0 – false	Indicates if this client will be trading on the Spot Bond Market Client.
BDA Account Number	11	P	AN	n/a	ABC-123	BDA Account Number for this client.
Is Professional Client	1	B	N	n/a	1 – True 0 – False	Indicates if this client is a professional bond client or not.
Is Shariah	1	B	N	n/a	1 – True 0 – False	Indicates if this client can trade Shariah products.
Total Length	984 Bytes					

7.5.4 Client Verification Message – Message Type 124

The Client Verification message is reserved for Master Dealers and allows users to verify the details loaded. Upon verification, the client account can be used for trading. This message can also be used to un-verify a client account by setting the Client Status field to false (0).

Name	Length	Type	Description	Case	Example	Comment
Client Sequence No*	4	I	AN	n/a	5533	Sequence number of the client record in the exchange data set.
Client Principal*	8	P	A	U	ABC123	Client Code
Client Status*	1	B	N	n/a	1 – True 0 – False	Change client status from TRUE to FALSE or vice versa.

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Name	Length	Type	Description	Case	Example	Comment
Client Status at STRATE*	1	B	N	n/a	1 – True 0 – False	Change client status at Strate from TRUE to FALSE or vice versa, to allow/restrict access to Bond Products.
Member Code*	6	P	A	n/a	AAAA	Indicates the member code to which the client belongs to.

Total Length: 20 Bytes

7.6 Physical Delivery/Silo Certificate Messages (Agricultural Market Only)

7.6.1 Add Silo Certificate – Message Type 129

The Add Silo Certificate Message allows users to load new Silo Certificates.

Name	Length	Type	Description	Case	Example	Comment
Sequence of Silo Certificate	4	I	N	n/a	0	When adding a new silo certificate this should be zero.
Certificate number*	4	I	N	n/a	12348	Silo Certificate number
Silo Owner Sequence*	4	I	N	n/a	123457	Silo Certificate owner sequence.
Silo Location Sequence*	4	I	N	n/a	54546	Silo Certificate location sequence.
Unused	4	B	n/a	n/a		
Instrument Sequence*	4	I	N	n/a	4564	Instrument table sequence of this certificate.
Grade Sequence*	4	I	N	n/a	544546	Grade sequence number
Origin Sequence*	4	I	N	n/a	1346	Sequence of Origin
Member Sequence*	4	I	N	n/a	64	Sequence number of certificate member from member data.
Unused	4	B	n/a	n/a		
Status*	1	C	N	U	N – Not Verified	Status of certificate. Should be marked U on initial entry.
Quantity*	4	I	N	n/a	45	Quantity on certificate
Storages Paid Date*	3*4	I	N	n/a	2006, 7, 23	The Date up until which storage has been paid.
Electronic paper*	1	B	N	n/a	1 – True 0 – False	Is the certificate paper based.
Issued Date*	3*4	I	N	n/a	2006, 5,18	Date on which the certificate was issued.
Original Depositor	50	P	AN	n/a		Name or original depositor

Total Length: 120 Bytes

7.6.2 Edit Silo Certificate – Message Type 131

Please see **7.6.1** for the message structure.

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7.6.3 Add new Physical Delivery – Message Type 128

Name	Length	Type	Description	Case	Example	Comment
Sequence of Physical Delivery	4	I	N	n/a	5353	Not used for new physical delivery.
Member Sequence*	4	I	N	n/a	434	Sequence Number of the member to which the position belongs.
Client Sequence	4	I	N	n/a	1242	Sequence number of the client for which the position belongs, 0 if no client account.
Contract Date Sequence*	4	I	N	n/a	53	Sequence number of the contract date of the position.
Silo Certificate Sequences*	100 * 4	I	N	n/a	12, 13, 14	Array of up to 100 silo certificates which are attached to this delivery notice.
Delivery Date*	3*4	I	N	n/a	2007, 6, 23	Date of the delivery.
Notice Date*	3*4	I	N	n/a	2007, 6, 24	Notice date given for the delivery.
Nominal*	4	I	N	n/a	1000	Total amount of the underlying commodity delivered.
Quantity*	4	I	N	n/a	10	Quantity from position which is being delivered.
Delivery Notice Reference Number*	20	P	AN	U	UPDS232S	Delivery notice reference number for this delivery notice.

Total Length: 468 Bytes

7.6.4 Allocation of Delivery – Message Type 137

This message needs to be used after adding a new delivery notice (Message Type 128). The purpose of this message is to identify what the make up of the delivery notice entails regarding the positions that make up the position delivered. This allows the user to define if the position delivered is made up of underlying sub account positions, or branch member positions. Multiple messages can be sent for a single delivery notice using the Delivery Notice Sequence Number.

Name	Length	Type	Description	Case	Example	Comment
Delivery Notice Sequence Number*	4	I	N	n/a	5353	The Delivery Notice Sequence Number of the delivery notice.
Member Sequence*	4	I	N	n/a	434	The Member Sequence of the member which holds the position. This can be set to the Branch Member Sequence number if the position is on the branch member account.
Client Sequence	4	I	N	n/a	1242	The Client Sequence of the client which holds the position. This can be set to 0, if not applicable.

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Name	Length	Type	Description	Case	Example	Comment
Position Quantity*	4	I	N	n/a	53	The quantity of the position allocated to this Principal on the delivery notice.
Sub Account	6	P	AN	U	12, 13, 14	The sub account which holds the position. This can be set to empty, if not applicable.

Total Length: 22 Bytes

7.6.5 Delete Silo Certificate – Message Type 136

Please see **7.6.1** for the layout of this message. The certificate number field must be that of the certificate you want to delete.

7.6.6 Verify Silo Certificate – Message Type 129

Please see **7.6.1** for the layout of this message. Note that the same message is sent for the verification of a silo certificate, as that for a new silo certificate. To verify a silo certificate, the details of the certificate which you would like to verify must be sent in this message with a status field of 'V'. This will indicate your intention to verify the details of the certificate.

7.7 Request Data Retrieval – Message Type 36

The Request Data Retrieval Message allows users to request data from the system. The Data Type field indicates what type of data should be returned. It is important to note that 256 must be added to the specific Data Type in order for the data to be returned. To download a specific record within a data set, the Specific Record field is filled with the sequence number of the record required. The Download Date field allows the user to request data for a specified date. This date can only be set to today or the previous business day. If no data is available for the request, and empty data set will be returned.

Name	Length	Type	Description	Case	Example	Comment
Data Type*	2	I	N	n/a	5+256 (261, orders)	261 is equivalent to an Orders data download
Last Piece of Chunk	1	B	N	n/a	1	Not used for request
Re-request	1	B	N	n/a	True or false	Indicates if this is a re-request for data
Action	4	I	N	n/a		Not used for request
Specific Record	4	I	N	n/a	4664	Allows to download a specific record sequence number and onwards
Download Date*	2	I	N	n/a	12743	Dos Date of days records which must be downloaded

Total Length: 14 Bytes

The following table contains possible data types:
Table 4.1

Name	Data Type number	Historical Data retrieval
Market Display Data	1	No
Instruments data	2	No
Contract Dates	3	No

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Name	Data Type number	Historical Data retrieval
Strike Data	4	No
Active Orders Data	5	Yes
Completed Orders	7	Yes
Deal Data	8	Yes
Positions data	9	Yes
Unmatched deal data	10	Yes
Client data	12	No
RFQ data	13	No
Dealer data	14	No
Member data	15	No
MTM data	16	Yes
Holiday	18	No
Skew	19	Yes
Dealer Risk Value Limits	24	No
Daily Rates	25	Yes
Equity Instruments available	29	No
ATS Message Types	38	No
Tripartite data	61	No
Custom Future data	63	No
Trace Deal data	64	Yes
Clearing Member data	65	No
Client Detail	66	No
Message Subscription data	67	No
Delivery Notices	68	Yes
Silo Certificates	69	Yes
Daily Account Summary	70	Yes
Silo location	71	No
Silo Owner	72	No
Physical grades	73	No
Certificate Physical Origins	75	No
Group definitions	78	No
Fee data	79	No
Fee Scale data	80	No
Fee Calculation data	81	No
Transfer Client	82	No
Transfer Client member data	83	No
Transfer member	84	No
Transfer member Clearing member	85	No
Allocation Notices Report	86	Yes
Delivery Notices Report	87	Yes
Exchange Announcements	89	Yes
Delivery No Physical (Exchange for physical)	90	Yes
Delivery Allocations	91	Yes
CPI Index	23	No
Industry Codes	59	No

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Name	Data Type number	Historical Data retrieval
GOVI Index Parameters	96	Yes
Margin Parameters	97	Yes
Zero Curve	98	Yes
JNote Curve	57	Yes
Early Valuations Data	100	Yes
Client Margin Multiplier Data	102	No
Days History	103	Yes
Options Concentration Risk	107	Yes
Incoming Unmatched	108	No
RFQ Quote Data	110	No
Swap Detail	137	Yes

7.8 Request Daily Trend – Message Type 61

The Request Daily Trend message allows a user to request the on-screen trade history for a contract for the current trading session.

Name	Length	Type	Description	Case	Example	Comment
Contract Name	20	P	AN	n/a	GG923 R153	Contract Name for history request.

Total Length: 20 Bytes

7.9 Heart Beats – Message Type 84

This message contains only a header with message type 84. This message must be sent to the system to inform the system of the users open connection. This will allow the system to verify that the user is still connected and has not lost connection to the system.

7.10 Guarantee Trade – Message Type 141

This message allows clearing member users to guaranteed previously un-guaranteed reported trades booked by their members.

Name	Length	Type	Description	Case	Example	Comment
Unsettled Order Sequence	4	I	N	n/a	2523	Unsettled order sequence to change guarantee status of.
Guarantee	1	B	N	n/a	0 – Un-guarantee 1 – Guarantee	Indicates if the traded should be guaranteed or un-guaranteed
Contract Name*	20	P	AN	U	GK503 R153	Name of the contract on the unsettled order to be guaranteed.

Total Length: 25 Bytes

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7.11 RFQ

The RFQ process currently supports the request for quote for Banks for currency any day contracts. The RFQ process allows users to request a quote for a spread between 2 currency forward forward expiries given a spot price and forward points for the first leg. Users can also submit quotes against an RFQ by supplying a spread points value and a buy/sell indicator.

7.11.1 Capture RFQ – Message Type 173

This message allows user to capture an RFQ to a particular audience.

Users sending this message supply an identifier prefix of F, an instrument short name, and the early and late expiry and settlement dates of an existing any day currency contract for which they would like to request a quote for.

They then supply the early leg price, and the forward points that were used from spot. Quotes would then be received for the spread points from the early expiry date to the late expiry date.

The counterparty for this RFQ must be sent to a group of members identified by the Counter Party Category field in the members download. Only those members can then quote against this RFQ.

Name	Length	Type	Description	Case	Example	Comment
RFQ Sequence	4	I	N	n/a	5	Indicates the sequence number for this RFQ record. Unused for new RFQ captures. Contains the existing RFQ sequence for editing and deleting.
Initiating Member Code	5	P	AN	U	AAAA	Indicates the member code for the initiating member. Will return a blank string when this member is not the same as the user.
Initiating Dealer Code	4	P	A	U	AAA	Indicates the dealer code for the initiating member. Will return a blank string when this member is not the same as the user.
Initiating Principal	7	P	A	U	ABC123	Indicates the Principal on the RFQ.
Identifier Prefix	1	C	A	U	F – Future	Indicates the instrument type of the instrument being quoted. F (Future is currently the only instrument type supported.)
Instrument Short Name	5	P	AN	U	DAUS	Indicates the instrument name of the instrument being quoted.
Quantity	8	I	N	n/a	1000	Indicates the number of contracts being quoted.
Forward Points	8	D	N	n/a	500	Indicates the number of forward points that was added to spot to get the quote price for the early leg of the RFQ.
Early Leg Price	8	D	N	n/a	9.278	Indicates the early leg price for the RFQ.
Early Leg Expiry Date	4 * 3	I	N	n/a	2013, 5, 10	Indicates the expiry date of the early leg of the RFQ.

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Name	Length	Type	Description	Case	Example	Comment
Early Leg Settlement Date	4 * 3	I	N	n/a	2013, 5, 12	Indicates the settlement date of the early leg of the RFQ.
Late Expiry Date	4 * 3	I	N	n/a	2013, 7, 10	Indicates the expiry date of the late leg of the RFQ.
Late Settlement Date	4 * 3	I	N	n/a	2013, 7, 12	Indicates the settlement date of the late leg of the RFQ.
Call Put	1	C	A	U	C or P	Indicates the call or put for an option.
Is Delta Option	1	B	N	n/a	1 – True 0 – False	Indicates if the option is a delta option.
Strike	8	D	N	n/a	12.25	Indicates the strike for the option.
Future Price	8	D	N	n/a	12.5	Indicates the future price use for the option.
Timeout	4	I	N	n/a	120	Number of seconds that the RFQ is valid for.
Capture Time	4	C	N	n/a	10, 5, 21, 0	Indicates the time that the RFQ was captured at.
Counterparty Category	56	P	AN	n/a	Bank	Indicates the counterparty category that the RFQ was captured for. This maps to the member download.
Status	1	C	A	U	I – Inserted, E – Edited, T – Timed out, D – Deleted, M – Matched	Indicates the current status.
Reference Number	25	P	AN	n/a	00000001	Indicates the user reference for this RFQ.
Client Name	53	P	AN	n/a	Client Name	Indicates the name of the client.
Is Physical Settled	1	B	N	n/a	1 – True 0 – False	Indicates if this RFQ is physically settled.
Request Type	1	C	A	U	B – Buy S – Sell D – Double	Indicates what responses are accepted on the RFQ.
Is All or Nothing	1	B	N	n/a	1 – True 0 – False	Indicates if this RFQ is for all or nothing quotes.

Total Length: 262 Bytes

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7.11.2 Edit RFQ – Message Type 174

This message uses the same layout as the Capture RFQ (**7.11.1**) message.

Users should complete the RFQ sequence number of the record they would like to edit. Please note, that any timeout value set on the edit message, will restart the timeout period from the time the edit message was processed.

7.11.3 Delete RFQ – Message Type 175

This message uses the same layout as the Capture RFQ (**7.11.1**) message.

Only the RFQ sequence and the Initiating Member Code fields need to be completed when sending in a delete RFQ message.

7.11.4 Capture Quote against an RFQ – Message Type 176

The Capture Quote against an RFQ message allows users to submit a quote against an RFQ. This message allows users to submit a spread points value and a buy/sell indicator for the quote. If this quote is accepted, trade legs would be booked against the early leg price from the RFQ, and a late leg price calculated by adding the spread points.

Name	Length	Type	Description	Case	Example	Comment
RFQ Sequence	4	I	N	n/a	5	Indicates the sequence number that this RFQ Quote is associated with. This is left 0 for new quote records or filled with a number when editing or deleting a quote.
RFQ Quote Sequence	4	I	N	n/a	5	Indicates the sequence number for this RFQ Quote record.
Quoting Member Code	5	P	AN	U	AAAA	Indicates the member code for the quoting member. Will return a blank string when this member is not the same as the user.
Quoting Dealer Code	4	P	A	U	AAA	Indicates the dealer code for the quoting member. Will return a blank string when this member is not the same as the user.
Quoting Principal	8	P	A	U	ABC123	Indicates the Principal of the quote.
Identifier Prefix	1	C	A	U	F – Future	Indicates the instrument type of the instrument being quoted. F (Future is currently the only instrument type supported.)
Instrument Short Name	5	P	AN	U	DAUS	Indicates the instrument name of the instrument being quoted.
Quantity	8	I	N	n/a	1000	Indicates the number of contracts being quoted.
Spread Points	8	D	N	n/a	500	Indicates the number of spread points for this quote.
Unused	8	B	n/a	n/a		
Buy Sell	1	C	A	U	B – Buy, S – Sell	Indicates if this is a quote to buy or sell at the given spread points.

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Name	Length	Type	Description	Case	Example	Comment
Timeout	4	I	N	n/a	120	Number of seconds that the quote is valid for.
Capture Time	4	C	N	n/a	10, 5, 21, 0	Indicates the time that the quote was captured at.
Status	1	C	A	U	I – Inserted, E – Edited, T – Timed out, D – Deleted, M – Matched	Indicates the current status.
Future Price	8	D	N	n/a	12.25	Indicates the future price of the option quote.
Client Name	53	P	A	n/a	Client Name	Indicates the name of the client on the quote.
Swap Rate	8	D	N	n/a	12.25	Indicates the swap rate used for the quote.

Total Length: 126 Bytes

7.11.5 Edit Quote against an RFQ – Message Type 177

This message uses the same layout as the Capture Quote against an RFQ message.

Users must supply an RFQ Quote sequence of the quote they would like to edit.

7.11.6 Delete Quote against an RFQ – Message Type 178

This message uses the same layout as the Capture Quote against an RFQ message.

Only the RFQ Quote sequence and the Quoting Member Code fields need to be completed when sending in a delete RFQ Quote message.

7.11.7 Accepting a Quote for an RFQ – Message Type 179

This message allows the initiating member of the RFQ to accept a quote which was submitted against this RFQ.

Name	Length	Type	Description	Case	Example	Comment
Instrument Short Name	5	P	AN	n/a	DAUS	Indicates the instrument short name for this RFQ.
RFQ sequence	4	I	N	n/a	100	Indicates the RFQ which is being accepted.
RFQ Quote Sequence	4	I	N	n/a	1	Indicates the RFQ quote which was successfully accepted.

Total Length: 13 Bytes

Docusign Envelope ID: CF6858C9-4901-4F7C-A4B1-C0F3ED83273A

7.12 Classic Repo Messages

In a Classic Repo, one party sells an asset (usually fixed-income securities) to another party at one price and commits to repurchase the same or another part of the same asset from the second party at a different price, at a future date, or (in the case of an open Repo) on demand.

Classic repos provide the ability to easily manage repurchase agreement trades through the creation of the master repo and repo collateral records.

Classic repos introduce the ability to configure a floating rate repo through a repo rate type field in the initiation and management messages – these repo rates can be downloaded using the **Repo Rate – Number 147** file download request.

The behaviour of the repo can be extended in multiple ways to include evergreen, collateral swap, and open ended or closed functionalities.

- **Is Open Ended** – Configures the repo to be created without the R2 leg of the repo, this allows the repo to be closed at any time. Open-ended repos do not have a defined closing date. Open-ended repos with floating rates will have the rate fixed during the settlement period of R2 – this will be reflected in the Repo Rate field of the Master Repo record.

- **Is Evergreen** – Configures the repo to require a notice period when requesting to close the repo, this field can only be set if “Is Open Ended” is true. Setting “Is Evergreen” to true allows you to set the “Notice Period Days” field, which enforces the effective date of any “Close Repo” request on this repo to be greater than or equal to T + Notice Period Days.

- **Is Collateral Swap** – Configures the repo to be settled against another instrument.

This allows a repo to have any of the following configurations:

Repo Type	Configuration
Classic	Closed
	Closed + Collateral Swap
	Open-ended
	Open-ended + Evergreen

Trades generated for repos where the R2 leg cannot be calculated (open-ended and floating closed repos) will have a new exchange reference for the R1 and R2 legs. Fixed closed repos will have 4 trade legs with the same exchange reference.

All initiation and management messages must be accepted by the counterparty before the request takes effect. Both parties are able to make changes while the repo is in the “acceptance” phase, however both parties must agree before the repo becomes active.

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7.12.1 Initiate Repo – Message Type 180

This message is sent to initiate new classic repo.

The “Repo Rate Type” value can be set to the desired floating rate, an additional spread can be configured by setting the “Spread” value. The “Repo Rate Type” can be set to Fixed if a fixed repo rate is more desirable than the floating options. You can reset the fixed repo rate or change the spread later by making use of the “Edit Repo” message.

It must be noted that when placing a “Collateral Swap” repo, the “Repo Rate Type” and “Repo Rate” must be set for the “Contract”; and the “Swap Repo Rate Type” and “Swap Repo Rate” must be set for the “Swap Contract”.

The “Repo Rate Type” and “Swap Repo Rate Type” must be the same when initiating collateral swap repos. The collateral swap spread will then be calculated as the difference between the repo rate and the swap repo rate. The initiation legs settle Free of Value (FoV) whereas the terminating legs will settle Delivery vs Payment (DvP).

Name	Length	Type	Description	Case	Example	Comment
Buy Sell	1	C	A	U	B or S	This indicates whether the repo being initiated is a Buy(B) or Sell(S).
Nominal	8	I	N	n/a	100	The amount of the underlying bond being traded.
Yield	8	D	N	n/a	12.3	The yield at which the repo is executed.
Swap Yield	8	D	N	n/a	8.4	The yield at which the swap repo is executed. Required when: • IsCollateralSwap = true.
Consideration	8	D	N	n/a	12.3	The consideration at which the repo is executed.
Swap Consideration	8	D	N	n/a	8.4	The consideration at which the swap repo is executed. Required when: IsCollateralSwap = true.
Repo Rate Type	1	C	A	U	F	Identifies the repo rate type of the repo. See repo rate types (**9.70 Repo Rate – Number** 147) for more detail.
Repo Rate	8	D	N	n/a	12.3	The repo rate for fixed repos. Required when: • RepoRateType = ‘F’ (Fixed)

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Name	Length	Type	Description	Case	Example	Comment
Spread	8	D	N	n/a	0.2	The repo rate spread applied to the repo rate. Required when: • RepoRateType != 'F' (Fixed)
Swap Repo Rate Type	1	C	A	U	F	Identifies the repo rate type of the swap repo. Required when: • IsCollateralSwap = true
Swap Repo Rate	8	D	N	n/a	12.3	The repo rate for fixed swap repos. Required when: • IsCollateralSwap = true **AND** SwapRepoRateType = 'F' (Fixed)
Swap Spread	8	D	N	n/a	0.3	The swap repo rate spread applied to the repo rate. Required when: • IsCollateralSwap = true **AND** SwapRepoRateType != 'F' (Fixed)
Contract	20	P	AN	U	R186	The short name of the instrument for the repo.
Companion Bond	5	P	N	U	R2030	The companion bond for the repo.
Companion Bond Spread	8	D	N	n/a	7.1	The companion bond spread.
Swap Contract	20	P	AN	U	R209	The short name of the instrument to use for the swap repo.
Initiation Date	3*4	I	N	n/a	2024, 5, 27	The date that the R1 legs of the repo will trade.
Closing Date	3*4	I	N	n/a	2024, 6, 27	The date that the R2 legs of the repo will trade. Required when: • IsOpenEnded = false
Notice Period Days	4	I	N	n/a	35	The minimum days that must be given when closing an Evergreen repo. Required when:

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Name	Length	Type	Description	Case	Example	Comment
						• IsEvergreen = true
Repo Type	1	C	A	U	C	**C** – Classic
Is Open Ended	1	B	N	n/a	1 – True 0 – False	Identifies if the repo is open-ended.
Is Evergreen	1	B	N	n/a	1 – True 0 – False	Identifies if this is an Evergreen repo. Evergreen repos require a notice period when closing the repo is requested.
Is Collateral Swap	1	B	N	n/a	1 – True 0 – False	Identifies if this is a collateral swap repo.
User Reference	25	P	AN	n/a	00001	A user input reference assigned to the repo to identify it.
Member Code	6	P	AN	U	AAAA	The member that is reporting the trade.
Dealer Code	4	P	AN	U	XXZ	The dealer of the member that the trade should be reported for.
Principal Code	8	P	AN	U	ABC123	The principal to report the trade with.
Sub Account	6	P	AN	U	ABC123	The sub account to report the trade with.
BDA Account Number	11	P	AN	U	ABCV3453	The BDA Account number that the trade should be reported against when reporting trades to Strate.
Principal Agency	1	C	A	U	P or A	Used to specify if the repo should be booked as Principal or Agency.
Counterparty	8	P	AN	U	ABC123	The counterparty Member or Principal.
Trade Date	3*4	I	N	n/a	2024, 5, 27	The date that the repo was agreed, if the field sent through is empty (0,0,0) then the date will be defaulted to the day the message was processed by the trading engine.
Trade Time	4*1	I	N	n/a	10, 15, 0	The time that the repo was agreed, if the field sent through is empty (0,0,0) then the time will be defaulted to midnight 00:00:00.

Total Length: 245

7.12.2 Accept Unmatched Repo – Message Type 181

When a repo is initiated by a member, it must first be accepted by the counterparty before it becomes an active Master Repo. The Unmatched Repo record with a status of active is used to communicate a pending repo that requires a response.

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Name	Length	Type	Description	Case	Example	Comment
Id Unmatch	4	I	N	n/a	20000001	The ID of unmatched repo to accept.
Dealer Code	4	P	AN	U	XXZ	The trader that is accepting the repo.
Principal Code	8	P	AN	U	ABC123	The principal that the repo will be traded with.

Total Length: 16

7.12.3 Reject Unmatched Repo – Message Type 182

Should the counterparty of a pending repo not agree with the change or configuration, the unmatched repo can be edited or rejected – this message is used to reject the unmatched repo. A reject reason field allows the counterparty to provide more context to the rejection. Rejected unmatched repos will continue to be made available as a download until the end of the day.

Name	Length	Type	Description	Case	Example	Comment
Id Unmatch	4	I	N	n/a	20000001	The ID of Unmatched repo to reject.
Reject Reason	200	P	AN	n/a		The reason for rejecting the repo.

Total Length: 204

7.12.4 Edit Repo – Message Type 183

This message is used to request a change to an unsettled R1 or R2 leg, it is also used to edit an unmatched repo – Message 188 (**7.12.9**).

When any of the rate fields are modified, it is mandatory to specify the effective reset date field. The Repo rate type cannot be modified after R1 has settled, but the spread (for floating rates) and the repo rate (for fixed rates) can be modified.

Name	Length	Type	Description	Case	Example	Comment
Id Unmatched Repo	4	I	N	n/a	20000001	The ID of unmatched repo to edit.
Id Repo	4	I	N	n/a	20000001	The ID of repo to edit.
Id Repo Collateral	4	I	N	n/a	20000001	The ID of the repo collateral being edited.
Yield	8	D	N	n/a	12.3	The yield at which the repo is executed.
Swap Yield	8	D	N	n/a	8.3	The yield at which the swap repo is executed. Required when: • IsCollateralSwap = true.
Consideration	8	D	N	n/a	12.3	The consideration at which the repo is executed.
Swap Consideration	8	D	N	n/a	8.3	The consideration at which the swap repo is executed.

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Name	Length	Type	Description	Case	Example	Comment
						Required when: IsCollateralSwap = true.
Nominal	8	I	N	n/a	1000	Indicates the nominal of the repo.
Contract	20	P	AN	U	R186	The short name of the instrument for the repo.
Companion Bond	5	P	AN	U	R2030	The companion bond for the repo.
Companion Bond Spread	8	D	N	n/a	7.1	The companion bond spread.
Swap Contract	20	P	AN	U	R209	The short name of the instrument for the swap repo. Required when: • IsCollateralSwap = true.
Repo Rate Type	1	C	A	U	F	Identifies the repo rate type of the repo. See repo rate types for more detail.
Repo Rate	8	D	N	n/a	12.5	The repo rate for fixed repos. Required when: • RepoRateType = 'F' (Fixed)
Spread	8	D	N	n/a	0.3	The repo rate spread applied to the repo rate. Required when: • RepoRateType != 'F' (Fixed)
Swap Repo Rate Type	1	C	A	U	F	Identifies the repo rate type of the swap repo. Required when: • IsCollateralSwap = true
Swap Repo Rate	8	D	N	n/a	10.2	The repo rate for fixed swap repos. Required when: • IsCollateralSwap = true **AND** SwapRepoRateType = 'F' (Fixed)
Swap Spread	8	D	N	n/a	0.2	The swap repo rate spread applied to the repo rate. Required when:

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Name	Length	Type	Description	Case	Example	Comment
						• IsCollateralSwap = true **AND** SwapRepoRateType != 'F' (Fixed)
Closing Date	3*4	I	N	n/a	2024, 7, 27	The date that the R2 legs of the repo will trade. Required when: • IsOpenEnded = false
Interest Payment Effective Date	3*4	I	N	n/a	2024, 7, 27	The effective date for interest payments.
Is Collateral Swap	1	B	N	n/a	1 – True 0 – False	Identifies if this is a collateral swap repo.
Is Evergreen	1	B	N	n/a	1 – True 0 – False	Identifies if this is an Evergreen repo.
Notice Period Days	4	I	N	n/a	35	The minimum number of days' notice that must be given when closing an Evergreen repo.
Member Code	6	P	AN	U	AAAA	The member that is reporting the trade.
Dealer Code	4	P	AN	U	XXZ	The dealer of the member that the trade should be reported for.
Principal Code	8	P	AN	U	ABC123	The principal to report the trade with.
Sub Account	6	P	AN	U	ABC123	The sub account to report the trade with.
BDA Account Number	11	P	AN	U	ABCV3453	The BDA Account number that the trade should be reported against when reporting trades to Strate.
Principal Agency	1	C	A	U	P or A	Used to specify if the repo should be booked as Principal or Agency.
Counterparty	8	P	AN	U	ABC123	The counterparty Member or Principal.
Rate Change Effective Date	3*4	I	N	n/a	2024-05-29	The date that the rate change should take effect. Required when: • Repo Rate changes **AND** Repo Rate Type = 'F' **OR**

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Name	Length	Type	Description	Case	Example	Comment
						• Spread changes **AND** Repo Rate Type != 'F'
Trade Date	3*4	I	N	n/a	2024, 5, 27	The date that the repo was agreed, if the field sent through is empty (0,0,0) then the date will be defaulted to the day the message was processed by the trading engine.
Trade Time	4*1	I	N	n/a	10, 15, 0	The time that the repo was agreed, if the field sent through is empty (0,0,0) then the time will be defaulted to midnight 00:00:00.

Total Length: 241

7.12.5 Substitute Collateral – Message Type 184

Allow a seller (Borrower) the ability to replace collateral with a different instrument making up at least the equivalent value. You may substitute a repo with a single instrument multiple times, but you can only substitute a repo with multiple instruments (maximum of 3) once.

When the R2 leg is known – an equal and opposite trade is done on the original R2 leg, a trade is then booked free of value to close out the current repo on the substitution effective date, with the yield of the trade being the "Closing Yield" field of the substitution request. New R1 and R2 legs are then booked according to the substitution request to action the substituted collateral.

The operations of closing out the repo legs are slightly different when the R2 leg is unknown. Since there is not an R2 – the equal opposite trade is not required. Trades are booked free of value to close out the current repo on the substitution's effective date, with the yield of the trade being the "Closing Yield" field of the substitution request. New R1 legs are booked according to the substitution request to action the substituted collateral.

Name	Length	Type	Description	Case	Example	Comment
Id Repo	4	I	N	n/a	20000001	The ID of repo to substitute.
Id Collateral	4	I	N	n/a	20000001	Identifies the collateral of the repo that will be substituted.
Effective Date	12	I	N	n/a	2024, 5, 27	The date that the original repo ends, and the substituted repo begins.
Closing Yield	8	D	N	n/a	9.1	The yield with which the open ended R1 leg must be closed with.
Closing Consideration	8	D	N	n/a	9.1	The consideration with which the open

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Name	Length	Type	Description	Case	Example	Comment
						ended R1 leg must be closed with.
Substitution Instruments	36*3		n/a	n/a		Identifies the collateral that will replace the existing collateral.

Total Length: 144

Substitution Instrument

Name	Length	Type	Description	Case	Example	Comment
Contract	20	P	AN	U	R207	The short name of the instrument to use as a substitution.
Yield	8	D	N	n/a	10.2	The yield at which the substitution trades are executed.
Nominal	8	I	N	n/a	1000	The amount of the underlying bond being traded.

Total Length: 36

7.12.6 Close Repo – Message Type 185

This message is sent to request for the repo to be closed on a specified date. When requesting to close Evergreen repos, the closing date must be greater than T + Notice period days.

Name	Length	Type	Description	Case	Example	Comment
Id Repo	4	I	N	n/a	20000001	The ID of repo to close.
Closing Date	3*4	I	N	n/a	2024, 05, 29	The date that the closing will take effect. This must be T + Notice Period Days for Evergreen repos.

Total Length: 16

7.12.7 Cancel Repo – Message Type 186

Requests that an unsettled repo be cancelled. The cancel reason field should be set by the cancelling party to communicate a reason for the cancellation, the cancel reason will be displayed to both parties in the reject reason field in the unmatched repo record. This message only serves as a request to cancel an unsettled repo and must be accepted by the counterparty before the cancellation takes effect.

Name	Length	Type	Description	Case	Example	Comment
Id Repo	4	I	N	n/a	20000001	The ID of repo to cancel.
Cancel Reason	200	P	AN	n/a		The reason for cancelling the repo.

Total Length: 204

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7.12.8 Cancel Unmatched Repo – Message Type 187

This message is used to cancel and terminate the unmatched repo should any member no longer wish to pursue it further. The cancel reason field allows more context to be provided.

Name	Length	Type	Description	Case	Example	Comment
Id Unmatched Repo	4	I	N	n/a	20000001	The ID of unmatched repo to cancel.
Cancel Reason	200	P	AN	n/a		The reason for cancelling the requested changes.

Total Length: 204

7.12.9 Edit Unmatched Repo – Message Type 188

This message shares the structure of the **Edit Repo – Message Type 183** message. Any changes to the unmatched repo must first be accepted by the counterparty before the repo becomes active.

7.13 Repo Interest Payment Messages

Repo interest payments can only be initiated on Open ended, evergreen, and floating-rate repos (where the R2 leg is not known). The accumulated value of interest payments made to the repo will be deducted from the R2 leg when the repo is closed.

7.13.1 Initiate Repo Interest Payment – Message Type 189

Initiates a repo interest payment made by the client.

Name	Length	Type	Description	Case	Example	Comment
Id Repo	4	I	N	n/a	20000001	The ID of repo that the interest payment is made on.
Id Repo Collateral	4	I	N	n/a	20000001	The ID of repo that the interest payment is made on.
Payment Date	3*4	I	N	n/a	2024, 6, 27	The date that the payment was made.
Payment Value	8	D	N	n/a	420.69	The monetary value of the payment.

Total Length: 28

7.13.2 Accept Repo Interest Payment – Message Type 190

Upon accepting the pending repo interest payment, the trading system will create the Repo Interest Payment records and update the pending record's status to "Accepted".

Name	Length	Type	Description	Case	Example	Comment
Id Pending Repo Interest Payment	4	I	N	n/a	20000001	The Pending interest payment to be accepted.

Total Length: 4

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7.13.3 Reject Repo Interest Payment – Message Type 191

Rejects and terminates a repo interest payment.

Name	Length	Type	Description	Case	Example	Comment
Id Pending Repo Interest Payment	4	I	N	n/a	20000001	The pending interest payment to be rejected.
Reject Reason	200	P	AN	n/a		The reason for rejecting the interest payment.

Total Length: 204

7.13.4 Cancel Pending Repo Interest Payment – Message Type 192

If a repo interest payment request is created in error, this request is sent to cancel it. The pending repo interest payment is updated to show "Cancelled" with a reason for the cancellation.

Name	Length	Type	Description	Case	Example	Comment
Id Pending Repo Interest Payment	4	I	N	n/a	20000001	The pending interest payment to be rejected.
Cancel Reason	200	P	AN	n/a		The reason for cancelling the interest payment.

Total Length: 204

7.14 Triparty Repo Messages

7.14.1 Initiate Triparty Repo – Message Type 193

This message is used to initiate a Triparty Repo, triparty repos can only be placed on General collateral baskets – which are downloaded using the "**Collateral Basket – Number 146**" message.

Name	Length	Type	Description	Case	Example	Comment
Buy Sell	1	C	A	U	B or S	This indicates whether the repo being initiated is a Buy(B) or Sell(S).
Consideration	8	D	N	n/a	3000000	The face value of the triparty repo being initiated.
Rate	8	D	N	n/a	12.3	The repo rate of the triparty repo.
Initiation Date	3*4	I	N	n/a	2024, 5, 27	The date that the R1 legs will trade.
Close Date	3*4	I	N	n/a	2024, 6, 27	The date that the R2 legs will trade.
Is Open	1	B	N	n/a	1 – True 0 – False	Identifies this repo as an open-ended repo.
Basket Reference	20	P	AN	U	AAAA-AAAA-01	The collateral basket that this repo will trade on.

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Name	Length	Type	Description	Case	Example	Comment
Member	6	P	AN	U	AAAA	The member that is reporting the trade.
Dealer	4	P	AN	U	XXZ	The dealer of the member that the trade should be reported for.
Principal	8	P	AN	U	ABC123	The principal to report the trade with.
Sub Account	6	P	AN	U	ABC123	The sub account to report the trade with.
BDA Account Number	11	P	AN	U	ABCV3453	The BDA Account number that the trade should be reported against when reporting trades to Strate.
Counterparty	8	P	AN	U	ABC123	The counterparty Member or Principal.
User Reference	25	P	AN	n/a	00001	A reference that the user assigns to the repo to identify it.
Principal Agency	1	C	A	U	P or A	Used to specify if the repo should be booked as Principal or Agency.
Settlement Date	3*4	I	N	n/a	2024, 6, 1	The date on which the stock will move at Strate, can be the current business day, or a future business day.
Trade Date	3*4	I	N	n/a	2024, 5, 27	The date that the repo was agreed, if the field sent through is empty (0,0,0) then the date will be defaulted to the day the message was processed by the trading engine.
Trade Time	4*1	I	N	n/a	10, 15, 0	The time that the repo was agreed, if the field sent through is empty (0,0,0) then the time will be defaulted to midnight 00:00:00.

Total Length: 159

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7.14.2 Edit Unmatched Triparty Repo – Message Type 194

Allows members to edit pending triparty repos, both parties must accept before the requested changes are applied to the triparty repo deal. There are restrictions on which fields can be updated based on what the “Triparty Deal Action” field’s value is.

- ‘I’ – INIT (Initiation): Any field in the triparty repo can be edited.
- 'T – TERM (Termination): None of the fields can be edited.
- 'D' – CDTA (Close Date Adjustment): Only the closing date can be updated.
- 'R' – RATA (Repo Rate Adjustment): Only the rate can be updated.
- 'P' – PADJ (Consideration Adjustment): Only the consideration can be updated.

Name	Length	Type	Description	Case	Example	Comment
Id Unmatched Triparty Repo	4	I	N	n/a	20000001	The ID of the unmatched triparty repo being edited.
Consideration	8	D	N	n/a	300000	The face value of the triparty repo being initiated.
Rate	8	D	N	n/a	12.3	The repo rate of the triparty repo.
Initiation Date	3*4	I	N	n/a	2024, 5, 27	The date that the R1 legs will trade.
Close Date	3*4	I	N	n/a	2024, 6, 27	The date that the R2 legs will trade.
Is Open	1	B	N	n/a	1 – True 0 – False	Identifies this repo as an open-ended repo.
Basket Reference	20	P	AN	U	AAAA-BBBB-01	The collateral basket that this repo will trade on.
Member	6	P	AN	U	AAAA	The member that is reporting the trade.
Dealer	4	P	AN	U	XXZ	The dealer of the member that the trade should be reported for.
Principal	8	P	AN	U	ABC123	The principal to report the trade with.
Sub Account	6	P	AN	U	ABC123	The sub account to report the trade with.
BDA Account Number	11	P	AN	U	ABCV3453	The BDA Account number that the trade should be reported against when reporting trades to Strate.
Counterparty	8	P	AN	U	ABC123	The counterparty Member or Principal.
User Reference	25	P	AN	n/a	00001	A reference that the user assigns to the repo to identify it.

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Name	Length	Type	Description	Case	Example	Comment
Principal Agency	1	C	A	U	P or A	Used to specify if the repo should be booked as Principal or Agency.
Trade Date	3*4	I	N	n/a	2024, 5, 27	The date that the repo was agreed, if the field sent through is empty (0,0,0) then the date will be defaulted to the day the message was processed by the trading engine.
Trade Time	4*1	I	N	n/a	10, 15, 0	The time that the repo was agreed, if the field sent through is empty (0,0,0) then the time will be defaulted to midnight 00:00:00.

Total Length: 150

7.14.3 Cancel Unmatched Triparty – Message Type 195

This message is used to cancel and terminate an unmatched triparty repo.

Name	Length	Type	Description	Case	Example	Comment
Id Unmatched Triparty Repo	4	I	N	n/a	20000001	The ID of the unmatched triparty repo being cancelled.
Reason	200	P	AN	n/a		The reason for the cancellation.

Total Length: 204

7.14.4 Accept Unmatched Triparty – Message Type 196

This message is used to accept an unmatched triparty repo.

When the unmatched triparty record is accepted, the request is forwarded to Strate to be processed, Strate will then acknowledge the request in a response message that will update the status of the unmatched triparty repo and triparty repo deal (if the request was successful).

Each status update and its meaning can be found in the "**Unmatched Triparty Repo – Number 144**" and "**Triparty Deal – Number 145**" sections respectively.

Name	Length	Type	Description	Case	Example	Comment
Id Unmatched Triparty Repo	4	I	N	n/a	20000001	The ID of the unmatched triparty repo being accepted.
Dealer Code	4	P	AN	U	XXZ	The member that is reporting the trade.

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Name	Length	Type	Description	Case	Example	Comment
Principal Code	8	P	AN	U	ABC123	The dealer of the member that the trade should be reported for.

Total Length: 16

7.14.5 Reject Unmatched Triparty – Message Type 197

This message is used to reject and terminate an unmatched triparty repo. The unmatched triparty repo record status is updated to 'Rejected' and the reason field is updated with the provided reason.

Name	Length	Type	Description	Case	Example	Comment
Id Unmatched Triparty Repo	4	I	N	n/a	20000001	The ID of the unmatched triparty repo being rejected.
Reject Reason	200	P	AN	n/a		The reason for the rejection.

Total Length: 204

7.14.6 Edit Triparty Repo – Message Type 198

This message is used to edit Triparty Repo deals. The action field is used to identify which operation must be applied to the triparty deal. Only one edit operation can be active at a time, and only one action can be requested in a message.

When editing a Triparty Repo, an Unmatched Triparty Repo structure is sent to both parties, the initiating party receives the unmatched record in a pending state – to be cancelled or edited if required. The counterparty receives the unmatched record in an active state - to accept, reject, or edit the modification.

The valid Action field values can be:

- 0: None – The default value that will be used to identify internal allocation errors.
- 'I': INIT – This action is used on the unmatched record when a triparty repo is initiated and is not expected to be sent on the edit message.
- 'T': TERM – The action to be sent to request to terminate a triparty repo.
- 'D': CDTA – The Close Date field must be set with the new termination date.
- 'R': RATA – The Rate field must be set with the new rate value.
- 'P': PADJ – The Consideration field must be set with the new repo consideration value.

All values of the repo – other than the respective edited field – will retain their original values when the edit request is accepted.

Name	Length	Type	Description	Case	Example	Comment
Id Triparty Deal	4	I	N	n/a	20000001	The ID of the triparty deal being edited.
Action	1	C	A	U	I – Init T – Term D – CDTA R – RATA P – PADJ	The update action that must be applied to the triparty deal.
Rate	8	D	N	n/a	12.3	The new rate for the rate update action.

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Name	Length	Type	Description	Case	Example	Comment
						Required when: • Action = ‘R’ (RATA) Otherwise ignored.
Consideration	8	D	N	n/a	300000	The new consideration for the consideration update action. Required when: • Action = ‘P’ (PADJ) Otherwise ignored.
Close Date	3*4	I	N	n/a	2024, 6, 27	The new close date for the close date update action. Required when: • Action = ‘D’ (CDTA) Otherwise ignored.

Total Length: 33

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8. Output Messages

8.1 Session Key Challenge – Message Type 16

The Session Key Challenge Message is returned to a user when a successful TCP socket connection is established to the system. This session key should be used in the encryption of the user's login message, and password change message.

Name	Length	Type	Description	Case	Example	Comment
Challenge	9	P	N	N/A	54341278	The session challenge message. Received when connecting to market.
Total Length	9 Bytes					

8.2 Successful Log in Response – Message Type 1

The Successful log in message is returned to users when the user successfully authenticates to the system. This message indicates the Open and Close times of the on-screen trading session and the time at which the Market will be offline.

Name	Length	Type	Description	Case	Example	Comment
Sequence Number	4	I	N	N/A	11	Returned sequence of log in message
Market Open Time	4	B	N	U	11, 56, 55, 0	Time Format: Hours, Minutes, Seconds, 0
Market Close Time	4	B	N	U	11, 56, 55, 0	Time Format: Hours, Minutes, Seconds, 0
Market Offline Time	4	B	N	U	11, 56, 55, 0	Time Format: Hours, Minutes, Seconds, 0
Settlement Date	2	I	N	n/a	13546	Settlement Date for standard settlement T+3
Today date	2	I	N	N/A	11234	Today's date in DOS date format
Is Price Taker	1	B	N	n/a	0 = False 1 = True	Indicates if the dealer logging on is a price taker. Please see NOTE, below
Unused	81	B	n/a	n/a		Not used
Previous Business Day	2	I	N	n/a	11234	Previous business day in DOS date format
Unused	162	B	n/a	n/a		Not used
Primary Dealer	1	B	N	n/a	0 = False 1 = True	Indicates if the logged in user is a Compliance officer
Unused	8	B	n/a	n/a		
Number of Unique Members	4	I	N	n/a	32	The number of member codes that is affiliated with this member

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Name	Length	Type	Description	Case	Example	Comment
Pair Member codes with unique number	400 x Member Unique Numbers	B	n/a	n/a		See structure below

The following is the structure for the Member Unique Numbers sent with the login reply message.

Name	Length	Type	Description	Case	Example	Comment
Member Code	6	P	AN	U	LBTS	Member code of affiliated member
Unique Member Number	4	I	N	n/a	2141	Unique member number of affiliated member

Total Length: 275 + Number of Unique Members x 10 Bytes (Maximum size: 4279 Bytes)

NOTE: A price taker is obliged by the rules of the exchange to place all orders on the central order book as Take Or Kill orders. No orders can be placed which are not execution orders.

8.3 Display/Price Update Message – Message Type 59

The Display Update Message is returned whenever on-screen activity is recorded on a particular contract. Please note section **4.16** for anonymous contracts.

Name	Length	Type	Description	Case	Example	Comment
Last Chunk	1	B	N	n/a	1	Indicates if this 59 message contains the last chunk of compressed data. If false, the next 59 message received contains the next set of compressed data before the entire buffer can be decompressed.
Display data	Display + (Number of Contracts * Depth Data)	B	AN	n/a		Compressed

Total Length: Compressed Length may vary

8.3.1 Display Update Message – Message Type 59 Display

Name	Length	Type	Description	Case	Example	Comment
Trading Anonymous	1	B	N	n/a	1	Indicates if the contract is anonymous or not. True – Anonymous False – Non-Anonymous.
Contract	20	P	AN	U	FG603 ALSI	Contract Name for this entry.

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Name	Length	Type	Description	Case	Example	Comment
Mid Price	8	D	N	n/a	19500.00	Mid-price for this contract.
Last Dealt Price	8	D	N	n/a	19500.00	Last traded price for this contract.
Last Dealt Time	4	B	N	n/a	10, 55, 59 ,0	Last time this contract traded.
Deal Volume	4	I	N	n/a	10	Last volume traded on this contract.
High Price	8	D	N	n/a	19500.00	The high for the day on this contract.
Low Price	8	D	N	n/a	19400.00	The low for the day on this contract.
Days Volume	8	I	N	n/a	100	Total volume traded on this contract.
Last Order Qty	4	I	N	n/a	10	Last quantity bid on this contract.
Last Order Buy Sell	1	C	A	U	B	Last action on this contract.
Last Order Price	8	D	N	n/a	19500.00	Last price bid on this contract.
Number of depth	1	B	N	n/a	5	Number of depth available on this contract
Open Interest	8	I	N	n/a	100	Amount of open interest on this contract.
Change	8	D	N	n/a	10	The change in price from the last traded price.
Auction	1	B	N	n/a	1	Indicates if this contract is in auction.
Contract status	1	B	N	U	1	Please see table below for descriptions.
Odd Lot	1	B	N	n/a	1	Indicates if there is an odd lot depth available on this contract.
Last Traded Quantity	4	I	N	n/a	43	Last traded quantity.
Date Sequence	4	I	N	n/a	43	Date Sequence of contract.
Secondary Contract Date Sequence	4	I	N	n/a	44	Secondary Date Sequence of contract if contract is spread or split.

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Name	Length	Type	Description	Case	Example	Comment
Strike Sequence	4	I	N	n/a	44	Strike Sequence of contract if contract is an option.
Market Shard Global Sequence Number	4	I	N	n/a	44	Global sequence number for re-request message.
Stack Sequence Number	4	I	N	n/a	44	Sequence number of this message for a particular contract.
Update Time	4	B	N	n/a	10, 59, 55, 0	Time the update was sent.
Total Length	130 Bytes					

Contract Status Value	Description
0	Bid or Offer activity with no change to best bid or offer.
1	Bid activity which has changed the best bid on this contract.
2	Offer activity which has changed the best offer on this contract.
3	Bid or Offer activity which has changed both the best bid and offer on this contract.
4	Trade activity has been recorded on this contract with no change to the best bid or offer.
5	Trade activity which has changed the best bid on this contract.
6	Trade activity which has changed the best offer on this contract.
7	Trade activity which has changed the best bid and offer on this contract.

8.3.2 Display Update Message – Message Type 59 Depth Data

Name	Length	Type	Description	Case	Example	Comment
Buy Side Phantom	1	B	N	N/A	True or false	Indicates if this buy element is a phantom.
**Buy Who	6	P	A	U	AAAA	Member bidding
Buy Price	8	D	N	n/a	19500.00	Price of bid
Buy Quantity	4	I	N	n/a	10	Quantity of bid
Sell Quantity	4	I	N	n/a	10	Quantity of ask
Sell Price	8	D	N	n/a	19800.00	Price of ask
**Sell Who	6	P	A	U	BBBB	Member asking
Sell Side Phantom	1	B	N	N/A	True or false	Indicates if this sell element is a phantom.
Total Length	38 Bytes					

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****Please note that if the contract is Anonymous that the length byte will be 0 followed by 4 bytes indicating the Unique member number.**

Included in the message are a number of the above Depth Data messages where the number is “Number of depth” in the first part of the message.

A note on receiving Display Update Messages (Message Type 59):

- A display update message will be received with a unique global sequence number. If a 59 message is received as a result of a trade, then a further 59 message will be received as an update to a particular global sequence number. This update message will contain the latest open interest and volume figures for that contract. These are published as updates to a 59 message, and therefore may contain a global sequence number which you have already received. Any 59 messages received with a global sequence number which you have already processed should be treated as updates and processed as such. Multiple updates can be received for a particular global sequence number. For example, if a trade is captured for 100 contracts, and this is made up of 5 legs of 20 contracts each, 5 updates will be received on the global sequence number for that trade. These updates are due to volume and open interest updates.
- The depth received on the display update message will display all orders on the order book. The top of the depth will indicate the order which is currently the best order on the market. There may however be orders at the same price going down the depth. The discretion is up to the user whether to cumulate the quantity on the top of the depth to indicate the total quantity available at that price.

8.4 Info and Error Return Messages – Message Type 125

Please see section **10** for the details of the error messages. Please note that the Information and Error return message is a variable length message, which defines a variable length Message field with a maximum length of 251.

Name	Length	Type	Description	Case	Example	Comment
Error Number	4	I	N	n/a	12	This is the error number of the associated error message.
Information or error indicator	1	B	N	n/a	1 or 0	0 – information message 1 – error message
Message	251	P	AN	n/a	Fill or Kill order could not be filled	A Description of the error
Total Length	256 Bytes					

8.5 Order Rejection Message – Message Type 126

Please see section 10 for the details of the error messages. This message is returned as a negative response to a Multi Bid message (message type 56). This indicates the order reference of the order in the multi bid message which has been rejected. Please note that the Information and Error return message is a variable length message, which defines a variable length Message field with a maximum length of 251.

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Name	Length	Type	Description	Case	Example	Comment
Error Number	4	I	N	n/a	12	This is the error number of the associated error message.
Order Reference	25	P	AN	n/a	A1122322B	The order reference of the order which has been rejected.
Error Message	255	P	AN	n/a	Fill or Kill order could not be filled	A Description of the error.

Total Length: Variable length with maximum of 284 Bytes

8.6 Daily Trend Reply – Message Type 61

The Daily Trend Reply indicates to users what on screen trade activity has been recorded on a particular contract. The response to this message is compressed. And the decompressed data will contain the following layout. The below structure allows for up to 1000 History Suffix items. If there are more than 1000 trades captured on a particular contract, multiple Message Type 61 messages will be sent in response to the request to cater for the full range of the days trades.

Name	Length	Type	Description	Case	Example	Comment
Contract	20	P	AN	U	FK721 ALSI	Contract code of requested history contract.
History suffix	16*1000	History Suffix	n/a	n/a		Array of daily trend suffixes.

Total Length: 16020 Bytes

History Suffix

Name	Length	Type	Description	Case	Example	Comment
Price	8	D	N	n/a	123.15	Price of contract at time
Quantity	4	I	N	n/a	45	Quantity of instrument at time
Time	4	B	N	n/a	10, 55, 59 ,0	Time of price and quantity in Time Format Hours, Minutes, Seconds, 0
Total Length	16 Bytes					

8.7 Heartbeat – Message Type 10

A heartbeat message sent to the logged in member as simply a blank header.

8.8 Market Time Change – Message 140

This message indicates that a market time has changed. This message will be sent when a Market Open, Market Close Admin, and Market Offline change has occurred.

Name	Length	Type	Description	Case	Example	Comment
Event Number	4	I	N	n/a	7	Please see below table for event types.
Event Time	4	B	N	n/a	10, 55, 59 ,0	Time of event in Time Format Hours, Minutes, Seconds, 0

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Name	Length	Type	Description	Case	Example	Comment
Total Length	8 Bytes					

Event Number Descriptions

Event Number	Event Description
5	Market open for trading
7	Market closed (Admin period)
8	Market offline

8.9 Failure Messages

In the event that the exchange system fails the following message types should be noted, and the appropriate actions taken from the user.

8.9.1 Notification of Failure (Message 127)

The following message will be sent on the event of a failure of the exchange trading system, or in the event of the recovery of the exchange trading system.

Name	Length	Type	Description	Case	Example	Comment
Failure Notice Identifier	4	I	N	n/a	1 – Market Shard has failed 2 – Market Shard has recovered	Identifier to identify if a market shard has failed or recovered.
Market Number	4	I	N	n/a	1 – EDM 2 – APD 4 – Global	Indicates the market number on which a particular market shard has failed.
Market Shard Number	4	I	N	n/a	1	Indicates the market shard which has failed. This can be mapped to the Instrument Data Download to indicate which instruments are affected.

Total Length: 12 Bytes

8.9.2 Failover Recovery Response (Message 37)

The failover recovery response message will be published automatically to all connected users to update their transactional data (Active Orders, Deals, Completed Orders, Positions and Unmatched) in the event of the recovery of a Market Shard, post a failure. This message can be used to update any transactional data which may have been affected by the recovery of a market shard.

The message definition is the same as the Download Data Response (Message 36) and should be processed the same.

PLEASE NOTE: In the case of large data transmissions, the flag “Another Set to Come” could be set to true. In this case the normal download data request message 37 should be sent by the user to retrieve the next set of data. E.g.

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API Application		Exchange System
		Exchange systems send message type 37 with Another Set to Come set to True.
API system sends message type 37 with Re-Request flag set to True to request the next set.		
		Exchange system replies with message type 37 with the next set of data.

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9. Download Data Structures

The following structures are received when downloading data. Example of this process can be found in section **6**.

All these Messages are compressed.

9.1 Request Data Header – Message Type 36 and 123

Please see section **4.7** for the handling of this message.

The Request Data Header will be attached to all 36 and 123 messages received by the user. This indicates the Data Type received. For 123 messages, the Specific Record and Action fields are filled to indicate the specific record received and the action to be taken.

Name	Length	Type	Description	Case	Example	Comment
Data Type	2	I	N	n/a	5	When receiving a 36 type, the Data Type field is identified by adding 256 to identifier. When receiving 123 the Data Type field is identified without the 256 addition. See table 4.1 for identifiers.
Last Piece of Chunk	1	B	N	n/a	1 – True 0 – False	Indicates if the data contained in download data is the last record, or if more to come.
Another set to come	1	B	N	n/a	1 – True 0 – False	Indicates if there is another set of data to come. If this is true, a re-request should be issued to retrieve the next set.
Action	4	I	N	n/a	1	For 123 messages indicates if Delete – 1, Insert – 2, Update – 3, otherwise 0 for file download.
Specific Record	4	I	N	n/a	54522	Allows to download a specific record sequence number
Download Date	2	I	N	n/a	12634	Dos Date of days records which must be downloaded.
Download Data	5000	B	AN	n/a		Compressed data returned.
Total Length	5014 Bytes					

9.2 Unmatched Deal Data – Number 10

The Unmatched Deal Data record defines the structure for deals awaiting match.

NOTE: Please note that Spot Bond Unmatched data will be kept until the day before settlement date of the transaction. All other products will have their unmatched deal data cleared at the end of every day.

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Name	Length	Type	Description	Case	Example	Comment
Unmatched Sequence Number	4	I	N	n/a	12	Sequence number of the unmatched record. Not used for new entries.
Single Leg	1	B	N	n/a	1 – True 0 – False	If this field is true, the opposite leg will NOT be sent to the counterparty.
Status	1	C	A	U	I – Inserted E – Edited D – Deleted	Indicates to the initiator or the counterparty of the trade that this unmatched record has been inserted, edited or deleted by the initiator or counterparty.
Is Physically Settled	1	B	N	n/a	1 – True 0 – False	Indicates if this trade is physically settled
Unused	5	B	n/a	n/a		
Enter Time*	4	B	N	n/a	10, 59, 56, 0	The time of entry of unmatched order
User Member*	6	P	AN	n/a	AAAA	Member Code of logged in member
User Dealer*	4	P	A	n/a	XXZ	Dealer Code of logged in dealer.
Clearing Member	6	P	A	n/a	ABZAC	Clearing Member code of the reporting member
Deals Member*	6	P	AN	n/a	AAAA	Member Code of unmatched deal
Deals Dealer*	4	P	A	n/a	XXZ	Dealer Code of unmatched deal.
Deals Principal*	8	P	AN	n/a	AAAA / ABC678	This field displays the code of the Principal to the deal.
Buy Or Sell*	1	C	A	n/a	B, S, b, s, W, D	Buy/Sell field of the unmatched order. Lower case b and s can be used to mark this unmatched trade as unconfirmed. W (Buy) and D (Sell) will indicate

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Name	Length	Type	Description	Case	Example	Comment
						that the deal can only be accepted by a clearing member. The Accept (40) message can be used to confirm the unmatched trade.
Unused	1	B	n/a	n/a		
Quantity*	8	I	N	n/a	10	This field displays the number of contracts involved in the trade.
Contract*	20	P	AN	n/a	R153 AUG04	Contract for this leg of the trade.
Rate*	8	D	N	n/a	12.00000	Rate at which the report only entry was done. Used for volatility for option contracts or should be set to the same value as price. This field is mandatory when reporting option trades.
User Reference*	25	P	AN	n/a	My Code	User Reference code.
Suffix Code	2	I	A	n/a	1	Suffix of entry.
Portfolio	8	P	AN	n/a		Portfolio code to record the unmatched deal with.
Profit Centre	6	P	AN	n/a		Profit centre code to record the unmatched deal with.
Sub Account	6	P	AN	n/a	ABC01	Sub account code for the deal.
Counter Party*	8	P	AN	n/a	SSQM	This field displays the code of the counterparty to the deal.
Assign Sequence	4	I	N	n/a	12	For Assigning deals, this is the sequence number of the deal to be assigned.

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Name	Length	Type	Description	Case	Example	Comment
Origin	1	C	A	U	A, F etc.	See table in section 6.10
Enter Date	2	I	N	n/a	11223	The date which the trade was entered
Trade Date	2	I	N	n/a	11425	The date which the trade was traded.
Trade Time	4	B	N	n/a	10, 55, 59 ,0	The time the trade was done
Booking Fee Flag	1	C	A	U	'Z' – Zero Fees-	This flag indicates the fee status on the trade. **NOTE**: Only the exchange can set this value.
Reason	10	P	A	U	NR etc,	See table in section **6.11**. Note this may include multiple reasons.
Unused	2	B	n/a	n/a		
First Settlement Date	2	I	N	n/a	12546	For bond products indicates the first settlement date of the reported trade
Deal Price*	8	D	N	n/a	124.001	The Price for this leg of the reported trade. This field is used to capture the premium when reporting an option trade and is always mandatory.
First Consideration	8	D	N	n/a	1254845.36	For bond products is the consideration for the first leg
First Yield	8	D	N	n/a	12	For bond products is the yield for the first leg
Second Yield	8	D	N	n/a	12.124	For bond carry or repo products is the yield for the second leg
Second Settlement Date	2	I	N	n/a	12456	For bond carry or repo products is the settlement

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Name	Length	Type	Description	Case	Example	Comment
						date for the second leg
Second Consideration	8	D	N	n/a	1254786.36	For bond carry or repo products is the consideration for the second leg
Unused	24	B	n/a	n/a		
Price Reference	8	D	N	n/a	124.001	This field can be used as a reference field to indicate to the counterparty at what price the unmatched trade was booked against.
Unused	6	B	n/a	n/a		
Future Price*	8	D	N	n/a	23560	The future price used when capturing report only option trades. This field is mandatory when reporting option trades.
Unused	2	B	n/a	n/a		
Second Leg Price	8	D	N	n/a	125.63	For bond carry or repo products is the price for the second leg
Unused	3	B	n/a	n/a		
Bond Spread	8	D	N	n/a	0.25	Bond spread from the companion bond.
Position Sequence to Roll Forward	4	I	N	n/a	14	Used for Roll forwards, contains the sequence number of position to roll forward
Roll Forward Price	8	D	N	n/a	118.2	Price at which the late leg of roll forward must be captured
Unused	11	B	n/a	n/a		
Companion Bond	5	P	A	U	R201	Name of the companion bond for this report only trade
Principal Agency*	1	C	A	U	‘P’ or ‘A’	Principal Agency indicator

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Name	Length	Type	Description	Case	Example	Comment
BDA Account Number	10	P	AN	n/a	ABCSD12	BDA Account Number to be used for this reported trade
Total Length	319 Bytes					

9.3 Instruments Data – Number 2

The Instruments Data record defines instruments traded on a market.

The Instrument Group Sequence indicates to which group this instrument belongs to in a Series Spread Margin grouping. The Group Margin field indicates the Series Spread Margin requirement for this instrument in the Series Spread Grouping. The other instruments in this group can be determined by going to the specified record in the Group Definition data to which this instrument points to in the Instrument Group Sequence field.

The Fee details applicable to this instrument for Futures, Options and Deliveries are defined by going to the appropriate record in the Fee Data record pointed to by the Future Fee Sequence, Option Fee Sequence and Delivery Fee Sequence fields of this structure.

Name	Length	Type	Description	Case	Example	Comment
Instrument Sequence	4	I	N	n/a	3433	Sequence number of instrument record.
Is Swap Flex	1	B	N	n/a	0 – False, 1 – True	Indicates if this instrument is a flex swap.
Category	1	C	A	U	Fixed = 'F', Floating = 'A', Inflation = 'I', Corporate = 'C', Banking = 'B', SOC = 'S'	Indicates the category of the instrument.
Sub Category	1	C	A	U	Fixed = 'F', Floating = 'A', Inflation = 'I', Corporate = 'C', Banking = 'B', SOC = 'S'	Indicates the subcategory of the instrument
Unused	1	B	n/a	n/a		
Instrument Group Sequence	4	I	N	n/a	23	Group Sequence Number to which this instrument belongs to. See 9.27 Group Definition.
Future Fee Sequence	4	I	N	n/a	65	Fee Sequence Number which defines the fee structure for future deals on this instrument. See 9.28 Fee Download

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Name	Length	Type	Description	Case	Example	Comment
Option Fee Sequence	4	I	N	n/a	16	Fee Sequence Number which defines the fee structure for option deals on this instrument. See 9.28 Fee Download
Delivery Fee Sequence	4	I	N	n/a	23	Fee Sequence Number which defines the fee structure for deliveries on this instrument. See 9.28 Fee Download
Market Number	1	C	N	n/a	1	Market Number on which this instrument trades.
Market Shard Number	1	C	N	n/a	1	Indicates the market subset on which this instrument is listed.
Instrument Name	5	P	AN	U	ALSI	Name of the instrument
Instrument Type Number	1	C	A	n/a	2	Instrument type number which defines the class of instrument. Please see table below for instrument type definitions
ISIN Code	13	P	AN	U	ABD433-12	ISIN number of the instrument. If Applicable
Description	58	P	AN	n/a	All share index	A Description of the instrument
JNote Maturity Months	4	I	N	n/a	5	Indicates the number of months until maturity of the JNote.
On Screen	1	B	N	n/a	1	Indicates if this instrument is tradable or not.
Maturity Date	2	I	N	n/a	15645	Dos Date of the maturity date for a bond
Coupon Rate	8	D	N	n/a	13.5	Coupon Rate for this period of the bond
Number Of Periods	2	I	N	n/a	2	Number of periods for a bond
Coupon Dates	12 * 2	I	N	n/a	12345, 15465	Coupon Dates for all periods of a bond
Books Close Dates	12 * 2	I	N	n/a	12356, 12345	Books Close Dates for all periods of a bond
Instrument Sequence to Close to	4	I	N	n/a	1	Indicates the instrument sequence number of the instrument into which this instrument will close out into.

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Name	Length	Type	Description	Case	Example	Comment
Nominal Divisor	4	I	N	n/a	100	For bond instruments indicates how the nominal should be divided when processing nominal amounts. Please see NOTE below.
Issue Date	2	I	N	n/a	12523	Dos Date at which instrument was issued.
Linked to Floating Rate	1	C	A	U	N – None, C – CPI Index	Indicates if this bond is linked to a floating rate.
Is Replica Bond	1	B	N	n/a	0 = False 1 = True	Indicates if the bond is a replica bond
ZeroFeeAuto CloseTrades	1	B	n/a	n/a	0 = False 1 = True	Sets the fees on auto close trades on expiry to zero
Margining Type	1	B	N	n/a	0 – Calm 1 – Span	Indicates the type of margining used for this instrument
Underlying	4	I	N	n/a	43422	Instrument sequence of underlying instrument
Options Exercise Is Percentage	1	B	N	n/a	1	Indicates of this instrument uses a percentage-based option exercise points system or not.
Options Exercise Cost	8	D	N	n/a	1500.00	Indicates either the percentage or amount which an option will be considered in the money
Group Margin	8	D	N	n/a	8.5	Indicates the group margin applicable for this instrument when part of a group.
VAT	1	B	N	N/a		Indicates if VAT is applicable on this instrument or not.
Settlement Margin	8	D	N	n/a	2560	The settlement margin used for agricultural derivative instruments.
Physical Settlement	1	B	N	n/a	1 – True 0 – False	Indicates if this instrument is physically settled, or not.
Group Description	56	P	AN	n/a	ALSI / INDI	Indicates the group make up for this instrument.
Id Companion Bond Instrument	4	I	N	n/a	124	Indicates the instrument of the companion bond
Display Name	30	P	AN	n/a	Rand Dollar	This field allows the exchange to indicate

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Name	Length	Type	Description	Case	Example	Comment
						how an instrument should be presented. This is to supplement the Instrument Name
Reference Cpi Rate	8	D	N	n/a	525.623	The Reference Cpi Rate that should be used if this is a replica bond
Country Code	4	P	AN	n/a	ZAR	The country code for this instrument.
Id Margin Parameter Instrument	4	I	N	n/a	1	The sequence number of the instrument from which this instrument inherits its margin parameters
Total Length	319 Bytes					

Instrument Type Number	Instrument Type Code	Instrument Type Description
1	SSF	Single Stock Future
2	INDEX	Index Future
3	FUT	Bond Future
4	BOND	Bond
5	JBAR	JBAR Quotation
6	SWAP	Interest Rate Swap
7	JROD	JROD
8	JIBARF	JiBar Future
13	AGRIF	Agri Future
17	AGRIP	Agri Physicals
15	CANDO	Can-Do Future
18	DIVF	Dividend Future
20	CURR	Currency Future
23	IDXFUT	International Derivative Futures
24	IDXDIV	International Derivative Dividend Futures
25	DIVNUT	Dividend Neutral Futures
26	ETF	Exchange Traded Fund
27	ETFFUT	ETF Future
28	JNOTE	Notional Swap
29	GOVI	Government Bond Index
30	JFIX	Fixed Interest Derivative
31	LINDEX	Live Index
40	CONTR	Price Contribution Instrument
42	ADEX	Any Day Expiry
43	CANDOIR	Interest Rates Can-Do
44	ANYDAYIR	Interest Rates Any Day Expiry
48	ForwardForward	Forward Forward Currency future.

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NOTE: When handling bond trades, the nominal value for these transactions should cater for decimal values. In order to make the system multi-asset compatible, a nominal divisor has been added to indicate how the value for quantity should be sent/presented. This divisor (i.e. 100) will be used to divide the value received from the API when presenting this number or multiplied by the divisor when sending in the value. i.e. A value of 1 000 000.50 should be sent as 1 000 000 500 on the API and will be received as this value in any confirmations.

This is only applicable for Report only Bond transactions, where the quantity value in the API structure represents the nominal amount traded. Input messages where this nominal translation is required is:

- Message 28 and Message 29
- Message 22

Output messages where this nominal translation is required:

- Unconfirmed/Unsettled Orders Data (6 and 7)
- Deals Data (8)
- Positions Data (9)
- Unmatched Data (10)

Note that this will not be applicable on order entry for bond instrument products, as there the accepted amount for quantity will only be in full lots. The default value for this field will be set to 1 for instruments which do not apply this logic and will typically be set to 100 for bond instrument types.

For bond instruments a Nominal Divisor of 100, essentially means that a nominal amount is indicated in South African cents. The user can then divide by this value to represent the South African Rand equivalent.

9.4 Contract Dates – Number 3

The Contract Dates Record defines the Expiry Dates for a particular Instrument Record.

The Spread Margin Requirement for this expiry is defined in the Spread Margin field. The Initial Margin Requirement is also defined in the Initial Margin field.

Name	Length	Type	Description	Case	Example	Comment
Instrument Sequence	4	I	N	n/a	3252	Instrument sequence number to which this expiry belongs to.
Contract Date Sequence	4	I	N	n/a		Contract Date Sequence Number.
Expiry Date	2	I	N	n/a	12644	Dos Date of the expiry date of the date record
Expiry (Months)	2	I	N	n/a	52	Number of months to expiry
Valuation Date	2	I	N	n/a		Dos Date of the valuation date of this contract date record.
Nominal	8	D	N	n/a	100	Nominal in which this instrument is issued
Strike Interval	8	D	N	n/a	10	Interval in which new strikes can be loaded

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Name	Length	Type	Description	Case	Example	Comment
Spread Margin	8	D	N	n/a	2	Indicates the spread margin applicable for this expiry in a group.
Lot size	4	I	N	n/a	1	Indicates if a full lot size is applicable to this contract, otherwise 1.
Option Lot size	4	I	N	n/a	1	Indicates if a full lot size is applicable to option contracts, otherwise 1
Big Depth	1	B	N	n/a	36	Indicates the maximum depth available to view on this contract
Price Rate	1	C	A	U	P	'P' for Price or 'R' for Rate
Max Change	8	D	N	n/a	10	Percentage of the maximum change from the last traded price allowed
Max Days Move	8	D	N	n/a	10	Rand value of the maximum change from the opening price allowed
Max Gap	8	D	N	n/a	12.0	Maximum gap between the current value and upper and lower bound as a percentage
Swap Effective Date	2	B	n/a	n/a		Indicates the swap effective date for swap contracts
Options Allowed	1	B	N	n/a	1	Indicates if options are traded on this contract or not.
Deltas Allowed	1	B	N	n/a	1	Indicates if delta options are traded on this contract or not.
Spreads Allowed	1	B	N	n/a	1	Indicates if spreads are traded on this contract or not.
Fixed Rate	8	D	N	n/a	12	Fixed Rate for JFIX and Swap contracts
Reset Rate	8	D	N	n/a	13.5	Reset Rate for swap contracts
Basis Point Value	8	D	N	n/a	14.8	Indicates the basis point value for the contract.
Initial Margin	8	D	N	n/a	1500	Indicates the initial margin requirement for this contract.
Quote Format	12	P	A	n/a	####.#####	Indicates the format of the prices quoted on screen for live trading.
Price Format	12	P	A	n/a	####.####	Indicates the format of the price at which deals are recorded at.
Option Premium Format	12	P	A	n/a	####.####	Indicates the format of the premiums at which option deals are recorded at.
Unused	6	B	n/a	n/a		

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Name	Length	Type	Description	Case	Example	Comment
Max Day Move Percentage	8	D	N	n/a	2.5	Indicates the percentage price movement allowed during the day on this contract.
Clearance Date	2	I	N	n/a	12453	Dos Date of the clearance date for this contract
VSR	8	D	N	n/a		Volatility Scanning Range for this contract.
RPVE	8	D	N	n/a		Range Price Volatility Effect for this contract
Unused	8	B	n/a	n/a		
Dynamic Max Day Move	8	D	N	n/a	2.5	Indicates the price movement allowed from the last traded price.
Minimum Valid Bid Volume On Screen	4	I	N	n/a	100	Indicates the minimum order quantity which can be submitted on screen
Minimum Valid Bid Volume Off Screen	4	I	N	n/a	100	Indicates the minimum unmatched trade quantity which can be submitted off screen
Minimum Valid Bid Volume On Screen Options	4	I	N	n/a	100	Indicates the minimum order quantity which can be submitted on screen for options
Minimum Valid Bid Volume Off Screen Options	4	I	N	n/a	100	Indicates the minimum unmatched trade quantity which can be submitted off screen for options
Price Interval	8	D	N	n/a		The price interval on the contract in which bids can be incremented in value.
All Or Nothing allowed	1	B	N	n/a	1	Indicates if all or nothing order type can be used on this contract
At Best Orders Allowed	1	B	N	n/a	1	Indicates if at best order type can be used on this contract
Stop Orders Allowed	1	B	N	n/a	1	Indicates if stop orders can be used on this contract
Ice Berg Orders Allowed	1	B	N	n/a	1	Indicates if iceberg orders can be used on this contract
Hold Over Orders Allowed	1	B	N	n/a	1	Indicates if hold over orders can be used on this contract
At Close Orders Allowed	1	B	N	n/a	1	Indicates if at close orders can be used on this contract
Dynamic Max Day Move Percentage	8	D	N	n/a	3%	Indicates the price movement allowed from the last traded price as a percentage.

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Name	Length	Type	Description	Case	Example	Comment
Future Anonymous	1	B	N	n/a	1 = true, 0 = false	Indicates if the futures on this contract are anonymously traded.
Option Anonymous	1	B	N	n/a	1 = true, 0 = false	Indicates if the options on this contract are anonymously traded.
Total Length	233 Bytes					

9.5 Strike Data – Number 4

The Strike Data record defines a strike record for an option on a particular Contract Date. Delta option strikes are indicated by Deltas being set to true (1).

Name	Length	Type	Description	Case	Example	Comment
Strike Sequence Number	4	I	N	n/a	12342	The strike sequence number of this record
Contract Date Sequence	4	I	N	n/a	12522	The dates sequence number
Strike	8	D	N	n/a	19232.00	The strike price of this contract
Strike Expiry Date	2	I	N	n/a	12322	The exercise date of this strike.
Deltas	1	B	N	n/a	1 – True 0 – False	Indicates if this is a delta option strike
Call Or Put	1	C	A	n/a	C	Indicates if this is a Call or Put option strike
Unused	16	B	n/a	n/a		
Total Length	36 Bytes					

9.6 MTM Data – Number 16

The MTM Data record defines the end of day closing statistics for a particular contract.

Name	Length	Type	Description	Case	Example	Comment
Instrument Sequence	4	I	N	n/a	1225	Instrument sequence number
Date Sequence	4	I	N	n/a	1455	Dates sequence number
Strike Sequence	4	I	N	n/a	6442	Strike sequence number
Days Closing Price	8	D	N	n/a	19500.00	Closing Mark-to-market price
Days Closing Rate	8	D	N	n/a	8.5	Closing Mark-to-market rate (this would apply to rate traded products such as Spot Bonds, Bond Futures, JIBAR Futures)

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Name	Length	Type	Description	Case	Example	Comment
Open Interest	8	D	N	n/a	12	Open interest on this contract
Date	2	I	N	n/a	12533	Date of the price
Spot Price	8	D	N	n/a	19500	Spot price for this contract
Volatility	8	D	N	n/a	45	Future or Option Volatility for this contract
Total Length	54 Bytes					

9.7 Holiday Data – Number 18

The Holiday Data record defines the holidays applicable for a specific centre. JHB is the standard centre to be used for holidays. The holiday data can be used to determine previous business day.

Name	Length	Type	Description	Case	Example	Comment
Holiday Sequence	4	I	N	n/a	1225	Holiday sequence number
Country Code	4	P	AN	n/a	ZAR	Indicates the country for which this holiday applies.
Holiday Date	2	I	N	n/a	12533	DOS Date of the holiday
Total Length	10Bytes					

9.8 Market Display Data – Number 1

The Market Display Data record defines all available contracts in the day's trading session. Only contracts specified in this download are available to be traded.

The Display field contained in this data contains the information for Last Traded Time, Last Traded Price, Day's High and Day's Low as at the time of download for every contract contained in the Market Display Data. This can be used as an initial indication of the market statistics for these contracts at the time of download.

Name	Length	Type	Description	Case	Example	Comment
Display Sequence	4	I	N	n/a	2333	Display sequence number of this record.
Contract	20	P	AN	U	FG602 ALSI	Contract name of this record.
Display	10*8 (10 arrays of P of length 8)	P	AN	n/a		Display data on the contract as a string field: Buy Qty Buy Price Sell Price Sell Qty Change Last Trade Time Last Trade Price High Low Volume

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Name	Length	Type	Description	Case	Example	Comment
Open Price	8	D	N	n/a	19500.00	Day's opening price of this contract.
Instrument Sequence	4	I	N	n/a	1235	Instrument sequence number.
Date Sequence	4	I	N	n/a	1522	Dates sequence number.
Strike Sequence	4	I	N	n/a	333	Strike sequence number.
Second Instrument Sequence	4	I	N	n/a	5122	Secondary instrument sequence number for split / switch instruments.
Second Date Sequence	4	I	N	n/a	5631	Secondary dates sequence number for spread instruments.
Unused	50	B	n/a	n/a		
Total Length	182 Bytes					

9.9 Active Orders Data – Number 5

The Active Orders Data indicates the active on-screen orders for a user currently on the system.

Name	Length	Type	Description	Case	Example	Comment
Sequence Number	4	I	N	n/a		Active Order Sequence number of this record.
Unused	8	B	n/a	n/a		
Enter Time	4	B	N	n/a	10, 55, 59 ,0	Time the order was placed.
User Code	6	P	A	U	AABB	Member code of logged in dealer.
User Dealer	4	P	A	U	ABC	Dealer code of logged in dealer.
Clearing Member	6	P	A	U	AABBC	Clearing member of the member.
Member	6	P	A	U	AABB	Member code of the member who the order was placed for.
Dealer	4	P	A	U	ABC	Dealer code of the dealer who the order was placed for.
Principal	8	P	A	U	ABC123	This displays the code of the Principal to the order.
Buy Or Sell	1	C	A	U	B	This displays whether the order is a Buy (B) or Sell(S).
State	1	C	A	U	A	Active or suspended.
Quantity	4	I	N	n/a	12	This displays the number of contracts involved in the order.
Contract	20	P	AN	U	FG603 ALSI	This displays the name of the contract being bought or sold.
Rate	8	D	N	n/a	19503.00	Price or rate of the order placed.
User Reference	25	P	AN	U	AFFS322	Reference code issued by the dealer.

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Name	Length	Type	Description	Case	Example	Comment
Suffix Code	2	B	AN	n/a		Suffix of the current deal.
Unused	8	B	n/a	n/a		
Profit Centre	6	P	AN	U	SDF22	Profit centre code to record the active order with.
Sub Account	6	P	AN	U	ABC12	Sub account used for the order.
Unused	4	B	n/a	n/a		
Principal Agency	1	C	A	U	'P' or 'A'	Principal Agency indicator
BDA Account number	11	P	AN	n/a	ABC23222	BDA Account Number for this active order.
Gash	89	P				
Total Length	236 Bytes					

9.10 Unconfirmed Orders Data – Number 6

The Unconfirmed Orders Data indicates all order which have been completed, but still require successful confirmation from STRATE that the order has matched.

Please see 9.7 Completed Orders / Unsettled Orders data – Number 7 for the details of the structure

9.11 Completed Orders / Unsettled Orders Data – Number 7

The Completed Order Data indicates all orders which have been satisfied for a particular user. The Exchange Reference number of the deal which resulted is given. The quantity and price which was dealt is also given in the Quantity, Dealt Price and Dealt Rate fields. The Original Quantity field indicates the quantity of the order submitted.

Name	Length	Type	Description	Case	Example	Comments
Completed Order Sequence Number	4	I	N	n/a	12422	Sequence number of this completed order record.
Unused	8	B	n/a	n/a		
Enter Time	4	B	N	n/a	10, 55, 59 ,0	Time of the completed order creation.
User Member	6	P	A	U	AABB	Member code of the logged in member.
User Dealer	4	P	A	U	ABC	Dealer code of the logged in dealer.
Clearing Member	6	P	A	U	AABBC	Clearing member code of the member.
Member	6	P	A	U	AABB	The member code of the completed order.
Dealer	4	P	A	U	ABC	The dealer code of the completed order.
Principal	8	P	A	U	ABC123	This displays the code of the Principal to the completed order.

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Name	Length	Type	Description	Case	Example	Comments
Buy Or Sell	1	C	A	U	B	Buy/Sell field of the order.
State	1	C	A	U	C	C – completed
Quantity	8	I	N	n/a	10	This displays the number of contracts involved in the order.
Contract	20	P	AN	U	FG603 ALSI	This displays the name of the contract being bought or sold.
Rate	8	D	N	n/a	8.5	Price or rate of the completed order.
User Reference	25	P	AN	U	AFDD233	Reference Code from the active order which made this completed order
Suffix Code	2	B	AN	n/a	0	Suffix of the current deal.
Unused	8	B	n/a	n/a		
Profit Centre	6	P	A	U	ASDD2	Profit Centre used from the active order which made this completed order.
Sub Account	6	P	A	U	ABC12	User Sub Account for this completed order.
Original Quantity	8	I	N	n/a	10	This displays the number of contracts involved in the order.
Dealt Rate	8	D	N	n/a	8.5	The rate at which the deal was actually done. This is different from the bid rate.
Dealt Price	8	D	N	n/a	19500.00	The price at which the deal was done.
Consideration	8	D	N	n/a	2504554.36	The value of the trade. Used for Bond products.
Exchange Reference	10	P	AN	U	A000232A	Exchange reference from the deal which created the completed order.
Carry Rate	8	D	N	n/a	12.5	The carry rate applicable to carry orders.
Settlement Date	2	D	N	n/a	12456	DOS Date on which this order settles
Unused	2	B	n/a	n/a		
Trade Date	2	I	N	n/a	12522	Dos Date of the date on which this order traded.
Trade Time	4	B	N	n/a	10, 55, 59 ,0	Dos Time of the time at which this order traded.
Trade Leg Number	10	P	N	n/a	000123456	Trade Leg Number from STRATE for this order.
Match Reference Number	10	P	N	n/a	000123456	Match Reference Number from STRATE for this order.
Unused	26	B	n/a	n/a		
Match Date	2	I	N	n/a	12523	Dos Date of the date on which this order was matched.

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Name	Length	Type	Description	Case	Example	Comments
Match Time	4	B	N	n/a	10, 55, 59 ,0	Time at which the order was matched.
Counter Party	8	P	AN	U	AAAA	Member Code of the counterparty when the completed order is on a Spot Bond Product.
Unused	10	n/a	n/a	n/a		
Price	8	D	N	n/a	19500.00	Price of the order submitted.
Unused	4	B	n/a	n/a		
Committed	1	C	n/a	n/a	Y, N	Indicates if this order has been committed.
Unused	6	B	n/a	n/a		
BDA Account Number	11	P	AN	n/a	AGF125	BDA Account Number for this order.
Is Guaranteed	1	B	N	n/a	1- True 0 - False	Indicates if this order is guaranteed or not.
Bond Spread	8	D	N	n/a	0.25	Indicates the spread from the companion bond.
Companion Bond	5	P	A	n/a	R201	Indicates the companion Bond.
Unused	54	B	n/a	n/a		
Origin	1	C	A	U	Y	See **6.10** for Origin Descriptions.
Reason	10	P	A	U	NT	See **6.11** For reason Descriptions. Note this may include multiple reason definitions.
Principal Agency	1	C	A	U	‘P’ or ‘A’	Principal Agency indicator
Spot Price	8	D	N	n/a	152.00	Mid-price of contract at time of entry.
Hitter	1	B	A	U	0	Indicates a true or false value if this order was placed by the aggressor or a market maker.
Clean Price	8	D	N	n/a	124.2565	Indicates the clean price for a completed order on a bond or bond future contract.
Accrued Interest	8	D	N	n/a	2.56545	Indicates the accrued interest for a completed order on a bond or bond future contract.
Total Length	400 Bytes					

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9.12 Deals Data – Number 8

The Deals Data defines what deals have been done for a particular user. When receiving a deal entry each entry will contain an Exchange Reference Number. This identifies the deal as recorded by the exchange. This Exchange Reference number will be accompanied with an Exchange Suffix field. This Exchange Suffix field is the version of the particular exchange reference number. When the deal is initially entered the Exchange Suffix will be 0, when further deal management activity is performed on this deal, the Exchange Suffix will be incremented. The uniqueness of an Exchange reference is therefore determined by both the Exchange Reference and Exchange Suffix on the deal.

Deals created as a result of end of day operations are identified by the Exchange Reference indicator of “DELIVERY”, “AUTOCLOSE”, “AUTOCLOSF” or “CORPORATE”. “DELIVERY” indicates a deal used to indicate a physical position on an agricultural product. These are generated during the processing of physical deliveries. “AUTOCLOSE” or “AUTOCLOSF” indicates a deal used to close out a position on a contract on future’s expiry. These deals are generated during the end of day process on a futures close out day. “CORPORATE” indicates a deal used to effect a corporate action. These deals are generated during the end of day process when a corporate action is scheduled.

Name	Length	Type	Description	Case	Example	Comment
Sequence Number	4	I	N	n/a		Sequence number of the deal record.
Unused	12	B	n/a	n/a		
Deal Time	4	B	N	n/a	10, 55, 59, 0	The time at which the deal was done.
Clearing Member	6	P	A	U	AAAAC	Data copied from orders.
Member	6	P	A	U	AAAA	Member code of logged in user.
Dealer	4	P	A	U	BAB	Dealer code of logged in user.
Principal	8	P	A	U	AAAA	Code of principal to the deal.
Buy Or Sell	1	C	A	U	B / S	Buy/Sell field of the order.
Origin	1	C	AN	n/a		See **6.10** for Origin field Descriptions.
Quantity	8	I	N	n/a	10	Number of contracts involved in the deal.
Contract	20	P	AN	n/a		Name of the contract on which the deal is done.
Dealt Rate	8	D	N	n/a		The rate at which the deal was done.
User Reference	25	P	AN	n/a		Reference number to appear on deal.
Exchange Suffix	2	B	AN	n/a		Set to 0 on first inc for div/split
Portfolio	8	P	N	n/a		Portfolio code for the deal.
Profit Centre	6	P	A	n/a		Profit centre code for the deal
Sub Account	6	P	A	n/a		Sub account code for the deal
Exchange Ref	10	P	AN	n/a	A000025	Exchange reference number.
Dealt Price	8	D	N	n/a		The price at which the deal was done.

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Name	Length	Type	Description	Case	Example	Comment
Unused	8	B	n/a	n/a		
Trade Date	2	B	N	12672		Trade Date of the deal as a DOS Date.
Booking Fee Flag	1	C	N	U		Will contain Z if zero fee.
Reason	10	C	N	UT		See **6.11** For reason Descriptions. Note that this may include multiple reasons.
Counterparty	8	P	A	CLE665		Code for the counterparty on the deal. Will only be populated for spot bond trades.
Original Quantity	8	I	N	n/a	10	Indicates the original quantity of the trade, before deal management took place on this deal.
Bond Spread	8	D	N	n/a	0.25	Indicates the bond spread from the companion bond.
Companion Bond	5	P	A	n/a	R201	Indicates the companion bond for this trade.
Is Guaranteed	1	B	N	n/a	1 – True 0 – False	Indicates if the trade is guaranteed.
Client Name	47	P	A	n/a	Client Name	Indicates the name of the counterparty.
Entered Time	4	B	N	n/a	12, 10, 15	Indicates the time the trade was entered.
Allocation Time	4	B	N	n/a	12, 10, 15	Indicates the time the trade was allocated.
Is Physical Settled	1	B	N	n/a	1 – True 0 – False	Indicates if the trade is physically settled.
Unused	15	B	n/a	n/a		
Principal Agency	1	C	A	U	‘P’ or ‘A’	Principal Agency indicator.
Total Length	270 Bytes					

9.13 Positions Data – Number 9

The Positions Data indicates the day’s position for a user. This includes a physical and delivered position for Agricultural Products.

Name	Length	Type	Description	Case	Example	Comment
Position Sequence Number	4	I	N	n/a	2342	Position Sequence number.
Clearing Member	6	P	N	U	AAAAC	Clearing Member code for the position.
Member	6	P	A	U	AAAA	Member code of the logged in user.
Dealer	4	P	A	U	BAB	Dealer code of the logged in user.

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Name	Length	Type	Description	Case	Example	Comment
Principal	8	P	A	U	AAAA	Principal for the position.
Contract Name	20	P	AN	U	FK503 R153	The of the contract on this position.
Start Position	8	D	N	n/a	10	This field displays the member's starting position before the markets open for the day.
Bought	8	D	N	n/a	10	This field displays the number of contracts bought during the day.
Sold	8	D	N	n/a	10	This field displays the number of contracts sold during the day.
Close Position	8	D	N	n/a	10	This field shows the Principal's current position.
Uncommitted Bought	8	D	N	n/a	10	Indicates the total long positions which still need to be committed to by the settlement agent.
Uncommitted Sold	8	D	N	n/a	10	Indicates the total short positions which still need to be committed to by the settlement agent.
Uncommitted Close	8	D	N	n/a	10	Indicates the total position which still need to be committed to by the settlement agent.
Uncommitted Open	8	D	N	n/a	10	Indicates the total starting position which still need to be committed to by the settlement agent.
Open Total Position	8	D	N	n/a	10	Indicates the starting total opening position.
Open Consideration	8	D	N	n/a	10	Indicates the starting total value of the position.
Unused	8	n/a	n/a	n/a	n/a	
Total Position	8	D	N	n/a	10	Indicates the total exposure on the position.
Consideration	8	D	N	n/a	10	Indicates the total value of the position.
Unused	48	n/a	n/a	n/a	n/a	
Physical Position	8	I	N	n/a	140	Total Physical Position
Physical Deliveries	8	I	N	n/a	140	Total Physical Delivered Position.
Position Date	2	I	N	n/a		Indicates the Settlement Date of a bond position, or a trade date for other products.
Total Length	215 Bytes					

Total Length: 207 Bytes

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9.14 Dealer Data – Number 14

The Dealer Data indicates the dealers in the user's member firm.

Name	Length	Type	Description	Case	Example	Comment
Dealer Sequence	4	I	N	n/a	124	Dealer sequence number of this record.
Unused	4	B	n/a	n/a		
Member Sequence	4	I	N	n/a	2523	Member sequence number.
Dealer Code	4	P	N	n/a	ABC	Dealer Code for this dealer.
Full Name	32	P	A	n/a	Joe Soap	Name of the dealer.
Position	50	P	A	n/a	Trader	Position of this dealer.
Telephone Number	24	P	AN	n/a	(011)342-7856	Telephone number of this dealer.
Fax Number	24	P	AN	n/a	(011)363-4522	Fax Number of this dealer.
Email	50	P	AN	n/a	joesoap@jse.com	Email address of this dealer.
Unused	77	B	n/a	n/a		
Total Length	273 Bytes					

9.15 Client Data - Number 12

The Client Data indicates the clients for a particular user's member firm. The Verified status field indicates if a client is available to trade or not.

Name	Length	Type	Description	Case	Example	Comment
Client Sequence	4	I	N	n/a	23542	Client Sequence Number of this record.
Master Client Sequence Number	4	I	N	n/a	2343	Client sequence number of the master client.
Member Sequence Number	4	I	N	n/a	2342	Member sequence number of the member.
Client Code	7	P	AN	U	ABC123	Client code for this client.
Name	50	P	AN	n/a	Joe Soap	Name of this client.
Verified	1	B	N	n/a	True = 1, False = 0	Indicates if this client has been verified by a compliance officer.
Foreign	1	B	N	n/a	True = 1, False = 0	Indicates if this client is foreign or not.
Can Trade Derivatives	1	B	N	n/a	True = 1, False = 0	Indicates if this is a client has been enabled to trade on derivatives.
Is Verified At STRATE	1	B	N	n/a	True = 1, False = 0	Indicates if this is a STRATE client if the details of the client have been verified at STRATE.

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Name	Length	Type	Description	Case	Example	Comment
Multiplication Factor	4	I	N	n/a	100	Multiplication factor for client.
Strate Code	7	P	AN	U	ABC123	For client accounts which are linked to a STRATE code. This field will indicate the STRATE code for this YieldX client account.
Last Active Date	2	I	N	n/a	12512	Indicates the last date this client was active.
Is Professional	1	B	N	n/a	0 = False 1 = True	Indicates if this client is a professional bond trader.
Is Shariah	1	B	N	n/a	0 = False 1 = True	Indicates if client can trade shariah contracts.
Total Length	88 Bytes					

9.16 Member Data – Number 15

The Member Data indicates all available members on the market.

Name	Length	Type	Description	Case	Example	Comment
Member Sequence	4	I	N	n/a	2355	Member sequence of this record.
Master Member Sequence	4	I	N	n/a	2123	Member sequence of the master member.
Clearing Member Sequence	4	I	N	n/a	1612	Clearing member sequence of this members clearing member.
Member Code	5	P	A	U	AAAA	Member code for this member.
Description	50	P	AN	n/a	AAAA Brokers	Name or Description of this member.
Category	56	P	AN	n/a	Banks	Indicates the category setup at the exchange for this user.
Total Length	123 Bytes					

9.17 Skew Data – Number 19

The Skew Data indicates the skews applied to particular contracts.

Name	Length	Type	Description	Case	Example	Comment
Skew Sequence	4	I	N	n/a	2355	Skew sequence of this record
Instrument Sequence	4	I	N	n/a	1225	Instrument sequence number
Date Sequence	4	I	N	n/a	1455	Dates sequence number
Entry Date	2	I	N	n/a	13425	Dos Date of date of entry
At the Money	8	D	N	n/a	1245.00	The At-the-Money price or rate
MTM Volatility	8	D	N	n/a	24.09	MTM Volatility at the strike
Volatility Weight	8	D	N	n/a	45.22	Vol Weight at the strike price
Maximum Skew	8	D	N	n/a	20	Maximum skew value

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Name	Length	Type	Description	Case	Example	Comment
Minimum Skew	8	D	N	n/a	10	Minimum skew value
Moneydness	9*8	D	N	n/a	45.88	Array of nine Doubles Moneyed-ness of strike
Skew	9*8	D	N	n/a	222.44	Array of Nine Doubles representing Skews
Weights	9*8	D	N	n/a	222.44	Array of Nine Doubles representing Skews
Total Length	270 Bytes					

9.18 Dealer Risk Value Limits Data – Number 24

The Dealer Risk Value Limits Data indicates the current limits applied for dealers of the user's member firm.

Name	Length	Type	Description	Case	Example	Comment
Sequence number of Risk value limits	4	I	N	n/a	12	Sequence number of Risk value limits.
Member	6	P	AN	U	AAAA	Member code of logged in user.
Dealer	4	P	A	U	ABC	Dealer code of logged in user.
Instrument Type Code	10	P	A	n/a	"AGRIF"	The instrument type to which this limit applies.
Instrument Short Name	5	P	A	n/a	"WMAZ"	The instrument name to which this limit applies.
Limits On-Screen	8	D	N	n/a	32.00	Limit for on screen transactions.
Limits Options	8	D	N	n/a	15.00	Limit for option transactions both on screen and off screen.
Limits Report Only	8	D	N	n/a	74.00	Limit for Report Only transactions.
Total Length	53 Bytes					

9.19 Daily Rates – Number 25

The Daily Rates download indicates the daily interest and other rates used by the exchange.

Name	Length	Type	Description	Case	Example	Comment
Daily Rate Sequence	4	I	N	n/a	2355	Daily Rate sequence of this record.
Effective Date	2	I	N	n/a		Date of the Daily Rate Record.
Rate	8	D	N	n/a		
RODI	8	D	N	n/a		Rand Overnight Deposit Rate.
JRODI	8	D	N	n/a		
JRODI Factor	8	D	N	n/a		

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Name	Length	Type	Description	Case	Example	Comment
JIBAR	8	D	N	n/a		
JIBAR 3 Month	8	D	N	n/a		3 Month JIBAR Rate
JIBAR 6 Month	8	D	N	n/a		6 Month JIBAR Rate
JIBAR 9 Month	8	D	N	n/a		9 Month JIBAR Rate
JIBAR 12 Month	8	D	N	n/a		12 Month JIBAR Rate
Prime	8	D	N	n/a		Prime Rate
Discount Rate 3 Month	8	D	N	n/a		
SARB Call Rate	8	D	N	n/a		
USD Rate	8	D	N	n/a		US Dollar / Rand Exchange Rate
EUR Rate	8	D	N	n/a		Euro / Rand Exchange Rate
GBP Rate	8	D	N	n/a		British Pound / Rand Exchange Rate
OCAD	8	D	N	n/a		
NCD 3 Month	8	D	N	n/a		
NCD 6 Month	8	D	N	n/a		
NCD 12 Month	8	D	N	n/a		
STEFI	8	D	N	n/a/		Short Term Fixed Interest Rate
91-Day Treasury Bill	8	D	N	n/a		Rate for the 91-day Treasury Bill
Total Length	174 Bytes					

9.20 Message Type Data – Number 38

The Message Type Data indicates what message types are available on the market. This can be used in conjunction with setting message subscription for particular messages.

Name	Length	Type	Description	Case	Example	Comment
Sequence of Message Type	4	I	N	n/a	1	Sequence number of Message Type.
Message Type Number	4	I	N	n/a	36	This field represents the number of the message type for Example a 36 would be a File Download.
Message Type Code	10	P	AN	U	LDD	This is the Code name of the message type. For Example, 36's Code is LDD.
Message Type Name	25	P	AN	UL	File Download	This represents the name of the message type. For example, 36 LDD is a File Download.
Total Length	43 Bytes					

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9.21 Tripartite Setup Data – Number 61

The Tripartite Setup Data will indicate what tripartite agreements have been setup that involve the user's member firm.

Name	Length	Type	Description	Case	Example	Comment
Clients member	6	P	AN	U	LJBM	The member code of the tripartite client.
Client Code	8	P	AN	U	ABC123	The code of the tripartite client.
Clearing member	6	P	AN	U	LJBCC	The Clearing member code of the member.
Tripartite Member	6	P	AN	U	GHTM	The member code of the tripartite member.
Gash	128	C	AN	n/a	n/a	n/a
Total Length	154 Bytes					

9.22 Trace Deal Data – Number 64

The Trace Deal Data indicates additional detail regarding the capturing and updating of deals. Post Deal activity such as accumulations and allocations are recorded here, with the Trace Action field indicating the resultant state of a particular deal record.

Name	Length	Type	Description	Case	Example	Comment
Audit Sequence number	4	I	N	n/a	12	The sequence number of the audit deal.
Order Sequence	4	I	N	n/a		Sequence of order creating deal.
Unused	8	B	n/a	n/a		
Deal Time	4	B	N	n/a	10, 55, 59 ,0	The time at which the deal was done.
Clearing Member	6	P	A	U	AAAAC	Data copied from orders.
Member	6	P	A	U	AAAA	Member code of logged in user.
Dealer	4	P	A	U	BAB	Dealer code of logged in user.
Principal	8	P	A	U	AAAA	Code of principal to the deal.
Buy Or Sell	1	C	A	U	B / S	Buy/Sell field of the order.
Origin	1	C	AN	n/a		See 6.10 for Origin field Descriptions.
Quantity	8	I	N	n/a	10	Number of contracts involved in the deal.
Contract	20	P	AN	n/a		Name of the contract on which the deal is done.
Dealt Rate	8	D	N	n/a		The rate at which the deal was done.
User Reference	25	P	AN	n/a		Reference number to appear on deal.
Exchange Suffix	2	I	N	n/a		Set to 0 on first inc for div/split
Portfolio	8	P	N	n/a		Portfolio code for the deal.

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Name	Length	Type	Description	Case	Example	Comment
Profit Centre	6	P	A	n/a		Profit centre code for the deal.
Sub Account	6	P	A	n/a		Sub account code for the deal.
Exchange Ref	10	P	AN	n/a	A000025	Exchange reference number.
Dealt Price	8	D	N	n/a		The price at which the deal was done.
Deal Consideration	8	D	N	n/a		Consideration on current deal.
Settlement Date	2	B	N	n/a		Settlement date of this leg.
Booking Fee Flag	1	C	N	U		Will contain Z if zero fee
Reason	10	P	N	U		See 6.11 for Reason Descriptions. Note this may include multiple reasons
Unused	101	B	n/a	n/a		
Trace Action	1	C	N	U	U, I, D	U – Update I – Insert D – Delete This is an indication if the record was deleted or not.
Action Time	4	B	N	n/a	10, 55, 59 ,0	Time that action took place.
Original Sequence	4	I	N	n/a	27	If the deal is created from an action on another deal, then this is the sequence of the original.
Original Reference Number	10	P	N	AN	A0002314	This is the reference number of the original deal.
Original Suffix	4	I	N	n/a	1	This is the suffix of the original deal.
Principal Agency	1	C	A	U	‘P’ or ‘A’	Principal Agency indicator.
Total Length	293 Bytes					

9.23 Clearing Member Data – Number 65

The Clearing Member Data displays all Clearing Members available on the market.

Name	Length	Type	Description	Case	Example	Comment
Clearing member Sequence	4	I	N	n/a	23	This is the Clearing member sequence.
Clearing member code	6	P	NA	U	LJBCC	This is the code used for the clearing member.
Clearing member Description	50	P	NA	U	LJB Clearing house	This is the Description of the clearing member.
Total Length	60 Bytes					

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9.24 Message Subscription Data – Number 67

The Message Subscription Data indicates the message subscription details for dealers of a member firm. This indicates if a particular dealer has subscribed to a particular message.

Name	Length	Type	Description	Case	Example	Comment
Message Subscription sequence	4	I	N	n/a	12	The is the sequence of the message subscription.
Member	6	P	AN	U	LJBM	This is the member code for the subscription details.
Dealer	4	P	AN	U	DJW	This is the dealer code for which these message subscriptions apply.
Message subscription message number	4	I	N	n/a	32	This is the message number for which this subscription applies.
Is Subscribed	1	B	n/a	n/a	1 – True 0 – False	This indicates if the dealer is subscribed to the message.
Can Change	1	B	n/a	n/a	1 – True 0 – False	The indicates if the dealer has rights to change his subscription to the message
Group Rights	1	B	n/a	n/a	1 – True 0 – False	This indicates if the group to which this dealer belongs has rights to the message.
Total Length	21 Bytes					

9.25 Group Definition Data – Number 78

The Group Definition Data defines the group setup for instruments. The Next Group Sequence points to the next level in this group. The instrument which then links to that group sequence is defined as being part of the group setup. The Next margin field indicates the margin amount applicable to the next level of grouping. For example, ALSI (Instrument Seq 1 may point to Group Sequence 2, Group Sequence 2 may have a Next Group Sequence of 3, INDI Instrument Sequence 5 may point to Group Sequence 3, thus ALSI (1) and INDI (5) belong to the same group.

Name	Length	Type	Description	Case	Example	Comment
Group Sequence	4	I	N	n/a	2355	Group Definition sequence of this record.
Next Group Sequence	4	I	N	n/a	1225	The sequence number of the group following this Group Definition sequence number.
Unused	4	B	n/a	n/a		
Group Code	4	I	N	n/a	21	Code representing this group.
Next Margin	8	D	N	n/a	1245.00	The next margin value on this group.
Group Description	60	P	AN	n/a	MAR JUN FBWC	The string Description of this group.

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Name	Length	Type	Description	Case	Example	Comment
Total Length	84 Bytes					

9.26 Fee Data – Number 79

The Fee Data indicates the fee structure for a particular scenario. The additional sequence numbers mentioned here (Assigned, Early Leg, etc) indicate further breakdown of fee amounts applicable to those further scenarios. The Fee Sequence is reference by Instruments and thus instruments have fee amounts as per the structure defined in this layout.

Name	Length	Type	Description	Case	Example	Comment
Fee Sequence	4	I	N	n/a	2355	Fee sequence number of this record.
Fee Calculation Sequence	4	I	N	n/a	1225	The sequence number of the fee calculation data sequence.
Aggressed Sequence	4	I	N	n/a	1287	Fee Data Sequence which defines fee breakdown for aggressed transactions.
Assigned sequence	4	I	N	n/a	2211	Fee Data Sequence which defines fee breakdown for assignment transactions.
Equal and opposite sequence	4	I	N	n/a	2548	Fee Data Sequence which defines fee breakdown for equal and opposite transactions.
Early leg sequence number	4	I	N	n/a	2345	Fee Data Sequence which defines fee breakdown for early leg transactions.
Option Abandon Sequence number	4	I	N	n/a	457	Fee Data Sequence which defines fee breakdown for option abandon transactions.
Option Exercise Sequence number	4	I	N	n/a	457	Fee Data Sequence which defines fee breakdown for option exercise transactions.
Late leg sequence	4	I	N	n/a	456	Fee Data Sequence which defines fee breakdown for late leg transactions.
Report Only sequence number	4	I	N	n/a	5644	Fee Data Sequence which defines fee breakdown for report only transactions.
Roll forward sequence number	4	I	N	n/a	5644	Fee Data Sequence which defines fee breakdown for roll forward transactions.
Tripartite sequence number	4	I	N	n/a	5644	Fee Data Sequence which defines fee breakdown for tripartite transactions.
Fee scale number	4	I	N	n/a	5	The record in the fee scale data set that indicates the scale of this fee
Nominal	4	I	N	n/a	20000	This is the nominal of the contract that this fee scale applies to.

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Name	Length	Type	Description	Case	Example	Comment
Fee	8	D	N	n/a	12.50	The fee value.
Fee Minimum	8	D	N	n/a	10.50	The Min fee value.
Fee Maximum	8	D	N	n/a	15.50	The Max fee value.
Contract Minimum Fee	8	D	N	n/a	10.2	Indicates the minimum fee per contract.
Contract Maximum Fee	8	D	N	n/a	20.2	Indicates the maximum fee per contract.
Fee Description	50	P	AN	n/a	Fee for…	Fee Description
Total Length	146 Bytes					

9.27 Fee Scale Data – Number 80

Fee Scales are to be implemented in future, and as a result the description will be updated when the scaling of fees becomes necessary.

Name	Length	Type	Description	Case	Example	Comment
Fee Scale Sequence	4	I	N	n/a	2355	Fee Scale sequence number of this record.
Fee Scale Number	4	I	N	n/a	1225	The sequence number of the fee calculation date sequence.
Scale	4	I	N	n/a	1287	number of this fee scale.
Scale Value	8	D	N	n/a	48.00	Scale value in decimals.
Total Length	20 Bytes					

9.28 Fee Calculation Data – Number 81

Fee Calculations provide a description for the Fee Data. This description provides additional information for the calculation of fees.

Name	Length	Type	Description	Case	Example	Comment
Fee Calculation Sequence	4	I	N	n/a	2355	Fee Calculation sequence number of this record.
Fee Calculation Number	4	I	N	n/a	1225	The sequence number of the fee calculation date sequence.
Fee calculation Description	100	P	AN	n/a	Fee for WMAZ	Fee calculation Description.
Total Length	108 Bytes					

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9.29 Transfer Client Member Data – Number 83

The Transfer Client Member Data indicates the transfers of clients to other members. Included in this definition is the date the transfer is to be effected, and the new member sequence to which the client is to be transferred to.

Name	Length	Type	Description	Case	Example	Comment
Transfer Client Member sequence	4	I	N	n/a	12	Sequence number of the transfer client member.
Client Sequence	4	I	N	n/a	1225	The sequence number of the client in the client data retrieval.
Dealer responsible sequence	4	I	N	n/a	232	The sequence number of the dealer in the dealer data retrieval.
Member original sequence	4	I	N	n/a	232	Original Member sequence number.
New member sequence number	4	I	N	n/a	546	New member sequence number.
Processed	1	B	N	n/a	1 – True 0 – False	This Boolean value indicates if the transfer has been done yet.
Transfer date	2	I	N	n/a	18543	Date on which the transfer will take place.
Total Length	23 Bytes					

9.30 Transfer Client Data – Number 82

The Transfer Client Data indicates the transfer of client accounts to new client accounts. Included in this layout is the date the transfer is to be effected, and the new Client Sequence, to which this client is to be transferred to.

Name	Length	Type	Description	Case	Example	Comment
Transfer Client sequence	4	I	N	n/a	12	Sequence number of the transfer client.
New Client Sequence	4	I	N	n/a	1225	The sequence number of the new client in the client data retrieval.
Original Client Sequence	4	I	N	n/a	546	The sequence number of the original client in the client data retrieval.
Transfer Client	4	I	N	n/a	5465	The sequence number of the Transfer client in the client data retrieval.
Transfer date	2	I	N	n/a	18432	Date on which the transfer will take place.
Total Length	18 Bytes					

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9.31 Transfer Member Data – Number 84

The Transfer Member Data indicates the transfer of Member accounts to new Member accounts. Included in this layout is the date on which this transfer is to be effected, and the new Member Sequence to which the member is transferred to.

Name	Length	Type	Description	Case	Example	Comment
Transfer Member sequence	4	I	N	n/a	12	Sequence number of the transfer Member.
New Member Sequence	4	I	N	n/a	1225	The sequence number of the new member in the member data retrieval.
Original Member Sequence	4	I	N	n/a	546	The sequence number of the original member in the member data retrieval.
Transfer member	4	I	N	n/a	5465	The sequence number of the Transfer member in the member data retrieval.
Transfer date	2	I	N	n/a	18543	Date on which the transfer will take place.
Total Length	18 Bytes					

9.32 Transfer Member Clearing Member Data – Number 85

The Transfer Member Clearing Member Data indicates the transfer of Member accounts to new Clearing Members. Included in this layout is the date the transfer is to be effected, and the New Clearing Member Sequence of the member.

Name	Length	Type	Description	Case	Example	Comment
Transfer Clearing Member sequence	4	I	N	n/a	12	Sequence number of the transfer Clearing Member.
New Clearing Member Sequence	4	I	N	n/a	1225	The sequence number of the new Clearing member in the member data retrieval.
Original Clearing Member Sequence	4	I	N	n/a	546	The sequence number of the original clearing member in the member data retrieval.
Transfer Clearing member	4	I	N	n/a	5465	The sequence number of the Transfer clearing member in the member data retrieval.
Processed	1	B	N	n/a	1 – True 0 – False	Transaction processed.
Transfer date	2	I	N	n/a	18764	Date on which the transfer will take place.
Total Length	19 Bytes					

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9.33 Physical Grade Data – Number 73

The Physical Grade Data indicates the Grades applicable to Agricultural Product Instruments. These grades are used in the delivery and capturing of silo certificates.

Name	Length	Type	Description	Case	Example	Comment
Grade Sequence	4	I	N	n/a	1	Grade Sequence
Instrument Sequence	4	I	N	n/a	45	Instrument sequence of grade
Grade Code	5	P	AN	U	WEAT	Code of grade
Grade Description	100	P	AN	n/a	Grade of wheat	Grade Description of this sequence.
Total Length	113 Bytes					

9.34 Silo Owner Data – Number 72

The Silo Owner Data indicates the details for Silo Owners. These Silo Owners are used in the capturing of silo certificates and delivery.

Name	Length	Type	Description	Case	Example	Comment
Silo Owner Sequence	4	I	N	n/a	2342	Sequence of owner.
Certificate Start Range	4	I	N	n/a	9996245	This is the starting range of this set of certificates.
Certificate End Range	4	I	N	n/a	9999999	This is the ending range of this set of certificates.
Silo Owner Code	10	P	AN	n/a	EMPANGENI	This the code of the owner
Silo Owner Name	52	P	AN	n/a	Empangeni Silo	This is the name of the owner.
Total Length	74 Bytes					

9.35 Silo Location Data – Number 71

The Silo Location Data indicates the details of Silo Locations. A Silo Location is reference by a Silo Owner. These Silo Locations are used in the capturing of silo certificates and delivery.

Name	Length	Type	Description	Case	Example	Comment
Silo Location Sequence	4	I	N	n/a	3241	Silo Location Sequence
Silo Owner Sequence	4	I	N	n/a	525	Silo owner Sequence
Silo Location Code	10	P	N	n/a	VRYHEID	Code of silo location
Silo Location Name	52	P	N	n/a	Vryheid Silo	Name of silo Location
Total Length	70 Bytes					

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9.36 Delivery Notices Data – Number 68

The Delivery Notices Data indicate the delivery notices captured for a particular Delivery Date. This information includes an array of Silo Certificates that were delivered against this delivery notice.

Name	Length	Type	Description	Case	Example	Comment
Physical Delivery Sequence	4	I	N	n/a	456465	Physical Delivery Sequence.
Member Sequence	4	I	N	n/a	4554	Member sequence
Client Sequence	4	I	N	n/a	454	Client Sequence
Contract Date Sequence	4	I	N	n/a	4546	Contract Date sequence
Silo Receipt Sequence	100*4	I	N	n/a	7898,7845	Silo receipt sequences to be delivered.
Delivery Date	3*4	I	N	n/a	2006,6,13	Delivery Date
Notice Date	3*4	I	N	n/a	2006,6,14	Notice Date
Nominal	4	I	N	n/a	10000	Nominal of delivery
Quantity	4	I	N	n/a	54	Quantity of delivery
Delivery Notice reference number	20	P	AN	U	456473	Delivery notice reference number.
Total Length	468 Bytes					

9.37 Delivery Notices Report (Number 87) and Allocation Notices Report (Number 86) data

The Delivery Notice Report and Allocation Notice Report provide a summary of deliveries and allocations done for a particular delivery or allocation date respectively.

Name	Length	Type	Description	Case	Example	Comment
Delivery Notice reference number	20	P	AN	U	AD456473	Delivery notice reference number.
Client Code	7	P	AN	U	ABC123	Client Code on Delivery or Allocation Notice.
Member Code	6	P	AN	U	ABCD	Member Code on Delivery or Allocation Notice.
Clearing Member Code	6	P	AN	U	ABCDC	Clearing Member Code on Delivery or Allocation Notice.
Delivery Date	3*4	I	N	n/a	2006,6,23	Delivery Date
Notice Date	3*4	I	N	n/a	2006,6,24	Notice Date
Instrument	5	P	A	U	SOYA	Instrument Delivered
Expiry Date	3*4	I	N	n/a	2006,6,20	Contract Expiry Date
Nominal	4	I	N	n/a	54	Nominal of delivery
Quantity	8	I	N	n/a	54	Quantity of delivery
Certificate Number	4	I	N	n/a	456473	Certificate Number to be delivered or allocated.

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Name	Length	Type	Description	Case	Example	Comment
Electronic	1	B	N	n/a	1 – True 0 – False	Boolean value indicating if receipt is electronic or paper.
Certificate Quantity	8	I	N	n/a	21	Quantity of silo certificate.
Silo Owner Code	11	P	AN	n/a	EMPANGENI	This the code of the owner.
Silo Location Name	53	P	AN	n/a	Vryheid Silo	Name of silo Location.
Storage Paid Date	3*4	I	N	n/a	2006, 6, 12	Date up until which storage was paid.
Storage Discount	8	D	N	n/a		Storage discount applicable.
Location Discount	8	D	N	n/a		Location discount applicable.
Grade Discount	8	D	N	n/a		Grade discount applicable.
Origin Discount	8	D	N	n/a		Origin discount applicable.
VAT	8	D	N	n/a		VAT amount applicable.
Total Discount	8	D	N	n/a		Total discount applicable.
Closing Price	8	D	N	n/a		Closing price on contract delivered.
Total Length	229 Bytes					

NOTE: Allocation Notice Reports are referenced by the Notice Date Parameter, Delivery Notice Reports are referenced by the Delivery Date Parameter.

9.38 Certificate Origin Data – Number 75

The Certificate Origin Data indicates the origin of agricultural products. This information is used in the capturing of silo certificates and deliveries.

Name	Length	Type	Description	Case	Example	Comment
Sequence of Origin	4	I	N	n/a	21347	Origin sequence
Instrument Sequence	4	I	N	n/a	243	Sequence of instrument
Country Name	50	P	N	n/a	SWAZILAND	Name of origin country
Total Length	58 Bytes					

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9.39 Silo Certificates – Number 69

The Silo Certificates Data indicates the silo certificates loaded by a user.

Name	Length	Type	Description	Case	Example	Comment
Sequence of Silo Certificate	4	I	N	n/a	223	When editing a silo certificate this should be the sequence of the certificate.
Certificate number	4	I	N	n/a	12348	Silo Certificate number
Silo Owner Sequence	4	I	N	n/a	123457	Silo Certificate owner number
Silo Location Sequence	4	I	N	n/a	54546	Silo Certificate location number
Delivery Notice Sequence	4	I	N	n/a	5645	Delivery Notice Number
Instrument Sequence	4	I	N	n/a	4564	Instrument table sequence of this certificate.
Grade Sequence	4	I	N	n/a	544546	Grade sequence number
Origin Sequence	4	I	N	n/a	1346	Sequence of Origin
Member Sequence	4	I	N	n/a	64	Sequence number of certificate member from member data.
Unused	4	B	n/a	n/a		
Status	1	C	A	U	R – Ready for delivery V – Verified D – Delivered E – Error Blank – unknown N – Not Verified	Status of certificate
Quantity	8	I	N	n/a	45	Quantity on certificate
Storage Paid Date	3*4	I	N	n/a	2006,6,23	Date up until which storage has been paid.
Electronic paper	1	B	N	n/a	1 – True 0 – False	Is the certificate paper based.
Issued Date	3*4	I	N	n/a	2006,6,23	Date the certificate was issued.
Original Depositor	50	P	AN	U		Name of original depositor.
Total Length	120 Bytes					

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9.40 Daily Account Summary – Number 70

The Daily Account Summary is available to Clearing Member users only. This data gives a breakdown of the margin and fee calculated by the exchange at the end of day.

Name	Length	Type	Description	Case	Example	Comment
Client Code	7	P	AN	U	XYZ123	Client Code
Nightly Run Date	2	I	N	n/a	11245	Dos date of Nightly Run
Fee	8	D	N	n/a	14.00	Fee Charged
Supplementary Fee	8	D	N	n/a	122.00	Supplementary Fee Charged.
Discount	8	D	N	n/a	12.00	Discount charged
Margin	8	D	N	n/a	1100000.00	Margin amount
Previous Margin	8	D	N	n/a	11.0	Previous Margin amount
Mark To Market	8	D	N	n/a	25600.00	MTM amount
Rate	8	D	N	n/a	11.25	Rate changed
Clearing member	6	P	AN	U	LOUIC	Clearing member name
Clearing member name	52	P	AN	U/L	Bank of South Africa	Clearing member Description
Clearing member second name	52	P	AN	U/L	Bank of South Africa LT	Second Clearing member Description
Member Code	6	P	AN	U	LOUI	Member code
Member name	52	P	AN	U/L	Loui member	Member Name Description
Client name	52	P	AN	U/L	Koos Visagie Client	Client Description
VAT Registration Number	20	P	N	n/a	12345678	VAT Registration Number
TelephoneNumber1	24	P	N	n/a	0114552948	Primary Contact number
Fax Number	24	P	N	n/a	0114552866	Fax number
Physical Address	50	P	AN	U/L	10 Boom St	Address field 1
Physical Address1	50	P	AN	U/L	Empangeni	Address field 2
Physical Suburb	50	P	N	n/a	Nyala	Suburb on address
Physical City	50	P	N	n/a	Johannesburg	City in address
Postal Code1	15	P	N	n/a	1068	Postal code
Client second name	52	P	AN	U/L	Buuren	Client Second Name
Transfer Margin	8	D	N	n/a		Transfer margin
Net Payment	8	D	N	n/a		Net Payment
Margin Collateral Cash Value	8	D	N	n/a		Indicates the collateral amount held for margin payments
Total Length	644 Bytes					

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9.41 Client Detail – Number 66

The Client Detail Data provides additional detail for clients. This information includes contract, and address information for a particular Client Sequence.

Name	Length	Type	Description	Case	Example	Comment
Client Sequence	4	I	N	n/a	2422	For Updates the sequence number of the client is required.
Master Client Sequence	4	I	N	n/a	6223	If this client is a sub account for another client, that client's sequence number is required.
Member Sequence	4	I	N	n/a	267	The sequence number of the member.
Member Code	6	P	AN	U	ABMN	The member code of the member to which this client is registered.
Foreign Client	1	B	N	n/a	1 – True 0 – False	Indicates if this is a foreign client or not.
Client Code	7	P	AN	U	ABC123	Client code for this client.
Unused	8	n/a	n/a	n/a		Not used in request.
ID Number	15	P	AN	n/a	5504122775089	The ID Number of the client, if this client is an individual.
Passport Number	15	P	AN	n/a	1441267	Passport Number for foreign client.
VAT Registration Number	51	P	AN	n/a	23-555531-232	VAT Registration number for non-individuals, example companies.
Client Name	51	P	A	n/a	Joe Soap	Name of client.
Client Second Name	53	P	A	n/a	Private Investment Services	Second name of client.
Postal Address Postal Code	11	P	N	n/a	2411	Postal Code of the address supplied for postal address.
Physical Address Postal Code	11	P	AN	n/a	4162	Postal Code of the address supplied for physical address.
Telephone Number	25	P	AN	n/a	(011)222-3341	Telephone number at which the client can be contacted.
Alternate Telephone Number	25	P	AN	n/a	(011)335-6331	An alternate telephone number at which the client can be contacted.
Fax Number	25	P	AN	n/a	(011)452-2221	Fax number at which the client can be contacted.

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Name	Length	Type	Description	Case	Example	Comment
Physical Address	51	P	AN	n/a	4 Exchange Square	First line of physical address.
Physical Address Line 2	51	P	AN	n/a	Gwen Lane	Second line of physical address.
Physical Address Suburb	21	P	AN	n/a	Sandton	Suburb of physical address.
Physical Address City	31	P	AN	n/a	Johannesburg	City of physical address.
Postal Address	51	P	AN	n/a	4 Exchange Square	First line of postal address.
Postal Address Line 2	51	P	AN	n/a	Gwen Lane	Second line of postal address.
Postal Address Suburb	21	P	AN	n/a	Sandton	Suburb of postal address.
Postal Address City	31	P	AN	n/a	Johannesburg	City of postal address.
Email Address	51	P	AN	n/a	joesoap@jse.com	Email address at which client can be contacted.
Compliance Officer Name	51	P	A	n/a	Joe Soap	Name of the compliance officer for the member firm.
Discretionary Managed	1	B	N	n/a	1 – True 0 – False	Indicates if this client is discretionarily managed or not.
Date Of Birth	3*4	I	N	n/a	2006,8,24	Date of birth in format: 2006, 8, 24
Client's Bank Account Number	19	P	AN	n/a	241122	Bank account number for client.
Multiplication Factor	4	I	N	n/a	100	Multiplication factor for foreign clients.
Swift Code	13	P	AN	n/a	2411-23	Swift code used by client. BIC Code.
Registration Number	21	P	AN	n/a	34223-443	Registration number for non-individuals e.g. CCs
Income TAX Number	21	P	AN	n/a	42551-533	Income tax number of client.
Is an Update	1	B	N	n/a	1 – True 0 – False	Indicates if this record is an update, or not.
Is an Individual	1	B	N	n/a	1 – True 0 – False	Indicates if this client is an individual or not.
Electronic Account Number	30	P	AN	n/a	4224666	Electronic account number used on delivery notice system for agricultural deliveries.

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Name	Length	Type	Description	Case	Example	Comment
Is Electronic	1	B	N	n/a	1 – True 0 – False	Indicates if this client can receive electronic delivery notices or not.
Proof of Residence Supplied	1	B	N	n/a	1 – True 0 – False	Indicates if proof of residence has been supplied by client, or not.
Proof of Registration Supplied	1	B	N	n/a	1 – True 0 – False	Indicates if proof of registration has been supplied by client.
Date Client Loaded	3*4	I	N	n/a	2007,5,15	Date the client was loaded.
Date Client Verified	3*4	I	N	n/a	2007,5,16	Date the client was verified.
Is Staff Account	1	B	N	n/a	1 – True 0 – False	Indicates true or false if this client is a staff account.
STRATE Client code	9	P	AN	U	ABC123	The client code of the client at STRATE.
Settlement Agent STRATE Code	9	P	AN	U	SETT	The STRATE code of the settlement agent to which the client belongs.
Funds Account Number	19	P	AN	n/a	AABB-223	The account number at STRATE which will be used for this client.
Scrip Account Number	19	P	AN	n/a	BBTT-2233	The account number at STRATE which will be used for this client.
Funds Account Branch Code	9	P	AN	n/a	AA444	The branch code applicable to the Funds Account Number.
Scrip Account Branch Code	9	P	AN	n/a	22332	The branch code applicable to the Scrip Account Number.
Client Type	3	P	AN	n/a	MM – Member Managed MS – Member Settled GP – General Purpose	The client type must be one of the 3 options mentioned.
Industry Code	11	P	AN	n/a	RETAIL	Please use one of the Industry Codes specified in the Industry Data Download.
Trading Role	3	P	AN	n/a	PT	The trading role code as specified by STRATE.
Can Trade Derivatives	1	B	n/a	n/a	1 – true 0 – false	Indicates if this client has been enabled to trade on derivatives.
Is Existing at STRATE	1	B	n/a	n/a	1 – true 0 – false	Indicates if this client loading transaction is

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Name	Length	Type	Description	Case	Example	Comment
						for a new STRATE client, or for an existing STRATE client
Unused	1	B	n/a	n/a	n/a	
BDA Account Number	11	P	AN	n/a	ABC-123	BDA Account Number for this client.
Is Professional Client	1	B	N	n/a	1 – True 0 – False	Indicates if this client is a professional bond client or not.
Is Shariah	1	B	N	n/a	1 – True 0 – False	Indicates if this client can trade Shariah products.
Total Length	984 Bytes					

Total Length: 994 Bytes

9.42 Exchange Announcements – Number 89

The Exchange Announcement data provides a list of announcements which were sent by the exchange for a particular trading day.

Name	Length	Type	Description	Case	Example	Comment
Announcement Sequence	4	I	N	n/a	2422	Sequence number of the exchange announcement record.
Announcement Date	3*4	I	N	n/a	2007,6,18	Date of the exchange announcement.
Announcement Time	4	B	N	n/a	10, 54, 55, 0	Time of the exchange announcement.
Announcement	255	P	AN	n/a	“Market times have been extended”	Announcement as sent by the exchange.
Total Length	275 Bytes					

Total Length: 275 Bytes

9.43 Delivery Allocation Data – Number 91

This data can be downloaded to reflect the position make up of a delivery notice.

Name	Length	Type	Description	Case	Example	Comment
Delivery Notice Sequence Number*	4	I	N	n/a	5353	The Delivery Notice Sequence Number of the delivery notice.
Member Sequence*	4	I	N	n/a	434	The Member Sequence of the member which holds the position. This can be the Branch Member Sequence number if the position is on the branch member account.

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Name	Length	Type	Description	Case	Example	Comment
Client Sequence	4	I	N	n/a	1242	The Client Sequence of the client which holds the position, This can be 0, if not applicable.
Position Quantity*	4	I	N	n/a	53	The quantity of the position allocated to this Principal on the delivery notice.
Sub Account	6	P	AN	U	12, 13, 14	The sub account which holds the position. This can be empty, if not applicable.
Delivery Notice reference number	20	P	AN	U	AD456473	Delivery notice reference number.
Total Length	42 Bytes					

9.44 Delivery No Physical (Exchange for Physical) Data – Number 90

This data can be downloaded to reflect the deliveries processed as exchange for physical.

Name	Length	Type	Description	Case	Example	Comment
Delivery No Physical Sequence Number	4	I	N	n/a	5353	The Sequence Number of the delivery record.
Client Sequence	4	I	N	n/a	1242	The Client Sequence of the client which holds the position, This can be 0, if not applicable.
Member Sequence	4	I	N	n/a	434	The Member Sequence of the member which holds the position. This can be the Branch Member Sequence number if the position is on the branch member account.
Contract Date Sequence	4	I	N	n/a	1242	The contract date sequence number of the contract which was delivered.
Position Quantity	4	I	N	n/a	53	The quantity of the position delivered to this Principal on the delivery
Sub Account	6	P	AN	U	12, 13, 14	The sub account which holds the position. This can be empty, if not applicable.
Trade Date	3*4	I	N	n/a	2007, 08, 20	The date on which this delivery was processed.

Total Length: 38 Bytes

Docusign Envelope ID: CF6858C9-4901-4F7C-A4B1-C0F3ED83273A

9.45 Options Traded Data – Number 94

PLEASE NOTE: This data is only available on the Equity Derivatives Market.

The Options Traded data shows a list of all option trades done on the market.

Name	Length	Type	Description	Case	Example	Comment
Trade Date	2	I	N	n/a	5353	Date of the trade.
Trade Time	4	B	N	n/a	10, 54, 55, 0	Time of the trade.
Strike Sequence	4	I	N	n/a	434	Sequence Number of the strike data for the option trade.
Number of Contracts	8	I	N	n/a	1242	Quantity traded
Premium	8	D	N	n/a	2540.45	The premium traded
Origin	1	B	A	U	O or P	Indicates Origin of the trade, either ‘O’ for onscreen or ‘P’ for report only.
Total Length	27 Bytes					

9.46 CPI Index Data – Number 23

This download retrieves the CPI Index values for historic periods.

Name	Length	Type	Description	Case	Example	Comment
CPI Sequence Number	4	I	N	n/a	5353	Sequence Number for this record
Date	2	I	N	n/a	12578	Date for which this value applies
Index Value	8	D	N	n/a	12.53	CPI Index value for this date
Unused	22	B	n/a	n/a		
Total Length	36 Bytes					

9.47 JNOTE Curve Data – Number 57

This download retrieves the JNOTE Curve values.

Name	Length	Type	Description	Case	Example	Comment
JNOTE Sequence Number	4	I	N	n/a	5353	Sequence Number for this record.
Curve Value	8	D	N	n/a	12.53	JNOTE Curve value for this date
Total Length	12 Bytes					

Docusign Envelope ID: CF6858C9-4901-4F7C-A4B1-C0F3ED83273A

9.48 Industry Code Data – Number 59

This download retrieves the Industry codes necessary for loading STRATE clients.

Name	Length	Type	Description	Case	Example	Comment
Category Number	2	I	N	n/a	5353	Category Number applicable to the Industry Code.
Industry Description	40	P	AN	n/a	Retail	Describes the industry category.
Total Length	42 Bytes					

9.49 GOVI Parameters Data – Number 96, Margin Parameters Data – Number 97, Zero Curve Data – Number 98

This downloads excel files for each of the parameters required for Calm margining. The data downloaded will be in compressed format, and the de-compressed data collated as a result of each download can be put together and saved as an excel file (*.xls)

9.50 Early Valuations Data – Number 100

PLEASE NOTE: This data is only available on the Equity Derivatives Market.

The early valuations data indicates the mark-to-market valuations of all contracts at a time before the official closing prices are made available.

Name	Length	Type	Description	Case	Example	Comment
Instrument Sequence	4	I	N	n/a	1225	Instrument sequence number
Date Sequence	4	I	N	n/a	1455	Dates sequence number
Strike Sequence	4	I	N	n/a	6442	Strike sequence number
Days Close	8	D	N	n/a	19500.00	Early Mark-to-market price
Date	2	I	N	n/a	12533	Date of the price.
Volatility	8	D	N	n/a	45	Future or Option Volatility for this contract.

Total Length: 30 Bytes

9.51 Client Member Margin Multiplier Data – Number 102

Name	Length	Type	Description	Case	Example	Comment
Member Sequence*	4	I	N	n/a	267	The sequence number of the member
Client Sequence	4	I	N	n/a	1242	The Client Sequence of the client which the additional Margin is set.
Instrument Sequence*	4	I	N	n/a	2523	Instrument Sequence of instrument for which the Additional Margin is set.
Multiplication Factor	8	D	N	n/a	150.00	Multiplication Factor to use for the client.

Total Length: 20 Bytes

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9.52 Days History Data – Number 103

PLEASE NOTE: This request can only be processed during Market Online (Download Only) Period. Any request for this data during other market periods will return an empty dataset.

The days history request allows users to download the traded values for all contracts traded on the market.

Name	Length	Type	Description	Case	Example	Comment
Instrument Name	5	P	A	U	ZAUS	Instrument name of the instrument traded.
Expiry Date	2	I	N	n/a	16525	DOS Date of the expiry date for this contract traded.
Strike	8	D	N	n/a	12.564	Strike of the contract traded if the contract was an option.
Call Put	1	B	A	U	C	Indicates the call or put indicator if the contract was an option.
Instrument Type Number	4	I	N	n/a	12	Indicates the instrument type of the contract traded.
Trade Time	4	B	N	n/a	10, 54, 55, 0	Time of the trade.
Price	8	D	N	n/a	12.565	Traded price of the trade.
Quantity	4	I	N	n/a	100	Number of contracts traded.
Total Length	36 Bytes					

9.53 Options Concentration Risk – Number 107

This download will return the data for all the options on the market on which there is open interest.

Name	Length	Type	Description	Case	Example	Comment
Instrument Sequence	4	I	N	n/a	5	Indicates the Instrument sequence number of this contract.
Contract Date Sequence	4	I	N	n/a	12	Indicates the sequence number of the contract date.
Strike Sequence	4	I	N	n/a	12	Indicates the sequence number of the strike.
Open Interest	4	I	N	n/a	16	Indicates the number of open positions on this contract.

Total Length: 16 Bytes

9.54 Incoming Unmatched – Number 108

This download will return the unmatched legs on which you are the counterparty. This download provides a view of what the counterparty to an unmatched trade has captured for their leg of the trade to which you are the counterparty.

Docusign Envelope ID: CF6858C9-4901-4F7C-A4B1-C0F3ED83273A

9.55 RFQ Data – Number 13

This download will return any RFQs which have either been initiated by the user or have been created in the market. This download will return anonymous data for RFQs which were not captured by the user.

Name	Length	Type	Description	Case	Example	Comment
RFQ Sequence	4	I	N	n/a	5	Indicates the sequence number for this RFQ record.
Initiating Member Code	5	P	AN	U	AAAA	Indicates the member code for the initiating member. Will return a blank string when this member is not the same as the user.
Initiating Dealer Code	4	P	A	U	AAA	Indicates the dealer code for the initiating member. Will return a blank string when this member is not the same as the user.
Identifier Prefix	1	C	A	U	F – Future	Indicates the instrument type of the instrument being quoted. F (Future is currently the only instrument type supported.)
Instrument Short Name	5	P	AN	U	DAUS	Indicates the instrument name of the instrument being quoted.
Quantity	8	I	N	n/a	1000	Indicates the number of contracts being quoted.
Forward Points	8	D	N	n/a	500	Indicates the number of forward points that was added to spot to get the quote price for the early leg of the RFQ.
Early Leg Price	8	D	N	n/a	9.278	Indicates the early leg price for the RFQ.
Early Leg Expiry Date	4 * 3	I	N	n/a	2013, 5, 10	Indicates the expiry date of the early leg of the RFQ.
Early Leg Settlement Date	4 * 3	I	N	n/a	2013, 5, 12	Indicates the settlement date of the early leg of the RFQ.
Late Expiry Date	4 * 3	I	N	n/a	2013, 7, 10	Indicates the expiry date of the late leg of the RFQ.
Late Settlement Date	4 * 3	I	N	n/a	2013, 7, 12	Indicates the settlement date of the late leg of the RFQ.
Timeout	4	I	N	n/a	120	Number of seconds that the RFQ is valid for.
Capture Time	4	C	N	n/a	10, 5, 21, 0	Indicates the time that the RFQ was captured at.
Counterparty Category	56	P	AN	n/a	Bank	Indicates the counterparty category that the RFQ was captured for. This maps to the member download.
Status	1	C	A	U	I – Inserted,	Indicates the current status.

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Name	Length	Type	Description	Case	Example	Comment
					E – Edited, T – Timed out	
Reference Number	25	P	AN	n/a	00000001	Indicates the user reference for this RFQ.

Total Length: 181 Bytes

9.56 RFQ Quote Data – Number 110

This download will return any RFQs which have either been initiated by the user or have been created in the market. This download will return anonymous data for RFQs which were not captured by the user.

Name	Length	Type	Description	Case	Example	Comment
RFQ Sequence	4	I	N	n/a	5	Indicates the sequence number that this RFQ Quote is associated with.
RFQ Quote Sequence	4	I	N	n/a	5	Indicates the sequence number for this RFQ Quote record
Quoting Member Code	5	P	AN	U	AAAA	Indicates the member code for the quoting member. Will return a blank string when this member is not the same as the user.
Quoting Dealer Code	4	P	A	U	AAA	Indicates the dealer code for the quoting member. Will return a blank string when this member is not the same as the user.
Identifier Prefix	1	C	A	U	F – Future	Indicates the instrument type of the instrument being quoted. F (Future is currently the only instrument type supported)
Instrument Short Name	5	P	AN	U	DAUS	Indicates the instrument name of the instrument being quoted.
Quantity	8	I	N	n/a	1000	Indicates the number of contracts being quoted.
Spread Points	8	D	N	n/a	500	Indicates the number of spread points for this quote.
Unused	8	B	n/a	n/a		
Buy Sell	1	C	A	U	B – Buy, S – Sell	Indicates if this is a quote to buy or sell at the given spread points.
Timeout	4	I	N	n/a	120	Number of seconds that the quote is valid for.
Capture Time	4	C	N	n/a	10, 5, 21, 0	Indicates the time that the quote was captured at.
Status	1	C	A	U	I – Inserted, E – Edited, T – Timed out	Indicates the current status.

Total Length: 57 Bytes

Docusign Envelope ID: CF6858C9-4901-4F7C-A4B1-C0F3ED83273A

9.57 Additional Margin – Number 136

The additional margin download allows users to download any additional margin the exchange has called for.

Name	Length	Type	Description	Case	Example	Comment
Margin Additional Sequence	4	I	N	n/a	1	Indicates the sequence number for this Additional Margin record.
Trade Date	3 * 4	I	N	n/a	2013,6,20	Indicates the date
Clearing Member ID	4	I	A	n/a	9	Indicated the Clearing Member ID for the Additional Margin.
Member ID	4	I	AN	n/a	515	Indicated the Member ID for the Margin Additional.
Previous Additional Margin	8	C	A	n/a	150000.00	Indicates the Previous Additional Margin.
Additional Margin	8	B	N	n/a	150000.00	Indicates the Current Additional Margin.
Market ID	4	C	A	n/a	2	Indicates the Market Number for Member/Clearing Member and Dealers Additional Margin.
Client ID	4	C	AN	n/a	2145	Indicates Client ID.

Total Length: 48 bytes

9.58 Intraday Margin MTM – Number 112

The intraday margin MTM download will return MTM rates specifically for an intraday margin call. This should only be requested when the exchange does an intraday margin call. The structure for this message is the same as the standard MTM download (File Type 16).

9.59 Intraday Margin Deals – Number 111

The intraday margin deals download will return deals specifically for an intraday margin call. This should only be requested when the exchange does an intraday margin call. The structure for this message is the same as the standard deals download (File Type 8).

9.60 Swap Detail Data – Number 137

The Swap Detail download contains the Historical Fixed And Floating Amounts as well as Price Alignment Index used to price swap instruments.

Name	Length	Type	Description	Case	Example	Comment
Swap Detail Sequence	4	I	N	n/a	1	Sequence number for this record.
Trade Date	2	I	N	n/a	18555	Indicates the dos date for this record.

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Name	Length	Type	Description	Case	Example	Comment
Contract Date Sequence	4	I	N	n/a	1	Indicates the contract date sequence for this swap instrument.
Historical Fixed And Floating Amounts	8	D	N		12.2	
Price Alignment Index	8	D	N		12.3	

Total Bytes: 26 Bytes

9.61 Master Repo – Number 138

The single record that stores the highest level of information of the repo regardless of what collateral is used. Everything related to the repo can be traced back to this single record.

Name	Length	Type	Description	Case	Example	Comment
Id Repo	4	I	N	n/a	20000001	The unique identifier for the repo.
Buy Sell	1	C	A	U	B or S	**B** – Buy **S** – Sell
Repo Type	1	C	A	U	C	**C** – Classic
Repo Rate Type	1	C	A	U	F	Identifies the repo rate type for the repo. See repo rate types (**9.70 Repo Rate – Number 147**) for more detail.
Repo Rate	8	D	N	n/a	12.34	The current fixed repo rate of the repo.
Spread	8	D	N	n/a	0	The repo rate spread applied to the repo rate.
Swap Repo Rate Type	1	C	A	U	F	Identifies the floating rate of the repo's closing leg on collateral swap repos. See repo rate types (**9.70 Repo Rate – Number 147**) for more detail.
Swap Repo Rate	8	D	N	n/a	10.34	The current fixed repo rate of the swap repo.
Swap Spread	8	D	N	n/a	0	The repo rate spread applied to the closing leg's repo rate, for collateral swap repos.
Collateral Swap Spread	8	D	N	n/a	2.0	The repo rate spread as calculated for collateral swap repos. This field represents the difference between

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Name	Length	Type	Description	Case	Example	Comment
						the initiation leg's repo rate and the closing leg's repo rate.
Initiation Date	2	I	N	n/a	12672	The date that the R1 legs of the repo will trade.
Closing Date	2	I	N	n/a	14923	The date that the R2 legs of the repo will trade.
Notice Period Days	4	I	N	n/a	35	The minimum number of days' notice that must be given when closing an Evergreen repo.
Is Evergreen	1	B	N	n/a	1 – True 0 – False	Identifies if this is an Evergreen repo. Evergreen repos require a notice period when closing the repo is requested.
Is Collateral Swap	1	B	N	n/a	1 – True 0 – False	Identifies if the repo is a collateral swap repo.
Is Open Ended	1	B	N	n/a	1 – True 0 – False	Identifies if the repo is open-ended. Open ended = true Closed = false
Repo Status	1	C	A	U	A	The status of the repo. **A** – Active **X** – Cancelled **C** – Completed
User Reference	25	P	AN	n/a	00001	A reference that the user assigns to the repo to identify it.
Member Code	6	P	AN	U	AAAA	The member the repo belongs to.
Dealer Code	4	P	AN	U	XXZ	The dealer the repo belongs to.
Principal Code	8	P	AN	U	ABC123	The principal that the repo belongs to.
Sub Account	6	P	AN	U	ABC123	The sub account the repo was reported with.
BDA Account Number	11	P	AN	U	ABCV3453	The BDA Account number that the repo is reported against when reporting to Strate.
Principal Agency	1	C	A	U	P or A	Identifies if the repo was booked as Principal or Agency. **P** = Principal **A** = Agency
Counterparty	8	P	AN	U	ABC123	The counterparty member, or in the case

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Name	Length	Type	Description	Case	Example	Comment
						that the member and counterparty member are the same, this will show the principal if applicable.
Report Date	2	I	N	n/a	12672	The Date that the last change was made to the master repo.
Report Time	4	B	N	n/a	10, 55, 59 ,0	The Time that the last change was made to the master repo.
Trade Date	2	I	N	n/a	12672	The Date the master repo was created.
Trade Time	4	B	N	n/a	10, 55, 59 ,0	The Time the master repo was created.

Total Length: 141

9.62 Repo Collateral – Number 139

The single record that stores the instrument-based information of the repo, there may be multiple of these per repo as in the case of the collateral swap repo and after a substitution takes place.

Name	Length	Type	Description	Case	Example	Comment
Id Repo	4	I	N	n/a	20000001	The unique identifier for the repo.
Id Repo Collateral	4	I	N	n/a	20000001	The unique identifier for the repo collateral.
Contract	20	P	AN	U	R186	The short name of the instrument for the collateral.
Companion Bond	5	P	AN	U	R2030	The companion bond for the repo.
Companion Bond Spread	8	D	N	n/a	7.1	The companion bond spread.
Buy Sell	1	C	A	U	B or S	This indicates whether the collateral being traded is a Buy(B) or Sell(S).
Nominal	8	I	N	n/a	10000	The amount of the underlying bond being traded.
Yield	8	D	N	n/a	7.1	The yield at which the repo is executed.
Initiation Consideration	8	D	N	n/a	10746.80	The face value of the repos R1 leg.
Closing Consideration	8	D	N	n/a	10873.58	The face value of the repos R2 leg.
Initiation Date	2	I	N	n/a	12672	The date that the R1 legs of the repo will trade.

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Name	Length	Type	Description	Case	Example	Comment
Closing Date	2	I	N	n/a	14923	The date that the R2 legs of the repo will trade.
Status	1	C	A	U	U	Refers to the current state of the transaction. States include: U – Unconfirmed – The trade legs have not yet been confirmed by Strate. C – R1Confirmed – The R1 trade legs of the collateral have been confirmed by Strate. Q – R2Confirmed – The R2 trade legs of the collateral have been confirmed by Strate. O – R1Committed – The R1 trade legs of the collateral have been committed by Strate. M - R2Committed – The R2 trade legs of the collateral have been committed by Strate. S - R1Settled – The R1 trade legs of the collateral have been settled by Strate **K** – R2Settled – The R2 trade legs of the collateral have been settled by Strate. B – Substituted – The collateral has been substituted for another contract. X – Cancelled – The repo has been cancelled.

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Name	Length	Type	Description	Case	Example	Comment
Entered Date	2	I	N	n/a	12672	The Date that the unmatched repo for the repo collateral was created.
Entered Time	4	B	N	n/a	10, 55, 59 ,0	The Time that the unmatched repo for the repo collateral was created.
Trade Date	2	I	N	n/a	12672	The Date that the repo collateral was created.
Trade Time	4	B	N	n/a	10, 55, 59 ,0	The Time that the repo collateral was created.
Report Date	2	I	N	n/a	12672	The Date that the last change was made to the repo collateral.
Report Time	4	B	N	n/a	10, 55, 59 ,0	The Time that the last change was made to the repo collateral.
Principal Code	8	P	AN	U	ABC123	The principal that the repo collateral was reported with.

Total Length: 105

9.63 Unmatched Repo – Number 140

All changes go through an acceptance phase before taking effect, this is the structure that gets accepted. It stores all details of the repo and repo collateral objects. There will be multiple of these records in the case of a substitution or collateral swap repo in which case any of the “Id Unmatched Repo” values can be passed to accept the change, the system will identify the associated records and apply all the changes. The associated changes can be identified by grouping the records by the “Unmatched Edit Id”.

Unmatched Repos can be in one of five states:

- **Pending** – Unmatched repos in a pending state indicate that the changes are pending approval from the counterparty. Unmatched repos in a pending state can only be Edited or Cancelled, editing an unmatched repo will update the record for both parties. Cancelling an unmatched repo will end the approval process and can no longer be accepted.
- **Active** – Unmatched repos in an active state can be Accepted, Rejected, or Edited. Editing an active unmatched repo changes the state to pending as the counterparty must now accept the latest changes.
- **Rejected** – When an unmatched repo is rejected by the counterparty, the unmatched repo will remain in view until the end of the day with the Rejected status, the reason supplied will be visible in the reject reason field.
- **Cancelled** – When an unmatched repo is cancelled, the unmatched repo will remain in view until the end of the day with a Cancelled status, the reason supplied by the cancelling party will be visible in the reject reason field.
- **Accepted** – When a change is accepted the changes are committed to the repo and the unmatched repo will remain in view until the end of the day with the Accepted status.

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The Operations bitmap is set with every change that is requested, there are multiple operations that can be performed on repos:

- **Initiating** – the initiating flag is set when a new repo is initiated and will have an Id Repo of 0.
- **Editing** – The edited flag is set when one of the following fields are changed:
  - Yield
  - Nominal
  - Notice Period Days for Evergreens
  - Is Evergreen
  - Is Collateral Swap
- **Closing** – The close flag is set when the repo is requested to be closed.
- **Cancelling** – The cancelling flag is set when the repo is requested to be cancelled.
- **Substituting** – The substituted flag is set when the repo is requested to be substituted, there can only be one substitution request on a repo at a time.
- **Rerate** – The Rerate flag is set when the repo rate is changed in some way, this includes the following fields:
  - Repo Rate
  - Spread
  - Swap Repo Rate
  - Swap Spread
  - Interest Payment Effective Date
- **Extending** – The Extended flag is set when the repo's Closing Date is changed.

Name	Length	Type	Description	Case	Example	Comment
Id Repo	4	I	N	n/a	20000001	The ID of the repo. If this is an initiated repo, the ID will be 0.
Id Repo Collateral	4	I	N	n/a	20000001	The ID of the repo collateral. If this is an initiated repo, the ID will be 0.
Id Unmatched Repo	4	I	N	n/a	20000001	The ID of the unmatched repo.
Id Unmatched Repo Edit	4	I	N	n/a	20000001	The ID of the unmatched repo group. Since there can be multiple unmatched repos (in the case of a collateral swap or substitution) this field will group the unmatched records together.
Repo Type	1	C	A	U	C	C – Classic
Buy Sell	1	C	A	U	B or S	This indicates whether the repo being traded is a Buy(B) or Sell(S).
Contract	20	P	AN	U	R186	The short name of the instrument for the repo.
Companion Bond	5	P	AN	U	R2030	The companion bond for the repo.
Companion Bond Spread	8	D	N	n/a	7.1	The companion bond spread.

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Name	Length	Type	Description	Case	Example	Comment
Swap Contract	20	P	AN	U	R209	The short name of the instrument to use for the swap repo.
Nominal	8	I	N	n/a	1000	The amount of the underlying bond being traded.
Yield	8	D	N	n/a	12.3	The yield at which the repo is executed.
Swap Yield	8	D	N	n/a	10.3	The yield at which the swap repo is executed.
Repo Rate Type	1	C	A	U	F	Identifies the repo rate type of the repo. See repo rate types (**9.70 Repo Rate – Number 147**) for more detail.
Spread	8	D	N	n/a	0.0	The repo rate spread applied to the repo rate.
Repo Rate	8	D	N	n/a	8.9	The fixed repo rate of the repo.
Swap Repo Rate Type	1	C	A	U	F	Identifies the repo rate type of the swap repo. See repo rate types (**9.70 Repo Rate – Number 147**) for more detail.
Swap Spread	8	D	N	n/a	0.0	The repo rate spread applied to the repo rate on the swap repo.
Swap Repo Rate	8	D	N	n/a	10.1	The fixed repo rate of the swap repo.
Collateral Swap Spread	8	D	N	n/a	1.2	The repo rate spread as calculated for collateral swap repos. This field represents the difference between the initiation leg's repo rate and the closing leg's repo rate.
Interest Payment Effective Date	2	I	N	n/a	14937	The date that an interest payment will be made.
Notice Period Days	4	I	N	n/a	35	The minimum number of days' notice that must be given when closing an Evergreen repo.
Is Evergreen	1	B	N	n/a	1 – True 0 – False	Identifies if this is an Evergreen repo. Evergreen repos require a notice period when closing the repo is requested.

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Name	Length	Type	Description	Case	Example	Comment
Is Collateral Swap	1	B	N	n/a	1 – True 0 – False	Identifies if the repo is a collateral swap repo.
Is Open Ended	1	B	N	n/a	1 – True 0 – False	Identifies if the repo is open-ended.
Initiation Consideration	8	D	N	n/a	962.9	The calculated consideration that the R1 legs of the repo will trade at.
Closing Consideration	8	D	N	n/a	164.28	The calculated consideration that the R2 legs of the repo will trade at.
Initiation Date	2	I	N	n/a	12672	The date that the R1 legs of the repo will trade.
Closing Date	2	I	N	n/a	14937	The date that the R2 legs of the repo will trade.
Substitution Effective Date	2	I	N	n/a	13261	The date that the substitution will take effect.
User Reference	25	P	AN	n/a	00001	A user input reference assigned to the repo to identify it.
Member Code	6	P	AN	U	AAAA	The member that is reporting the trade.
Dealer Code	4	P	AN	U	XXZ	The dealer of the member that the trade will be reported for.
Principal Code	8	P	AN	U	ABC123	The principal to report the trade with.
Sub Account	6	P	AN	U	ABC123	The sub account to report the trade with.
BDA Account Number	11	P	AN	U	ABCV3453	The BDA Account number that the trade should be reported against when reporting trades to Strate.
Principal Agency	1	C	A	U	P or A	Used to specify if the repo will be booked as Principal or Agency.
Counterparty	8	P	AN	U	ABC123	The counterparty Member or Principal of the repo.
Operation	4	I	N	n/a	2	The change that has been made to the repo. Multiple enums can be set at once.

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Name	Length	Type	Description	Case	Example	Comment
						<table><tr><th>Bit</th><th>Flag</th></tr><tr><td>1</td><td>Initiating</td></tr><tr><td>2</td><td>Edited</td></tr><tr><td>3</td><td>Substituting</td></tr><tr><td>4</td><td>Rate Changing</td></tr><tr><td>5</td><td>Extending</td></tr><tr><td>6</td><td>Cancelling</td></tr><tr><td>7</td><td>Closing</td></tr></table>
Status	1	C	A	U	A	The status of the unmatched repo. A – Active: Action required. This state can be approved, rejected, or edited. P – Pending: Pending approval from counterparty. This state can be edited or cancelled. C – Cancelled: Cancelled changes go into this state, nothing can be done. R – Rejected: Rejected changes go into this state, nothing can be done. E – Accepted: These changes have been accepted; nothing can be done.
Reject Reason	200	P	AN	n/a		In the case that the unmatched repo was rejected/ cancelled, this field will contain the reason supplied by the rejecting/ cancelling party.
Entered Date	2	I	N	n/a	12672	The date that the unmatched repo was created.
Entered Time	4	B	N	n/a	10, 55, 59 ,0	The time that the unmatched repo was created.
Report Date	2	I	N	n/a	13261	The date that the last change was made to the unmatched repo.
Report Time	4	B	N	n/a	10, 55, 59 ,0	The time that the last change was made to the unmatched repo.

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Name	Length	Type	Description	Case	Example	Comment
Rate Change Effective Date	2	I	N	n/a	13261	The date that the rate change should take effect.
Reported Trade Date	2	I	N	n/a	12672	The Date the repo was agreed.
Reported Trade Time	4	B	N	n/a	10, 55, 59 ,0	The Time the repo was agreed.

Total Length: 462

9.64 Pending Repo Interest Payment – Number 141

The message sent when an interest payment requires a response.

Name	Length	Type	Description	Case	Example	Comment
Id Pending Repo Interest Payment	4	I	N	n/a	20000001	The ID of the pending payment record.
Id Repo	4	I	N	n/a	20000001	The ID of the repo that the interest payment was made on.
Id Repo Collateral	4	I	N	n/a	20000001	The ID of the repo collateral the interest payment was made on.
Payment Date	2	I	N	n/a	14937	The date that the payment was made.
Payment Value	8	D	N	n/a	153.98	The monetary value of the payment.
Status	1	C	A	U	A	The status of the pending repo interest payment. A – Active: Action required. This state can be Approved or Rejected. P – Pending: Pending approval from counterparty. This state can be cancelled. C – Cancelled: Cancelled changes go into this state, nothing can be done. R – Rejected: Rejected changes go into this state, nothing can be done. E – Accepted: The repo interest payment has been accepted; nothing can be done.

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Name	Length	Type	Description	Case	Example	Comment
Reject Reason	200	P	AN	n/a		The reason provided by the Rejecting/ Cancelling party.
Entered Date	2	I	N	n/a	12672	The Date that the pending repo interest payment was created.
Entered Time	4	B	N	n/a	10, 55, 59 ,0	The Time that the pending repo interest payment was created.

Total Length: 229

9.65 Repo Interest Payment – Number 142

The message sent out after a repo interest payment has been accepted.

Name	Length	Type	Description	Case	Example	Comment
Id Repo Interest Payment	4	I	N	n/a	20000001	The ID of the repo interest payment record.
Id Repo	4	I	N	n/a	20000001	The ID of the repo that the interest payment was made on.
Id Repo Collateral	4	I	N	n/a	20000001	The ID of the repo collateral that the interest payment was made on.
Payment Date	2	I	N	n/a	14923	The date the payment was made on.
Payment Value	8	D	N	n/a	153.98	The monetary value of the payment.
Trade Date	2	I	N	n/a	14923	The Date that the repo interest payment was created.
Trade Time	4	B	N	n/a	10, 55, 59 ,0	The Time that the repo interest payment was created.
Entered Date	2	I	N	n/a	14923	The Date that the pending repo interest payment for the repo interest payment was created.
Entered Time	4	B	N	n/a	10, 55, 59 ,0	The Time that pending repo interest payment for the repo interest payment was created.

Total Length: 34

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9.66 Projected Repo Close – Number 143

The projected close message is the representation of the closing leg for repos where the R2 legs are not known, it represents the repo's R2 legs at the repo's earliest closing date. For example:

- Evergreens = T + Notice Period Days (default:35 days)
- Open Repos = T + 1

The consideration represents the cash value if you chose to close the repo at the above closing dates.

The Project Repo Close record has a one-to-one relationship with active Repo Collaterals, i.e., every active repo collateral has a corresponding projected close.

Name	Length	Type	Description	Case	Example	Comment
Id Projected Repo Close	4	I	N	n/a	20000001	The ID of the projected close.
Id Repo	4	I	N	n/a	20000001	The ID of the repo this projected close belongs to.
Id Repo Collateral	4	I	N	n/a	20000001	The ID of the repo collateral this projected close represents.
Principal Code	8	P	AN	U	ABC123	The principal that the repo collateral was reported with.
Buy Sell	1	C	A	U	B or S	This indicates whether the projected close is a Buy(B) or Sell(S).
Contract	20	P	AN	U	R186	The short name of the instrument for the collateral.
Companion Bond	5	P	AN	U	R2030	The companion bond for the repo.
Yield	8	D	N	n/a	12.3	The yield at which the repo is executed.
Nominal	8	I	N	n/a	1000	The amount of the underlying bond being traded.
Consideration	8	D	N	n/a	10951.64	The face value of the repo's R2 leg.
Closing Date	2	I	N	n/a	14923	The earliest possible date this collateral can be closed. For Evergreens this is T + Notice Period Days. For open Repos this is T + 1. For closed Repos this is the Closing Date.
Status	1	C	A	U	A	Refers to the current state of the projection record.

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Name	Length	Type	Description	Case	Example	Comment
						A – Active I – Inactive
Report Date	2	I	N	n/a	13261	The Date that the last change was made to the projected repo close.
Report Time	4	B	N	n/a	10, 55, 59 ,0	The Time that the last change was made to the projected repo close.

Total Length: 79

9.67 Unmatched Triparty Repo – Number 144

The Unmatched Triparty Repo message is used to communicate pending changes to a triparty repo.

Name	Length	Type	Description	Case	Example	Comment
Id Unmatched Triparty Repo	4	I	N	n/a	20000001	The ID of the unmatched triparty repo.
Id Triparty Deal	4	I	N	n/a	20000001	The ID of the triparty deal if applicable.
Consideration	8	D	N	n/a	100000	The face value of the triparty repo being initiated.
Rate	8	D	N	n/a	12.3	The repo rate of the unmatched triparty repo.
Initiation Date	2	I	N	n/a	12672	The date that the R1 legs will trade.
Close Date	2	I	N	n/a	14923	The date that the R2 legs will trade.
Is Open	1	B	N	n/a	1 – True 0 – False	Identifies this repo as an open-ended repo.
Basket Reference	20	P	AN	U	AAAA-BBBB-01	The collateral basket that this repo will trade on.
Member	6	P	AN	U	AAAA	The member that is reporting the trade.
Dealer	4	P	AN	U	XXZ	The dealer of the member that the trade should be reported for.
Principal	8	P	AN	U	ABC123	The principal to report the trade with.
Sub Account	6	P	AN	U	ABC123	The sub account to report the trade with.
BDA Account Number	11	P	AN	U	ABCV3453	The BDA Account number that the trade should be reported against when reporting trades to Strate.

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Name	Length	Type	Description	Case	Example	Comment
Counterparty	8	P	AN	U	P or A	The counterparty Member or Principal.
Buy Sell	1	C	A	U	B or S	This indicates whether the repo being initiated is a Buy(B) or Sell(S)
User Reference	25	P	AN	n/a	00001	A reference that the user assigns to the repo to identify it.
Principal Agency	1	C	A	U	P or A	Used to specify if the repo should be booked as Principal or Agency.
Status	1	C	A	U	A	The status of the unmatched triparty repo. A – Active: Action required. This state can be approved, rejected, or edited. M – Active Modified: Identifies an edit request. This state can be accepted, rejected, or edited. P – Pending: Pending approval from counterparty. This state can be edited or cancelled. C – Cancelled: Cancelled changes go into this state, nothing can be done. R – Rejected: Rejected changes go into this state, nothing can be done. E – Accepted: These changes have been accepted; nothing can be done. p – Pending Strate: The acknowledgement response from Strate has not been received. e – Strate Accepted: Strate has responded with a successful acknowledgement.

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Name	Length	Type	Description	Case	Example	Comment
						r – Strate Rejected: Strate has responded with a failed acknowledgement.
Entered Date	2	I	N	n/a	13261	The date that the unmatched triparty repo was created.
Entered Time	4	B	N	n/a	10, 55, 59 ,0	The time that the unmatched triparty repo was created.
Report Date	2	I	N	n/a	13261	The date that the last change was made to the unmatched triparty repo.
Report Time	4	B	N	n/a	10, 55, 59 ,0	The time that the last change was made to the unmatched triparty repo.
Triparty Deal Action	1	C	A	U	I – Init T – Term D – CDTA R – RATA P – PADJ	The modification action that was applied to the triparty repo to generate this record. *(INIT, TERM, CDTA, RATA, PADJ)*
Settlement Date	2	I	N	n/a	13261	The date on which the stock will move at Strate, can be the current business day or a future business day.
Reason	200	C	AN	n/a		The reason provided by the cancelling/ rejecting party.
Reported Trade Date	2	I	N	n/a	12672	The Date the repo was agreed.
Reported Trade Time	4	B	N	n/a	10, 55, 59 ,0	The Time the repo was agreed.

Total Length: 341

9.68 Triparty Deal – Number 145

The Triparty Deal message is used to communicate the Trade legs of an accepted Triparty repo.

Name	Length	Type	Description	Case	Example	Comment
Id Triparty Deal	4	I	N	n/a	20000001	The ID of the triparty deal.
Consideration	8	D	N	n/a	100000	The face value of the triparty repo.
Rate	8	D	N	n/a	12.3	The repo rate of the triparty repo.
Initiation Date	2	I	N	n/a	12672	The date that the R1 legs will trade.

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Name	Length	Type	Description	Case	Example	Comment
Close Date	2	I	N	n/a	14937	The date that the R2 legs will trade.
Is Open	1	B	N	n/a	1 – True 0 – False	Identifies this repo as an open-ended repo.
Basket Reference	20	P	AN	U	AAAA-BBBB-01	The collateral basket that this repo trades on.
Member	6	P	AN	U	AAAA	The member that is reporting the trade.
Dealer	4	P	AN	U	XXZ	The dealer of the member that the trade was reported for.
Principal	8	P	AN	U	ABC123	The principal the trade was reported with.
Sub Account	6	P	AN	U	ABC123	The sub account the trade was reported with.
BDA Account Number	11	P	AN	U	ABCV3453	The BDA Account number that the trade was reported against when reporting trades to Strate.
Counterparty	8	P	AN	U	BBBB	The counterparty Member or Principal.
Buy Sell	1	C	A	U	B or S	This indicates whether the repo is a Buy(B) or Sell(S).
User Reference	25	P	AN	n/a	00001	A reference that the user assigns to the repo to identify it.
Exchange Reference	10	P	AN	U	01A000001	Exchange reference for the triparty repo deal.
Reference Number	10	P	AN	U	000000001	The trade ID provided by Strate.
Principal Agency	1	C	A	U	P or A	Used to specify if the repo was booked as Principal or Agency.
Status	1	C	A	U	U	**U** – Uncommitted – The trade legs have not yet been committed by Strate. **C** – Committed – The trade legs of the collateral have been committed by Strate. **S** – Settled – The trade legs of the collateral have been settled by Strate.
Trade Date	2	I	N	n/a	13261	The Date the triparty repo deal was created.

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Name	Length	Type	Description	Case	Example	Comment
Trade Time	4	B	N	n/a	10, 55, 59 ,0	The Time the triparty repo deal was created.
Entered Date	2	I	N	n/a	13261	The date that the unmatched triparty repo for this triparty repo deal was created.
Entered Time	4	B	N	n/a	10, 55, 59 ,0	The time that the unmatched triparty repo for this triparty repo deal was created.
Report Date	2	I	N	n/a	13261	The date that the last change was made to the triparty repo deal.
Report Time	4	B	N	n/a	10, 55, 59 ,0	The time that the last change was made to the triparty repo deal.
Settlement Date	2	I	N	n/a	13261	The date on which the stock will move at Strate.
Reported Trade Date	2	I	N	n/a	12672	The Date the repo was agreed.
Reported Trade Time	4	B	N	n/a	10, 55, 59 ,0	The Time the repo was agreed.

Total Length: 162

9.69 Collateral Basket – Number 146

The collateral basket records are received from CMS and made available through file download requests. If a new collateral basket is received in the morning, it will be flagged as inactive and will only be made available for trading the next day.

Name	Length	Type	Description	Case	Example	Comment
Id Collateral Basket	4	I	N	n/a	1	The ID of the Collateral basket.
Principal	8	P	AN	U	ABC123	The member or principal code for the collateral basket.
Counterparty	8	P	AN	U	XYZ987	The member or counterparty code for the collateral basket.
Collateral Basket	20	P	AN	U	ABC-XYZ-01	The collateral basket code.
Collateral Basket Status	1	C	A	U	A – Active I – Inactive N – New	The status of the collateral basket, only Active collateral baskets can be used to report triparty repos.

Total Length: 41

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9.70 Repo Rate – Number 147

This is a download (message 36) only message that is used to communicate the various floating rates and their respective rate value for the given date. The character value in the “Repo Rate Type” field should be supplied in the Repo Rate Type and Swap Repo Rate Type fields when initiating or editing floating rate repos.

Name	Length	Type	Description	Case	Example	Comment
Repo Rate Type	1	C	A	U	J	On Screen = R Prime = P SABOR = B Overnight Rate = S JIBAR1 = O JIBAR3 = T JIBAR6 = Q JIBAR9 = H JIBAR12 = W Fixed = F
Repo Rate Type Description	50	P	AN	n/a	JIBAR	A short friendly name of the rate.
Effective Date	3*4	I	N	n/a	2024, 7, 11	The date the rate was recorded for.
Rate	8	D	N	n/a	8.3	The floating rate value recorded for the date.

Total Length: 71

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10. Error and Information Messages

10.1 Information Messages

Number	Message	Why	When Sent	To Who
100	*Password changed successfully*	When changing the password, indicates that the password was changed successfully.	After sending a message type 88	The user on the socket connection.
102	*Market Announcement*	The exchange can broadcast an announcement	At the exchange's discretion	All connected socket connections.
108	*Generic Market Interaction message*	Notifications to members about deals assigned to them and other deal messages		Appropriate users
116	*Successful Client Loaded*	Client successfully loaded	When adding a new client (message type 102)	The user on the socket connection.
120	*Your password expires in x days.*	Message to indicate when your password expires.	When validating your login message (0).	The user on the socket connection.
123	*Mark to Market Rates is ready for download.*	The mark to market rates have been added for today and are ready for download.	After the end of day procedures have been completed.	To all connected users.
124	*Daily Rates is ready for download.*	The daily SAFEX rates have been added for today and ready for download.	After the daily rates have been inserted by the exchange.	To all connected users.
126	*The Re-Request service is currently un-available. Please try again later.*	The current volume of re-requests being dealt with by the exchange has exceeded the allowed limit, and the users request can only be dealt with when that volume has been reduced to below the limit.	After sending message type 3.	The user on the socket connection.
127	*Early Valuations are ready for download.*	Indicates that the early valuation data is ready to download.	After the early valuation procedure is completed by the exchange.	Users on the EDM market.
129	*Intraday Call Mark to Market Rates is ready for download*	Indicates intraday call has been completed and market rates are ready to be downloaded.	After an intraday call has been processed.	To all connected users.

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10.2 Error Messages

Number	Message	Why	When Sent	To Who
2	*Order quantity below minimum*	The contract has been setup with a lotsize, and the bid quantity is below this.	After sending a bid (message type 56)	The dealer who sent the bid message.
3	*Bid on contract was not a multiple of the lotsize*	The bid was entered for a contract which was setup with a lotsize, and the quantity was not a multiple of this.	After sending a bid (message type 56)	The dealer who sent the bid message.
7	*Trading on this contract is only allowed between x and x*	Order was placed on a contract which has not opened for trading.	After sending a bid (message type 56)	The dealer who sent the bid message.
8	*Your bid initial margin exceeds your limit*	The bid is for an order which exceeds the dealer's margin limit for this contract. This is determined by multiplying the initial margin of the contract by the quantity of the bid and checking that against the dealer's limit.	This message is sent when a bid message is received. If the dealer's margin limit for this contract has been exceeded, this error message is returned immediately.	The dealer who sent the bid message.
12	*Invalid data in bid message: number of orders exceeds limit*	This message is sent when a user tries to send a bid message with the number of orders field which is greater than 10, or less than 0.	This message is sent when a bid message is received. If the number of orders is invalid, this error message is returned immediately.	The dealer who sent the bid message.
13	*Invalid data in bid message: Incorrect contract name or contract doesn't exist*	This message is sent when a user tries to send a bid message in which any one of the orders contains an invalid contract name.	This message is sent when a bid message is received. If the contract name in any of the orders is invalid, this error is returned immediately.	The dealer who sent the bid message.
18	*Could not find index for contract x*	Contract name specified is not in a valid format.		The dealer who sent the message.
19	*Could not create strike*	Contract name specified for the	After entering a bid on a new strike (message type 56).	The dealer who sent the bid message.

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Number	Message	Why	When Sent	To Who
		option contract was not valid.		
20	*Not a buy sell order*	The buy sell indicator specified was not valid, must be either B or S.		The dealer who sent the bid message.
21	*Invalid Order type*	Order type parameter in the bid message was incorrect.	After sending a bid message (type 56)	The dealer who sent the bid message.
22	*Bid outside market limits*	The bid placed was outside the market limits for this contract.	After sending a bid message (type 56)	The dealer who sent the bid message.
24	*Member does not exist*	Member code specified does not exist.		The dealer who sent the bid message.
25	*Order type not allowed*	Order type parameter in the bid message is not allowed on this particular contract.	After sending a bid message (type 56)	The dealer who sent the bid message.
26	*Invalid client code*	Client code specified does not exist.		The dealer who sent the message.
27	*Not a valid member code*	Member code specified is not valid, must be 4 characters long.		The dealer who sent the message.
28	*Not a valid clearing member code*	Clearing Member code specified is not valid, must be 5 characters and end with a C.		The dealer who sent the message.
29, 30	*Invalid front end version*	The version specified in the login message is not supported by the exchange.	After sending a login message.	The dealer who sent the message.
31	*Dealer does not belong to member*	Dealer code specified is not a dealer for this member.		The dealer who sent the message.
32	*Cannot book deals for other members*	The member code specified is not the same member as the logged in connection.		The dealer who sent the message.
33	*Invalid Principal*	Principal code supplied is not valid.		The dealer who sent the message.
34	*Member does not belong to clearing member*	Member code specified is not a		The dealer who sent the message.

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Number	Message	Why	When Sent	To Who
		member of the clearing member.		
35	*Cannot book deals for other clearing members*	The clearing member code specified is not the same clearing member as the logged in connection.		The dealer who sent the message.
36	*X is not a client of member*	Client code specified does not belong to logged in member.		The dealer who sent the message.
37	*Invalid counterparty*	Counterparty specified is invalid or does not exist.		The dealer who sent the message.
39	*Dealer not found*	Dealer specified is not a dealer of the member.		The dealer who sent the message.
40	*Invalid cancel flag*	Cancel flag specified is not valid, must be 0 - 5		The dealer who sent the message.
41	*Invalid reference number*	Reference number specified was invalid, must be 9 characters.		The dealer who sent the message.
42	*Instrument not found*	Instrument specified does not exist.		The dealer who sent the message.
43	*Contract Date not found*	Contract date specified does not exist.		The dealer who sent the message.
44	*Strike not found*	Strike specified does not exist.		The dealer who sent the message.
46	*Dealer not a master dealer*	The action specified can only be done by master dealers.		The dealer who sent the message.
47	*FOK/TOK order cannot be satisfied*	This message indicates that a Fill or Kill, or Take or Kill order could not be satisfied, since the quantity available on the opposite side of the stack is not sufficient to satisfy the FOK or TOK execution constraint.	When a bid message is received with the FOK, or TOK flag set. The bid is validated, and if unsuccessful, the error will be returned.	The dealer who sent the bid message.
48	*All or nothing not allowed*	An all or nothing order was entered for a contract which does not allow all or nothing order.	After sending a bid message (message type 56)	The dealer who sent the bid message.

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Number	Message	Why	When Sent	To Who
49	*Trading on this contract is closed*	Each contract has an open time and a close time associated with it. If the time at which a bid or suspend message is received is before the open time, or after the close time, this message will be sent.	When a bid message or suspend/cancel message is received and the current time is outside contract open/close, then this message will be returned immediately.	The dealer who sent the bid or suspend/cancel message.
50	*Order quantity below minimum*	The contract has been setup with a lotsize, and the bid quantity is below this.	After sending a bid (message type 56)	The dealer who sent the bid message.
51	*Bid on contract was not a multiple of the lotsize*	The bid was entered for a contract which was setup with a lotsize, and the quantity was not a multiple of this.	After sending a bid (message type 56)	The dealer who sent the bid message.
52	*Invalid spread*	Price of the spread or split order would create orders on the underlying which is invalid.	After sending a bid message on a spread or split contract	The dealer who sent the bid message.
53	*Odd Lots not allowed when underlying in auction*	This message is sent when a bid message is received for an odd lot order, and that contract is in auction.	This message is sent when a bid message is received for an odd lot order and the contract is in auction. This error message is then returned immediately.	The dealer who sent the bid message.
54	*Not allowed to change subscription*	This dealer is not authorised to change subscription policy.		The dealer who sent the message.
60	*Limits specified must be positive*	When setting limits for a dealer, the values specified can only be positive.		The dealer who sent the message.
62	*Principal Agency indicator is invalid*	Principal Agency indicator entered was invalid. Must be either P or A.		The dealer who sent the message.
63	*Cannot suspend an order 1 minute before the end of Open Order Period*	Cannot suspend an order after 1 minute before the end of the Open Order Period.		The dealer who sent the message.

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Number	Message	Why	When Sent	To Who
64	*Spreads not allowed with underlying in auction*	This message is sent when a user tries to put up a bid on a spread, or split contract, and either one of the contracts which make up the spread or split contract are in auction.	This message is sent when a bid message is received, and the underlying contract of a spread or split contract is in auction. This message is then sent immediately.	The dealer who sent the bid message.
66	*Contract is suspended*	The contract specified is currently suspended from trading.	After sending a bid message.	The dealer who sent the message.
67	*Dealer code is empty*	The dealer code specified was not filled in.		The dealer who sent the message.
68	*Incorrect price format*	The price format specified is incorrect.		The dealer who sent the message.
69	*Strike cannot be loaded*	The creation of the strike was unable to be completed.		The dealer who sent the message.
70	*Price cannot be less than zero*	Price specified on this contract cannot be less than 0.		The dealer who sent the message.
71	*Quantity cannot be less or equal to zero*	Quantity specified on this contract cannot be less than or equal to 0		The dealer who sent the message.
72	*Must be a master dealer to perform this action*	Action specified to be performed can only be completed by master dealers.		The dealer who sent the message.
73	*Contract not a valid contract*	This message is sent when the contract name in a message is not one which the system recognizes.	This message is sent if the contract name is invalid in any of the following message type: Display Update Request, Option Display Update Request, Bid Message, Suspend Message.	The dealer who sent the message.
74	The active order selected cannot be found	The active order selected cannot be found in database.	After sending a reduce message (message type 104).	The dealer who sent the message.
76	*Cannot reduce an order 1 minute before end of Open Order Period*	Orders submitted during Open Order period cannot be reduced, 1 minute before the end pf the Open Order Period.	After sending a reduce message (message type 104)	The dealer who sent the message.

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Number	Message	Why	When Sent	To Who
77	*Cannot resubmit an order 1 minute before end of Open Order Period*	Orders suspended during Open Order Period cannot be resubmitted 1 minute before the end of Open Order Period.	After sending a resubmit message (message type 27)	The dealer who sent the message.
78	*Cannot suspend this order until market opens.*	Orders suspended during Open Order Period cannot be suspended until market open, if market open order period has closed.	After sending a suspend message (message type 8)	The dealer who sent the message.
80	*This order type has not been enabled on this contract.*	Order type specified has not been enabled.	After submitting multi bid message (message type 56)	The dealer who sent the message.
81	*Order quantity x is less than 1 on contract x*	Order quantity submitted is less than 1.	After submitting multi bid message (message type 56)	The dealer who sent the message.
82	*Price cannot be less than or equal to 0.*	Order price submitted is less than 0 or equal to 0.	After submitting multi bid message (message type 56)	The dealer who sent the message.
83	*This order cannot be deleted as it is currently active. Please use message 8.*	You cannot use message type 15 to delete an active order.	After submitting cancel order (message type 15)	The dealer who sent the message.
84	*The From Sequence cannot be larger than the To Sequence.*	You cannot specify a from sequence greater than the to sequence.	After submitting re-request message (message type 13)	The dealer who sent the message.
87	*Order sequence x cannot be found.*	The order sequence number supplied could not be found in the database.	After cancelling a suspended order (message type 15)	The dealer who sent the message.
101	*Invalid Password or Incorrect Date*	Password supplied is incorrect, or date used as not correct.	After logging in (message type 0)	The user on the socket connection.
103	*Invalid Old Password*	Password change contained the incorrect old password.	After sending a message type 88.	The user on the socket connection.
104	*Submitted on screen limit invalid*	Submitted onscreen limits exceed existing limit.	After sending limit change message (message type 6)	The user on the socket connection.
105	*Submitted option limit invalid*	Submitted option limits exceed existing limit.	After sending limit change message (message type 6)	The user on the socket connection.
106	*Submitted report only limit invalid*	Submitted report only limits exceed existing limit.	After sending limit change message (message type 6)	The user on the socket connection.
109	*Member does not have position on this contract*	Giving notice for delivery on a contract on which	When doing a physical delivery (message type 128)	The user on the socket connection.

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Number	Message	Why	When Sent	To Who
		you do not have a position.		
110	*Can only give notice for delivery on a short position*	Giving notice for delivery on a long position.	When doing a physical delivery (message type 128)	The user on the socket connection.
111	*Cannot give notice on certificate, because the certificate is not the same instrument as the delivery notice*	Cannot give notice on certificate, because the certificate is not the same instrument as the delivery notice.	When doing a physical delivery (message type 128)	The user on the socket connection.
112	*Number of contracts in notice exceeds total position*	Giving notice of delivery for more than your position allows.	When doing a physical delivery (message type 128)	The user on the socket connection.
113	*Silo Certificate Number is not within the valid range for this silo*	Silo Certificate Number is not within the valid range for this silo.	When adding a new silo certificate (message type 129)	The user on the socket connection.
114	*Invalid multiplication factor*	When loading a client, the multiplication factor must be either 100, 125, 150, or 170.	When adding a new client (message type 102)	The user on the socket connection.
115	*Contact Details error*	Contact details supplied are invalid.	When adding a new client (message type 102)	The user on the socket connection.
117	*Market Period Rule error*	The current market period does not allow for the sent message type.		The user on the socket connection.
118	*You have no rights to perform this operation*	Indicates you do not have sufficient rights setup to send this message.		All connected sockets.
119	*Auction Notifications:* *"Contract xxx is entering an auction period."* *"Auction on contract xxx has been extended for 2 minutes."* *"Auction on contract xxx has been extended for 5 minutes."* *"Auction on contract xxx has closed."*	Indicates the begin and end of an auction period.		All connected sockets.
121	*Cannot delete a certificate which is ready for delivery or delivered.*	The certificate which you are trying to delete has already been	After send a delete silo certificate message (136)	The user on the socket connection.

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Number	Message	Why	When Sent	To Who
		delivered or is ready for delivery.		
122	*Collateral Swap Repos cannot be amended.*	The repo that you are trying to edit is a collateral swap.	When initiating and accepting a collateral swap repo. Initiate Repo (180), Accept Unmatched Repo (181).	The user on the socket connection.
123	*Repo yield or nominal cannot be amended after R1 has settled.*	The repo becomes binding after R1 has settled.	When editing or accepting a repo. Accept Unmatched Repo (181), Edit Repo (183), Edit Unmatched Repo (188).	The user on the socket connection.
124	*The effective date must be set to the future when changing the repo rate.*	The rate change effective date supplied in the message was a past date.	When editing or accepting a repo. Accept Unmatched Repo (181), Edit Repo (183), Edit Unmatched Repo (188).	The user on the socket connection.
125	*Unable to identify repo collateral. Repo Collateral Id: x does not belong to repo x.*	The collateral you are trying to edit or substitute does not belong to the repo.	When editing or accepting a repo. Accept Unmatched Repo (181), Edit Repo (183), Substitute Collateral (184), Edit Unmatched Repo (188).	The user on the socket connection.
126	*Repo cannot be cancelled after R1 has settled.*	The repo becomes binding after R1 has settled.	When cancelling a repo. Cancel repo (186).	The user on the socket connection.
127	*Closed repos cannot be closed.*	The repo you are trying to close is already closed.	When closing a repo. Close Repo (185).	The user on the socket connection.
128	*Closing an Evergreen repo requires that the close date be after the notice period: xxx.*	The close date entered when closing an evergreen repo is before Today + notice period days.	When closing an evergreen repo. Close Repo (185).	The user on the socket connection.
129	*Only Active repos can be accepted.*	The unmatched repo sent to be accepted is not in the Active state.	When accepting an unmatched repo. Accept Unmatched Repo (181).	The user on the socket connection.

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Number	Message	Why	When Sent	To Who
130	*Repo interest payments cannot be made on closed repos.*	The repo interest payment was made on a closed repo.	When initiating and accepting a repo interest payment. Initiate Repo Interest Payment (189), Accept Repo Interest Payment (190).	The user on the socket connection.
131	*Cannot edit a triparty repo that is pending acknowledgement from Strate.*	The triparty repo requested to be edited already has a transaction pending acknowledgement from Strate.	When editing a triparty repo. Edit Triparty repo (198).	The user on the socket connection.
132	*Cannot edit triparty repos on the day of closing.*	The request to edit a repo was made on the same day as it's close date.	When editing and accepting a triparty repo. Accept Unmatched Triparty (196), Edit Triparty repo (198).	The user on the socket connection.
133	*Triparty Deal Action could not be identified, received xxx, expected a P, D, R, T, or I.*	The triparty deal action received was not an expected value.	When editing a triparty repo. Edit Unmatched Triparty (194), Edit Triparty repo (198).	The user on the socket connection.
134	*Closed repos must have a close date set.*	A closed repo was initiated or edited without a close date set. (To initiate an open ended repo set the Is Open field on the initiate repo message to true)	When initiating or editing a repo. Initiate Repo (180), Edit Repo (183), Edit Unmatched Repo (188), Initiate Triparty Repo (193), Edit Unmatched Triparty (194), Edit Triparty repo (198).	The user on the socket connection.
135	*Collateral Basket Reference does not exist.*	A triparty repo was initiated with a collateral basket that does not exist. (Request a 146 data download for valid collateral baskets.)	When accepting, initiating or editing a triparty repo. Accept Unmatched Triparty (196), Initiate Triparty Repo (193), Edit Unmatched Triparty (194).	The user on the socket connection.

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Number	Message	Why	When Sent	To Who
136	*Collateral Basket Reference does not belong to principal xxx.*	The principal of the initiated triparty repo is not linked to the collateral basket.	When accepting, initiating or editing a triparty repo. Accept Unmatched Triparty (196), Initiate Triparty Repo (193), Edit Unmatched Triparty (194).	The user on the socket connection.
137	*Collateral Basket Reference does not belong to counterparty xxx.*	The counterparty of the initiated triparty repo is not linked to the collateral basket.	When accepting, initiating or editing a triparty repo. Accept Unmatched Triparty (196), Initiate Triparty Repo (193), Edit Unmatched Triparty (194).	The user on the socket connection.
138	*Close date must be a valid future business day.*	The close date submitted is not a future date.	When accepting, initiating or editing a triparty repo. Accept Unmatched Triparty (196), Initiate Triparty Repo (193), Edit Unmatched Triparty (194).	The user on the socket connection.
139	*Close date cannot be the same as the current close date.*	The close date submitted is the same as the current close date of the repo.	When editing a triparty repo. Edit Unmatched Triparty (194), Edit Triparty repo (198).	The user on the socket connection.
140	*Rate cannot be the same value as the current repo rate.*	The repo rate submitted is the same as the current repo rate of the repo.	When editing a triparty repo. Edit Unmatched Triparty (194), Edit Triparty repo (198).	The user on the socket connection.
141	*Consideration cannot be the same value as the current consideration.*	The consideration submitted is the same as the current consideration of the repo.	When editing a triparty repo. Edit Unmatched Triparty (194), Edit Triparty repo (198).	The user on the socket connection.
142	*Cannot terminate repos on the day of settlement.*	The request to terminate the repo occurred on the day of settlement.	When editing a triparty repo. Edit Unmatched Triparty (194),	The user on the socket connection.

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Number	Message	Why	When Sent	To Who
			Edit Triparty repo (198).	
143	*An invalid edit was made to a field in the triparty repo.*	A field outside of the allowed fields was edited on a triparty repo. (Only fields that conform to the Triparty Deal Action field can be edited.)	When editing a triparty repo. Edit Unmatched Triparty (194), Edit Triparty repo (198).	The user on the socket connection.
1000	*Generic Exception*			

10.3 Market Period Announcements

Number	Message	Reason
102	Market online in 5 minutes	
102	Market online in 2 minutes	
102	Market online in 1 minute	
102	**Market online (Download only)**	Market has moved into a session where no trading is possible only, file downloads.
102	Market opens in 5 minutes	
102	Market opens in 2 minutes	
102	Market opens in 1 minute	
102	**Market open for trading**	Market has moved into a session where trading is allowed.
102	Market closes in 5 minutes	
102	Market closes in 2 minutes	
102	Market closes in 1 minute	
102	**Market closed (Admin period)**	Market has moved into a session where no on-screen trading is possible only report only activity and deal management activities.
102	Market offline in 5 minutes	
102	Market offline in 2 minutes	
102	Market offline in 1 minute	
102	**Market offline**	Market has moved into a session where no system interaction is possible.
102	Market Open Order period in 5 minutes	
102	Market Open Order period in 2 minutes	
102	Market Open Order period in 1 minute	
102	**Start of Market Open Order period**	Market has moved into a session where pre-open trading is possible. During this period orders can be placed on the order book in preparation for market open.
102	**Same Day Settlement Window is now open**	Indicates that trades reported on Spot Bond products for settlement today can now be reported.

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Number	Message	Reason
102	**Same Day Settlement Window is now closed**	Indicates that trades reported on Spot Bond products for settlement today are no longer allowed to be reported.

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11. Appendix A: Links to Algorithms

11.1 Encryption URL

http://www.schneier.com/blowfish-download.html

11.2 Compression URL

http://www.programmersheaven.com/download/2215/download.aspx

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12. Distribution

List the names and divisions/departments of the persons to whom this document will be distributed. It is not necessary to include designations.

Name	Department
M. ~~Janke~~De Beer	STT
Glenda De Wet	JSE
Arlette Macfarlane	JSE
Matthias Kempgen	JSE

13. Glossary

Term	Definition
A	Alpha only
ACK	Acknowledgement
AN	Alpha numeric
B	The field is made up of 1 or more bytes of type U
C	Single character ASCII equivalent
D	Intel/IEEE floating point 8-byte format
FF	Hex for 255
FOK	Fill or Kill
I	Intel Integer format; the length is defined.
LZH	Compressed file format
JSE DERIVATIVES MARKETS TRADING SYSTEM REPLACEMENT	Multiple Instrument Trading System
MTM	Market to Market
N	Numeric only – Default for types I.U.D
NACK	Negative Acknowledgement
NOB	Number of bids
P	Pascal type string with leading length byte, maximum length is the defined length – 1. All strings in JSE DERIVATIVES MARKETS TRADING SYSTEM REPLACEMENT are represented in this manner.
TCP / IP	Transmission Control Protocol / Internet Protocol
TOK	Take or Kill
U	Intel unsigned integer; the length is defined
URL	Uniform Resource Locator
XOR	Mathematical term for exclusive disjunction
Information Subscriber	Those entities which will be subscribing to the public data for their own use, and onward redistribution to their external clients.

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14. Sign-Off

All parties signing this document acknowledge that they have read, understood and are committed to this document, including all attached schedules and diagrams.

Name:	Michelle de Beer	**Name:**	Craig Marais
Designation:	Managing Director	**Designation:**	ATS Team Lead
Project Role:	Project Sponsor	**Project Role:**	Project Owner
Signature:	DocuSigned by: Michelle de Beer F9F33A2F4D16483...	**Signature:**	Signed by: Craig Marais 1403 1C7EB844A3...
Date:	9/3/2024	**Date:**	9/3/2024
Name:	Patrick P. Maphike	**Name:**	Riaan Kruger
Designation:	Director STT TC	**Designation:**	Director
Project Role:	Director STT TC	**Project Role:**	Architect
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Date:	9/3/2024	**Date:**	9/3/2024