



ReferencePoint[®]

Daily Official List Message Specification

The definitive reference data service, direct from the source



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Updated: May 2016
Version: 2.3

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Introduction

ReferencePoint® is a financial information service providing daily market information from the Australian Security Exchange's single integrated trading platform known as ASX Trade and the Market Announcements Platform (MAP).

Files Format and Access

ReferencePoint Daily Official List files are available in two formats and two delivery mechanisms:

- Comma separated (CSV) format via internet connection utilising ASXOnline B2B web portal. Some of the CSV files are compressed using Zip compression.

For details about ASXOnline, refer to the "Becoming an Internet Subscriber (ASXOnline)" section in this document.

The order of Data Fields appearing for each message is listed in the [Message Structure](#) section of this document with each message having a schematic indicating the order of Data Fields within the message.

NOTE: In ReferencePoint CSV files, the Issuer Code and Security Code fields are amalgamated into one field, despite being identified in the Message Structure section as separate fields.

The definition of each Data Field is supplied in [Field Definition](#) section of this manual

- Fixed width non delimited ASCII format via VPN utilising the TCP/IP communications protocol.

All Gateway log on procedures and message formats are detailed in the document titled "Becoming a Gateway Subscriber or an Internet Subscriber (ASXOnline)" available on <https://www.asxonline.com/marketinfo/referenceproducts/ReferencePoint/>.

Files Composition

Daily Official List includes files that provide hourly snapshots during on market trading and evening snapshots. The snapshots contain market information on indices, equities, loan securities, warrants, exchange traded options, futures contracts and market summaries. A snapshot is a 'summary' record of events occurring up to the point of snapshot generation. It contains some trade based information such as first, high, low, last and cumulative volume and value and quote based information such as bid, ask and number of buyers and sellers. It also contains market overview information such as market & index volumes and turnover, and top moving securities.

A snapshot of market activity is generated hourly from 11:00 hours on ReferencePoint Daily Official List Intraday service: at 11:00, 12:00, 13:00 (End of Morning Snapshot), 14:00, 15:00, 16:00 (Afternoon Equity Snapshot), 17:00 (Afternoon Derivatives Snapshot), 19:00 (End of Day Snapshot) and at 20:00 (End of Day Derivatives Snapshot).

When the latest session is requested (session indicator: 000L), the most recently updated snapshot will be received. If the latest session is requested between 00:00 hours and 11:00 hours on any trading day, the previous trading day's evening session is obtained. If the latest session is requested between 12:30 hours and 13:15 hours on any trading day the current day's 12:00 session is obtained. A request for the latest session between 19:30 hours and 24:00 hours on any trading day provides the current trading day's evening session.

Any planned reduction or extension in on-market trading and the associated times of snapshot generation are advised via Market Information Bulletin.

ReferencePoint Daily Official List Product Service Option Codes

In late 2011, ASX introduced a new trading facility ASX PureMatch® which is a separate order book operating in parallel to the existing ASX equity trade execution facility (ASX TradeMatch). This new trading facility provides trading in a subset of ASX listed securities.

With the introduction of the new trading facility, ReferencePoint Daily Official List product offering was expanded to include new files containing information from ASX PureMatch only and new files containing All ASX Market information consisting of data from the existing ASX TradeMatch*, ASX VolumeMatch* and ASX PureMatch trading facilities.

Below table contains information on the different service options made available to subscribers.

Trading Facility	Service Options		
	Derivatives Snapshots	Equity Snapshots	Market Summary
ASX TradeMatch (existing trading facility)	D04	D01	D06
ASX PureMatch (new trading facility)	currently not applicable	D07	D08
All ASX Market (ASX TradeMatch*/ASX VolumeMatch* + ASX PureMatch)	currently not applicable	D17	D10

ASX PureMatch® Snapshots (D07)

This section provides additional details on the data content disseminated in the QY – Equity Snapshot message for the ASX PureMatch® (PM) market.

The D07 hourly snapshot messages and end of day file only contains the list of securities eligible for trading in the ASX PureMatch® (PM) market.

Below are the details on a number of data fields' values disseminated in this particular message.

- Trading facility data value source for Bid Price, Ask Price, First, High, Low, Cumulative Sales Volume & Cumulative Sales Value data fields is ASX PureMatch®.
- Valuation Price data field value for each ASX PureMatch® market eligible security for all the snapshots for each business day is defaulted to the corresponding ASX TradeMatch security Valuation Price value from the previous business day's end of day value.
- Detailed information on Last/Previous Last, Last Traded Date & Last Trade Time data field values.
 - If trades occurred for the PM eligible security during the day in the ASX PureMatch® market, data fields' values reflected are from trades on ASX PureMatch® for that day.

To illustrate:

ASX PureMatch® trades (PM) occurred up to 10:45 am

D07_11:00 snapshot data sample

* ASX VolumeMatch is not represented in the product as a separate trading facility. Trades executed under ASX VolumeMatch is reported under ASX TradeMatch. ASX VolumeMatch trades are reported with the "VM" trade condition code attached to it.

Data Field	ASX Trading Facility Source
Bid Price	ASX PureMatch®
Ask Price	ASX PureMatch®
First	ASX PureMatch®
High	ASX PureMatch®
Low	ASX PureMatch®
Cumulative Sales Volume	ASX PureMatch®
Cumulative Sales Value	ASX PureMatch®
Valuation Price	Defaulted to corresponding ASX TradeMatch® security's previous business day's end of day Valuation Price value.
Last/Previous Last	ASX PureMatch®
Last Traded Date	ASX PureMatch®
Last Traded Time	ASX PureMatch®

- If no trades occurred for the PM eligible security during the day in the ASX PureMatch® market, data fields' values reflected are defaulted to the corresponding ASX TradeMatch® eligible security data field values from the previous business day's end of day value.

To illustrate:

No ASX PureMatch® trade(s) occurred just before 15:00.

D07_15:00 snapshot data will be:

Data Field	ASX Trading Facility Source
Bid Price	0
Ask Price	0
First	0
High	0
Low	0
Cumulative Sales Volume	0
Cumulative Sales Value	0
Valuation Price	Defaulted to corresponding ASX TradeMatch® security's previous business day's end of day Valuation Price value.
Last/Previous Last	Defaulted to corresponding ASX TradeMatch® security's previous business day's end of day Last/Previous Last value.
Last Traded Date	Defaulted to corresponding ASX TradeMatch® security's previous business day's end of day Last Traded Date value.
Last Traded Time	Defaulted to corresponding ASX TradeMatch® security's previous business day's end of day Last Trade Time value.

All ASX Markets Afternoon Snapshot and End of Day File (D17)

The All ASX Market afternoon snapshot and end of day file consist of records from all the ASX Trade trading facilities namely, ASX TradeMatch*, ASX VolumeMatch* and ASX PureMatch. Detailed below are the sources of price and trade related data fields for these files:

Data Field	Trading Facility Source
Bid Price	ASX TradeMatch
Ask Price	ASX TradeMatch
First	ASX TradeMatch
High	across ASX TradeMatch & ASX PureMatch®
Low	across ASX TradeMatch & ASX PureMatch®
Last/Previous Last	ASX TradeMatch
Last Traded Date	ASX TradeMatch
Last Traded Time	ASX TradeMatch
Cumulative Sales Volume	ASX TradeMatch*/ASX VolumeMatch* + ASX PureMatch®
Cumulative Sales Value	ASX TradeMatch*/ASX VolumeMatch* + ASX PureMatch®
Valuation Price	ASX TradeMatch

Files Availability

When the snapshot is generated, a batch file is produced relaying market information at that point in time. The sheer volume of securities that have been active up to that time means that it takes a number of minutes to disseminate the snapshot information. Hence, each snapshot is available for access from about 5 minutes after generation.

A breakdown of the message content of each of the Snapshots disseminated on Reference Point Daily Official List messages as well as session indicator codes are detailed in the following two tables:

Daily Official List Intraday Messages

ASX TradeMatch		ASX PureMatch		All ASX Markets (ASX TradeMatch** + ASX PureMatch)		Message Composition of Snapshot File
Snapshot Name	File Name/Session Indicator	Snapshot Name	File Name/Session Indicator	Snapshot Name	File Name/Session Indicator	
D01 11:00	D01_1100.CSV	D07 11:00	D07_1100.CSV			GG, QG, QY, QK, IB, GE
D01 12:00	D01_1200.CSV	D07 12:00	D07_1200.CSV			GG, QG, QY, QK, IB, GE
D01 13:00	D01_000M.CSV	D07 13:00	D07_000M.CSV			GG, QG, QY, QK, IB, GE
D01 14:00	D01_1400.CSV	D07 14:00	D07_1400.CSV			GG, QG, QY, QK, IB, GE
D01 15:00	D01_1500.CSV	D07 15:00	D07_1500.CSV			GG, QG, QY, QK, IB, GE
D01 16:00*	D01_000A.CSV	D07 16:00*	D07_000A.CSV	D17 16:00*	D17_000A.CSV	GG, QG, QY, QK, IB, GE
D01 19:00*	D01_000E.CSV	D07 19:00*	D07_000E.CSV	D17 19:00*	D17_000E.CSV	GG, QG, QY, QK, GE
D04 11:00	D04_1100.ZIP expands to d04_1100.csv					GG, QS, QX, QZ, GE
D04 12:00	D04_1200.ZIP expands to d04_1200.csv					GG, QS, QX, QZ, GE
D04 13:00	D04_000M.ZIP expands to d04_000m.csv					GG, QS, QX, QZ, GE
D04 14:00	D04_1400.ZIP expands to d04_1400.csv					GG, QS, QX, QZ, GE
D04 15:00	D04_1500.ZIP expands to d04_1500.csv					GG, QS, QX, QZ, GE
D04 17:00*	D04_00AD.ZIP					GG, QS, QX, QZ, GE

ASX TradeMatch		ASX PureMatch		All ASX Markets (ASX TradeMatch** + ASX PureMatch)		Message Composition of Snapshot File
Snapshot Name	File Name/Session Indicator	Snapshot Name	File Name/Session Indicator	Snapshot Name	File Name/Session Indicator	
	expands to d04_00ad.csv					
D04 19:00	D04_000E.ZIP expands to d04_000e.csv					GG, QS, QX, QZ, GE
D04 20:00*	D04_00ED.ZIP (previously known as D04_1700.CSV) expands to d04_00ed.csv					GG, QS, QX, QZ, GE
D06 11:00	D06_1100.CSV	D08 11:00	D08_1100.CSV	D10 11:00	D10_1100.CSV	GG, MA, MI, MW, MV, MM, ML, MH, MO, MN, MT, MK, MF, MB, GE
D06 12:00	D06_1200.CSV	D08 12:00	D08_1200.CSV	D10 12:00	D10_1200.CSV	GG, MA, MI, MW, MV, MM, ML, MH, MO, MN, MT, MK, MF, MB, GE
D06 13:00	D06_000M.CSV	D08 13:00	D08_000M.CSV	D10 13:00	D10_000M.CSV	GG, MA, MI, MW, MV, MM, ML, MH, MO, MN, MT, MK, MF, MB, GE
D06 14:00	D06_1400.CSV	D08 14:00	D08_1400.CSV	D10 14:00	D10_1400.CSV	GG, MA, MI, MW, MV, MM, ML, MH, MO, MN, MT, MK, MF, MB, GE
D06 15:00	D06_1500.CSV	D08 15:00	D08_1500.CSV	D10 15:00	D10_1500.CSV	GG, MA, MI, MW, MV, MM, ML, MH, MO, MN, MT, MK, MF, MB, GE
D06 16:00	D06_000A.CSV	D08 16:00	D08_000A.CSV	D10 16:00	D10_000A.CSV	GG, MA, MI, MW, MV, MM, ML, MH, MO, MN, MT, MK, MF, MB, GE
D06 19:00*	D06_000E.CSV	D08 19:00*	D08_000E.CSV	D10 19:00*	D10_000E.CSV	GG, MA, MI, MW, MV, MM, ML, MH, MO, MN, MT, MK, MF, MB, GE

* These files are available in the End of Day product offering.

** ASX VolumeMatch is not represented in the product as a separate trading facility. Trades executed under ASX VolumeMatch are reported under ASX TradeMatch.

Daily Official List End of Day Messages Details

Snapshot Name	Session Indicator/ (File Name)	Message Composition of Snapshot File	Time Usually Available From
Afternoon Equities Snapshot	000A	QY – Equity Snapshot QK – Screen Trade Load Security Snapshot IB – Index Snapshot	16:20 hours
Afternoon Derivatives Snapshot	00AD	QX – ASX Futures Contract Snapshot QZ – Exchange Traded Option Snapshot	17:05 hours
End of Day Snapshot	000E	QY – Equity Snapshot QK – Screen Trade Load Security Snapshot QX – ASX Futures Contract Snapshot QZ – Exchange Traded Option Snapshot MF – ASX Futures Contract Summary MH – Interest Rate Market (IRM)/ Loan Movers, Top 20 MI – Index Top Movers Summary MK – Hybrids and Convertible Notes Turnover Summary ML – Market Movers – Entire Market Summary MM – Market Movers – ASX100 Summary MN – Top Trading Exchange Traded Options Summary MO – Exchange Traded Options Turnover Summary MT – Market Turnover Summary MV – Index Turnover, Volume and Trading Summary MW – Warrant Summary	19:15 hours
End of Day Derivatives Snapshot	00ED (formerly referred to as 1700)	QX – ASX Futures Contract Snapshot QZ – Exchange Traded Option Snapshot	20:05 hours
Initialisation Quotes	Qlyymmdd.ZIP expands to qiyymmdd.csv Where: yy year mm month dd day	QP – Initialisation Quotes: Equities, Loan Securities & Exchange Traded Funds QQ – Initialisation Quotes: Exchange Traded Options & ASX Futures Contracts	T + 1, 01:00 hours
Official Closing Index Values	D33 (D33____.CSV)	IC – Index Share Price Values	T+1, 09:30 hours
mFund Price	D11_000E	QN – mFund Price file	From 7:00 am

Operating Sequences

This section outlines the operating sequence for Daily Official List. It includes such data as message types and dissemination times. References to operating times are based on Australian Eastern Standard Time (AEST). Subscribers should make allowances in their systems for changes in operating times as a result of daylight saving. Such changes are released in ASX Market Information Bulletins in order to notify subscribers.

Message Types

In the Snapshot messages, securities are grouped into Equities (QG, QY), Screen Traded Loan securities¹ (QI, QK), Exchange Traded Options (QL, QZ) and ASX Futures Contracts (QS, QX). Snapshots of S&P/ASX share price indices are also available and are disseminated on the IB – Index Snapshot message. The End of Day share price index values are disseminated in the IC – Share Price Index Values message.

The Index Snapshot contains all Index values at the time of snapshot generation. In addition, end of day summary information on the following: market sector and index volumes and turnover (MT, MV); security and index top movers (MM, ML, MI); Option and Warrant summaries (MO, MN, MW), ASX Futures Contract summaries (MF, MP, MQ) and Loan (Interest Rate) security turnover and movement (MK, MH) is also available on ReferencePoint.

Lastly, initialisation quote files QQ and QP are generated after the close of market on the day indicated by the date label and are applicable for the next trading day. The bid, ask, number of buyers and number of sellers are zero filled on the QP message type.

Initialisation quotes are disseminated for active securities as well as suspended securities.

General Message Information

Type	Name	Comments
GE	End of Transmission	When no more messages are to be sent, a GE message type is disseminated.
GG	Date Label	The first message type sent for each service option code, indicating the date for which the data is applicable. The time field is zero filled.

Index Information

Type	Name	Comments
IB	Index Snapshot	<p>This message is only available on the intraday service.</p> <p>Message type disseminated on hourly snapshots during on market trading .It contains the S&P/ASX Share Price Index values at the time of snapshot generation together with the highest and lowest Share Price Index point values for each index so far that business day, as calculated continuously by Standard and Poor's (S&P).</p>
IC	Share Price Index Values	<p>This message is only available on the end of day service.</p> <p>Message type disseminated containing the official closing S&P/ASX Share Price Index values.</p> <p>This file is usually available from 9:30 AM on T+1.</p>

¹ Interest Rate Market (IRM) Securities are referred to as Loan Securities in this document.

Market Summary Information

Type	Name	Comments
MA	Start of Market Summary	Disseminated to indicate the commencement of the market summary and the time and date of the summary.
MB	End of Market Summary	Disseminated to indicate that all market summary messages for that hour have been received.
MF	ASX Futures Contract Summary	Message type disseminated hourly summaries during on market trading and on the end of day summary for ASX Futures Contract securities.
MH	Interest Rate Market (IRM) / Loan Movers – Top 20 Summary	Message type disseminated on hourly summaries during on market trading and on the end of day summary for the Top 20 IRM (Loan) traded securities by price movements and the number of IRM (Loan) securities rising, falling or steady in price. This message covers information on Security Types 21 (Hybrids), Security Type 51 (Convertible Notes), Security Type 71 (Screen Traded Unsecured Notes), Security Type 72 (Floating Rate Notes) & Security Type 81 (Government Bonds).
MI	Index Top Movers Summary	<p>Message type disseminated on hourly summaries during on market trading and on the end of day summary.</p> <p>The message contains the Index rises and falls from the start of day (e.g. 23 Indices are up on start of day and 28 are down). It also shows the top five Index movers from start of day by percentage movement.</p>
MK	Hybrids & Convertible Notes Turnover Summary	Message type disseminated on hourly summaries during on market trading and on the end of day summary for Security Type 21 (Hybrids) & Security Type 51 (Convertible Notes).
ML	Market Movers – Entire Market Summary	<p>Disseminated on hourly summaries during on-market trading and on the end of day summary.</p> <p>The message contains the top 20 ASX Trade traded securities by price movement. It also lists the number of securities rising, falling or steady in price.</p>
MM	Market Movers – ASX100 Summary	<p>Disseminated on hourly summaries during on-market trading and on the end of day summary.</p> <p>The message contains the top 20 ASX Trade traded securities by price movement within the ASX100 index. It also lists the number of securities rising, falling or steady in price within the ASX100 Index.</p>
MN	Top Trading Exchange Traded Options Summary	<p>Disseminated on hourly summaries during on-market trading and on the end of day summary.</p> <p>The message contains the top ten Exchange Traded Option classes by volume of contracts traded, broken down into calls and puts. (Class refers collectively to the contracts issued over a single underlying product, e.g. BHP).</p>
MO	Exchange Traded Options Turnover Summary	<p>Disseminated on hourly summaries during on-market trading and on the end of day summary.</p> <p>The message contains the total Exchange Traded Options (including LEPOs) turnover, number of trades and volume of contracts broken down by calls and puts.</p>
MP	ASX Futures Options Turnover Summary	Disseminated on hourly summaries during on-market trading and on the end of day summary for ASX Futures Contract securities.
MQ	Top Trading ASX Futures Options Summary	Disseminated on hourly summaries during on-market trading and on the end of day summary for ASX Futures Contract securities.

Type	Name	Comments
MT	Market Turnover Summary	<p>Disseminated on hourly summaries during on-market trading and on the end of day summary.</p> <p>The message contains the total Equity turnover, number of trades and volume traded over the ASX Trade system and also this total broken down by sector. (Mining, Industrial and Oil & Gas plus Exempt Foreign Industrial, Exempt Foreign Mining and Exempt Foreign Oil & Gas).</p>
MV	Index Turnover, Volume and Trading Summary	<p>Disseminated on hourly summaries during on-market trading and on the end of day summary.</p> <p>The message contains a summary of the turnover, number of trades and volume of shares traded in each Index group.</p>
MW	Warrant Summary	<p>Disseminated on hourly summaries during on-market trading and on the end of day summary.</p> <p>The message contains the total warrant turnover, number of trades and volume traded over the ASX Trade system. It also shows the rises, falls and steadies for Warrant securities and the top five Warrants by price movement.</p>

Snapshot Information

Type	Name	Comments
QG	Beginning of Equity Summary	Disseminated during the morning, afternoon and end of day snapshots to indicate that Equity snapshot records are to follow.
QI	Beginning of Screen Traded Loan Security Summary	Disseminated during the morning, afternoon and end of day snapshots to indicate that Screen Traded Loan security snapshots are to follow.
QK	Screen Traded Loan Security (Dollar Traded) Snapshots	<p>Message types which contain such market information as first, high, low, last, last traded date, last traded time, cumulative volume, cumulative value, bid, ask, number of buyers and number of sellers for Screen Traded Loan (dollar traded) securities.</p> <p>These message types are transmitted during the morning, afternoon and end of day snapshots.</p>
QL	Beginning of Exchange Traded Options Summary	Disseminated as part of the morning, afternoon and end of day snapshots to indicate that Exchange Traded Options snapshots are to follow.
QN	mFund Price file	Disseminated as an end of day file.
QP	Initialization Quote – Equities, Loan Securities & Exchange Traded Funds	These messages are generated after the close of market on the day indicated by the date label and are applicable for the next trading day. The bid, ask, number of buyers and number sellers are zero filled.
QQ	Initialization Quote–Exchange Traded Options and ASX Futures Contracts	<p>QP Initialization Quotes are disseminated for active securities as well as suspended securities.</p> <p>QQ Initialization Quotes are disseminated for active securities.</p>
QS	Beginning of ASX Futures Contracts Summary	Disseminated as part of the morning, afternoon and end of day snapshots to indicate that ASX Futures Contract snapshots are to follow.
QX	ASX Futures Contracts Snapshot	<p>Disseminated during the morning, afternoon derivatives and evening snapshots for all ASX Futures Contract securities.</p> <p>These messages contain such market information as first, high, low, last, last traded date, last traded time, cumulative contract volume, cumulative contract value, bid, ask, number of contracts bid and number of contracts offered. This message may carry a theoretical value in cases where a stock has not had trade /</p>

Type	Name	Comments
		quote activity during the day and has therefore only had theoretical values calculated for it throughout the trading day.
QY	Equity Snapshot	<p>Disseminated during the morning, afternoon equity and evening snapshots for all Equity securities.</p> <p>These messages contain such market information as first, high, low, last, last traded date, last traded time, cumulative volume, cumulative value, bid, ask, number of buyers and number of sellers.</p>
QZ	Exchange Traded Option Snapshot	<p>Disseminated during the morning, afternoon derivatives and evening snapshots for Exchange Traded Options.</p> <p>These messages contain such market information as first, high, low, last, last traded date, last traded time, cumulative volume, cumulative value, bid, ask, number of buyers/contracts and number of sellers/contracts. This message may carry a theoretical value in cases where a stock has not had trade / quote activity during the day and has therefore only had theoretical values calculated for it throughout the trading day.</p>

Message Structure

This section describes the message types.

Message Header Structure

The standard message header attached to all messages has the following structure:

Name	Size	Comments
Sequence Number	6	
Message Type	2	
Retransmit ID	1	

Every message is assigned a sequence number. The sequence number is incremented by one for each message sent. Sequence numbers will range from 1 to 999999 with wrap-around.

The message type describes the data being sent.

The Retransmit ID is zero filled for all messages for first time transmission of data.

GE – End of Transmission**15 bytes**

Name	Column*	Size	Comments
Sequence Number	A	6	
Message Type	B	2	GE
Retransmit ID	C	1	
Time	D	6	

GG – Date Label**23 bytes**

Name	Column*	Size	Comments
Sequence Number	A	6	
Message Type	B	2	GG
Retransmit ID	C	1	
Time	D	6	
Date	E	8	

* Applicable to ASXOnline CSV file subscribers. It is the location of the field if the file is opened in a spreadsheet.

IB – Index Snapshot**Variable – maximum 438 bytes**

Name	Column*	Size	Comments
Sequence Number	A	6	
Message Type	B	2	IB
Retransmit ID	C	1	
Time	D	6	
Count	E	2	
Continue Marker	F	1	<p>This message is capable of disseminating up to 20 values.</p> <p>In order to disseminate more than 20 Index values, more than one message would be sent with each holding a maximum of 20 values and a Continue Marker '0'.</p> <p>The exception to this would be the final message in this series which would carry up to a maximum of 20 values and a Continue Marker of '1'.</p>
Index Code		3	These fields occur <i>Count</i> times – maximum 20
Current Share Price Index Values		6	
Share Price Index High		6	
Share Price Index Low		6	

IC – Share Price Index Values**Variable – maximum 318 bytes**

Name	Column*	Size	Comments
Sequence Number	A	6	
Message Type	B	2	IC
Retransmit ID	C	1	
Time	D	6	
Count	E	2	
Continue Marker	F	1	<p>This message is capable of disseminating up to 20 values.</p> <p>In order to disseminate more than 20 Index values, more than one message would be sent with each holding a maximum of 20 values and a Continue Marker '0'.</p> <p>The exception to this would be the final message in this series which would carry up to a maximum of 20 values and a Continue Marker of '1'.</p>
Index Code		3	These fields occur <i>Count</i> times – maximum 20
Reserved Field (Zero Values)		6	
Share Price Index Values		6	

* Applicable to ASXOnline CSV file subscribers. This is the location of the field if the file is opened in a spreadsheet.

MA – Start Of Market Summary Message**23 bytes**

Name	Column*	Size	Comments
Sequence Number	A	6	
Message Type	B	2	MA
Retransmit ID	C	1	
Time	D	6	
Date	E	8	

ME – End Of Market Summary Message**23 bytes**

Name	Column*	Size	Comments
Sequence Number	A	6	
Message Type	B	2	ME
Retransmit ID	C	1	
Time	D	6	
Date	E	8	

MF – ASX Futures Contracts Summary**147 bytes**

Name	Column*	Size	Comments
Sequence Number	A	6	
Message Type	B	2	MF
Retransmit ID	C	1	
Turnover	D	12	
Volume	E	12	
Trades	F	6	
ASX Code		6	These fields occur 5 times
Change		9	
Percentage Change		5	
Change Sign		1	
Market ID		3	001 (D06) 002 (D08) 100 (D10)

* Applicable to ASXOnline CSV file subscribers. This is the location of the field if the file is opened in a spreadsheet. This message will not be disseminated for ASX PureMatch® (D08) as no ASX Futures contracts will be traded in this trading facility at this point.

MH – Interest Rate Market Movers – Top 20 Summary	444 bytes
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Name	Column*	Size	Comments
Sequence Number	A	6	
Message Type	B	2	MH
Retransmit ID	C	1	
Rises	D	4	
Falls	E	4	
Steadies	F	4	
ASX Code		6	These fields occur 20 times
Change		9	
Percentage Change		5	
Change Sign		1	
Market ID		3	001 (D06) 002 (D08) 100 (D10)

This message will not be disseminated for ASX PureMatch® (D08) as no Interest Rate Securities will be traded in this trading facility at this point.

MI – Index Top Movers Summary	90 bytes
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Name	Column*	Size	Comments
Sequence Number	A	6	
Message Type	B	2	MI
Retransmit ID	C	1	
Index Rises	D	3	
Index Falls	E	3	
Index Code		3	These fields occur 5 times
Index Change		6	
Percentage Change		5	
Change Sign		1	

* Applicable to ASXOnline CSV file subscribers. This is the location of the field if the file is opened in a spreadsheet.

MK – Hybrids & Convertible Notes Turnover Summary**42 bytes**

Name	Column*	Size	Comments
Sequence Number	A	6	
Message Type	B	2	MK
Retransmit ID	C	1	
Turnover	D	12	
Volume	E	12	
Trades	F	6	
Market ID		3	001 (D06) 002 (D08) 100 (D10)

ML – Market Movers – Entire Market Summary**444 bytes**

Name	Column*	Size	Comments
Sequence Number	A	6	
Message Type	B	2	ML
Retransmit ID	C	1	
Rises	D	4	
Falls	E	4	
Steadies	F	4	
ASX Code		6	These fields occur 20 times
Change		9	
Percentage Change		5	
Change Sign		1	
Market ID		3	001 (D06) 002 (D08) 100 (D10)

* Applicable to ASXOnline CSV file subscribers. This is the location of the field if the file is opened in a spreadsheet.

MM – Market Movers – Top 20/ASX100 Summary**444 bytes**

Name	Column*	Size	Comments
Sequence Number	A	6	
Message Type	B	2	MM
Retransmit ID	C	1	
Rises	D	4	
Falls	E	4	
Steadies	F	4	
ASX Code		6	These fields occur 20 times
Change		9	
Percentage Change		5	
Change Sign		1	
Market ID		3	001 (D06) 002 (D08) 100 (D10)

MN – Top Trading Exchange Traded Options Summary**282 bytes**

Name	Column*	Size	Comments
Sequence Number	A	6	
Message Type	B	2	MN
Retransmit ID	C	1	
Class Code		3	These fields occur 10 times
Underlying Product		6	
Total Contracts Traded		6	
Call Contracts Traded		6	
Put Contracts Traded		6	
Market ID		3	001 (D06) 002 (D08) 100 (D10)

* Applicable to ASXOnline CSV file subscribers. This is the location of the field if the file is opened in a spreadsheet.

MO – Exchange Traded Options Turnover Summary**60 bytes**

Name	Column*	Size	Comments
Sequence Number	A	6	
Message Type	B	2	MO
Retransmit ID	C	1	
Calls Turnover	D	12	
Puts Turnover	E	12	
Call Contracts Traded	F	6	
Put Contracts Traded	G	6	
Call Trades	H	6	
Put Trades	I	6	
Market ID		3	001 (D06) 002 (D08) 100 (D10)

MP – ASX Futures Options Turnover Summary**60 bytes**

Name	Column*	Size	Comments
Sequence Number	A	6	
Message Type	B	2	MP
Retransmit ID	C	1	
Calls Turnover	D	12	
Puts Turnover	E	12	
Call Contracts Traded	F	6	
Put Contracts Traded	G	6	
Call Trades	H	6	
Put Trades	I	6	
Market ID		3	001 (D06) 002 (D08) 100 (D10)

* Applicable to ASXOnline CSV file subscribers. This is the location of the field if the file is opened in a spreadsheet.

MQ – Top Trading ASX Futures Options Summary**312 bytes**

Name	Column*	Size	Comments
Sequence Number	A	6	
Message Type	B	2	MQ
Retransmit ID	C	1	
Class Code	D	6	These fields occur 10 times
Underlying Product	E	6	
Total Contracts Traded	F	6	
Call Contracts Traded	G	6	
Put Contracts Traded	H	6	
Market ID		3	001 (D06) 002 (D08) 100 (D10)

MT – Market Turnover Summary**234 bytes**

Name	Column*	Size	Comments
Sequence Number	A	6	
Message Type	B	2	MT
Retransmit ID	C	1	
Turnover	D	12	
Volume	E	12	
Trades	F	6	
Sector Code		2	These fields occur 6 times
Sector Turnover		12	
Sector Volume		12	
Sector Trades		6	
Market ID		3	001 (D06) 002 (D08) 100 (D10)

* Applicable to ASXOnline CSV file subscribers. This is the location of the field if the file is opened in a spreadsheet.

MV – Index Turnover, Volume and Trading Summary	Variable – maximum 417 bytes
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Name	Column*	Size	Comments
Sequence Number	A	6	
Message Type	B	2	MV
Retransmit ID	C	1	
Count	D	2	
Continue Marker	E	1	<p>This message is capable of disseminating up to 15 values.</p> <p>Therefore, in order to disseminate more than 15 Index values, more than one message would be sent, each holding a maximum of 15 values and a Continue Marker '0'.</p> <p>The exception to this would be the final message in this series which would carry up to a maximum of 15 values and a Continue Marker of '1'.</p>
Index Code		3	These fields occur <i>Count</i> times – maximum 15
Turnover		12	
Volume		12	

MW – Warrant Summary	147 bytes
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Name	Column*	Size	Comments
Sequence Number	A	6	
Message Type	B	2	MW
Retransmit ID	C	1	
Turnover	D	12	
Volume	E	12	
Trades	F	6	
ASX Code		6	These fields occur 5 times
Change		9	
Percentage Change		5	
Change Sign		1	
Market ID		3	001 (D06) 002 (D08) 100 (D10)

* Applicable to ASXOnline CSV file subscribers. This is the location of the field if the file is opened in a spreadsheet.

QG – Beginning Of Equity Summary**16 bytes**

Name	Column*	Size	Comments
Sequence Number	A	6	
Message Type	B	2	QG
Retransmit ID	C	1	
Exchange ID	D	1	
Time	E	6	

QI – Beginning Of Loan Security Summary**16 bytes**

Name	Column*	Size	Comments
Sequence Number	A	6	
Message Type	B	2	QI
Retransmit ID	C	1	
Exchange ID	D	1	
Time	E	6	

* Applicable to ASXOnline CSV file subscribers. This is the location of the field if the file is opened in a spreadsheet.

QK – Loan Security Snapshot – Dollar Traded**156 bytes**

Name	Column*	Size	Comments
Sequence Number	A	6	
Message Type	B	2	QK
Retransmit ID	C	1	
Exchange ID	D	1	
Time	E	6	
Issuer Code	F	3	
Security Code	F	3	
Security Type	G	2	
Bid Price	H	9	
Number of Buyers	I	3	Zero filled from September 4, 2006
Ask Price	J	9	
Number of Sellers	K	3	Zero filled from September 4, 2006
First	L	9	
High	M	9	
Low	N	9	
Last/Previous Last	O	9	
Last Traded Date	P	8	
Last Traded Time	Q	6	
Cumulative Sales Volume	R	11	
Cumulative Sales Value	S	14	
Valuation Price	T	9	Formerly the “Latest Theory Market” data field. Changed to Valuation Price data field effective 15 July 2013. Values to relevant security types are disseminated only on Signal D01.
Valuation Price Footnote	U	1	Formerly the “Latest Theory Market Footnote” data field. Changed to Valuation Price Footnote data field effective 15 July 2013. Values to relevant security types are disseminated only on Signal D01.
Reserved	V	9	Reserved for future use. Currently zero filled.
Basis of Quotation	W	10	
Special Market Indicator	X	1	
Market ID	Y	3	

* Applicable to ASXOnline CSV file subscribers. This is the location of the field if the file is opened in a spreadsheet.

QL – Beginning Of Exchange Traded Options Summary**16 bytes**

Name	Column*	Size	Comments
Sequence Number	A	6	
Message Type	B	2	QL
Retransmit ID	C	1	
Exchange ID	D	1	
Time	E	6	

QN – mFund Prices Message**79 bytes**

Name	Column*	Size	Comments
Sequence Number	A	6	
Message Type	B	2	QN
Retransmit ID	C	1	
Time	D	6	
Date	E	8	
Application Price	F	17	
Price Date	G	10	
mFund Code	H	12	
Redemption Price	I	17	

* Applicable to ASXOnline CSV file subscribers. This is the location of the field if the file is opened in a spreadsheet.

QP – Initialisation Quotes for Equity, Loan Security & Exchange Traded Funds
114 bytes

Name	Column*	Size	Comments
Sequence Number	A	6	
Message Type	B	2	QP
Retransmit ID	C	1	
Exchange ID	D	1	
Time	E	6	
Issuer Code	F	3	
Security Code	F	3	
Security Type	G	2	
Bid Price	H	9	
Number of Buyers	I	3	Zero filled from September 4, 2006
Ask Price	J	9	
Number of Sellers	K	3	Zero filled from September 4, 2006
Opening Theory Market	L	9	
Opening Theory Market Footnote	M	1	
Previous Last	N	9	
Valuation Price	O	9	
Valuation Yield	P	5	Currently blank filled.
Valuation Footnote	Q	1	
Board Section Number	R	2	Zero filled
Price/Yield Indicator	S	1	
Last Traded Date	T	8	
Exercise Price	U	9	
Reserved	V	9	Reserved for future use. Currently zero filled.
Market ID		3	001 (D06) 002 (D08) 100 (D10)

* Applicable to ASXOnline CSV file subscribers. This is the location of the field if the file is opened in a spreadsheet.

QQ – Initialisation Quotes for Exchange Traded Options & ASX Futures Contracts
82 bytes

Name	Column*	Size	Comments
Sequence Number	A	6	
Message Type	B	2	QQ
Retransmit ID	C	1	
Exchange ID	D	1	
Time	E	6	
Issuer Code	F	3	
Security Code	F	3	
Security Type	G	2	
Margin Price	H	9	
Open Interest	I	9	
Number of Days to Expiry	J	5	
Exercise Price	K	9	
Board Section Number	L	2	Zero filled.
Contract Multiplier/Shares Per Contract/Index Multiplier	M	12	
Reserved	N	9	Reserved for future use. Currently zero filled.
Market ID		3	001 (D06) 002 (D08) 100 (D10)

QS – Beginning Of ASX Futures Contracts Summary
16 bytes

Name	Column*	Size	Comments
Sequence Number	A	6	
Message Type	B	2	QS
Retransmit ID	C	1	
Exchange ID	D	1	
Time	E	6	

* Applicable to ASXOnline CSV file subscribers. This is the location of the field if the file is opened in a spreadsheet.

QX – ASX Futures Contract Snapshot**174 bytes**

Name	Column*	Size	Comments
Sequence Number	A	6	
Message Type	B	2	QX
Retransmit ID	C	1	
Exchange ID	D	1	
Time	E	6	
Issuer Code	F	3	
Security Code	F	3	
Security Type	G	2	
Bid Price	H	9	
Reserved (old location of Number of Contracts Bid)	I	3	Zero filled
Ask Price	J	9	
Reserved (old location of Number of Contracts Offered)	K	3	Zero filled
First	L	9	
High	M	9	
Low	N	9	
Last	O	9	
Last Traded Date	P	8	
Last Traded Time	Q	6	
Cumulative Contract Volume	R	11	
Cumulative Contract Value	S	14	
Margin Price	T	9	
Reserved	U	9	Reserved for future use. Currently zero filled.
Reserved	V	10	Reserved for future use. Currently blank filled.
Market ID	W	3	
Number of Contracts Bid	X	10	
Number of Contracts Offered	Y	10	

* Applicable to ASXOnline CSV file subscribers. This is the location of the field if the file is opened in a spreadsheet.

QY – Equity Snapshot**165 bytes**

Name	Column*	Size	Comments
Sequence Number	A	6	
Message Type	B	2	QY
Retransmit ID	C	1	
Exchange ID	D	1	
Time	E	6	
Issuer Code	F	3	
Security Code	F	3	
Security Type	G	2	
Bid Price	H	9	
Number of Buyers	I	3	Zero filled from September 4, 2006 for Fixed Income and Warrant Securities. Zero filled from October 2, 2006 for Equity Securities.
Ask Price	J	9	
Number of Sellers	K	3	Zero filled from September 4, 2006 for Fixed Income and Warrant Securities. Zero filled from October 2, 2006 for Equity Securities.
First	L	9	
High	M	9	
Low	N	9	
Last/Previous Last	O	9	
Last Traded Date	P	8	
Last Traded Time	Q	6	
Cumulative Sales Volume	R	11	
Cumulative Sales Value	S	14	
Valuation Price	T	9	This field position used to be for the “Latest Theory Market” data field. The change was effective December 5, 2005.
Valuation Price Footnote	U	1	This field position used to be for the “Latest Theory Market Footnote” data field. The change was effective December 5, 2005.
Reserved	V	9	Reserved for future use. Currently zero filled.
Basis of Quotation	W	10	
Special Market Indicator	X	1	
Reserved (price data field)	Y	9	
Market ID	Z	3	

* Applicable to ASXOnline CSV file subscribers. This is the location of the field if the file is opened in a spreadsheet.

QZ – Exchange Traded Option Snapshot**198 bytes**

Name	Column*	Size	Comments
Sequence Number	A	6	
Message Type	B	2	QZ
Retransmit ID	C	1	
Exchange ID	D	1	
Time	E	6	
Issuer Code	F	3	
Security Code	F	3	
Security Type	G	2	
Bid Price	H	9	
Reserved (old location of Number of Buyers/Contracts)	I	3	Zero filled
Ask Price	J	9	
Reserved (old location of Number of Sellers/Contracts)	K	3	Zero filled
Broker/Contract Indicator	L	1	
First	M	9	
High	N	9	
Low	O	9	
Last/Previous Last	P	9	
Last Traded Date	Q	8	
Last Traded Time	R	6	
Cumulative Sales Volume	S	11	
Cumulative Sales Value	T	14	
Intrinsic Value	U	9	Intrinsic Value for Options with unquoted underlying security is blank filled
Time Value	V	9	Time Value for Options with unquoted underlying security is blank filled
Number of Days to Expiry	W	5	
Margin Price	X	9	
Reserved	Y	9	Reserved for future use. Currently zero filled.
Reserved	Z	10	Reserved for future use. Currently blank filled.
Market ID	AA	3	
Number of Buyers/Contracts	AB	10	
Number of Sellers/Contracts	AC	10	

* Applicable to ASXOnline CSV file subscribers. This is the location of the field if the file is opened in a spreadsheet.

Field Definitions

The following alphabetic listing of all the field definitions referred to the preceding section provides details of bytes, format, description and valid values.

Please note that for all field definitions:

- Whenever a field shows a blank, it contains the ASCII space character (hex 20)
- All numeric fields are right-justified, zero filled and have implied decimal places.
- All alphabetic fields are left-justified and blank filled, unless otherwise stated.
- All times disseminated are based on a 24 hour clock.

Application Price	
Bytes	17
Format	Numeric 9(11)V9(6) Expressed as dollars and cents up to six (6) decimal places.
Description	The last unit price declared by the fund issuer to purchase one unit in a fund.
Valid Values	N/A

Ask Price	
Bytes	9
Format	Numeric 9(5)V9(4) Expressed as cents to four decimal places. For Security Types 11, 12, 33, 34, 35, 48, 49, 57, 58, 85, 87 and 90 to 97 (high denomination equities and warrants & structured products, options and LEPO's), the Price is expressed as dollars and cents to four decimal places. ----- Numeric 9(7) v 9(2) For Security Types 39, 52, 59 & 65 (Ultra High Denomination securities), the Price is expressed as dollars and cents to two decimal places.
Description	The price at which someone is prepared to sell shares. For detailed information on data field values disseminated for ASX All Market file D17, refer to the ReferencePoint Daily Official List Product Service Option Codes section (page 6).
Valid Values	N/A

ASX Code							
Bytes	6						
Format	Alphanumeric						
Description	<p>A code allocated to identify securities and derivative products.</p> <p>Equities, Interest Rate Securities, Convertible Notes and Company Options:</p> <p>The first three characters (Issuer Code) are a code assigned to the issuing body, and the last three characters (Security Code) are a code allocated to each security pertaining to an issuing body. In the case of ordinary shares, the last three characters are generally blank filled.</p> <p>In relation to equity security codes, a period of 10 years needs to have elapsed before a given code may be reused.</p> <p>Interest Rate Securities:</p> <p>The first three characters refer to the underlying security. The fourth character H indicates interest rate security, the fifth character is an alpha character - from A to Z, and the sixth character may be "empty/blank" or an alpha character - from A to Z.</p> <p>For Exchange-traded Australian Government Bonds (AGBs), the following coding convention applies:</p> <table border="0"> <tr> <td style="vertical-align: top;"> <ul style="list-style-type: none"> ○ First Two Characters ○ 3rd Character ○ 4th Character </td> <td style="vertical-align: top; padding-left: 20px;"> <p>GS B for Fixed coupon , I for Indexed month of maturity <u>Values</u> A or B for January C or D for February E or F for March G or H for April I or J for May K or L for June M or N for July O or P for August Q or R for September S or T for October U or V for November W or X for December year of maturity (i.e. 2014 will be</p> </td> </tr> <tr> <td style="vertical-align: top; padding-top: 10px;"> <ul style="list-style-type: none"> ○ 5th & 6th Characters represented as 14) </td> <td></td> </tr> </table> <p>For Corporate Bond CDIs, the following coding convention applies:</p> <table border="0"> <tr> <td style="vertical-align: top;"> <ul style="list-style-type: none"> ○ First three Characters ○ 4th & 5th Characters ○ 6th Character </td> <td style="vertical-align: top; padding-left: 20px;"> <p>Issuer Code Year of maturity (2017 will be represented as 17) month of maturity (i.e. "A" or "B" represents January, "C" or "D" represents February, etc...)</p> </td> </tr> </table> <p>Exchange Traded Options:</p> <p>The first three characters refer to the underlying security. The fourth and fifth characters used in the coding of each strike of an option series are randomly generated. The sixth character will be the numeral 7, 8 or 9.</p> <p>ASX Code convention for TORESS (TOtal REturn Single Stock) Options</p> <p>Unique, to distinguish them from existing Exchange Trade Options.</p> <ol style="list-style-type: none"> a. The first two characters denote/map to the first 2 characters of the underlying ASX Code i.e. BH for BHP b. The third character is a set numerical value i.e. 8 --> BH8 c. The 4th and 5th characters are the clearing code which is randomly assigned by the ASX. Some codes will include a 6th numerical character which is also a clearing code randomly assigned by ASX. 	<ul style="list-style-type: none"> ○ First Two Characters ○ 3rd Character ○ 4th Character 	<p>GS B for Fixed coupon , I for Indexed month of maturity <u>Values</u> A or B for January C or D for February E or F for March G or H for April I or J for May K or L for June M or N for July O or P for August Q or R for September S or T for October U or V for November W or X for December year of maturity (i.e. 2014 will be</p>	<ul style="list-style-type: none"> ○ 5th & 6th Characters represented as 14) 		<ul style="list-style-type: none"> ○ First three Characters ○ 4th & 5th Characters ○ 6th Character 	<p>Issuer Code Year of maturity (2017 will be represented as 17) month of maturity (i.e. "A" or "B" represents January, "C" or "D" represents February, etc...)</p>
<ul style="list-style-type: none"> ○ First Two Characters ○ 3rd Character ○ 4th Character 	<p>GS B for Fixed coupon , I for Indexed month of maturity <u>Values</u> A or B for January C or D for February E or F for March G or H for April I or J for May K or L for June M or N for July O or P for August Q or R for September S or T for October U or V for November W or X for December year of maturity (i.e. 2014 will be</p>						
<ul style="list-style-type: none"> ○ 5th & 6th Characters represented as 14) 							
<ul style="list-style-type: none"> ○ First three Characters ○ 4th & 5th Characters ○ 6th Character 	<p>Issuer Code Year of maturity (2017 will be represented as 17) month of maturity (i.e. "A" or "B" represents January, "C" or "D" represents February, etc...)</p>						

ASX Code																									
	<p>ASX Futures Contracts:</p> <p>The first three characters refer to the underlying security. The fourth and fifth characters are an identifier for the expiry / maturity of the contract.</p> <p>Warrants:</p> <p>The first three characters refer to the underlying security; the fourth character signifying a warrant group may be a 'W', 'V', 'U', 'I', 'J', 'S', 'E', 'X', 'Y', 'Z', 'D', 'K', 'L', 'M', 'F' or 'Q'; the fifth character indicates the warrant issuer; and the sixth character identifies the warrant series.</p> <table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="text-align: left;">Warrant Group</th> <th style="text-align: left;">Description</th> </tr> </thead> <tbody> <tr> <td>B</td> <td>Bonus Certificate</td> </tr> <tr> <td>W, V, U or T</td> <td>Trading style warrants including equity calls and puts, index calls and puts, currency calls and puts.</td> </tr> <tr> <td>I or J</td> <td>Instalments</td> </tr> <tr> <td>S</td> <td>Self Funding Instalments (SFIs) and Structured Investment Products (SIPs – these include longer-term investment style products).</td> </tr> <tr> <td>E</td> <td>Endowments</td> </tr> <tr> <td>X, Y or Z</td> <td>Warrants which have significantly different structures to any of the above. Examples include equity and index knock-out warrants and Capital Plus Warrants.</td> </tr> <tr> <td>D</td> <td>This is a temporary code assigned to a warrant trading on a <u>deferred settlement</u> basis. The warrant will revert to its original code on the first day of normal trading after deferred settlement ends.</td> </tr> <tr> <td>K or Q</td> <td>MINIs</td> </tr> <tr> <td>L</td> <td>Guaranteed Stop Loss (GSL) MINIs</td> </tr> <tr> <td>M</td> <td>Listed Protected Loan</td> </tr> <tr> <td>F</td> <td>New Product Types</td> </tr> </tbody> </table> <p>In relation to warrant codes, there is no standard time frame for reusing codes that have previously been allocated to securities. This means that a given ASX warrant code may be reused within a period of 2 months.</p> <p>Unsponsored Depositary Receipts (UDRs)</p> <ul style="list-style-type: none"> – UDRS will have four (4) characters ASX/Trading Code; the first 3 characters do not reference the issuing body. – The first character of the ASX/Trading code will be "U" signifying it is a UDR. <p style="padding-left: 40px;">The 2nd to 4th characters of the code reference the underlying stock on the home exchange.</p>	Warrant Group	Description	B	Bonus Certificate	W, V, U or T	Trading style warrants including equity calls and puts, index calls and puts, currency calls and puts.	I or J	Instalments	S	Self Funding Instalments (SFIs) and Structured Investment Products (SIPs – these include longer-term investment style products).	E	Endowments	X, Y or Z	Warrants which have significantly different structures to any of the above. Examples include equity and index knock-out warrants and Capital Plus Warrants.	D	This is a temporary code assigned to a warrant trading on a <u>deferred settlement</u> basis. The warrant will revert to its original code on the first day of normal trading after deferred settlement ends.	K or Q	MINIs	L	Guaranteed Stop Loss (GSL) MINIs	M	Listed Protected Loan	F	New Product Types
Warrant Group	Description																								
B	Bonus Certificate																								
W, V, U or T	Trading style warrants including equity calls and puts, index calls and puts, currency calls and puts.																								
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S	Self Funding Instalments (SFIs) and Structured Investment Products (SIPs – these include longer-term investment style products).																								
E	Endowments																								
X, Y or Z	Warrants which have significantly different structures to any of the above. Examples include equity and index knock-out warrants and Capital Plus Warrants.																								
D	This is a temporary code assigned to a warrant trading on a <u>deferred settlement</u> basis. The warrant will revert to its original code on the first day of normal trading after deferred settlement ends.																								
K or Q	MINIs																								
L	Guaranteed Stop Loss (GSL) MINIs																								
M	Listed Protected Loan																								
F	New Product Types																								
Valid Values	N/A																								

Basis Of Quotation	
Bytes	2, occurs 5 times
Format	Alphabetic
Description	<p>Indicates the status under which a Security is quoted. In the case of trades, this field will only contain a value if special permission has been granted by the respective committees to trade outside the current stated Basis of Quotation.</p> <p>Note: Standard trading incorporates a fixed settlement period of 3 business days (T+3).</p>
Valid Values	Code Description

Basis Of Quotation	
CB	Cum Bonus Issue
CC	Cum Capital Return
CD	Cum Dividend
CE	Cum Entitlement
CF	Cum Takeover Offer
CL	Call Due
CM	Cum Premium Return
CP	Call Paid
CQ	Cum Equal Access Buy-back
CR	Cum Rights Issue
CT	Conditional Trading
CZ	Cum Non Pro-Rata Balance
NX	New Ex Interest
PA	Protection Available
PU	Protection Unavailable
RA	Receiver Appointed
RE	Reconstructed
XB	Ex Bonus Issue
XC	Ex Capital Return
XD	Ex Dividend
XE	Ex Entitlement
XF	Ex Takeover Offer
XI	Ex Interest
XM	Ex Premium Return
XQ	Ex Equal Access Buy back
XR	Ex Rights Issue
XZ	Ex Non Pro-Rata Balance

Bid Price	
Bytes	9
Format	<p>Numeric 9(5)V9(4)</p> <p>Expressed as cents to four decimal places.</p> <p>For Security Types 11, 12, 33, 34, 35, 48, 49, 57, 58, 85, 87 and 90 to 97 (high denomination equities and warrants & structured products, options and LEPO's), the Price is expressed as dollars and cents to four decimal places.</p> <hr/> <p>Numeric 9(7) v 9(2)</p> <p>For Security Types 39, 52, 59 & 65 (Ultra High Denomination securities), the Price is expressed as dollars and cents to two decimal places.</p>
Description	<p>The price at which someone is prepared to buy shares.</p> <p>For detailed information on data field values disseminated for ASX All Market file D17, refer to the ReferencePoint Daily Official List Product Service Option Codes section (page 6).</p>
Valid Values	N/A

Broker/Contract Indicator	
Bytes	1
Format	Numeric
Description	An Indicator which determines if: (a) Number of buyers or (b) Number of Contracts are represented in the quote message.
Valid Values	0 = Contracts 1 = Brokers

Call Trades	
Bytes	6
Format	Numeric
Description	The total number of trades in Exchange Traded Call Options so far that business day. The figure includes Call LEPO's.
Valid Values	N/A

Call Turnover	
Bytes	12
Format	Numeric Expressed as dollars
Description	The total value of trades in Exchange Traded Call Options so far that business day. This value reflects the price multiplied by number of contracts traded multiplied by the number of shares per contract or contract multiplier. This figure includes Call LEPO's.
Valid Values	N/A

Call Contracts Traded	
Bytes	6
Format	Numeric
Description	The total number of contracts traded in Exchange Traded Call Options so far that business day. This figure includes Call LEPO's.
Valid Values	N/A

Change	
Bytes	9
Format	<p>Numeric 9(5)V9(4)</p> <p>Expressed as cents to four decimal places</p> <p>For Security Types 11, 12, 33, 34, 35, 48, 49, 57, 58, 85, 87 and 90 to 97 (high denomination equities and warrants & structured products, options and LEPO's), the Price is expressed as dollars and cents to four decimal places.</p> <hr/> <p>Numeric 9(7) v 9(2)</p> <p>For Security Types 39, 52, 59 & 65 (Ultra High Denomination securities), the Price is expressed as dollars and cents to two decimal places.</p>
Description	Indicates the price change of a security (equity, convertible note, company option or warrant). The change is calculated from either the last trade price of the previous trading day, or a theoretically derived opening price. The latter is used where a security price is adjusted overnight due to corporate actions such as reconstructions or bonus issues.
Valid Values	N/A

Change Sign										
Bytes	1									
Format	Alphanumeric									
Description	Indicates the change direction of an index group value or security price since the start of the trading day.									
Valid Values	<table border="0"> <tr> <td>+</td> <td>=</td> <td>positive</td> </tr> <tr> <td>-</td> <td>=</td> <td>negative</td> </tr> <tr> <td>[]</td> <td>=</td> <td>no change</td> </tr> </table>	+	=	positive	-	=	negative	[]	=	no change
+	=	positive								
-	=	negative								
[]	=	no change								

Class Code	
Bytes	3, occurs 10 times
Format	Alphanumeric
Description	A unique identifying code for the class (e.g. BHP, NC1) which signifies the Underlying Product (equity or index) over which options are listed.
Valid Values	N/A

Continue Marker							
Bytes	1						
Format	Numeric						
Description	Sent to indicate whether more of the same reference values will follow on the next record.						
Valid Values	<table border="0"> <tr> <td>0</td> <td>=</td> <td>Reference values continue to next record.</td> </tr> <tr> <td>1</td> <td>=</td> <td>End of record.</td> </tr> </table>	0	=	Reference values continue to next record.	1	=	End of record.
0	=	Reference values continue to next record.					
1	=	End of record.					

Contract Multiplier/Shares Per Contract/Index Multiplier	
Bytes	12
Format	Numeric Values are expressed in whole numbers <u>with the exception of contracts with index as underlying</u> . For contracts with index as underlying, values are expressed in dollars to 2 decimal places [9(10)v9(2)]*.
Description	<p>For ASX Equity Exchange Traded Options, this is the number of underlying shares represented by a single contract (for example, a value of 100 disseminated in this field represents 100 shares in 1 contract).</p> <p>For ASX FuturesOptions contracts, this is the number of underlying futures represented by a single contract.</p> <p>*For ASX Index Options and ASX Index Futures contracts, the value is referred to as the index multiplier which is the dollar value per point of the underlying index (for example, a value of 1000 disseminated in this field represents AUD \$10/point of the underlying index)</p> <p>For ASX Wool Futures contracts, this is the number of Kilograms in each contract unit (for example, a value of 2500 disseminated in this field represents 2,500 kilograms in 1 contract)</p> <p>For ASX Grain Futures contracts, this is the number of metric tonnes in each contract unit (for example, a value of 20 disseminated in this field represents 20 metric tonnes in 1 contract)</p> <p>For ASX Options over Futures, this is the number of units of a futures contract (e.g. Option over ASX Grain Futures Contracts contract multiplier of "1" represents 1 contract of the ASX Grain Futures Contract).</p>
Valid Values	N/A

Count	
Bytes	2
Format	Numeric
Description	Number of times that a field or fields occurs in a message.
Valid Values	1-99

Cumulative Sale Value/Cumulative Contract Value	
Bytes	14
Format	Numeric 9(12)V9(2) Expressed as dollars and cents
Description	The total consideration of shares transacted during the day. For ASX Futures Contracts, it is the total of the Sale Contract Value traded during the day.
Valid Values	N/A

Cumulative Sale Volume/Cumulative Contract Volume	
Bytes	11
Format	Numeric
Description	The total number of shares transacted during the day. For ASX Futures and Share Ratio Contracts, it is the total number of contracts transacted during the day.
Valid Values	N/A

Current Share Price Index Values	
Bytes	6
Format	Numeric 9(5)V9(1) Expressed as points to one decimal place
Description	The latest share price index points value for an index group.
Valid Values	N/A

Date	
Bytes	8
Format	Numeric YYYYMMDD where YYYY = Century, Year MM = Month DD = Day
Description	The date for which the data is applicable.
Valid Values	N/A

Exchange ID	
Bytes	1
Format	Numeric
Description	With the advent of automated trading, all Exchange identifications for trades are National.
Valid Values	1 = National (automated trading)

Exercise Price	
Bytes	9
Format	<p>Numeric 9(5)V9(4) (Expressed as dollars to 4 decimal places.)</p> <p>Numeric 9(7) v 9(2) Expressed as dollars and cents to two (2) decimal places for Ultra High Denomination securities – Security Types 39, 52, 59, 65)</p>
Description	<p>Also called Strike Price. For Exchange Traded Options over securities, this is the price at which the underlying security may be bought or sold by exercise of the option.</p> <p>For Exchange Traded Options over indices, this is the level at which the underlying index maybe bought or sold on expiry. As this level is expressed in points, this level must be multiplied by the Index Multiplier to convert to a dollar value.</p> <p>For Company Options, this is the total exercise capital plus exercise premium for the option.</p> <p>For Warrants, this represents the price at which the underlying security may be bought or sold by exercise of the warrant. This figure will be fixed at a nominal amount of 1 cent for endowment warrants and does not refer to the amount actually outstanding on endowment warrants. An amount of \$0.0001 (i.e. 1/100 of a cent) will also be applicable to certain Capital Protected Warrants.</p>
Valid Values	N/A

Falls	
Bytes	4
Format	Numeric
Description	The number of equities, loan (IRM) securities, convertible notes and company options, the price of which has fallen from either the last trade price of the previous trading day, or a theoretically derived opening price. The latter is used where a security is adjusted overnight due to corporate actions such as reconstruction's or bonus issues.
Valid Values	N/A

First	
Bytes	9
Format	<p>Numeric 9(5)V9(4) Expressed as cents to four decimal places.</p> <p>For Security Types 11, 12, 33, 34, 35, 48, 49, 57, 58, 85, 87 and 90 to 97 (high denomination equities and warrants & structured products, options and LEPO's), the Price is expressed as dollars and cents to four decimal places.</p> <p>-----</p> <p>Numeric 9(7) v 9(2) For Security Types 39, 52, 59 & 65 (Ultra High Denomination securities), the Price is expressed as dollars and cents to two decimal places.</p>
Description	<p>The price of the first on market trade for the day.</p> <p>For detailed information on data field values disseminated for ASX All Market file D17, refer to the ReferencePoint Daily Official List Product Service Option Codes section (page 6).</p>
Valid Values	N/A

High	
Bytes	9
Format	<p>Numeric 9(5)V9(4)</p> <p>Expressed as cents to four decimal places.</p> <p>For Security Types 11, 12, 33, 34, 35, 48, 49, 57, 58, 85, 87 and 90 to 97 (high denomination equities and warrants & structured products, options and LEPO's), the Price is expressed as dollars and cents to four decimal places.</p> <hr/> <p>Numeric 9(7) v 9(2)</p> <p>For Security Types 39, 52, 59 & 65 (Ultra High Denomination securities), the Price is expressed as dollars and cents to two decimal places.</p>
Description	<p>The highest price at which securities have sold on the market during the day.</p> <p>For detailed information on data field values disseminated for ASX All Market file D17, refer to the ReferencePoint Daily Official List Product Service Option Codes section (page 6).</p>
Valid Values	N/A

Index Code	
Bytes	3
Format	Alphabetic
Description	A three letter code which uniquely identifies an Index Group.
Valid Values	<p>XAB S&P/ASX Corporate Bond AA Rating Band Index (currently not live)</p> <p>XAC S&P/ASX Corporate Bond A Rating Band Index (currently not live)</p> <p>XAE S&P/ASX 200 A-REIT Equal Weight Index (currently not live)</p> <p>XAF S&P/ASX All Australian 50</p> <p>XAO S&P/ASX ALL ORDINARIES</p> <p>XAR S&P/ASX Corporate Bond AAA Rating Band Index (currently not live)</p> <p>XAT S&P/ASX All Australian 200</p> <p>XBB S&P/ASX Bank Bill (currently not live)</p> <p>XBI S&P/ASX Government Bond Index (currently not live)</p> <p>XBW S&P/ASX Buy-Write</p> <p>XCO S&P/ASX Corporate Bond Index (currently not live)</p> <p>XDI S&P/ASX Dividend Opportunities Index</p> <p>XDJ S&P/ASX 200 Consumer Discretionary (Sector)</p> <p>XEC S&P/ASX Emerging Companies Index</p> <p>XEJ S&P/ASX 200 Energy (Sector)</p> <p>XEW S&P/ASX Corporate Issuer Equal-Weight Index (currently not live)</p> <p>XFA S&P/ASX Australian Fixed Interest AAA Rating Band Index (currently not live)</p> <p>XFB S&P/ASX Australian Fixed Interest AA Rating Band Index (currently not live)</p> <p>XFC S&P/ASX Australian Fixed Interest A Rating Band Index (currently not live)</p> <p>XFD S&P/ASX Australian Fixed Interest BBB Rating Band Index (currently not live)</p> <p>XFF S&P/ASX Australian Fixed Interest Index 5 – 10 Years (currently not live)</p> <p>XFI S&P/ASX Australian Fixed Interest Index (currently not live)</p> <p>XFJ S&P/ASX 200 Financials (Sector)</p> <p>XFL S&P/ASX 50</p> <p>XFO S&P/ASX Australian Fixed Interest Index 1 – 5 Years (currently not live)</p> <p>XFT S&P/ASX Australian Fixed Interest Index 10 – 15 Years (currently not live)</p> <p>XFP S&P/ASX Australian Fixed Interest Index 15 15 Years +(currently not live)</p> <p>XGB S&P/ASX Australian Government Bond Index (currently not live)</p> <p>XGD S&P/ASX All Ordinaries Gold Index</p> <p>XHJ S&P/ASX 200 Health Care (Sector)</p>

Index Code			
XIB	S&P/ASX Government Inflation –Linked Bond Index (currently not live)		
XIJ	S&P/ASX 200 Information Technology (Sector)		
XJO	S&P/ASX 200		
XKO	S&P/ASX 300		
XLD	S&P/ASX 200 2x Leverage Daily Index		
XMD	S&P/ASX MID CAP 50		
XMJ	S&P/ASX 200 Materials (Sector)		
XMM	S&P/ASX 300 Metals and Mining Index		
XNJ	S&P/ASX 200 Industrials (Sector)		
XNT	S&P/ASX 200 Net Total Return Index		
XNV	S&P/ASX 200 2x Inverse Daily Index		
XPJ	S&P/ASX 200 Property Trusts (Sector)		
XSJ	S&P/ASX 200 Consumer Staples (Sector)		
XSO	S&P/ASX SMALL ORDINARIES		
XSU	S&P/ASX Supranational and Sovereign Bond Index (currently not live)		
XSV	S&P/ASX State-Government Bond Index (currently not live)		
XSY	S&P/ASX 300 Shareholder Yield Index (currently not live)		
XTJ	S&P/ASX 200 Telecommunications (Sector)		
XTL	S&P/ASX 20		
XTO	S&P/ASX 100		
XUJ	S&P/ASX 200 Utilities (Sector)		
XVI	S&P/ASX 200 VIX Index		
XXJ	S&P/ASX 200 Financial-x-Property Trusts (Sector)		
<p>The Indices below are international Index codes that will not be disseminated via ASX Signal services. They are included as valid values in order to recognise that they can nonetheless be used as underlying instruments for Derivative securities such as Warrants which are quoted and traded in the Australian market.</p>			
XDO	Dow Jones Industrial Average Index	XNK	Nikkei 225 Index
XND	NASDAQ 100 Index	XSP	S&P 500 Index

Index Change	
Bytes	6
Format	Numeric 9(5)V9(1) Expressed as points to one decimal place
Description	Indicates the value change of an index from its start of day value so far that business day.
Valid Values	N/A

Index Falls	
Bytes	3
Format	Numeric
Description	The number of indices whose value has fallen from their start of day value so far that business day.
Valid Values	N/A

Index Rises	
Bytes	3
Format	Numeric
Description	The number of indices whose value has risen from their start of day value so far that business day.
Valid Values	N/A

Intrinsic Value	
Bytes	9
Format	Alphanumeric 9(5)V9(4) Expressed as dollars to four decimal places
Description	The difference between the market value of the underlying security and the Exercise Price of the exchange traded option. The intrinsic value is never less than zero, so any negative value is represented by a zero.
Valid Values	N/A

Issuer Code	
Bytes	3
Format	Alphanumeric
Description	A code assigned to each issuing body. This field may be suffixed with the Security Code to make up a unique ASX Code.
Valid Values	N/A

Last	
Bytes	9
Format	Numeric 9(5)V9(4) Expressed as cents to four decimal places For Security Types 11, 12, 48, 49, 85, 87, and 90 to 97 (Options, Share Ratio Contracts and ASX Futures), the price is expressed as dollars to four decimal places. If Yield, expressed as a percentage to three decimal places.
Description	The last on-market sale price for a security. Note: The term "last on-market sale price" is the price from the transaction that resulted in the current Last Price.
Valid Values	N/A

Last/Previous Last	
Bytes	9
Format	<p>Numeric 9(5)V9(4)</p> <p>Expressed as cents to four decimal places</p> <p>For Security Types 11, 12, 33, 34, 35, 48, 49, 57, 58, 85, 87 and 90 to 97 (high denomination equities and warrants & structured products, options and LEPO's), the Price is expressed as dollars and cents to four decimal places.</p> <p>-----</p> <p>Numeric 9(7) v 9(2)</p> <p>For Security Types 39, 52, 59 & 65 (Ultra High Denomination securities), the Price is expressed as dollars and cents to two decimal places.</p> <p>-----</p> <p>If Yield, expressed as a percentage to three decimal places.</p>
Description	<p>The last on-market price at which a sale occurred for the specified security.</p> <p>Note: "last on-market price at which a sale occurred" is the price from the transaction that resulted in the current Last Price.</p> <p>To determine if the last is for the current day or a previous day, interrogate the last traded date and last traded time fields.</p> <p>For detailed information on data field values disseminated for ASX PureMatch® file D07, refer to the ReferencePoint Daily Official List Product Service Option Codes section (from page 6).</p>
Valid Values	N/A

Last Traded Date	
Bytes	8
Format	<p>Numeric YYYYMMDD where</p> <p>YYYY = Century, Year</p> <p>MM = Month</p> <p>DD = Day</p>
Description	<p>Indicates the date the last on-market price was captured. This date reflects the date of the transaction that generated the current Last Price</p> <p>For detailed information on data field values disseminated for ASX PureMatch® file D07, refer to the ReferencePoint Daily Official List Product Service Option Codes section (from page 6).</p>
Valid Values	N/A

Last Traded Time	
Bytes	6
Format	Numeric HHMMSS where HH = Hours MM = Minutes SS = Seconds
Description	Indicates the time the last on-market price was effected. On market reflects trading between 10.00 am and 4.00 pm on a normal business day. This time is identical to the time-stamp of the quote message corresponding to the transaction that generated the Last Price. For detailed information on data field values disseminated for ASX PureMatch® file D07, refer to the ReferencePoint Daily Official List Product Service Option Codes section (from page 6).
Valid Values	N/A

Last Traded Yield	
Bytes	5
Format	Numeric 9(2)V9(3) Expressed as a percentage to two decimal places
Description	Represents an equivalent of the last trade price, expressed as the annualised return on an Interest Rate security transaction. If the calculated yield is less than 0, the value 0 is sent. This field is zero filled since September 04, 2006.
Valid Values	N/A

Low	
Bytes	9
Format	Numeric 9(5)V9(4) Expressed as cents to four decimal places For Security Types 11, 12, 33, 34, 35, 48, 49, 57, 58, 85, 87 and 90 to 97 (high denomination equities and warrants & structured products, options and LEPO's), the Price is expressed as dollars and cents to four decimal places. ----- Numeric 9(7) v 9(2) For Security Types 39, 52, 59 & 65 (Ultra High Denomination securities), the Price is expressed as dollars and cents to two decimal places.
Description	The lowest price at which shares or securities have traded on the market during the day. For detailed information on data field values disseminated for ASX All Market file D17, refer to the ReferencePoint Daily Official List Product Service Option Codes section (page 6).
Valid Values	N/A

Margin Price	
Bytes	9
Format	Numeric 9(5)V9(4) Expressed as dollars to four decimal places
Description	Is determined at the end of the day's trading, for derivative products, and is used in calculating the daily margin liability. It is calculated by taking the mid-point between the bid and offer, then rounding up to the nearest whole cent, and is subject to adjustment by ASX Derivatives. The correct value used for margining calculations appears on the end of day (normally 7.00 pm) snapshot and on initialisation quotes; Margin Price values in the hourly and afternoon derivatives snapshots are zero filled.
Valid Values	N/A

Market ID	
Bytes	3
Format	Numeric
Description	Unique identifier for trading facility.
Valid Values	001 = ASX TradeMatch 002 = ASX PureMatch® 100 = All ASX Market (ASX TradeMatch + ASX PureMatch®)

Message Type	
Bytes	2
Format	Alphabetic
Description	Identifies the type of message being transmitted and enables the subscriber to identify the message format.
Valid Values	Refer to the Message Types section for data message types and content.

mFund Code	
Bytes	12
Format	Alphanumeric
Description	The code assigned by ASX that identifies the mFund.
Valid Values	N/A

Number Of Buyers	
Bytes	3
Format	Numeric
Description	<p>The number of Buyers recorded at the Current Bid Price.</p> <p>Zero filled from September 4, 2006 for Fixed Income and Warrant Securities.</p> <p>Zero filled from October 2, 2006 for Equity Securities.</p>
Valid Values	N/A

Number Of Buyers/Contracts	
Bytes	10
Format	Numeric
Description	<p>This indicates either:</p> <ul style="list-style-type: none"> • the number of Buyers at the current Bid Price OR • the number of Contracts at the current Bid Price. <p>To determine for Exchange Traded option quotes, whether Buyers or Contracts, interrogate the Broker/Contract Indicator.</p>
Valid Values	N/A

Number Of Contracts	
Bytes	9
Format	Numeric
Description	The number of Options forming the trade.
Valid Values	N/A

Number Of Contracts Bid	
Bytes	10
Format	Numeric
Description	The number of contracts bid at the Current Bid Price.
Valid Values	N/A

Number Of Contracts Offered	
Bytes	10
Format	Numeric
Description	The number of contracts offered at the Current Ask Price.
Valid Values	N/A

Number Of Days To Expiry	
Bytes	5
Format	Numeric
Description	The number of days remaining until the exercise of an exchange traded option.
Valid Values	N/A

Number Of Sellers	
Bytes	3
Format	Numeric
Description	<p>The number of Sellers recorded at the Current Ask Price.</p> <p>Zero filled from September 4, 2006 for Fixed Income and Warrant Securities.</p> <p>Zero filled from October 2, 2006 for Equity Securities.</p>
Valid Values	N/A

Number Of Sellers/Contracts	
Bytes	10
Format	Numeric
Description	<p>This indicates either:</p> <ul style="list-style-type: none"> the number of sellers at the current Ask Price OR the number of contracts at the current Ask Price. <p>To determine for Exchange Traded Option quotes, whether Sellers or Contracts, interrogate the Broker/Contract Indicator.</p>
Valid Values	N/A

Open Interest	
Bytes	9
Format	Numeric
Description	The number of outstanding contracts in a particular class or series existing in the exchange traded options or share ratios market.
Valid Values	N/A

Opening Theory Market	
Bytes	9
Format	<p>Numeric 9(5)V9(4) (Expressed as cents to four decimal places).</p> <p>For Security Types 11, 12, 33, 34, 35, 48, 49, 57, 58, 85, 87 and 90 to 97 (high denomination equities and warrants & structured products, options and LEPO's), the Price is expressed as dollars and cents to four decimal places.</p> <p>-----</p> <p>Numeric 9(7) v 9(2)</p> <p>For Security Types 39, 52, 59 & 65 (Ultra High Denomination securities), the Price is expressed as dollars and cents to two decimal places.</p>
Description	<p>The Opening Theory Market represents a price at which the stock is expected to open on the current trading day.</p> <p>For price traded securities, Opening Theory Market is set up in one of the following ways:</p> <ol style="list-style-type: none"> 1. An estimated price which may be supplied by the Listings Department (because the stock is a new listing, for example). 2. A dilution of the VALUATION PRICE where a stock has gone EX new issue or capital reconstruction. There is no adjustment made for dividend payments. 3. If neither of the above applies, then the valuation price is used as the Opening Theory Market. <p>This field is zero filled for all yield traded securities since 26 February 2002.</p>
Valid Values	N/A

Opening Theory Market Footnote	
Bytes	1
Format	Alphabetic
Description	A notation indicating the source of the Opening Theory Market.
Valid Values	<p>[] = Not Adjusted for price traded securities. Indicates no valid values for Yield traded securities since 26 February 2002.</p> <p>T = Theoretical Price/Yield</p> <p>D = Dilution</p>

Percentage Change	
Bytes	5
Format	<p>Numeric 9(3)V9(2)</p> <p>Expressed as a percentage to two decimal places</p>
Description	<p>The percentage change in the value of an Index group or the price of a security – equities, loan (IRM) securities, convertible notes, company options and warrants.</p> <p>For an index group, the change is measured against the start of day value for indices. For securities, the change is calculated from either the last trade price of the previous trading day, or a theoretically derived opening price. The latter is used where a security is adjusted overnight due to corporate actions such as reconstruction's or bonus issues.</p>
Valid Values	N/A

Previous Last	
Bytes	9
Format	<p>Numeric 9(5)V9(4)</p> <p>Expressed as cents to four decimal places</p> <p>For Security Types 11, 12, 33, 34, 35, 48, 49, 57, 58, 85, 87 and 90 to 97 (high denomination equities and warrants & structured products, options and LEPO's), the Price is expressed as dollars and cents to four decimal places.</p> <p>-----</p> <p>Numeric 9(7) v 9(2)</p> <p>For Security Types 39, 52, 59 & 65 (Ultra High Denomination securities), the Price is expressed as dollars and cents to two decimal places.</p> <p>-----</p> <p>If Yield, expressed as a percentage to three decimal places.</p>
Description	<p>The previous days last on-market price/yield at which a sale occurred for the specified security. To determine if Price or Yield, interrogate the Price/Yield Indicator.</p> <p>This price is recorded for market transactions only and is not adjusted by theory.</p>
Valid Values	N/A

Price Date	
Bytes	10
Format	<p>Numeric YYYYMMDD where</p> <p>YYYY = Century, Year</p> <p>MM = Month</p> <p>DD = Day</p>
Description	<p>The date that the fund was last priced (applications and redemptions) by the fund issuer. The pricing frequency for a fund is stated in the Product Disclosure Statement (PDS). Most funds are priced daily, but may be priced weekly, monthly or quarterly.</p>
Valid Values	N/A

Price/Yield Indicator	
Bytes	1
Format	Alphabetic
Description	An indicator to say whether a security is Price-Traded or Yield-Traded.
Valid Values	C = Price Traded (expressed as cents to four decimal places) D = Price Traded (expressed as dollars and cents*) Y = Yield-traded * Notes For High Denomination security types (11, 12, 33, 34, 35, 48, 49, 57, 58, 85, 87 and 90 to 97), the price is expressed as dollars and cents to four (4) decimal places. For Ultra High Denomination security types (39, 52, 59 and 65), the price is expressed as dollars and cents to two (2) decimal places.

Put Trades	
Bytes	6
Format	Numeric
Description	The total number of trades in Exchange Traded Put Options so far that business day.
Valid Values	N/A

Put Turnover	
Bytes	12
Format	Numeric Expressed as dollars
Description	The total value of trades in Exchange Traded Put Options so far that business day. This value reflects the price multiplied by number of contracts traded multiplied by the number of shares per contract or contract multiplier.
Valid Values	N/A

Put Contracts Traded	
Bytes	6
Format	Numeric
Description	The total number of contracts traded in Exchange Traded Put Options so far that business day.
Valid Values	N/A

Redemption Price	
Bytes	17
Format	Numeric 9(11)V9(6) Expressed as dollars and cents up to six (6) decimal places.
Description	The last unit price declared by the fund issuer to redeem one unit in a fund.
Valid Values	N/A

Reserved (price data field in QY Message)	
Bytes	9
Format	Numeric 9(5)V9(4) Expressed as cents to four decimal places For Security Types 11, 12, 48, 49, 85, 87, and 90 to 97 (Options, Share Ratio Contracts and ASX Futures), the price is expressed as dollars to four decimal places.
Description	To be advised.
Valid Values	N/A

Retransmit ID	
Bytes	1
Format	Numeric
Description	Indicates whether the message sent is as a result of a first-time service request or a retransmission request.
Valid Values	0 = Message sent in response to a normal service request. 1 = Message sent in response to a retransmission request.

Rises	
Bytes	4
Format	Numeric
Description	The number of equities, loan securities, convertible notes and company options, the price of which has risen from either the last trade price of the previous trading day, or a theoretically derived opening price. The latter is used where a security is adjusted overnight due to corporate actions such as reconstruction's or bonus issues.
Valid Values	N/A

Sector Code	
Bytes	2
Format	Alphabetic
Description	Code indicating which market sector is being referred to.
Valid Values	I Industrial M Mining O Oil & Gas IX Foreign Exempt Industrial MX Foreign Exempt Mining OX Foreign Exempt Oil & Gas

Sector Trades	
Bytes	6
Format	Numeric
Description	The total number of trades in securities comprising each relevant market sector of the market so far that business day.
Valid Values	N/A

Sector Turnover	
Bytes	12
Format	Numeric Expressed as dollars
Description	The total value of trades in securities comprising each relevant market sector so far that business day.
Valid Values	N/A

Sector Volume	
Bytes	12
Format	Numeric
Description	The total number of securities traded within each market sector so far that business day.
Valid Values	N/A

Security Code	
Bytes	3
Format	Alphanumeric
Description	A code allocated to each security pertaining to an issuing body. This field may be prefixed with the Issuer Code to make up a unique ASX Code.
Valid Values	N/A

Security Type	
Bytes	2
Format	Numeric
Description	The type of Security as defined by the issuing body.
Valid Values	See the Security Type Table

Sequence Number	
Bytes	6
Format	Numeric
Description	A sequential number allocated by the Gateway system and specific to a particular session with a given Subscriber. Unless a retransmission request has been made, the first data message sent will always contain the sequence number "000001". Subsequent messages will have the sequence number incremented by one.
Valid Values	000001 - 999999

Share Price Index High	
Bytes	6
Format	Numeric 9(5)V9(1) Expressed as points to one decimal place
Description	The highest share price index points value of an index for the current business day.
Valid Values	N/A

Share Price Index Low	
Bytes	6
Format	Numeric 9(5)V9(1) Expressed as points to one decimal place
Description	The lowest share price index points value of an index for the current business day.
Valid Values	N/A

Special Market Indicator	
Bytes	1
Format	Alphabetic
Description	A notation indicating whether the message contains data relevant to a security which is being quoted on a basis different to the existing quotation. To determine what type of basis the security is being quoted under, interrogate the Basis Of Quotation field.
Valid Values	<p>Y = Yes the security is currently being quoted on a basis different to the existing quotation.</p> <p>N = No the security is not currently being quoted on a basis different to the existing quotation.</p> <p>Note: Only the messages relevant to the special market security will ever contain an indicator of "Y" and this indicator will always be accompanied by a valid value/s in the Basis Of Quotation field.</p>

Steadies	
Bytes	4
Format	Numeric
Description	The number of equities, loan securities, convertible notes and company options, the price of which has remained unchanged from either the last trade price of the previous trading day, or a theoretically derived opening price. The latter is used where a security is adjusted overnight due to corporate actions such as reconstructions or bonus issues.
Valid Values	N/A

Time	
Bytes	6
Format	Numeric HHMMSS where HH = Hours MM = Minutes SS = Seconds
Description	<p>The time that the record was entered into the computer system to be disseminated.</p> <p>The following 'Time' field changes on the Trade, Quote and Snapshot messages became effective after the Integrated trading System (ITS) implementation for each respective markets (Derivatives – July 10, 2006; Fixed Income Securities – September 4, 2006; Warrant Securities – September 4, 2006 and Equities – October 2, 2006).</p> <ul style="list-style-type: none"> • Trade messages are time-stamped with the time the trade was executed on the trading system. • Quote messages are time-stamped with the quote capture time of ASX's central repository system. • Snapshot messages are time-stamped with the snapshot dissemination time. <p>This field consists of several sub-fields as a result of the introduction of ITS in 2006. It has a different definition depending on the message type. These other 'Time' definitions are detailed below.</p> <p>(i) <u>Trade / Trade Cancellation Time</u>: this refers to the actual time of the trade or trade cancellation.</p> <ol style="list-style-type: none"> a. From 10 Jul 2006, the 'Time' field on Trade and Trade Cancellation messages for Derivatives securities became this new time. b. From 4 Sep 2006, the 'Time' field on Trade and Trade Cancellation messages for Fixed Income and Warrant securities became this new time. c. From 2 Oct 2006, the 'Time' field on Trade and Trade Cancellation messages for Equity securities became this new time. <p>(ii) <u>Quote Capture Time</u>: this refers to the time the ASX central system captured the quote message.</p> <ol style="list-style-type: none"> a. From 10 Jul 2006, the 'Time' field on Quote messages for Derivatives securities became this new time. b. From 4 Sep 2006, the 'Time' field on Quote messages for Fixed Income and Warrant securities became this new time. c. From 2 Oct 2006, the 'Time' field on Quote messages for Equity securities became this new time. <p>(iii) <u>Snapshot Dissemination Time</u>: this refers to the time of snapshot dissemination.</p> <ol style="list-style-type: none"> a. From 10 Jul 2006, the 'Time' field on Snapshot messages for Derivatives securities became this new time. b. From 4 Sep 2006, the 'Time' field on Snapshot messages for Fixed Income and Warrant securities became this new time. c. From 2 Oct 2006, the 'Time' field on Snapshot messages for Equity securities became this new time. <p>The 'Time' field on all other message types continue to indicate "the time that the record was entered into the computer system to be disseminated".</p>
Valid Values	N/A

Time Value	
Bytes	9
Format	Alphanumeric 9(5)V9(4) (Expressed as dollars to four decimal places)
Description	The value given to the amount of time the option has left in which it may appreciate. As the expiry date nears, the time value approaches zero. Blank filled for options with unquoted underlying security.
Valid Values	N/A

Total Contracts Traded	
Bytes	6
Format	Numeric
Description	The total number of call and put contracts traded in Exchange Traded Options so far that business day. Figure includes LEPO's.
Valid Values	N/A

Trades	
Bytes	6
Format	Numeric
Description	The total number of trades for the relevant market, or security type (as for the MW Warrants Summary message). For example in the MT Market Turnover message, trades refers to the total number of trades for all securities on the ASX Trade market so far that business day.
Valid Values	N/A

Turnover	
Bytes	12
Format	Numeric Expressed as dollars
Description	The total value of trades for the relevant market, index or security type (as for the MW Warrants Summary message). For example, in the MV Index turnover message, turnover refers to the total value of all trades for all securities in each ASX index so far that business day.
Valid Values	N/A

Underlying Product	
Bytes	6
Format	Alphanumeric
Description	The ASX Code for a product underlying an Exchange Traded Option, ASX Futures Contract or Warrant.
Valid Values	N/A

Valuation Price	
Bytes	9
Format	<p>Numeric 9(5)V9(4) (Expressed as cents to four decimal places)</p> <p>For Security Types 11, 12, 33, 34, 35, 48, 49, 57, 58, 85, 87 and 90 to 97 (high denomination equities and warrants & structured products, options and LEPO's), the Price is expressed as dollars and cents to four decimal places.</p> <p>-----</p> <p>Numeric 9(7) v 9(2)</p> <p>For Security Types 39, 52, 59 & 65 (Ultra High Denomination securities), the Price is expressed as dollars and cents to two decimal places.</p>
Description	<p>The purpose of this field is to provide a price for, say, valuing a portfolio, taking into account that the stock may not have traded today.</p> <p>1. Price Traded Stocks</p> <p><i>Set A</i> - For Equity Security Types (excluding Fund-Like security types 32 to 35).</p> <p>If there was a trade today, then the LAST price adjusted by either a higher BID price or a lower ASK price is used to create the valuation price. If there were no trades today, then yesterday's VALUATION price, adjusted by a higher BID price or a lower ASK price, becomes the new VALUATION price.</p> <p><i>Set B</i> - For Security Types 32 to 35 and Warrants/Structured Products Securities (Security Types 46 to 49 & 53 to 56).</p> <p>Valuation Price is the highest last BID price available for the day. If there is no BID price available (bid-price is zero), then the Valuation Price from previous calculation becomes the new Valuation Price.</p> <p>2. Yield Traded Stocks</p> <p>This field is zero filled for all yield traded securities.</p>
Valid Values	N/A

Valuation Price Footnote																
Bytes	1															
Format	Alphabetic															
Description	A notation indicating the source of the Valuation Price/Yield.															
Valid Values	<table> <tr> <td>[]</td> <td>=</td> <td>Set from the Last Traded Date Closing Price for Price Traded Stocks Set A; Set from previous Valuation Price for Price Traded Stocks Set B</td> </tr> <tr> <td>A</td> <td>=</td> <td>Set by a Lower Ask Price or a Higher Ask Yield</td> </tr> <tr> <td>B</td> <td>=</td> <td>Set by a Higher Bid Price or a Higher Bid Yield</td> </tr> <tr> <td>T</td> <td>=</td> <td>Theoretical Price/Yield</td> </tr> <tr> <td>*</td> <td>=</td> <td>Price/Yield not changed for 32 days</td> </tr> </table>	[]	=	Set from the Last Traded Date Closing Price for Price Traded Stocks Set A; Set from previous Valuation Price for Price Traded Stocks Set B	A	=	Set by a Lower Ask Price or a Higher Ask Yield	B	=	Set by a Higher Bid Price or a Higher Bid Yield	T	=	Theoretical Price/Yield	*	=	Price/Yield not changed for 32 days
[]	=	Set from the Last Traded Date Closing Price for Price Traded Stocks Set A; Set from previous Valuation Price for Price Traded Stocks Set B														
A	=	Set by a Lower Ask Price or a Higher Ask Yield														
B	=	Set by a Higher Bid Price or a Higher Bid Yield														
T	=	Theoretical Price/Yield														
*	=	Price/Yield not changed for 32 days														

Valuation Yield	
Bytes	5
Format	Numeric 9(2)V9(3) (Expressed as cents to 4 decimal places)
Description	This field is currently blank filled.
Valid Values	N/A

Volume	
Bytes	12
Format	Numeric
Description	The total number of equities, loan (IRM) securities, convertible notes, company options and warrants traded so far that business day. Disseminated by index in the index summary, for the entire market in the market summary and for warrants in the warrant summary.
Valid Values	N/A

General Information

This section provides general information applicable to the various messages.

Basis of Quotation

Generally securities trade on a 'cum' basis. However, under certain circumstances, special markets may be created on a daily basis, which trade outside the 'normal' market and in addition to the normal market.

To identify trades that have occurred as a result of a special market, a subscriber should interrogate the basis of quotation and special market indicator fields. Trades which occur in a **normal** market do **not** contain any values in the basis of quotation field and contain a value of 'N' in the special market indicator field, regardless of whether it is an 'ex' or a 'cum' market. Trades that occur as the result of a **special** market, have one or more values in the basis of quotation field and a valid value of 'Y' in the special market indicator. Refer to 'Basis of Quotation' field definition for the relevant valid values.

For example, if the normal market for XYZ is ex-dividend, then the basis of quotation field is blank filled and the special market indicator contains a value of 'N'. If a 'cum' dividend special market is established, any trades executed in this special market will contain 'CD' in the basis of quotation field and a value of 'Y' in the special market indicator field.

A special market may be established for a security that has more than one basis of quotation. For example, a cum dividend (CD), cum rights (CR) special market may be established for XYZ. Any trades executed in this special market would have 'CD' and 'CR' in the basis of quotation field and a value of 'Y' in the special market indicator.

Any trade that contains a value other than spaces in the basis of quotation field, should not update the first, high, low or last fields. These are considered off market trades, and thus only update the cumulative volume and cumulative value fields.

Exchange Traded Options (ETO) Securities Coding Conventions

A more random selection process of the fourth and fifth characters is used in the coding of each strike of an option series. The coding convention has moved away from the month and type identifiers.

Representation of ASX Index Futures Contract Prices

ASX Index Futures Contracts (Security Types 97) are traded in index points. Quoted markets for these products are in whole point terms (i.e. BID/ASK is 3567/3568), however at maturity these products can settle to 1/10 of an index point (i.e. 3567.3). The tick value of these products is 1 point which equates to a value of \$10. Hence, an index value of 3567.0 points would have a Futures Contract value of \$35,670.00.

A 9 byte field is disseminated in price fields on ReferencePoint and is expressed as a dollar value to 4 decimal places. A disseminated value of 000356700 is therefore interpreted as \$35.67. This dollar value is required in order to calculate cumulative contract value. The dollar value may be converted to an index point value by multiplying it by 100. The index point value can then be multiplied by 10 (i.e.: \$10.00) in order to arrive at the contract value.

The common representation used on trading screens for ASX Index Futures Contract prices is index points. Representation of ASX Index Futures Contract price is different on ASX Market Information's ReferencePoint products due to these calculation requirements.

Interpretation Guidelines for Shares Per Contract/Contract Multiplier/ Index Multiplier Data Field

The purpose of this section of the manual is to provide additional clarity and some interpretation guidelines for the values disseminated in the Shares per Contract/Contract Multiplier/Index Multiplier data field.

Subscribers are reminded of the triple-purpose nature of this data field, given it is used to accommodate contract size values across all the different ASX Exchange Traded Options and Futures products.

To illustrate:

ASX Index Options and Index Futures Contracts, have an index as an underlying and are measured according to an Index Multiplier rather than Shares per Contract size. The value disseminated in the Shares Per Contract / Contract Multiplier / Index Multiplier field is a value in cents, which users should convert into a dollar format, as specified in the field definition ie: a value of "000001000" disseminated in this 9-byte field as Index Multiplier for an Index Futures Contract, represents 1000 cents, and as per the field format specification, should be converted to the equivalent dollar value of \$10.00. This value should be interpreted by users as an Index Multiplier of AUD \$10/point of the underlying index.

Field Definitions for these fields can be found in the Field Definition section of this manual.

Total Return Single Stock (TORESS) Options and LEPOs

TORESS options are call only option products that have 2 distinguishing features which differentiate them from standard options traded in ASX. They are:

- Ordinary dividends are adjusted for via a cash transfer between the option seller and buyer. This feature allows for the better pricing of these options due to the removal of forecast dividend in pricing.
- The options are cash settled upon exercise as opposed to physical delivery. This feature removes some issues which clearers have expressed around Cash market Margining (CMM) on the back of exercise.

ASX Code convention for TORESS Options:

Unique, to distinguish them from existing Exchange Trade Options.

- d. The first two characters denotes/maps to the first 2 characters of the underlying ASX Code i.e. BH for BHP
- e. The third character is a set of numerical value i.e. 8 --> BH8
- f. The 4th and 5th characters are the clearing code which is randomly assigned by the ASX. Some codes will include a 6th numerical character which is also a clearing code randomly assigned by ASX.

First TORESS options were listed on 30 November 2015 and trading on these securities commenced on 01 December 2015.

Valuation Price, Opening Theory Market and other data fields in the QP, QK & QY Messages

Opening Theory Market price data field is disseminated in the QP Initialisation Quotes for Equity, Loan Security and Exchange Traded Funds securities. Valuation Price data field is disseminated in both the QP Initialisation message and the End of Day version of the QY (Equity Snapshot) message. These two messages are generated after the

close of market on the day indicated by the date label and are applicable for the next trading day. The file consists of both active and suspended securities (inactive securities for the next trading day are excluded). As such, zero Valuation Price and Opening Theory Market values are disseminated in the file for the following instances:

- Securities listed/quoted for the first time.

Example:

- Treyo Leisure and Entertainment Limited (TYO) – fully paid ordinary share TYO first listed on January 08, 2009.
- Opening Theory Market and Valuation Price values for TYO on January 7, 2009 QP Message is zero.

- Securities re-listed/requoted after temporary delisting. These are the securities quoted under deferred settlement ASX Codes during the period of temporary delisting. The securities are quoted as deferred settlement securities as a result of a reconstruction corporate action.

Example:

- Kalgoorlie-Boulder Resources Limited (KAL) - 5 for 1 consolidation on December 22, 2008.
- ASX Code "KAL" - temporarily delisted from December 22, 2008 to January 08, 2009.
- ASX Code "KALDA" - deferred settlement ASX Code for "KAL" from December 22, 2008 to January 8, 2009.
- ASX Code "KAL" – re-listed on January 9, 2009.
- Opening Theory Market and Valuation Price values for "KAL" on January 8, 2009 QP Message is zero.

For these re-listed/requoted securities, zero values will also be disseminated on the following data fields in the QY Equity Snapshot message:

- Bid Price
- Ask Price
- First
- High
- Low
- Last/Previous Last
- Last Traded Date
- Last Traded Time

"Valuation Price" and "Valuation Price Footnote" data fields were introduced in the QK Message effective 15 July 2013. Values for these data fields for relevant securities are disseminated for both the intraday and end of day files only in the D01 files.

Exchange Traded Options Price Calculation

There are several elements of the exchange traded options price which can be calculated from data in the signal. These are:

- Intrinsic value
- Time value
- Annualised return

These may be calculated as follows:

Intrinsic value

Call Options:

Intrinsic Value (Available from the QH Equity)	=	Last of the Underlying Security (Also known as Quote Message)	–	Exercise Price ‘Strike’ Price. Exercise Price is available from the QQ Initialisation Quote for Exchange Traded Option Messages)
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Put Options:

Intrinsic Value	=	Exercise Price	–	Last of the Underlying Security
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If the result of either calculation is a negative value, the intrinsic value is set to zero.

Time Value

Time Value	=	A	–	Intrinsic Value
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Where:

- **A** is the margin price or last sale price.
- Last sale price overrides margin price.
- If the result of the calculation is a negative value, then the time value is set to zero.

Annualised Return

Annualised Return	=	Time Value Last of the underlying security. (QH - Equity Quote Message)	X	36,500 Number of days to expiry. (QQ - Initialisation Quote - Exchange Traded Option Message)
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Annualised return should be set to zero for any of the following conditions:

- If Time Value is equal to zero
- If the number of days to expiry is zero
- If Last is zero

Security Type Table

Type	Description
01-03	Ordinary Shares
01	Ordinary
02	Restricted Ordinary
03	Employee Ordinary
04	Allocation Interest
05	Forfeited
06	Trust Units
07	Exchange Traded Fund Units
08	Reserved (N.Z.)
09	Entitlements
10	Rights
11	High Denomination Equities
12	High Denomination Convertible Notes
15	CHESS Miscellaneous Payments
16-31	Preference
16	Preference
17	Cumulative Preference
18	Cumulative Redeemable Preference
19	Cumulative Redeemable Convertible Preference
20	Cumulative Convertible Preference
21	Convertible Preference
22	Convertible Redeemable Preference
23	Redeemable Preference
24	Part Preference
25	Redeemable Part Preference
26	Cumulative Part Preference
27	Convertible Part Preference
28	Cumulative Redeemable Part Preference
29	Cumulative Redeemable Convertible Part Preference
30	Employee Preference
31	Cumulative Part Employee Preference
32-38	Funds
32	Trading Long Exposure
33	Trading Managed Fund – High Denomination
34	QDB Managed Fund (T+3) – High Denomination
35	mFund – High Denomination
36	Trading Managed Fund

Type	Description
37	QDB Managed Fund (T+3)
38	mFund
40-42	Company Options
40	Options
41	Employee Options
42	Restricted Option
43	Delivery Option
44	Bonus Delivery Option
45	Option Bonds
46-49, 59, 65	Warrants
46	Warrants (Calls)
47	Warrants (Puts)
48	High Denomination Warrants (Calls)
49	High Denomination Warrants (Puts)
59	Ultra High Denomination Warrants (Calls)
65	Ultra High Denomination Warrants (Puts)
50-51	Convertible Notes
50	Convertible Notes (Equity Security)
51	Convertible Notes (Interest Rate Security)
39, 52-58	Structured Products
39	Trading Structured Product (Calls) – Ultra High Denomination
52	Trading Structured Products (Puts) – Ultra High Denomination
53	Trading Structured Product Call
54	Trading Structured Product Put
55	QDB Structured Product Call
56	QDB Structured product Put
57	QDB Structured Product Call – High Denomination
58	QDB Structured Product Put – High Denomination
60	Debenture
61	Screen Traded Debentures
62	Transferable Deposits
63	Tax Free Loans
64	Semi-Government Loans
66	Screen Traded Semi Government Loans
70	Unsecured Notes (Non-Screen Traded)
71	Screen Traded Unsecured Notes (Cash Traded)
72	Floating Rate Notes
73	Wholesale Corporate Interest Rate Securities
80	Government Loans
81	Bond CDI (covers Exchange-traded Australian Government Bonds and Corporate Bond CDIs)

Type	Description
83	Screen Traded Government Loans
85	Australian Grain Futures
87	Australian Wool Futures
90	Local Call Options
91	Local Put Options
92	International Call Options
93	International Put Options
94	ASX Futures Call Options
95	Low Exercise Price Options (LEPOs)
96	ASX Futures Put Options
97	ASX Futures Contracts
99	Australian Futures Strip

Becoming an Internet Subscriber (ASXOnline)

System Introduction

ASXOnline is an innovative Extranet site from ASX, developed to meet your needs by providing information efficiently and cost effectively.

The site offers subscribers fast access to products and information while maintaining security through unique user names and passwords. ASX Online has been specifically designed to be flexible and easy to use. You will find the navigation bar gets you quickly to the information you need.

Access and Availability

The ASXOnline Site has a scheduled availability of 12:00am Monday – 12pm Saturday, Australian Eastern Standard Time, with a maximum downtime of 15 minutes in this period.

Refer to the Communications section on the following page for a full description of the recommended configuration for accessing ASXOnline.

Website Details

The ASXOnline Website has a unique URL:

<https://www.asxonline.com/Marketinfo/Login>

This is the only means of accessing the Website.

All pages on the Web Site provide the user with means of contacting the ASX, via both email (Information.Services@asx.com.au) and phone (1300 300 279).

Security Identification

Security Identification is defined by a unique combination of a user name and password. The only means of gaining a username and password for the ASXOnline Site is from the ASX Market Information Subscriptions Administrator.

Prior to receiving a username and password, the subscriber must have signed and returned two original copies of the Subscription Agreement. The user name and password will be sent by way of a personally addressed letter.

Security Identification Validity

It is the Subscriber's responsibility to protect the confidentiality of the Security Identification and prevent its unauthorised use or distribution. If the confidentiality of the Security Identification is compromised, the Subscriber must notify the ASX Market Information Subscriptions Administrator in writing immediately and a new Security Identification will be issued. The compromised Security Identification will be cancelled on receipt of the above written notice.

ASX may also cancel or suspend a Subscriber's Security Identification where misuse or abuse of access to the ASXOnline site has been identified. In this instance, ASX will notify the Subscriber in writing.

User Name and Password Changes

If the user requires either your username or password to be changed, you need to complete the Subscription Details Change form that can be printed off from the Feedback section of the ASXOnline site. The change details will be advised either verbally or via two separate emails –one containing your user name, and one containing your password.

Communications for ASX Online subscribers

To access ASXOnline, it is necessary that the Subscriber provide their own computer and communication equipment at their site. The equipment required can vary depending upon the sophistication and requirements of the subscriber. ASX recommends as a minimum configuration:

Browser:

Internet Explorer 3.x or higher
Netscape Navigator 3.x or higher

Using the Website

Logging On

Users log on to the site through the Gateway Page. This is the screen which appears after the user enters the site URL. At the gateway the user should enter their user name and password as issued by ASX. After entering this information, the user should press the button entitled "Click here to Login to ASXOnline".

Home Page

The home page of the ASXOnline Site confirms the User Name and Company name of the Subscriber. It has a top navigation bar, and hot links to the Adobe Acrobat Site and the Bulletins section.

Subscribed Products

The first item on the navigation bar after the Home Page is Subscribed Products. It is from this area of the site that Users download the products to which they subscribe.

Daily Official List is a sub-product under ASX ReferencePoint Market Watch.

To download a file for a specific date, or a specific file, select the ASX icon, or click on the underlined link.

Depending upon the configuration of your viewer, one of these options will happen:

The user is given the option to open the file or save it to disk

The file will open in view mode in one of 2 ways:

- The associated application opens embedded in the right hand frame
- The associated application opens as a separate window

Bulletins

The Bulletins section of the site is to help clients stay abreast of important business critical issues pertaining to the ASXOnline Site or the content of products held on the site.

Most bulletins relate to products, however there may also be general bulletins. The only bulletins a User receives are those that relate to the products to which they subscribe. If there is a bulletin that pertains to a product to which the user subscribes an asterisk will appear beside the product in the Subscribed Products section. It is possible to view bulletins by either date or product.

ASXOnline Product Information

The ASXOnline site provides a variety of information other than ReferencePoint. The Product Information Screens provide the User with overviews of products provided by the ASX via the ASX Online Site. The left column contains a list of the products available.

By selecting a product from the left column, the User receives an in depth descriptions of the product in the right frame.

Feedback

The Feedback sections provides the User with:

- ability to comment on site via the online survey
- ability to change subscription details
- ability to change address details

General Conditions

The General Conditions outline the Conditions of Use or legalities and user obligations in using the site. All Users should read this section when they access the ASXOnline site. There are links to the General Conditions from all other pages within the site.

Contact Details

Subscribers with product content problems should first check the Bulletins section of the site to check whether the problem has already been logged. If the issue is not resolved by a visit to the Bulletins section, they should contact ASX Trading and Market Information between 8:00am and 6:00pm on ASX Trading Days.

Subscribers requiring support regarding site availability should contact ASX by either

email: Information.Services@asx.com.au or

phone: 1300 300 279

Manual Updates Reference Table

Date	Version/ Bulletin	Page	Changes Made
23/3/05	Bulletin 03/05	31	Change of Basis of Quotation codes 'Cum Priority' and 'Ex Priority' to 'Cum Non Pro-Rata Balance' and 'Ex Non Pro-Rata Balance' respectively.
1/11/05	Bulletin 07/05	27, 50	Redefine 'Latest Theory Market' to 'Valuation Price' and 'Latest Theory Market Footnote' to 'Valuation Price Footnote'.
05/04/06	Bulletin 06/06	24, 25, 28, 42, 43, 44, 50	ITS Project impact on Signal products.
28/06/06	Bulletin 12/06	39,40	Additional information on the following fields definitions; Last Traded Date, Last Traded Time, Last, Last/Previous Last.
14/07/06	Bulletin 13/06	37	Addition of 2 new S&P/ASX Mining Indices to the Index Code field: XMM & XGD.
8/05/07	Bulletin 09/07	37	Addition of 2 new S&P/ASX Indices to the Index Code field; XAF & XAT.
11/05/07	Bulletin 11/07	30	Introduction of new 4 th position Warrants characters K, L, M, U, T & Z in the ASX Code field.
25/07/07	Bulletin 20/07	30	Introduction of new 4 th position Warrant characters K or L reserved for new product types known as MINIs in ASX Code field.
31/07/07	Bulletin 22/07	39, 40	Amended definitions for 'Last Traded Date', 'Last Traded Time' and 'Last' fields.
21/02/08	Bulletin 06/08	30	Introduction of a 6 character ETO coding convention where the 6 th character will be the numeral 7, 8 or 9.
2/05/08	Bulletin 19/08	31 25, 42	<ul style="list-style-type: none"> Warrant Group M changed to Listed Protected Loan in ASX Code Field. Open Interest data field size expanded from 5 to 9 bytes.
18/07/08	Bulletin 28/08	24, 25	Updated data filed column references on the QP & QQ messages.
23/07/08	Bulletin 29/08	56 30	<ul style="list-style-type: none"> 10 new security types added to the Security Type Table. New Warrant type F & Q added to ASX Code field.
18/08/08	Bulletin 31/08	30	Introduction of 6 character coding convention for quoted interest rate securities where the 6 th character updated in ASX Code Field.
16/02/10	Bulletin 01/09	50, 53	Valuation price methodology modified for Warrants & Structured Products (Valuation Price, Valuation Price footnote).
11/01/10	Bulletin 02/10	37	Introduction of XNV and XLD S&P/ASX indices. S&P/ASX 200 Resources Index (XJR) to be disseminated Intraday.
16/02/10	Bulletin 06/10	34, 53	Additional clarity on interpretation guidelines for Contract Multiplier/Shares Per Contract/Index Multiplier data field.
24/02/10	V1.5	5 - 7	Added the following sections: <ul style="list-style-type: none"> Files Format and Access Files Composition – End of Day and Intraday Messages Files Availability
29/07/10	V 1.5	25 & 28	<ul style="list-style-type: none"> Corrections to the following records in the QQ Message in the manual version 1.4: <ul style="list-style-type: none"> -Time data field size typo error from 16 to 6 - total Message size error from 75 bytes to 79 bytes

			<ul style="list-style-type: none"> Correction on the Time Value data field size typo error from 1 to 9 in the QZ Message in the manual version 1.4.
10/08/10	Bulletin 22/10	41	<ul style="list-style-type: none"> Introduction of XEC and XDI S&P/ASX indices.
10/03/11	Bulletin 06/11	37	<ul style="list-style-type: none"> Update to Contract Multiplier/Shares Per Contract Index Multiplier data field definition as a result of ETO migration to a standard contract size of 100 shares for stock options.
18/03/11	Bulletin 08/11	41	<ul style="list-style-type: none"> Introduction of XNT S&P/ASX index.
02/05/11	Bulletin 17/11		<ul style="list-style-type: none"> ASX Grain Futures and Options migration from ASX Trade tradinf platform to ASX Trade24 trading platform. Security Type 85 related will no longer be disseminated in ReferencePoint Daily Official List files.
20/06/11	Bulletin 20/11	29-30 27, 30-32 19-25 45 50 9 - 11 9, 11	<p>Added Market ID data field in the following:</p> <ul style="list-style-type: none"> - QQ and QP quote messages - QK, QX, QY & QZ snapshot messages - MF, MH, MK, ML, MM, MN, MO, MP, MQ, MT & MW summary messages <p>Added Market ID data field definition.</p> <p>Added Reserved data field (price data on QY message).</p> <p>Introduced the following new messages:</p> <ul style="list-style-type: none"> • ASX PureMatch snapshots (D07) • Combined (ASX TradeMatch + ASX PureMatch) snapshots (D17) • ASX PureMatch summary (D08) • Combined (ASX TradeMatch + ASX PureMatch) summary (D10) <p>Rename of end of day Derivatives file snapshot usually available from 20:05 from D04_1700 to D04_00ED effective 14/11/11.</p>
25/07/11	Bulletin 27/11	30 32 46, 47	<p>Increase in data field size of the Number of Contracts Bid/Offered data fields in the QX message from 3 to 10 digits. Data fields relocated at the end of the message. Old data fields' location designated as "Reserved" data fields.</p> <p>Increase in data field size of the Number of Buyers/Contracts & Number of Sellers/Contracts data fields in the QZ message from 3 to 10 digits. Data fields relocated at the end of the message. Old data fields' location designated as "Reserved" data fields.</p> <p>Updated definitions of Number of Contracts Bid/Offered, Number of Buyers/Contracts & Number of Sellers/Contracts data fields.</p>
30/08/11	Bulletin 30/11	6	Additional explanation on D07 message data fields content.
20/10/11	Bulletin 35/11	33 & 34	Re-allocation of "L" in the 4 th position of the ASX Code to identify Guaranteed Stop Loss Minis. Allocation of "K" and "Q" to identify Minis.
20/01/12	Bulletin 02/12	61- 62, 33, 35, 36, 40, 43, 44, 55	<ul style="list-style-type: none"> Introduction of new security types 38, 39, 52, 57, 58, 59 & 65 Security types 33-35, 37, & 53-56 description change Price data field format/size change for security types 33-35.

13/04/12	17/12	49	Update to Price/Yield Indicator data field definition.
21/05/12	22/12	9 - 11	Quotes and D04 files – files zipped and file names change
11/01/13	03/13	41	Availability of S&P/ASX 200 VIX INDEX (XVI added to valid values in the Index Code table).
19/02/13	06/13	11, 13, 20 62 69	<ul style="list-style-type: none"> Update on Interest Rate market summary messages data content description for MH & MK messages on D06. Change Security Type description to “Government Bond” Updated ASX Market Information contact details.
20/05/13	18/13	Not applicable	Initialization file “Qllyymmdd.ZIP” made available to RefPt Daily Official List intraday product subscribers from 21 May 2013.
30/05/13	19/13	27, 59	Rebadge of “Latest Theory Market” and “Latest Theory Market Footnote” data fields to “Valuation Price” and “Valuation Price Footnote” respectively in the QK message effective 15 July 2013. The changes are for both the intraday and end of day snapshot files in the D01 files only.
22/07/13	29/13	43 - 44	New S&P/ASX real time fixed income indices.
19/09/13	42/13	43 - 44	Introduction of 15 S&P/ASX real time fixed income indices (TBA)
19//11/13 13/01/14	49/13 01/14	65 - 66	Managed fund security description change.
12/02/14	04/14	66	Security Type 81 description change to Bond CDI. Update to Security Type 81 ASX Code convention
12/03/14	14/14	11, 14, 28, 34, 48, 51, 53	New Daily Official List mFund Price file and new data field definitions
07/03/15	05/15	11, 52	Change to mFund price file specifications. <ul style="list-style-type: none"> Price file name Indicative availability time Price Date data field format
30/11/15	43/15	36, 63	<ul style="list-style-type: none"> Dissemination of TORESS Options. Updated ASX Code data field description. Added TORESS Option and LEPOs sub-section.
05/02/15	01/15	43, 44	Introduction of 2 real time equity indices XSY and XAE (currently not live)
11/03/16	08/16	36	Introduction of new warrant type group Bonus Certificate.

Contact Details

ReferencePoint Content & System Support

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