

THE NASDAQ OMX INFORMATION, LLC.

GIDS-2.0

Version 1.0f

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1 Overview

In April 2012, NASDAQ OMX will be launching a newly enhanced Global Index Data Service 2.0 (GIDS 2.0), powered by NASDAQ OMX INET technology and migrating the service to the ITCH messaging standard. As part of the migration, NASDAQ OMX will be introducing new GIDS message formats for indexes and exchange traded products.

Instrument Type	Message Name	Message Type
N/A	Time Stamp – Seconds	T
N/A	System Event	S
Index - All	Index Directory	R
Index - All	Issue Symbol Participation	P
Index - All	Intraday Index Value (IIV)	I
Index - All	Settlement Value	A
Index - Equity	Equity Index Summary Values	F
Index - Fixed Income	Fixed Income Index Summary Values	B
Index - Commodity	Commodity Index Summary Values	C
ETP	ETP Directory & Valuation Data	D
ETP	ETP Intraday Value (IPV or IIV)	E
ETP	ETP Summary Message	V

2 Architecture

The NASDAQ OMX GIDS-2.0 feed will consist of a series of sequenced messages. Each message is variable in length, based on the message type. The messages that make up the GIDS-2.0 protocol are typically delivered using a higher level protocol that takes care of sequencing and delivery guarantees.

NASDAQ OMX will offer delivery of the GIDS-2.0 data feeds via the following protocols:

- [SoupBinTCP](#)
- [MoldUDP64](#)

3 Data Types

All numeric fields are signed big-endian (network byte order) binary encoded numbers. Numeric's may be shorts (2 bytes), integers (4 bytes), or longs (8 bytes).

Numeric longs are used to represent floating point numbers NASDAQ OMX will identify the decimal point precision for the field with a notation of En, where n indicates the number of decimal places in the number. For example, the notation of E2 reflects that the field number has an implied precision of two decimal places and E11 has an implied precision of 11 decimal places.

All alpha fields are left justified and padded on the right with spaces.

Dates are integer fields. When converted, dates are reported in YYYYMMDD format.

Please Note: NASDAQ OMX understands that vendors may choose not to display value data with a precision of up to 11 decimals. If a vendor opts to display less precision than what has been disseminated, NASDAQ OMX recommends that the vendor **round** the number to the decimal place displayed.

Example –

<i>Disseminated Value</i>	<i>Precision 2 decimals</i>	<i>Precision 4 decimals</i>
2804.52757933921	2804.53	2804.5276
1583.99994589423	1584.00	1583.9999

4 Message Formats

4.1 Event Messages

4.1.1 Timestamp

For bandwidth efficient reasons, NASDAQ OMX will separate the timestamp into two pieces on GIDS-2.0:

Timestamp Portion	Message Type	Notes
Seconds	Standalone message	The Timestamp – Seconds message will be disseminated for every second during which there is at least one payload message. For The Timestamp – Seconds message, NASDAQ OMX will reflect the UTC (Universal Time, Coordinated), as stated by number of seconds since the Unix epoch (midnight, January 1, 1970).
Nanoseconds	Field within individual messages	The Timestamp – Nanoseconds will be disseminated at the message level to denote the number of nanoseconds that passed between the UTC time represented by the most recent Timestamp-Seconds message and the current payload message.

For the standalone Timestamp – Seconds message, the format is as follows:

TIMESTAMP – SECONDS MESSAGE				
Name	Offset	Len	Type	Notes
Type	0	1	Alpha	T = Timestamp / Seconds
Second	1	4	Integer	The UTC (Universal Time, Coordinated) time, giving the number of seconds since the Unix epoch (midnight, January 1, 1970).

4.1.2 System Event

The System Event Message signals a data feed handler event. The format is as follows:

SYSTEM EVENT MESSAGE																				
Name	Offset	Len	Type	Notes																
Type	0	1	Alpha	S = System Event																
Timestamp	1	4	Integer	Reflects nanosecond portion of timestamp.																
Event Code	5	1	Alpha	<p>Denotes the GIDS system event code.</p> <p>The standard GIDS system event codes are as follows:</p> <table border="1"> <thead> <tr> <th>Code</th> <th>Definition</th> </tr> </thead> <tbody> <tr> <td>O</td> <td><i>Start of Messages:</i> Outside of time stamp messages, the Start of Messages is the first message sent in any trading day.</td> </tr> <tr> <td>S</td> <td><i>Start of Day:</i> The Start of Day signifies the beginning of the operational cycle for processing.</td> </tr> <tr> <td>E</td> <td><i>End of Day:</i> The End of Day signals the end of active message dissemination for the operational cycle.</td> </tr> <tr> <td>C</td> <td><i>End of Messages:</i> This is always the last message sent in any trading day</td> </tr> </tbody> </table> <p>The session-specific GIDS system event codes are as follows:</p> <table border="1"> <thead> <tr> <th>Code</th> <th>Definition</th> </tr> </thead> <tbody> <tr> <td>Q</td> <td><i>Session Open:</i> This code is used to signal the start of the stated GIDS Index Schedule identified in the next field.</td> </tr> <tr> <td>M</td> <td><i>Session Close:</i> This code is used to signal the end of the stated GIDS Index Schedule identified in the next field.</td> </tr> </tbody> </table>	Code	Definition	O	<i>Start of Messages:</i> Outside of time stamp messages, the Start of Messages is the first message sent in any trading day.	S	<i>Start of Day:</i> The Start of Day signifies the beginning of the operational cycle for processing.	E	<i>End of Day:</i> The End of Day signals the end of active message dissemination for the operational cycle.	C	<i>End of Messages:</i> This is always the last message sent in any trading day	Code	Definition	Q	<i>Session Open:</i> This code is used to signal the start of the stated GIDS Index Schedule identified in the next field.	M	<i>Session Close:</i> This code is used to signal the end of the stated GIDS Index Schedule identified in the next field.
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O	<i>Start of Messages:</i> Outside of time stamp messages, the Start of Messages is the first message sent in any trading day.																			
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C	<i>End of Messages:</i> This is always the last message sent in any trading day																			
Code	Definition																			
Q	<i>Session Open:</i> This code is used to signal the start of the stated GIDS Index Schedule identified in the next field.																			
M	<i>Session Close:</i> This code is used to signal the end of the stated GIDS Index Schedule identified in the next field.																			
Schedule	6	3	Alpha	Populated only for session-related event messages, otherwise this will be space filled. Refer to Appendix A for the current list of allowable Schedule codes.																

4.2 Index Messages

4.2.1 Index Directory Message

This Index Directory Message will be used to relay instrument level or reference data for NASDAQ OMX and Global Access Provider (GAP) indexes. On GIDS-2.0, this message will be supported for all indexes, including subordinate products such as LEAPS and total return indexes.

INDEX DIRECTORY MESSAGE										
Name	Offset	Len	Type	Notes						
Type	0	1	Alpha	R = Index Directory message						
Timestamp	1	4	Integer	The nanosecond portion of timestamp.						
Instrument ID	5	18	Alpha	The instrument identifier for the NASDAQ OMX or Global Access Program (GAP) Index.						
Dissemination Flag	23	1	Alpha	Flag to indicate if the index detail messages will be disseminated via GIDS-2.0 for the Instrument ID during the current system date. The allowable values are: <table border="1" data-bbox="862 829 1385 1031"> <thead> <tr> <th>Code</th> <th>Definition</th> </tr> </thead> <tbody> <tr> <td>Y</td> <td>Index Detail messages are being disseminated</td> </tr> <tr> <td>N</td> <td>Index Detail messages are not being disseminated</td> </tr> </tbody> </table>	Code	Definition	Y	Index Detail messages are being disseminated	N	Index Detail messages are not being disseminated
Code	Definition									
Y	Index Detail messages are being disseminated									
N	Index Detail messages are not being disseminated									
Financial Product Type (FP Type)	24	1	Alpha	The NASDAQ OMX or GAP financial product code associated with the instrument ID. Refer to Appendix A for allowable values.						
Brand	25	2	Alpha	The NASDAQ OMX or GAP brand name for the Instrument ID. Refer to Appendix A for allowable values.						
Series	27	3	Alpha	The NASDAQ OMX or GAP series identifier for the Instrument ID. Refer to Appendix A for allowable values.						
Strategy	30	3	Alpha	The NASDAQ OMX or GAP index strategy for the Instrument ID in the directory message. Refer to Appendix A for allowable values.						
Asset Type	33	2	Alpha	The NASDAQ OMX or GAP primary asset class for the Instrument ID. Refer to Appendix A for allowable values.						
Market Cap Size	35	1	Alpha	The NASDAQ OMX or GAP market capitalization size for the Instrument ID. Refer to Appendix A for allowable values.						
Currency	36	3	Alpha	The ISO 4217 Currency Code for the Instrument ID.						
Geography	39	4	Alpha	Denotes the NASDAQ OMX or GAP Geography code associated with the Instrument ID in the directory message. Refer to Appendix A for allowable values.						

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INDEX DIRECTORY MESSAGE				
Name	Offset	Len	Type	Notes
Index Settlement Type	43	1	Alpha	Denotes the NASDAQ OMX or GAP Settlement Type associated with the Instrument ID in the directory message. This field will be populated for Index Settlement Symbols only. Refer to Appendix A for allowable values.
Index Calculation Method	44	3	Alpha	Denotes the NASDAQ OMX or GAP Index Calculation Method code associated with the Instrument ID in the directory message. Refer to Appendix A for allowable values.
State	47	1	Alpha	Denotes the current NASDAQ OMX or GAP state associated with the Instrument ID in the directory message. Refer to Appendix A for allowable values.
Index Usage	48	1	Alpha	Denotes the current NASDAQ OMX or GAP usage code associated with the Instrument ID in the directory message. Refer to Appendix A for allowable values.
Schedule	49	3	Alpha	Denotes the NASDAQ OMX or GAP dissemination schedule associated with the Instrument ID in the directory message. Refer to Appendix A for allowable values.
Frequency	52	4	Alpha	Denotes the NASDAQ OMX or GAP frequency code associated with the Instrument ID in the directory message. Refer to Appendix A for allowable values.
Number of Issue Participation Messages	56	4	Integer	Reflects the number of Issue Participation messages associated with the given Index Instrument ID. If the Issue Participation messages are not supported for Index Instrument ID, this field should be set to zero.
Base Value	60	8	Long (E11)	Index value at inception.
Base Date	68	4	Integer (Date)	Inception date of the index.
Name Length	72	2	Short	The number of bytes for the Instrument Name field to follow.
Instrument Name	74	0 - 100	Alpha	The Instrument Name or Index Name from NASDAQ OMX or GAP.

4.2.2 Issue Symbol Participation Message

The Issue Symbol Participation Message is used to relay the component securities for select NASDAQ OMX indexes.

ISSUE SYMBOL PARTICIPATION MESSAGE				
Name	Offset	Len	Type	Notes
Type	0	1	Alpha	P = Issue Symbol Participation Message
Timestamp	1	4	Integer	The nanosecond portion of timestamp.
Instrument ID	5	18	Alpha	The Instrument ID of the index of which the security is a component.
Issue Symbol	23	18	Alpha	The security trading symbol for the component security, as assigned by the Issue MIC.
Issue MIC	41	4	Alpha	The ISO 10383 Market Identification Code (MIC) of the component security's primary listing market.
Name Length	45	2	Short	The number of bytes for the Issue Name field to follow.
Issue Name	47	0-100	Alpha	The issue name for the component security, as defined by the Issue MIC. NASDAQ OMX reserves the right to abbreviate the name so as to not exceed the maximum field length.

4.2.3 Intraday Index Value (IIV) Message

The Intraday Index Value Message for a given instrument is disseminated at a defined frequency and schedule as indicated in the Issue Directory message.

INTRADAY INDEX VALUE MESSAGE										
Name	Offset	Len	Type	Notes						
Type	0	1	Alpha	I = Intraday Index Value Message						
Timestamp	1	4	Integer	The nanosecond portion of timestamp.						
Financial Product Type (FP Type)	5	1	Alpha	The NASDAQ OMX or GAP primary asset class for the Instrument ID. Refer to Appendix A for allowable values.						
Brand	6	2	Alpha	The NASDAQ OMX or GAP brand name for the Instrument ID. Refer to Appendix A for allowable values.						
Series	8	3	Alpha	The NASDAQ OMX or GAP series identifier for the Instrument ID. Refer to Appendix A for allowable values.						
Instrument ID	11	18	Alpha	The instrument identifier for the NASDAQ OMX or GAP index for which the tick value is being calculated and disseminated.						
Tick Value	29	8	Long (E11)	The current calculated tick value for instrument ID.						
Tick Direction	37	1	Alpha	The net change direction for the tick value (since the last tick update). The allowable values are: <table border="1" data-bbox="776 1745 1406 1900"> <thead> <tr> <th>Code</th> <th>Definition</th> </tr> </thead> <tbody> <tr> <td>+</td> <td>Positive or zero net change (net gain)</td> </tr> <tr> <td>-</td> <td>Negative net change (net loss)</td> </tr> </tbody> </table>	Code	Definition	+	Positive or zero net change (net gain)	-	Negative net change (net loss)
Code	Definition									
+	Positive or zero net change (net gain)									
-	Negative net change (net loss)									

INTRADAY INDEX VALUE MESSAGE				
Name	Offset	Len	Type	Notes
				Space No net change calculated
Currency	38	3	Alpha	The ISO 4217 Currency Code for the Instrument ID.

4.2.4 Settlement Value Message

The Settlement Value Message is used to send the official settlement price and settlement session used to settle cash derivatives on financial products when they expire.

SETTLEMENT VALUE MESSAGE				
Name	Offset	Len	Type	Notes
Type	0	1	Alpha	A = Settlement Value Message
Timestamp	1	4	Integer	The nanosecond portion of timestamp.
Financial Product Type (FP Type)	5	1	Alpha	The NASDAQ OMX or GAP primary asset class associated with the Instrument ID. Refer to Appendix A for allowable values.
Brand	6	2	Alpha	The NASDAQ OMX or GAP brand name for the Instrument ID. Refer to Appendix A for allowable values.
Series	8	3	Alpha	The NASDAQ OMX or GAP series identifier for the Instrument ID. Refer to Appendix A for allowable values.
Instrument ID	11	18	Alpha	The Instrument ID for the settlement index value as assigned by NASDAQ OMX or GAP.
Settlement Value	29	8	Long (E11)	The current calculated settlement value for the instrument ID.
Settlement Type	37	1	Alpha	The NASDAQ OMX or GAP Settlement Type for the Instrument ID. Refer to Appendix A for allowable values.
Currency	38	3	Alpha	The ISO 4217 Currency Code for the Instrument ID.

4.2.5 Equities Summary Message

The Equities Summary Message relays the summary of the current trading day's activity for an equity index. A summary message will not be sent for indexes which have no activity for the trading day.

EQUITIES SUMMARY MESSAGE				
Name	Offset	Len	Type	Notes
Type	0	1	Alpha	F = Equities Summary Message
Timestamp	1	4	Integer	Reflects the nanosecond portion of timestamp.
Financial Product Type (FP Type)	5	1	Alpha	Denotes the NASDAQ OMX or GAP primary asset class associated with the Instrument ID in the directory message. Refer to Appendix A for allowable values.
Brand	6	2	Alpha	Denotes the NASDAQ OMX or GAP brand name associated with Instrument ID in the directory message. Refer to Appendix A for allowable values.
Series	8	3	Alpha	Denotes the NASDAQ OMX or GAP series identifier

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				associated with the Instrument ID in the directory message. Refer to Appendix A for allowable values.
Instrument ID	11	18	Alpha	Denotes the instrument identifier for the NASDAQ OMX or Global Access Program (GAP) Index in the directory message.
Summary Type	29	3	Alpha	EOD = End of Day Summary SOD = Start of Day Summary PDA = Prior Day Summary Add PDC = Prior Day Summary Correction STL = Settlement Summary
SOD Value	32	8	Long (E11)	Start of Day Value (prior day's closing price adjusted for corporate actions)
High	40	8	Long (E11)	calculated high value
Low	48	8	Long (E11)	calculated low value
EOD Value	56	8	Long (E11)	end of day value
Net Change	64	8	Long (E11)	net change (signed, to indicate direction)
Effective Date	72	4	Integer (Date)	Effective Date to which the information should be applied
Currency	76	3	Alpha	The ISO 4217 Currency Code for the Instrument ID.

4.3.6 Fixed Income Summary Message

The Fixed Income Summary Message relays the summary of the current trading day's activity for a fixed income index. A summary message will not be sent for indexes which have no activity for the trading day.

FIXED INCOME SUMMARY MESSAGE				
Name	Offset	Len	Type	Notes
Type	0	1	Alpha	B = Fixed Income Summary Message
Timestamp	1	4	Integer	Reflects the nanosecond portion of timestamp.
Financial Product Type (FP Type)	5	1	Alpha	Denotes the NASDAQ OMX or GAP primary asset class associated with the Instrument ID in the directory message. Refer to Appendix A for allowable values.
Brand	6	2	Alpha	Denotes the NASDAQ OMX or GAP brand name associated with Instrument ID in the directory message. Refer to Appendix A for allowable values.
Series	8	3	Alpha	Denotes the NASDAQ OMX or GAP series identifier associated with the Instrument ID in the directory message. Refer to Appendix A for allowable values.
Instrument ID	11	18	Alpha	Denotes the instrument identifier for the NASDAQ OMX or Global Access Program (GAP) Index in the directory message.
Summary Type	29	3	Alpha	EOD = End of Day Summary SOD = Start of Day Summary PDA = Prior Day Summary Add PDC = Prior Day Summary Correction STL = Settlement Summary

FIXED INCOME SUMMARY MESSAGE				
Name	Offset	Len	Type	Notes
SOD Value	32	8	Long (E11)	Start of Day Value (prior day's closing price adjusted for corporate actions)
High	40	8	Long (E11)	calculated high value
Low	48	8	Long (E11)	calculated low value
EOD Value	56	8	Long (E11)	end of day value
Net Change	64	8	Long (E11)	net change (signed, to indicate direction)
Effective Date	72	4	Integer (Date)	Effective Date to which the information should be applied
Yield	76	8	Long (E11)	Denotes the yield for the instrument value Calculated as the weighted average.
Duration	84	8	Long (E11)	Denotes the Instrument duration value calculated as the weighted average according to Macaulay's duration
Coupon	92	8	Long (E11)	Denotes the index coupon value calculated as the weighted average.
Currency	100	3	Alpha	The ISO 4217 Currency Code for the Instrument ID.

4.3.7 Commodity Summary Message

The Commodity Summary Message relays the summary of the current trading day's activity for a commodity index. A summary message will not be sent for indexes which have no activity for the trading day.

COMMODITY SUMMARY MESSAGE				
Name	Offset	Len	Type	Notes
Type	0	1	Alpha	C = Commodity Summary Message
Timestamp	1	4	Integer	Reflects the nanosecond portion of timestamp.
Financial Product Type (FP Type)	5	1	Alpha	Denotes the NASDAQ OMX or GAP primary asset class associated with the Instrument ID in the directory message. Refer to Appendix A for allowable values.
Brand	6	2	Alpha	Denotes the NASDAQ OMX or GAP brand name associated with Instrument ID in the directory message. Refer to Appendix A for allowable values.
Series	8	3	Alpha	Denotes the NASDAQ OMX or GAP series identifier associated with the Instrument ID in the directory message. Refer to Appendix A for allowable values.
Instrument ID	11	18	Alpha	Denotes the instrument identifier for the NASDAQ OMX or Global Access Program (GAP) Index in the directory message.
Summary Type	29	3	Alpha	EOD = End of Day Summary SOD = Start of Day Summary PDA = Prior Day Summary Add PDC = Prior Day Summary Correction STL = Settlement Summary

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SOD Value	32	8	Long (E11)	Start of Day Value (prior day's closing price adjusted for corporate actions)
High	40	8	Long (E11)	calculated high value
Low	48	8	Long (E11)	calculated low value
EOD Value	56	8	Long (E11)	end of day value
Net Change	64	8	Long (E11)	net change (signed, to indicate direction)
Effective Date	72	4	Integer (Date)	Effective Date to which the information should be applied
Currency	76	3	Alpha	The ISO 4217 Currency Code for the Instrument ID.

4.4 Exchange Traded Product Messages

The following messages are used to disseminate directory and daily valuation information as well as intraday tick values for NASDAQ intraday portfolio values for NASDAQ-listed Exchange Traded Products (ETPs).

4.4.1 ETP Directory and Daily Valuation Message

The ETP Daily Valuation Message is designed to provide the symbols and values of the prior day's closing ETP valuations, and is disseminated as part of the pre-opening processes.

ETP DIRECTORY AND DAILY VALUATION MESSAGE				
Name	Offset	Len	Type	Notes
Type	0	1	Alpha	D = ETP Daily Valuation Message
Timestamp	1	4	Integer	Reflects the nanosecond portion of timestamp.
Financial Product Type (FP Type)	5	1	Alpha	Denotes the NASDAQ OMX or GAP primary asset class associated with the Instrument ID in the directory message. Refer to Appendix A for allowable values.
Industry MIC	6	4	Alpha	The ISO 10383 Market Identification Code (MIC) of the component security's primary listing market.
ETP Trading Symbol	10	18	Alpha	Denotes the ETP instrument trading symbol for the NASDAQ OMX or Global Access Program (GAP) as assigned by the listing market and matches the symbology used for outbound dissemination on the listing markets native dissemination protocols.
ETP IPV Symbol	28	18	Alpha	Symbol identifying the Intraday Portfolio Value (IPV) to be disseminated in the ETP IPV Value message (i.e.: ABCD.IV; ABCDI)
Schedule	46	3	Alpha	Denotes the NASDAQ OMX or GAP dissemination schedule associated with the ETP IPV symbol in the directory message. Refer to Appendix A for allowable values.
Frequency	49	4	Alpha	Denotes the NASDAQ OMX or GAP frequency code associated with the ETP IPV symbol in the directory message. Refer to Appendix A for allowable values.

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ETP DIRECTORY AND DAILY VALUATION MESSAGE				
Name	Offset	Len	Type	Notes
State	53	1	Alpha	Denotes the current NASDAQ OMX or GAP state associated with the ETP IPV symbol in the directory message. Refer to Appendix A for allowable values.
NAV Symbol	54	18	Alpha	Symbol identifying the Net Asset Value per Creation Unit (ie: ABCD.NV; ABCDN)
NAV	72	8	Long (E2)	Net Asset Value per Creation Unit is reflected as long integer E2
Estimated Cash Per CU Symbol	80	18	Alpha	Symbol identifying the Estimated Cash Per Creation Unit (ie: ABCD.EU; ABCDM)
ECU	98	8	Long (E2)	Estimated Cash Per Creation Unit.
Total Cash Per CU Symbol	106	18	Alpha	Symbol identifying the Total Cash Amount Per Creation Unit (ie: ABCD.TC; ABCDT)
Total Cash Per CU	124	8	Long (E2)	The Estimated T-1 Cash Amount Per Creation Unit.
Estimated Cash Per Share Symbol	132	18	Alpha	Symbol identifying the Estimated Cash Per Share -Net Accrued Dividend. (ie: ABCD.DV; ABCDD)
ECS	150	8	Long (E2)	Estimated Cash Per Share.
TSO Symbol	158	18	Alpha	Symbol identifying the Total Shares Outstanding (ie: ABCD.SO; ABCDS)
TSO Outstanding	176	8	Long (E0)	Total Shares Outstanding
Effective Date	184	4	Integer (Date)	Effective Date to which the information should be applied.
Yield	188	8	Long (E11)	Denotes the yield for the instrument value Calculated as the weighted average. Populated for ETN products only.
Coupon	196	8	Long (E11)	Denotes the coupon value calculated as the weighted average. Populated for ETN products only.
Maturity Date	204	4	Integer (Date)	For ETN products this will represent when the ETN reaches maturity. Populated for ETN products only.
Currency	208	3	Alpha	The ISO 4217 Currency Code for the Instrument ID.
ETP Name Length	211	2	Short	Length of the following Name
ETP Name	213	0-100	Alpha	ETP Instrument Name

4.4.2 ETP Intra-Day Valuation Message

The ETP IPV Value Message is used to disseminate the Intraday Portfolio Value (IPV) of an Exchange Traded Fund (ETF) or the Intra-Day Indicative Value (IIV) of an Exchange Traded Managed Fund (ETMF).

ETP IPV VALUE MESSAGE				
Name	Offset	Len	Type	Notes
Type	0	1	Alpha	E = ETP Intra-day Valuation Message
Timestamp	1	4	Integer	Reflects the nanosecond portion of timestamp.
Financial Product Type (FP Type)	5	1	Alpha	Denotes the NASDAQ OMX or GAP primary asset class associated with the Instrument ID in the directory message. Refer to Appendix A for allowable values.
IPV Symbol	6	18	Alpha	Denotes the IPV or IIV symbol for the NASDAQ OMX or Global Access Program (GAP).
IPV Value	24	8	Long (E11)	The current calculated value for the IPV symbol.
Currency	32	3	Alpha	The ISO 4217 Currency Code for the Instrument.

4.4.3 ETP Summary Message

The ETP Summary Message relays the summary of the current trading day's IPV activity for an Exchange Traded Fund (ETF) or the IIV activity for an Exchange Traded Managed Fund (ETMFs). A summary message will not be sent for ETPs which have no activity for the trading day.

ETP IPV SUMMARY MESSAGE				
Name	Offset	Len	Type	Notes
Type	0	1	Alpha	V = ETP Summary Message
Timestamp	1	4	Integer	Reflects the nanosecond portion of timestamp.
Financial Product Type (FP Type)	5	1	Alpha	Denotes the NASDAQ OMX or GAP primary asset class associated with the Instrument ID in the directory message. Refer to Appendix A for allowable values.
Summary Type	6	3	Alpha	EOD = End of Day Summary SOD = Start of Day Summary PDA = Prior Day Summary Add PDC = Prior Day Summary Correction STL = Settlement Summary
IPV or IIV Symbol	9	18	Alpha	Denotes the instrument identifier for the NASDAQ OMX or Global Access Program (GAP) Index in the directory message.
SOD Value	27	8	Long (E11)	Start of Day Value (first disseminated tick value)
High	35	8	Long (E11)	calculated high value
Low	43	8	Long (E11)	calculated low value
EOD Value	51	8	Long (E11)	end of day value
Net Change	59	8	Long (E11)	net change (signed, to indicate direction)
Effective Date	67	4	Integer (Date)	Effective Date to which the information should be applied
Currency	71	3	Alpha	The ISO 4217 Currency Code for the Instrument.

5 Appendices

Appendix A- NASDAQ OMX Index Information Code (IIC) Attributes

A.1 Financial Product Type (FP Type)

Denotes the NASDAQ OMX or GAP assigned financial product associated with the instrument ID

<i>Code</i>	<i>Description</i>
<blank>	Not Specified
I	Index
E	Exchange Traded Fund (ETF)
N	Exchange Traded Note (ETN)
F	Exchange Traded Managed Fund (ETMF) (New code to be added in 2015)
S	Settlement
P	Spot
L	Subordinated product
W	World Currency
A	Alpha Index

A.2 Brand

The Index Brand is intended to provide details on the originating source of the instrument being disseminated. The allowable values are as follows:

<i>Code</i>	<i>Description</i>
<blank>	Not Specified
NQ	NASDAQ
CI	Custom Index – Client sponsored
OX	OMX
NX	NASDAQ OMX
PI	Partner Index – NASDAQ Co Branded
PX	PHLX
OP	Outsourced Partner*
GA	Global Access Partner
VX	VINX
FN	First North

* **“OP” Index Brand** will be used to identify indexes that appear within the GIDS data service and may also be contained within a Global Access client data feed. It is intended to assist data recipients in identifying index data that may be duplicative and allow for the data recipients to filter out this data from the GIDS data service.

A.3 Series

The Index Series is intended to convey the NASDAQ OMX entitlement to which the instrument is assigned. The following values are currently supported:

Code	Description
<blank>	Not Specified
NDQ	NASDAQ US
UAM	US All Market
ALW	All World
NQG	NASDAQ Global Index
GRN	Green Economy
CLE	Clean Energy
NOR	Nordic
BAL	Baltic
COM	Commodities
SHA	Sharia
NFI	Nordic Fixed Income
UST	US Treasury
NCM	NASDAQ Commodities
ETH	Ethical
SUS	Sustainable
OMR	OMRX
CRE	Credit SEK
VNX	VINX

A.4 Strategy

Code	Description
<blank>	Not Specified
TRD	Tradable
BM	Benchmark
COM	Composite
SEC	Sector
GRO	Growth
VAL	Value
INV	Inverse
LEV	Leverage
THE	Thematic
ETH	Ethical
SUS	Sustainable
SHA	Sharia
SRE	Social Responsible
STB	Stability
FDM	Fundamental
FCT	Factor
IVD	Investment Discipline

A.5 Asset Type

The Index Asset Type is intended to convey the composition of the instrument. The following values are currently supported:

Code	Description
<blank>	Not Specified
EQ	Equity
CM	Commodity
FI	Fixed Income
FX	Foreign Exchange
SP	Structured Products
FU	Funds
IX	Index
MC	Multi Class
XF	Exchange Traded Fund
XN	Exchange Traded Note
EC	Economic

A.6 Market Cap Size

Code	Description
<blank>	Not Specified
A	All
L	Large
M	Mid
S	Small
X	Large & Mid
Y	Mid & Small

A.7 Geography

The Index Geography Type may either be an ISO 3166 Country Code or one of the following:

Code	Description
<blank>	Not Specified
NAM	North America
LAM	Latin America
DEU	Developed Europe
EEU	Emerging Europe
DAP	Developed Asia Pacific
DMEA	Developed Middle East Africa
DMKT	Developed Markets
EAP	Emerging Asia Pacific
EMA	Emerging Middle East Africa
EMKT	Emerging Markets
FMKT	Frontier Markets
AP	Asia Pacific
MEA	Middle East Africa
ASI	Asia

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EASI	Emerging Asia
DASI	Developed Asia
BRIC	BRIC
DXUS	Developed ex US
DXNA	Developed ex North America
DXUK	Developed ex UK
DXJP	Developed ex Japan
DEUK	Developed Europe ex UK
EXUK	Europe ex UK
AXJP	Asia Pacific ex Japan
AXUK	All World ex UK
AXUS	All World ex US
AXJP	All World ex JP
AXNA	All World ex North America
NOR	Nordic
BAL	Baltic
ALWO	All World

A.8 Index Settlement Type

<i>Code</i>	<i>Description</i>
<space>	Not Specified
O	Instrument settles at the open
C	Instrument settles at the close
M	Instrument settles at mid day

A.9 Index Calculation Method

<i>Code</i>	<i>Description</i>
<space>	Not Specified
PR	Price Return
GTR	Total Return
NTR	Net Total Return
ER	Excess Return
ETR	Excess Total Return
INV	Inverse
LEV	Leveraged
WCO	World Currency Options
DIV	Dividend
ALP	Alpha
VOL	Volatility
PMI	Pre Market Indicator
AHI	After Hours Indicator
UW	Un-weighted
ORX	OMRX
OON	OMRXON
MM	Money Market
NOR	NOREX
SSV	SSV
CP-	Commodity Price
CE-	Commodity Excess

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CET	Commodity Excess Total
CFX	CMFX
CC-	Commodity Close
EXI	External Index
SET	Settlement
ALT	Alternative
NNR	Notional Total Return
HRE	Hedged Return

A.10 State

This indicates the current trading state of the instrument

<i>Code</i>	<i>Description</i>
A	Active
H	Held
P	Pending
D	Deleted

A.11 Usage

This indicates the current trading state of the instrument

<i>Code</i>	<i>Description</i>
L	Live
D	Demo
T	Test

A.12 Schedule / Session ID

The Session Identifier indicates the market session of the message, and indicates underlying trading session to be used in calculating the indexes. The allowable values are as follows:

Table- Schedule/ Session ID effective until Saturday 8th March 2014

Code	Description	Start of Session	Start of Tick Messages	End of Tick Messages	End of Session
<space>	Session Independent	NA	NA	NA	NA
IND	Session Independent	NA	NA	NA	NA
AME	American Market Session	02:00	08:15	18:30	18:45
CEU	Central Europe Market Session	18:00	03:00	12:00	14:30
EEU	Eastern Europe Market Session	18:00	03:00	12:00	14:30
ASI	Asia Market Session	18:00	19:30	12:00	14:30
PAC	Pacific Market Session	18:00	19:00	12:00	14:30
GLO	Global Market Session	22:05	22:30	17:16	18:45
BAL	Baltic Market Session	18:00	03:00	12:00	14:30
NOR	Nordic Market Session	18:00	03:00	12:00	14:30
NFI	Nordic Fixed Income Market Session	18:00	03:00	12:00	14:30
NSA	North/South America Market Session (Effective 01/14/2013)	02:00	09:30	17:16	18:45

New Table- Schedule/ Session ID effective from Sunday 9th March 2014

*Changes highlighted in Bold

Code	Description	Start of Session	Start of Tick Messages	End of Tick Messages	End of Session
<space>	Session Independent	NA	NA	NA	NA
IND	Session Independent	NA	NA	NA	NA
AME	American Market Session	02:00	08:15	18:30	19:45
CEU	Central Europe Market Session	19:15	03:00	12:00	14:30
EEU	Eastern Europe Market Session	19:15	03:00	12:00	14:30
ASI	Asia Market Session	19:15	19:30	12:00	14:30
PAC	Pacific Market Session	19:15	19:30	12:00	14:30
GLO	Global Market Session	22:05	22:30	17:16	19:45
BAL	Baltic Market Session	19:15	03:00	12:00	14:30
NOR	Nordic Market Session	19:15	03:00	12:00	14:30
NFI	Nordic Fixed Income Market Session	19:15	03:00	12:00	14:30
NSA	North/South America Market Session (Effective 01/14/2013)	02:00	09:30	17:16	19:45

Please note: The times above represent Eastern Time (ET). In addition, the session times do not correspond with market hours of the local exchanges.

For example an index with a session identifier of "ASI" will use trading activity that originated from the Asian operational market hours, however, dissemination of messaging may continue beyond the operational hours of the session.

A.13 Frequency

This denotes the frequency at which an instrument will be disseminated on the data feed.

Code	Description
<space>	Not Specified
TBT	Tick by tick
.01S	1/100 second
.10S	1/10 second
.25S	¼ second
.50S	½ second
1S	Once a second / Every 1 second
5S	Every 5 seconds
15S	Every 15 seconds
60S	Every 60 seconds
15m	Every 15 minutes (New code for ETMFs to be added in 2015)
ODOP	Once a day open
ODCL	Once a day close
ODID	Once a day intraday
OW	Once a week
OM	Once a month
OQ	Once a quarter
OY	Once a year

6 Revision History

<i>Date</i>	<i>Version</i>	<i>Change Description</i>
12/06/2011	1.0	Initial Publication of vendor specifications
2/1/2012	1.0a	Minor documentation clean up. <ul style="list-style-type: none"> Removed reference to ITCH
7/31/2012	1.0b	Minor documentation clean up. <ul style="list-style-type: none"> Updated Geography Codes in Appendix A7 <ul style="list-style-type: none"> DEUK – Dev Europe ex UK EXUK – Europe ex UK Within Section 4.4 corrected the offset values to reflect the correct calculation
9/26/2012	1.0c	Minor documentation clean up. <ul style="list-style-type: none"> Updated Geography Codes in Appendix A7 <ul style="list-style-type: none"> Removed values that are currently defined in the ISO 3166 standard Added several new codes to support Global Index initiative scheduled for Q3/Q4 2012 Added new value in Appendix A3 <ul style="list-style-type: none"> NQG – NASDAQ Global Index
12/14/2012	1.0d	Added the new “NSA” Schedule/Session ID. See Data Technical News #2013-38 for additional information. Updated the Appendix 12 to include the system and tick times for each Schedule/Session.
02/05/2014	1.0e	Added New Table- Schedule/ Session ID effective from Sunday 9th March 2014
03/06/2015	1.0f	Nasdaq expects to launch Exchange Traded Managed Funds (ETMFs) as a new Exchange Traded Product (ETP) asset class in the 4 th Quarter of 2015. ETMF Intraday Indicative Value (IIVs) will be disseminated via GIDS at 15 minute intervals via the existing Message “E” (ETP Intra-day Valuation Message). ETMF IIVs are expected to be disseminated during normal U.S. market hours only. Nasdaq has added a new Financial Product Type of “F” and a new Distribution Frequency of “15m” for Exchange Traded Managed Funds (ETMFs) to Appendix A of this document.