

European Last Sale (ELS)

Direct Data Feed Specification

Version: 1.00

Date Revised: December 19, 2008

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1 Product Description

European Last Sale (ELS) is a direct data feed product offered by the NASDAQ OMX Group. ELS will cover the full range of issues of the OMX Nordic and Baltic exchange-listed securities. The ELS data feed includes internalized trades reported to OMX exchanges.

ELS provides real-time, intra-day trade data from the SAXESS Trading Engine.

Market data distributors may use the ELS data feed to feed real-time stock tickers, portfolio trackers, trade alert programs, time and sale graphs, and other display systems.

For pricing and administration information, please refer to the [ELS product page](#) on the NASDAQ Trader website.

2 Network Protocol Options

NASDAQ OMX will offer the ELS data feed in the following protocol options:

Protocol Option	Number of Outbound Channels
SoupTCP	Single outbound channel for all securities
MoldUDP	Single outbound channel for all securities

For network support and ordering information, please refer to the [NASDAQ Direct Data Products Specifications Page](#) on the NASDAQ OMX Trader website.

3 Architecture

ELS is made up of a series of sequenced messages. Each message is fixed in length based on the message type and is composed of non-control ASCII bytes. The messages that make up the ELS protocol are typically delivered using a higher level protocol that takes care of sequencing and delivery guarantees.

4 Data Types

Data type	Format description	Example
<i>Numeric</i>	ASCII digits, right justified, space filled as necessary.	RoundLot " 100 "
<i>Alphanumeric</i>	Left justified, space filled as necessary.	MarketCode "12 "
<i>Price</i>	20 byte floating decimal format with up to 13 whole number digits, followed by a decimal point, followed by up to 6 decimal digits. The whole number portion is padded on the left with spaces; the decimal portion is padded on the right with zeros. For example	TradePrice " 170.500000 "

The *Timestamp* field contains the system time at which the outbound message was generated by the ELS Server. The field is numeric and the time is represented in HHMMSSsss format. The time zone is U.S. Eastern Time.

All *Exchange* fields use ISO 10383 Market Identification Codes (MIC).

All *Currency* fields use ISO 4217 currency codes.

5 Message Formats

5.1 System Event Message

System Event Messages are used to signal key market or data feed control events. Systems event messages are disseminated at system level and submarket level.

System Event message																										
Name	Offset	Len	Type	Value/Description																						
Timestamp	0	9	Numeric	The system time at which the message was disseminated.																						
MessageType	9	1	Alphanumeric	S = System Event Message																						
SourceId	10	1	Alphanumeric	Identifies the source system that generated the message. Possible values are: <table border="1" data-bbox="776 779 1432 940"> <thead> <tr> <th>Value</th> <th>Description</th> </tr> </thead> <tbody> <tr> <td>0</td> <td>ELS Dissemination server</td> </tr> <tr> <td>1</td> <td>OMX SAXESS system</td> </tr> <tr> <td><n></td> <td>Reserved for future use.</td> </tr> </tbody> </table>	Value	Description	0	ELS Dissemination server	1	OMX SAXESS system	<n>	Reserved for future use.														
Value	Description																									
0	ELS Dissemination server																									
1	OMX SAXESS system																									
<n>	Reserved for future use.																									
MarketCode	11	3	Alphanumeric	Identifies the submarket for the event. A space value indicates that this is an ELS system event. Submarket, market and exchange information can be derived from the MarketCode using Market Directory messages.																						
EventCode	14	1	Alphanumeric	Denotes the type of event for which the message is being generated. ELS system events are as follows: <table border="1" data-bbox="776 1268 1432 1388"> <thead> <tr> <th>Value</th> <th>Description</th> </tr> </thead> <tbody> <tr> <td>O</td> <td>Start of Transmission</td> </tr> <tr> <td>C</td> <td>End of Transmission</td> </tr> </tbody> </table> Submarket events are as follows: <table border="1" data-bbox="776 1488 1432 1801"> <thead> <tr> <th>Value</th> <th>Description</th> </tr> </thead> <tbody> <tr> <td>1</td> <td>Closed</td> </tr> <tr> <td>2</td> <td>Pre Trading</td> </tr> <tr> <td>3</td> <td>Trading</td> </tr> <tr> <td>4</td> <td>Terminating</td> </tr> <tr> <td>5</td> <td>Post Trading</td> </tr> <tr> <td>8</td> <td>Extended Trading</td> </tr> <tr> <td>9</td> <td>MidpriceAuction</td> </tr> </tbody> </table>	Value	Description	O	Start of Transmission	C	End of Transmission	Value	Description	1	Closed	2	Pre Trading	3	Trading	4	Terminating	5	Post Trading	8	Extended Trading	9	MidpriceAuction
Value	Description																									
O	Start of Transmission																									
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3	Trading																									
4	Terminating																									
5	Post Trading																									
8	Extended Trading																									
9	MidpriceAuction																									

5.2 Trade Report Message

The following message is used to relay trade transactions that are reported for the current business day.

Trade Report message										
Name	Offset	Len	Type	Value/Description						
Timestamp	0	9	Numeric	The system time at which the message was disseminated.						
MessageType	9	1	Alphanumeric	T = Trade Report						
SourceId	10	1	Alphanumeric	Identifies the source system that generated the message. Possible values are: <table border="1" data-bbox="893 724 1429 850"> <thead> <tr> <th>Value</th> <th>Description</th> </tr> </thead> <tbody> <tr> <td>1</td> <td>OMX SAXESS system</td> </tr> <tr> <td><n></td> <td>Reserved for future use.</td> </tr> </tbody> </table>	Value	Description	1	OMX SAXESS system	<n>	Reserved for future use.
Value	Description									
1	OMX SAXESS system									
<n>	Reserved for future use.									
IssueSymbol	11	16	Alphanumeric	Denotes the NASDAQ OMX-assigned symbol of the issue for which the trade report is being generated.						
MarketCode	27	3	Alphanumeric	Identifies the submarket for the issue. A space value indicates that the submarket code is not provided. Submarket, market and exchange information can be derived from the MarketCode using Market Directory messages.						
TradeControlNumber	30	10	Alphanumeric	Indicates the NASDAQ OMX internal control number associated with the trade transaction. The Trade Control Number is unique for the issue. This number is used to identify the original message in a trade cancellation.						
TradePrice	40	20	Price	Denotes the report price on the trade transaction. Price format is floating.						
TradeSize	60	13	Numeric	Indicates the reported number of shares on the trade transaction.						
SettlementDate	73	8	Alphanumeric	Settlement date in YYYYMMDD format. For example '20080324'. A <space> indicates that the default date applies, which is three days from the trade date.						

TradeClass	81	1	Alphanumeric	Trade class. Possible values are: <table border="1"> <thead> <tr> <th>Value</th> <th>Description</th> </tr> </thead> <tbody> <tr> <td>1</td> <td>Standard</td> </tr> <tr> <td>2</td> <td>Non standard</td> </tr> <tr> <td>space</td> <td>Not applicable</td> </tr> </tbody> </table>	Value	Description	1	Standard	2	Non standard	space	Not applicable		
Value	Description													
1	Standard													
2	Non standard													
space	Not applicable													
TradeType	82	3	Alphanumeric	Trade Type code. A descriptive meaning for each code value is provided through Code Description messages. A list of sample codes is given in Appendix E.										
LastPaidIndicator	85	1	Alphanumeric	Last paid indicator. Possible values are: <table border="1"> <thead> <tr> <th>Value</th> <th>Description</th> </tr> </thead> <tbody> <tr> <td>Y</td> <td>Last paid</td> </tr> <tr> <td>N</td> <td>Not last paid</td> </tr> <tr> <td>space</td> <td>Not applicable</td> </tr> </tbody> </table>	Value	Description	Y	Last paid	N	Not last paid	space	Not applicable		
Value	Description													
Y	Last paid													
N	Not last paid													
space	Not applicable													
HighLowIndicator	86	1	Alphanumeric	Trade updates high/low indicator. Possible values are: <table border="1"> <thead> <tr> <th>Value</th> <th>Description</th> </tr> </thead> <tbody> <tr> <td>Y</td> <td>High or low</td> </tr> <tr> <td>N</td> <td>Not high or low</td> </tr> <tr> <td>space</td> <td>Not applicable</td> </tr> </tbody> </table>	Value	Description	Y	High or low	N	Not high or low	space	Not applicable		
Value	Description													
Y	High or low													
N	Not high or low													
space	Not applicable													
ISLatestTradeIndicator	87	1	Alphanumeric	Latest trade indicator. Possible values are: <table border="1"> <thead> <tr> <th>Value</th> <th>Description</th> </tr> </thead> <tbody> <tr> <td>Y</td> <td>Is latest trade</td> </tr> <tr> <td>N</td> <td>Is not latest trade</td> </tr> <tr> <td>S</td> <td>Trade is out of sequence</td> </tr> <tr> <td>space</td> <td>Not applicable</td> </tr> </tbody> </table>	Value	Description	Y	Is latest trade	N	Is not latest trade	S	Trade is out of sequence	space	Not applicable
Value	Description													
Y	Is latest trade													
N	Is not latest trade													
S	Trade is out of sequence													
space	Not applicable													
AveragePriceIndicator	88	1	Alphanumeric	Average price indicator. Possible values are: <table border="1"> <thead> <tr> <th>Value</th> <th>Description</th> </tr> </thead> <tbody> <tr> <td>Y</td> <td>Average price</td> </tr> <tr> <td>N</td> <td>Not average price</td> </tr> <tr> <td>space</td> <td>Not applicable</td> </tr> </tbody> </table>	Value	Description	Y	Average price	N	Not average price	space	Not applicable		
Value	Description													
Y	Average price													
N	Not average price													
space	Not applicable													

OutsideSpreadIndicator	89	1	Alphanumeric	Outside spread indicator. Possible values are: <table border="1" data-bbox="898 302 1435 466"> <thead> <tr> <th data-bbox="898 302 1073 342">Value</th> <th data-bbox="1073 302 1435 342">Description</th> </tr> </thead> <tbody> <tr> <td data-bbox="898 342 1073 382">Y</td> <td data-bbox="1073 342 1435 382">Outside spread</td> </tr> <tr> <td data-bbox="898 382 1073 422">N</td> <td data-bbox="1073 382 1435 422">Not outside spread</td> </tr> <tr> <td data-bbox="898 422 1073 466">space</td> <td data-bbox="1073 422 1435 466">Not applicable</td> </tr> </tbody> </table>	Value	Description	Y	Outside spread	N	Not outside spread	space	Not applicable
Value	Description											
Y	Outside spread											
N	Not outside spread											
space	Not applicable											

5.3 Trade Cancel Message

The following message is used in the event that an NASDAQ OMX trade transaction is cancelled on the same business day that it is reported.

Trade Cancel message												
Name	Offset	Len	Type	Value/Description								
Timestamp	0	9	Numeric	The system time at which the message was disseminated.								
MessageType	9	1	Alphanumeric	X = Trade Cancel								
SourceId	10	1	Alphanumeric	Identifies the source system that generated the message. Possible values are: <table border="1" data-bbox="894 730 1432 852"> <thead> <tr> <th>Value</th> <th>Description</th> </tr> </thead> <tbody> <tr> <td>1</td> <td>OMX SAXESS system</td> </tr> <tr> <td><n></td> <td>Reserved for future use.</td> </tr> </tbody> </table>	Value	Description	1	OMX SAXESS system	<n>	Reserved for future use.		
Value	Description											
1	OMX SAXESS system											
<n>	Reserved for future use.											
IssueSymbol	11	16	Alphanumeric	Denotes the NASDAQ OMX-assigned symbol of the issue for which the trade cancel is being generated.								
MarketCode	27	3	Alphanumeric	Identifies the submarket for the issue. A space value indicates that the submarket code is not provided. Submarket, market and exchange information can be derived from the MarketCode using Market Directory messages.								
TradeControlNumber	30	10	Alphanumeric	Indicates the NASDAQ OMX internal control number associated with the trade transaction that is being cancelled.								
TradePrice	40	20	Price	Denotes the report price on the trade transaction.								
TradeSize	60	13	Numeric	Indicates the reported number of shares on the trade transaction.								
SettlementDate	73	8	Alphanumeric	Settlement date in YYYYMMDD format. For example '20080324'. A <space> indicates that the default date applies, which is three days from the trade date.								
TradeClass	81	1	Alphanumeric	Trade class. Possible values are: <table border="1" data-bbox="894 1686 1432 1845"> <thead> <tr> <th>Value</th> <th>Description</th> </tr> </thead> <tbody> <tr> <td>1</td> <td>Standard</td> </tr> <tr> <td>2</td> <td>Non standard</td> </tr> <tr> <td>space</td> <td>Not applicable</td> </tr> </tbody> </table>	Value	Description	1	Standard	2	Non standard	space	Not applicable
Value	Description											
1	Standard											
2	Non standard											
space	Not applicable											

TradeType	82	3	Alphanumeric	Trade Type code. A descriptive meaning for each code value is provided through Code Description messages. A list of sample codes is given in Appendix E.								
LastPaidIndicator	85	1	Alphanumeric	Trade updates last paid. Possible values are: <table border="1"> <thead> <tr> <th>Value</th> <th>Description</th> </tr> </thead> <tbody> <tr> <td>Y</td> <td>Last paid</td> </tr> <tr> <td>N</td> <td>Not last paid</td> </tr> <tr> <td>space</td> <td>Not applicable</td> </tr> </tbody> </table>	Value	Description	Y	Last paid	N	Not last paid	space	Not applicable
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Value	Description											
Y	High or low											
N	Not high or low											
space	Not applicable											
ISLatestTradeIndicator	87	1	Alphanumeric	Latest trade. Possible values are: <table border="1"> <thead> <tr> <th>Value</th> <th>Description</th> </tr> </thead> <tbody> <tr> <td>space</td> <td>Not applicable</td> </tr> </tbody> </table>	Value	Description	space	Not applicable				
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AveragePriceIndicator	88	1	Alphanumeric	Average price indicator. Possible values are: <table border="1"> <thead> <tr> <th>Value</th> <th>Description</th> </tr> </thead> <tbody> <tr> <td>Y</td> <td>Average price</td> </tr> <tr> <td>N</td> <td>Not average price</td> </tr> <tr> <td>space</td> <td>Not applicable</td> </tr> </tbody> </table>	Value	Description	Y	Average price	N	Not average price	space	Not applicable
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Value	Description											
Y	Outside spread											
N	Not outside spread											
space	Not applicable											

5.4 Administrative Messages

ELS supports the following administrative messages:

- (1) Stock Trading Action
- (2) Symbol Directory
- (3) Code Description message
- (4) Market Description message
- (5) General Administration message.

5.4.1 Stock Trading Action message

NASDAQ OMX uses the Trading Action message to indicate changes in trading status for a submarket or an issue.

There are separate Trading action message at submarket level and issue level. At submarket level, the halt affects all securities trading on the submarket.

Please note that securities may be halted in the NASDAQ OMX system for regulatory or operational reasons.

Trading Action message										
Name	Offset	Len	Type	Value/Description						
Timestamp	0	9	Numeric	The system time at which the message was disseminated.						
MessageType	9	1	Alphanumeric	H = Trading Action						
SourceId	10	1	Alphanumeric	Identifies the source system that generated the message. Possible values are: <table border="1" data-bbox="852 1241 1432 1367"> <thead> <tr> <th>Value</th> <th>Description</th> </tr> </thead> <tbody> <tr> <td>1</td> <td>OMX SAXESS system</td> </tr> <tr> <td><n></td> <td>Reserved for future use.</td> </tr> </tbody> </table>	Value	Description	1	OMX SAXESS system	<n>	Reserved for future use.
Value	Description									
1	OMX SAXESS system									
<n>	Reserved for future use.									
MarketCode	11	3	Alphanumeric	Identifies the submarket for the issue. A space value indicates that the submarket code is not provided. Submarket, market and exchange information can be derived from the MarketCode using Market Directory messages.						
IssueSymbol	14	16	Alphanumeric	Denotes the issue that the trade action message applies to. A <space> indicates that the action is at submarket level rather than issue level.						

CurrentTradingState	30	1	Alphanumeric	<p>Reflects the current trading state for the submarket or issue that the trade action message applies to. The possible values are:</p> <table border="1" data-bbox="854 369 1433 485"> <thead> <tr> <th data-bbox="854 369 995 407">Value</th> <th data-bbox="995 369 1433 407">Description</th> </tr> </thead> <tbody> <tr> <td data-bbox="854 407 995 445">1</td> <td data-bbox="995 407 1433 445">Halt in effect – Trading suspended</td> </tr> <tr> <td data-bbox="854 445 995 485">2</td> <td data-bbox="995 445 1433 485">Trading on NASDAQ OMX in effect</td> </tr> </tbody> </table>	Value	Description	1	Halt in effect – Trading suspended	2	Trading on NASDAQ OMX in effect
Value	Description									
1	Halt in effect – Trading suspended									
2	Trading on NASDAQ OMX in effect									
HaltCodes	31	3	Alphanumeric	<p>If the Action is a Trade Resume, the field has a space value. If the Action is a Halt, the field contains a Halt reason code. A descriptive meaning for each code value is provided through Code Description messages. A list of sample codes is given in Appendix E.</p>						

5.4.2 Stock Directory message

ELS disseminates stock directory messages for all active symbols listed on the OMX Nordic and Baltic exchanges.

Stock Directory message					
Name	Offset	Len	Type	Value/Description	
Timestamp	0	9	Numeric	The system time at which the message was disseminated.	
MessageType	9	1	Alphanumeric	R = Stock Directory	
SourceId	10	1	Alphanumeric	Identifies the source system that generated the message. Possible values are:	
				Value	Description
				1	OMX SAXESS system
				<n>	Reserved for future use.
IssueSymbol	11	16	Alphanumeric	Denotes the NASDAQ OMX-assigned ticker symbol for the issue.	
IssueName	27	40	Alphanumeric	Name or description of the issue	
Issuer	67	40	Alphanumeric	Name of the Issuer for the issue.	
MarketCode	107	3	Alphanumeric	Identifies the submarket for the issue. A space value indicates that the submarket code is not provided. Submarket, market and exchange information can be derived from the MarketCode using Market Directory messages.	
TradingCurrency	110	3	Alphanumeric	Denotes the trading currency of the submarket. Uses ISO 4217 currency codes.	
ListingCurrency	113	3	Alphanumeric	Denotes the listing currency of the issue. Uses ISO 4217 currency codes.	
HaltCodes	116	3	Alphanumeric	Current trading status for the issue at start of day. If the field has a space value, the issue is active for trading. If the field is not space, then the issue is in a Halt state and the field gives a reason code. A descriptive meaning for each code value is provided through Code Description messages. A list of sample codes is given in Appendix E.	
RoundLot	119	10	Numeric	Round lot size.	
NoOfDecPrice	129	1	Numeric	Number of decimals in price fields. The value can be 0 – 6.	

Financial Status Indicator	130	10	Alphanumeric	<p>Financial status indicators. A space value indicates that no FinancialStatusIndicator is provided. There can be one or more indicators expressed as integer codes separated by comma, for example "4,136".</p> <p>A descriptive meaning for each code value is provided through Code Description messages. A list of sample codes is given in Appendix E.</p>												
UpdateCode	140	1	Alphanumeric	<p>Indicates if the issue information is new, updated, deleted, or unchanged relative to the previous trading day. Possible values are:</p> <table border="1" data-bbox="808 617 1433 856"> <thead> <tr> <th data-bbox="808 617 959 657">Value</th> <th data-bbox="959 617 1433 657">Description</th> </tr> </thead> <tbody> <tr> <td data-bbox="808 657 959 697">1</td> <td data-bbox="959 657 1433 697">New</td> </tr> <tr> <td data-bbox="808 697 959 737">2</td> <td data-bbox="959 697 1433 737">Updated</td> </tr> <tr> <td data-bbox="808 737 959 777">3</td> <td data-bbox="959 737 1433 777">Deleted</td> </tr> <tr> <td data-bbox="808 777 959 816">4</td> <td data-bbox="959 777 1433 816">Unchanged</td> </tr> <tr> <td data-bbox="808 816 959 856">space</td> <td data-bbox="959 816 1433 856">Not applicable</td> </tr> </tbody> </table>	Value	Description	1	New	2	Updated	3	Deleted	4	Unchanged	space	Not applicable
Value	Description															
1	New															
2	Updated															
3	Deleted															
4	Unchanged															
space	Not applicable															

5.4.3 Market Directory message

ELS disseminates a Market Directory message for each submarket and market for the OMX Nordic and Baltic exchanges. The Market Directory messages can be used to derive submarket, market and exchange information from the MarketCode field in a System Event, Trade Report, Trade Cancel, Stock Action or Stock Directory message.

Market Directory message												
Name	Offset	Len	Type	Value/Description								
Timestamp	0	9	Numeric	The system time at which the message was disseminated.								
MessageType	9	1	Alphanumeric	M = Market Directory message								
SourceId	10	1	Alphanumeric	Identifies the source system that generated the message. Possible values are: <table border="1" data-bbox="836 758 1430 884"> <thead> <tr> <th>Value</th> <th>Description</th> </tr> </thead> <tbody> <tr> <td>1</td> <td>OMX SAXESS system</td> </tr> <tr> <td><n></td> <td>Reserved for future use.</td> </tr> </tbody> </table>	Value	Description	1	OMX SAXESS system	<n>	Reserved for future use.		
Value	Description											
1	OMX SAXESS system											
<n>	Reserved for future use.											
MarketCode	11	3	Alphanumeric	Identifies a submarket or market.								
MarketType	14	1	Alphanumeric	Indicates whether this message is for a market or submarket. Possible values are: <table border="1" data-bbox="836 1041 1430 1203"> <thead> <tr> <th>Value</th> <th>Description</th> </tr> </thead> <tbody> <tr> <td>1</td> <td>Market</td> </tr> <tr> <td>2</td> <td>Submarket</td> </tr> <tr> <td>space</td> <td>Not applicable</td> </tr> </tbody> </table>	Value	Description	1	Market	2	Submarket	space	Not applicable
Value	Description											
1	Market											
2	Submarket											
space	Not applicable											
ParentMarketCode	15	3	Alphanumeric	If MarketType = 2 (Submarket), this field identifies the parent market. Information on the parent market can be obtained from the Market Directory message with MarketCode set to this value. If MarketType = 1 (Market), this field has a space value.								
ExchangeCode	18	4	Alphanumeric	Denotes the Exchange associated with the market or submarket. Uses ISO 10383 Market Identification Codes (MIC).								
MarketName	22	40	Alphanumeric	The name or description of the submarket or market.								

UpdateCode	62	1	Alphanumeric	<p>Indicates if the issue information is new, updated, deleted, or unchanged relative to the previous trading day. Possible values are:</p> <table border="1" data-bbox="836 333 1427 569"> <thead> <tr> <th data-bbox="836 333 980 373">Value</th> <th data-bbox="984 333 1427 373">Description</th> </tr> </thead> <tbody> <tr> <td data-bbox="836 375 980 415">1</td> <td data-bbox="984 375 1427 415">New</td> </tr> <tr> <td data-bbox="836 417 980 457">2</td> <td data-bbox="984 417 1427 457">Updated</td> </tr> <tr> <td data-bbox="836 459 980 499">3</td> <td data-bbox="984 459 1427 499">Deleted</td> </tr> <tr> <td data-bbox="836 501 980 541">4</td> <td data-bbox="984 501 1427 541">Unchanged</td> </tr> <tr> <td data-bbox="836 543 980 569">space</td> <td data-bbox="984 543 1427 569">Not applicable</td> </tr> </tbody> </table>	Value	Description	1	New	2	Updated	3	Deleted	4	Unchanged	space	Not applicable
Value	Description															
1	New															
2	Updated															
3	Deleted															
4	Unchanged															
space	Not applicable															

5.4.4 Code Description message

ELS disseminates Code Description messages that provide text descriptions for code values used in data feed messages. For example, messages provide descriptions for TradeType, HaltCodes and FinancialStatusIndicator fields. Appendix E gives sample codes and their meanings for each of the field types.

Code Description message																
Name	Offset	Len	Type	Value/Description												
Timestamp	0	9	Numeric	The system time at which the message was disseminated.												
MessageType	9	1	Alphanumeric	C = Code Description message												
SourceId	10	1	Alphanumeric	Identifies the source system that generated the message. Possible values are: <table border="1" data-bbox="803 758 1430 884"> <thead> <tr> <th>Value</th> <th>Description</th> </tr> </thead> <tbody> <tr> <td>1</td> <td>OMX SAXESS system</td> </tr> <tr> <td><n></td> <td>Reserved for future use.</td> </tr> </tbody> </table>	Value	Description	1	OMX SAXESS system	<n>	Reserved for future use.						
Value	Description															
1	OMX SAXESS system															
<n>	Reserved for future use.															
CodeType	11	1	Alphanumeric	Identifies the field name for the entry. Possible values are: <table border="1" data-bbox="803 995 1430 1152"> <thead> <tr> <th>Value</th> <th>Description</th> </tr> </thead> <tbody> <tr> <td>1</td> <td>HaltCodes</td> </tr> <tr> <td>2</td> <td>FinancialStatusIndicator</td> </tr> <tr> <td>4</td> <td>TradeType</td> </tr> </tbody> </table>	Value	Description	1	HaltCodes	2	FinancialStatusIndicator	4	TradeType				
Value	Description															
1	HaltCodes															
2	FinancialStatusIndicator															
4	TradeType															
CodeValue	12	3	Alphanumeric	Identifies the code value for the entry. A list of sample codes and descriptions is given in Appendix E.												
CodeDescription	15	40	Alphanumeric	Description of the code's meaning. A list of sample codes and descriptions is given in Appendix E.												
UpdateCode	55	1	Alphanumeric	Indicates if the issue information is new, updated, deleted, or unchanged relative to the previous trading day. Possible values are: <table border="1" data-bbox="803 1530 1430 1770"> <thead> <tr> <th>Value</th> <th>Description</th> </tr> </thead> <tbody> <tr> <td>1</td> <td>New</td> </tr> <tr> <td>2</td> <td>Updated</td> </tr> <tr> <td>3</td> <td>Deleted</td> </tr> <tr> <td>4</td> <td>Unchanged</td> </tr> <tr> <td>Space</td> <td>Not applicable</td> </tr> </tbody> </table>	Value	Description	1	New	2	Updated	3	Deleted	4	Unchanged	Space	Not applicable
Value	Description															
1	New															
2	Updated															
3	Deleted															
4	Unchanged															
Space	Not applicable															

5.4.5 General Administrative message

The General Administrative message provides a mechanism for communicating free form text information to vendors at any time during transmission hours.

General Administrative message					
Name	Offset	Len	Type	Value/Description	
Timestamp	0	9	Numeric	The system time at which the message was disseminated.	
MessageType	9	1	Alphanumeric	A = General Administrative message	
SourceId	10	1	Alphanumeric	Identifies the source system that generated the message. Possible values are:	
				Value	Description
				0	ELS Dissemination server
				<n>	Reserved for future use.
Text	11	250	Alphanumeric	Free form text message	

6 Contact Information

General product inquiries about ELS – including questions about the basic data content, entitlement structure and display guidelines – may be directed to NASDAQ OMX Global Data Products at 301.978.5307 or dataproducts@nasdaqomx.com.

Technical inquiries about the ELS data formats and messaging protocol may be directed to NASDAQ OMX Systems Development at devsupport@nasdaqomx.com.

Operational Inquiries about the ELS system status may be directed to NASDAQ OMX Technical Support at 212.231.5180 or TradingServices@nasdaqomx.com.

Appendix A – Sample Exchange and Market hierarchy

The following are sample exchanges within the OMX Nordic and Baltic equity markets:

Exchange Code	Description
FNSE	FIRST NORTH STOCKHOLM
ISEC	FIRST NORTH ICELAND
XCSE	OMX NORDIC EXCHANGE COPENHAGEN A/S
XFND	FIRST NORTH DENMARK
XHEL	OMX NORDIC EXCHANGE HELSINKI OY
XICE	OMX NORDIC EXCHANGE ICELAND HF.
XLIT	OMX NORDIC EXCHANGE VILNIUS
XRIS	OMX NORDIC EXCHANGE RIGA
XSAT	AKTIETORGET
XSTO	OMX NORDIC EXCHANGE STOCKHOLM AB
XTAL	TALLINN STOCK EXCHANGE – LISTING

An exchange has one or more markets and submarkets. The following is a sample hierarchy:

Exchange	Market	Submarket
XSTO	OMX STO Equities and related	OMX STO Equities
	OTC REP in STO Listed Equities & Rel	OTC STO Equities
XCSE	OMX CPH Equities and related	OMX CPH Equities
	OTC REP in CPH Listed Equities & Rel	OTC CPH EQUITIES
		OTC First North CPH
XHEL	OMX HEL Equities and related	OMX HEL Equities
	OTC REP in HEL Listed Equities & Rel	OTC HEL Equities
XICE	OMX ICE Equities and related	OMX ICE Equities
XRIS	HEXIM Riga Equities and related	OMX RSE Equities
XLIT	OMX VSE Equities and related	OMX VSE Equities
XTAL	HEXIM Tallinn Equities and related	OMX TSE Equities
XFND	First North	First North
ISEC	First North Iceland	First North Iceland
XSAT	SEAT Aktietorget	MM Aktietorget-cotr
FNSE	SEFN First North	First North STO
		First North HEL

An issue lists and trades at the submarket level. An issuer may have multiple issues for a given instrument within a submarket, with different issue symbols. An issue symbol is unique within the submarket and across all exchanges and markets.

A submarket has a single Trading Currency; however an issue may have a different Listing Currency.

The Stock Directory message includes the submarket, trading currency and listing currency for the issue.

A Stock Action message represents a halt or a resume at either submarket level or issue level.

System event messages denote events at submarket level. In addition, the ELS system generates Start of Transmission and End of Transmission messages.

Market Directory messages can be used to derive the submarket, market and exchange hierarchy for the OMX Nordic and Baltic exchanges.

Appendix B – Trading hours and Trading days

Trading days and trading hours differ on the OMX Nordic and Baltic exchanges.

For the current schedule for the Copenhagen, Stockholm, Helsinki and Iceland exchanges, please visit the [Trading Hours page](#) of the OMX Nordic Exchange website.

For information on the Baltic exchanges, please refer to [Trading Day Structure](#) and [Trading Holiday](#) pages of the OMX Baltic Exchange website.

Appendix C – Stock symbol convention

The ELS data feed supports a 16-byte symbol field.

Symbols may contain spaces and special characters.

Trades conducted outside the regulated market are termed 'OTC' trades. These trades are reported under separate OTC submarkets. Each ordinary issue has a mirror copy in the OTC submarket with the same symbol prefixed with "O-".

Appendix D – ELS message types

The ELS data feed contains the following message types:

Message Name	Message Code	Message Description
System Event message	S	The Event message can be at system level or submarket level. Market event messages are sent for each market event, per submarket, at a scheduled time. System level events are Start of Transmission and End of Transmission for the ELS data feed.
Trade Report message	T	Trade report message.
Trade Cancel message	X	Cancels an original trade report message.
Stock Trading Action message	H	The Action can be a Halt or Resume. The Action can be at submarket level or issue level. A submarket Action may be followed by issue-level Action messages.
Stock Directory message	R	Sent daily for each issue. The message contains Halt codes that show if the issue is currently active.
Market Directory message	M	Sent daily for each submarket and market. The message has a field that indicates if the message provides market or submarket information. Provides information on the market associated with a submarket, or information on a submarket associated with a System Event, Trade report, Trade Cancel, Stock Action or Stock Directory message.
Code Description message	C	Sent daily for each code value. Can be used to translate the code value into meaningful text.
General Administrative message	A	Used to send a free-form text message to recipients. Sent as required at any time during transmission hours.

Appendix E – Sample code descriptions

Certain fields in the ELS data feed messages are expressed as code values. These include TradeType, HaltCodes and FinancialStatusIndicator fields. A text description of all the valid code values is disseminated using Code Description messages (Message Type 'C'). The following tables list sample codes and their meanings. Note that actual values may change over time. Any changes will be communicated to customers through the ELS product page on the NASDAQ Trader website.

Sample Trade Type values

Value	Description
15	Auto match
16	Accept match
17	Issuing call match
18	Request for call match
19	Negotiated auction match
20	Auto trade open for post trade alloc.
21	Post trade allocation trade
22	Regular
23	.T
24	.SLD
25	OX standard
26	OX non standard settlement
27	OX option expiration
28	OX changed market conditions
29	OX exchange granted trade
30	OX excluding dividend rights
31	OX future expiration
32	OX loan transactions
33	OX accumulated orders
34	OX old trades
35	OX standard average based
36	OX repurchase agreement
37	OX exchange of substitute mortgage bonds
38	OX basis trade
39	OX Volume Weighted Average Price
40	OX automated option expiration

41	OX automated future expiration
42	AM2 contract transaction
43	AM2 block transaction
44	AM2 ETF primary market
45	AM2 warrant exercise
46	CT contract transaction
47	CT block transaction
48	CT ETF primary market
49	CT warrant exercise
50	Pre-opening transaction
51	AM1 contract transaction
52	OX Helsinki trade report
53	OX Baltic trade report
65	OX Broker Fills
134	Deferred Publication 60 minutes
135	Deferred Publication end of day
138	OX Small
139	Combination trade
140	OX Derivatives Related Trade
145	OTC Standard
146	OTC Non standard
147	OX Portfolio Trade
149	SI Standard
150	SI Non Standard
54	Normal Trade
55	Outside spread
56	Exchange granted 1
57	Normal Trade Report

Sample Halt Code values

Value	Description
1	Technical Stop
2	Trading Halt
3	Matching Halt
144	Regulatory Halt
space	Halt code does not apply

Sample Financial Status Indicator values

Value	Description
4	On the surveillance list
5	Excluding dividend
6	Excluding participating in right/s
7	Excluding participating in split
8	Company subject to public offer
9	Under drawing
10	Excluding comb. split and issue right/s
11	UnListed
12	When Issued
13	Company Bankruptcy
14	Suspension
61	Removal from listing in process
62	Other surveillance list reason
63	A significant reverse take-over pending
64	Cent shares
66	Reversed Split
67	Excluding comb. Bonus issue & Split
68	Excluding comb. Bonus & Split
69	Excluding comb. Split & Redemption share
136	First North Company
137	New Market Company

Appendix F – Document Version Control Log

ELS Version 1.00	May 27, 2008
ELS specification document released to public. For ordering information, please refer to NASDAQ Vendor Alert #2008-22 .	
ELS Version 1.00	December 19, 2008
Increased the Round Lot field size in the Stock Directory message from 5 bytes to 10 bytes.	