



DOCUMENT TITLE

Dedicated LP specifications for SLE access to NSC-VW application

STATUS

Version 1.3. February 2009 (English)

VERSION HISTORY

Version Number	Date	Source Documents Used	Reasons for Issuing a New Version	Sections Changed
V.1.0	29/02/08	None		
V.1.1	16/04/08	None	Add error codes	Appendix 1
V1.2	August	SLE (order entry): Specifications for SLE access to NSC-VE, NSC-VW and NSC-VL applications	<ul style="list-style-type: none"> - Add specifications for Bulk Quote - Add 0172 and 0105 - Add messages 0139 and 0175 - Add error codes 	<ul style="list-style-type: none"> Bulk Quote Appendix 1
V1.3	February 2009	None	<ul style="list-style-type: none"> - Added type R to the "Action Code " field in the "Ask for Quote" - Complete list of possible values in field Security's type in Execution message 0105. 	<ul style="list-style-type: none"> Ask for Quote Execution message

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Chapter 1

INTRODUCTION

1. INTRODUCTION

This document describes the application messages exchanged between an SLE and the NSC VW system that can be sent and received on the **new Warrants market model**.

This document includes messages that are specific to Liquidity Providers and the members that trade on NSC VW.

Please be informed that in this new model a Liquidity Provider can either send a Bulk Quote (0501) or a standard order as a Liquidity Provider (0001).

The specifications of the standard order (0001) can be found in the following document:

“SLE (order entry): Specifications for SLE access to the NSC-VE, NSC-VW and NSC-VL applications”.

Chapter 2
NSC VW TRADING PRINCIPLES

2. NSC VW TRADING PRINCIPLES

The NSC VW trading principles are explained in the functional document:

“New Warrants & Certificates market model - Functional overview”.

The trading principles of the NSC VE and NSC VL system are explained in the document:

‘Specifications for SLE access to the NSC-VE, NSC-VW and NSC-VL applications’.

Chapter 3

**SPECIFICATIONS FOR
MESSAGES EXCHANGED BETWEEN
NSC VW AND SLEs**

3. SPECIFICATIONS FOR MESSAGES EXCHANGED NSC VW / SLEs

3.1. INTRODUCTION

This chapter presents the specifications for messages exchanged between the new NSC VW and SLEs that are reserved for Liquidity Providers. The messages described below are the following:

Message (Function Code)	Sent by SLE or NSC VW	See Section
MESSAGES DEDICATED FOR LIQUIDITY PROVIDERS		
BULK QUOTE = ENTRY + MODIFICATION + CANCELLATION (0501)	SLE	3.2
BULK QUOTE = ENTRY + MODIFICATION + CANCELLATION (0572)	NSC VW	3.3
ORDER OUTCOME (0172)	NSC VW	3.4
EXECUTION NOTICE (0105)	NSC VW	3.5
ASK FOR QUOTE (0502)	NSC VW	3.6
REQUEST FOR EXECUTION (0503)	NSC VW	3.7
START ONE SIDE ONLY PERIOD (0504)	SLE	3.8
START ONE SIDE ONLY PERIOD CONFIRMATION (0505)	SLE	3.9
GLOBAL ORDER ELIMINATION (0139)	NSC VW	3.11
CONFIRMATION OF GLOBAL CANCELLATION OF ORDERS (0175)	NSC VW	3.12
MESSAGES DEDICATED FOR NSC VW		
WARRANT PHASE CHANGE NOTICE (0506)	NSC VW	3.10

For messages sent by the SLE, the discussion of each parameter includes the purpose of each parameter, a description, the validity checks performed by NSC VW, and corresponding error codes. These error codes will be added in a new release.

For messages received by the SLE, the discussion of each parameter includes the purpose of each parameter and a description. The lengths of all parameters are given in bytes.

3.1. DESCRIPTION OF MESSAGES

Each message is described as follows:

	Type	length
BULK QUOTE = ENTRY + MODIFICATION + CANCELLATION(0501)		
Subscriber's Internal Reference (1) *	X	16

- The first column contains the different data making up the message.
- The second column called « Type » indicates the type of the data. The possible values are:

X: Alphanumeric
N: Numeric
B: Binary in BIG ENDIAN representation
Px: Price

- The third column indicates the length of the data.

3.2. BULK QUOTE = ENTRY + MODIFICATION + CANCELLATION (CODE = 0501)

BULK QUOTE = ENTRY + MODIFICATION + CANCELLATION (0501)		Type	length
MMTP HEADER			
Subscriber's Internal Reference (1) *		X	16
Function Code (2)		N	4
Member Code (3)		X	8
Order Type (4)		X	1
Filler (5)		X	5
Filler (5 bis)		X	8
Allocated Member Code (6)		X	8
Order Account Type (7)		X	1
Clearing aggregate	Client Account number (8)	X	12
	Trader Order Number (9)	X	8
	Filler (10)	X	5
	Originating Order message Entry Date and Time (11)	N	14
	Memo (12)	X	18
	Posting Action (Order) (13)	X	1
	Filler (14)	X	1
	Clearing of Operation Mode (15)	X	1
	Number of Quotes in the Aggregate (16)	N	3
	Security Code (17)	X	12
Quotes Data Aggregate	Price of Bid Quote (18)	Px	10
	<i>Format indicator</i>	X	1
	<i>Price</i>	N	9
	Bid Quote Total Quantity (19)	N	9
	Price of Ask Quote (20)	Px	10
	<i>Format indicator</i>	X	1
<i>Price</i>	N	9	
Ask Quote Total Quantity (21)	N	9	
Filler (22)	X	11	
LENGTH (excluding header)			Min. 175 Max. 7625

* For a description of each parameter, go to the corresponding numbered paragraph, for example (1), later in this document.

A Bulk Quote message can be used by a Liquidity Provider to enter, modify and cancel Bulk Quotes. Quote entries, modifications and cancellations can be included in the same 0501 message.

This message includes one unique clearing aggregate and from 1 up to 150 instruments. The minimum size of the message is 175 bytes (excluding the header) and the maximum size is 7625 bytes (excluding the header).

(1) Subscriber's Internal Reference

Purpose

To link a message sent by the SLE with the corresponding messages (responses) received from the central system. Can also be used to do multiplexing between different traders connected to the same SLE.

Description

When NSC VW receives a Bulk Quote, NSC VW saves the subscriber's internal reference that is sent by the SLE.

This value is returned in all the following messages related to this Bulk Quote message:

- BULK QUOTE CONFIRMATION
- EXECUTION NOTICE
- TRADE CANCELLATION NOTICE
- TRADE RETRANSMISSION.

NSC VW does not check the value of the internal reference; it is simply stored and resent.

(2) Function Code

Identifies the function of the message, which is here a Bulk Quote Entry, Modification and Cancellation. The value of this function code is 0501.

Validity Checks Performed by NSC VW	Associated Error Code
Must be numeric	9016
Must be recognised by NSC VW	1001
The function code must be authorised for member firms (a member firm cannot perform a function reserved for Euronext Cash Market Operations)	1002

(3) Member Code

Purpose

Identifies the member firm that sent the message. A value must be provided.

NSC VW verifies that the member code is compatible with the physical address (HUB subscriber ID) by which the message arrived. If this is not the case, NSC VW transmits a rejection message to the sender.

Validity Checks Performed by NSC VW	Associated Error Code
Must be alphanumeric	1028
The ID must be recognised by NSC VW	2033
The ID must belong to the member firm that sent the message (a member firm cannot place a quote on behalf of another member firm)	2035

(4) Order Type

Purpose

This parameter indicates the type of order or its origin.

Must have one of these values:

- I → Program trading arbitrage on index
- P → Portfolio strategy
- G → Unwind order for automatic counterparty handled by the member firm's automatic client order system
- A → Other orders
- C → Cross margining

Validity Checks Performed by NSC VW	Associated Error Code
Must be alphanumeric	1029
Must have a correct value	1029

(6) Allocated Member Code

Purpose

OPTIONAL. Code of the member receiving the clearing allocation.

(7) Order Account Type

Purpose

This parameter indicates the order account type that will be transmitted to the clearing partner.

Description

Must have the following value:

6 ==> Liquidity provider order

Validity Checks Performed by NSC VW	Associated Error Code
Must be numeric	1034/1041
Must be filled in	1034/1041
Must have the value 6	

(8) Client Account Number

Purpose

OPTIONAL. It is transmitted to the clearing system.

Validity Checks Performed by NSC VW	Associated Error Code
Must be alphanumeric	1035/1042

(9) Trader Order Number

Purpose

OPTIONAL. Number assigned by the trader.

Validity Checks Performed by NSC VW	Associated Error Code
Must be alphanumeric	1037/1044

(11) Originating Order Message Entry Date

Purpose

OPTIONAL. Date and time at which the order was entered on the trader's workstation.

Description

The format is: YYYYMMDDHHMMSS

Validity Checks Performed by NSC VW	Associated Error Code
Must be numeric	1038/1045
Must be less than or equal to the current date	2066

(12) Memo**Purpose**

OPTIONAL. Free text entry field, can serve to transmit additional information for logging purposes.

Validity Checks Performed by NSC VW	Associated Error Code
Must be alphanumeric	1057/1062

(13) Posting Action**Purpose**

OPTIONAL. It gives information about the position of the subscriber who has entered the order. It indicates the side in which the posting must be performed if the latter is requested.

Description

Must have one of the following values:

-O ==> Opening

-C ==> Closing

Validity Checks Performed by NSC VW	Associated Error Code
Must be alphanumeric	1058/1062
Must have one of the above values	1058/1062

(13) Clearing of Operation Mode**Purpose**

OPTIONAL. Indicates how C21 should handle the trade. Indicates whether the operation should be performed automatically by C21 upon receipt of the trade or whether it requires prior member validation.

Description

Must have one of the following values:

0 ==> Manual mode

1 ==> Automatic extraction

2 ==> Automatic allocation

[space/blank] ==> Systematic Posting

Description of these different modes:

0: Manual mode: *information is not processed in this case, but must be conveyed to the Trade Leg creation message that is sent to the back-office stations after having recorded the trade in C21.*

1: Automatic extraction: *Trade posting is carried out automatically by C21 in the dedicated account in accordance with the member's account structure.*

2: Automatic allocation: *Trade give-up is done automatically by C21 to the Give-Up destination member specified.*

[space/blank]: Systematic Posting: *Trade is automatically sent to the position account.*

Validity Checks Performed by NSC VW	Associated Error Code
Must be alphanumeric	1059/1064
Must have one of the above values	1059/1064

(16) Number of Quotes in the Aggregate

This parameter specifies the total number of quotes in the 0501 message.

The maximum number of quotes is 300.

The maximum number of instruments that can be updated is 150 instruments.

Validity Checks Performed by NSC VW	Associated Error Code
Must be alphanumeric	1059/1064
Must be coherent with nr of quotes in aggregate	3414

(17) Security Code

Purpose

This parameter specifies the code of the security for which the quote was entered.

Description

The security code is 12 bytes long in conformity with the ISIN standard.

If one Order Quote (0001) is already present in the security the Bulk Quote is rejected.

Validity Checks

A Bulk Quote message for a security is only permitted under the following circumstances:

- the group is in the Pre-Opening, Market Session phase and Trading At Last phase.
- the security is authorised.

Validity Checks Performed by NSC VW	Associated Error Code
Must be alphanumeric or numeric	9019
Must be a valid security	1000
Quote entry must be authorised for the current state of the group to which the security belongs	1003
Quote entry must be authorised for the current status of the security	1004

(18) Price of Bid Quote

Purpose

Indicates the bid price of the quote price limit of the order.

There are two ways in which an LP can cancel an outstanding quote:

Case 1 - Fill the price field and the quantity field with zero (0). In this case the outstanding quote will be cancelled and a 0572 message will be returned.

Case 2 - Fill the quantity field with zero (0) (The price field remains filled). In this case the outstanding quote will be cancelled.

Please note that for case 1 the Format indicator (IFT) needs to be left blank (space).

Description

The price limit is coded using 10 bytes, as follows:

Example: 498.500 €

3	*	0	0	0	4	9	8	5	0	0
---	---	---	---	---	---	---	---	---	---	---

* The Format indicator (first byte) is variable (**between 0 and 6** in the incoming messages).

Validity Checks Performed by NSC VW	Associated Error Code
The value must be numeric	9023

The format of the price must be valid	9023
The price entered must correspond to a valid price step	2014
If the price can cross with an outstanding quote on the other side of the book, the quote will be rejected	3413

(19) Bid Quote Total Quantity

Purpose

This parameter specifies the number of shares that the trader wants to trade.

For the cancellation of an outstanding quote, the LP can use two ways:

Case 1 - Fill the price field and the quantity field with zero (0). In this case the outstanding quote will be cancelled and a 0572 message will be returned.

Case 2 - Fill the quantity field with zero (0) (The price field remains filled). In this case the outstanding quote will be cancelled.

Please note that for case 1 the Format indicator (IFT) needs to be left blank (space).

Validity Checks Performed by NSC VW	Associated Error Code
Must be numeric	9021
Must be less than 100 000 000	2115
If a value is not provided (=0) and the price field is filled, any outstanding quote at Bid side will be cancelled	
If a value is not provided (=0) and the price field is not provided, any outstanding quote at Bid side will be cancelled	

(20) Price of Ask Quote

Purpose

Indicates the ask price of the quote.

There are two ways in which an LP can cancel an outstanding quote:

Case 1 - Fill the price field and the quantity field with zero (0). In this case the outstanding quote will be cancelled and a 0572 message will be returned.

Case 2 - Fill the quantity field with zero (0) (The price field remains filled). In this case the outstanding quote will be cancelled.

Please note that for case 1 the Format indicator (IFT) needs to be left blank (space).

Description

The price limit is coded using 10 bytes, as follows:

Example: 498.500 €

3 *	0	0	0	4	9	8	5	0	0
-----	---	---	---	---	---	---	---	---	---

* The Format indicator (first byte) is variable (**between 0 and 6** in the incoming messages).

Validity Checks Performed by NSC VW	Associated Error Code
The value must be numeric	9023
The format of the price must be valid	9023
The price entered must correspond to a valid price step	2014
If the price can cross with an outstanding quote on the other side of the book, the quote will be rejected	3413

(21) Ask Quote Total Quantity***Purpose***

This parameter specifies the number of shares that the trader wants to trade.

There are two ways in which an LP can cancel an outstanding quote:

Case 1 - Fill the price field and the quantity field with zero (0). In this case the outstanding quote will be cancelled and a 0572 message will be returned.

Case 2 - Fill the quantity field with zero (0) (The price field remains filled). In this case the outstanding quote will be cancelled.

Please note that for case 1 the Format indicator (IFT) needs to be left blank (space).

Validity Checks Performed by NSC VW	Associated Error Code
Must be numeric	9021
Must be less than 100 000 000	2115
If a value is not provided (=0) and the price field is filled, any outstanding quote at Bid side will be cancelled	
If a value is not provided (=0) and the price field is not provided, any outstanding quote at Bid side will be cancelled	

3.3. CONFIRMATION OF BULK QUOTE (CODE = 0572)

CONFIRMATION OF BULK QUOTE (0572)		Type	length
MMTP HEADER			
Subscriber's Internal Reference (1) *		X	16
Function Code (2)		N	4
Member code (3)		X	8
Number of Quotes in the Aggregate (4)		N	3
Security Code (5)		X	12
Bid Quote Return Code (6)		N	6
Ask Quote Return Code (7)		N	6
Filler		X	10
LENGTH (excluding header)			Min. 65 / Max. 3641

Outcome
Aggregate

* For a description of each parameter, go to the corresponding numbered paragraph, for example (1), later in this document.

A Bulk Quotes Entry, Modification and Cancellation Confirmation message is sent in response to the Bulk Quote message of the Liquidity Provider. One Bulk Quotes response message has exactly the same number of occurrences as the corresponding Bulk Quotes entry message with one response code per quote.

The response code for a quote is returned with zeroes if the quote has been correctly processed or with a specific error code if any problem has occurred.

The message can include 1 to 150 instruments. The minimum size of the message is 65 bytes (excluding the header) and the maximum size is 3641 bytes (excluding the header).

(1) Subscriber's Internal Reference

This parameter provides the internal reference that the SLE entered in the Bulk Quote Entry, Modification or Cancellation message (0502) which is related this message.

(2) Function Code

Identifies the function of the message, which is here a Confirmation of Bulk Quote message. The value of the function code is 0572.

(3) Member Code

Purpose

Identifies the member firm receiving the message.

Description

This parameter indicates the code of the member firm that sent the Bulk Quote Message.

(4) Number of Quotes in the Aggregate

Purpose

Gives the total number of quotes in the Bulk Quote message.

(5) Security Code

Purpose

This parameter specifies the code of the security for which the quote was entered.

(6) Bid Quote Return Code

Purpose

This parameter indicates the status of the Quote on the Bid side. If the Quote has been accepted this value will be empty. If the Quote has been rejected an error code will be returned in this field.

A list of error codes can be found in the document "SLE (order entry): Specifications for SLE access to the NSC-VE, NSC-VW and NSC-VL applications"

The list of error codes that are specific for the Warrants & Certificates platform can be found in Appendix 1 of this document.

(7) Ask Quote Return Code

Purpose

This parameter indicates the status of the Quote on the Ask side. If the Quote has been accepted this value will be empty. If the Quote has been rejected an error code will be returned in this field.

A list of error codes can be found in the document "SLE (order entry): Specifications for SLE access to the NSC-VE, NSC-VW and NSC-VL applications"

The list of error codes that are specific for the Warrants & Certificates platform can be found in Appendix 1 of this document.

3.4 ORDER OUTCOME (CODE = 0172)

ORDER OUTCOME (0172)	type	length
MMTP HEADER		
Subscriber's Internal Reference (1)	X	16
Function Code (2)	N	4
Date of the Order (3) YYYYMMDD	N	8
Sequential Order Number (4)	N	6
Updated Order Status (5)	X	1
Security Code (6)	X	12
Total Quantity (7)	N	9
Side of the Order (8)	X	1
Price Entered (9) <i>Format indicator = variable or blank</i> <i>Price</i>	Px X N	10 1 9
Member Code (10)	X	8
Filler (11)	X	6
Response Time (12) HHMMSS	N	6
Type of Price Entered (13)	X	1
Quantity Executed upon Introduction (14)	N	9
Function Code of Originating Message (15)	N	4
Date of the Initial Order (16)	N	8
Sequential Order Number (of the Initial Order) (17)	N	6
Validity Type of the Order (18)	X	1
Validity Date of the Order (19)	N	8
Filler (20)	X	1
Minimum Quantity (21)	N	9

Disclosed Quantity (22)	N	9
Order Type (23)	X	1
Confirmation Indicator (24)	B	1
Remaining Quantity from Initial Order (25)	N	9
Stop Order Activation Price (26)	Px	10
<i>Format indicator = variable</i>	X	1
<i>Price</i>	N	9
Filler (27)	N	6
Filler (27bis)	X	8
Allocated Member Code (28)	X	8
Order Account Type (29)	X	1
Client Account Number (30)	X	12
Trade Order Number (31)	X	8
Filler (32)	X	1
Filler (32 bis)	N	1
Filler (32ter)	X	3
Originating Order Message Entry Date (33)	N	14
Memo (34)	X	18
Posting Action (35)	X	1
Filler (36)	X	1
Clearing of Operation Mode (37)	X	1
Filler	X	20
LENGTH (excluding header)		267

The NSC Trading Engine sends an Order Outcome message to the LP only in one of the following cases:

- In case of a partial execution of an outstanding Quote that originates from a Bulk Quote message.
- In case of a full execution of an outstanding Quote that originates from a Bulk Quote message.

In case the Quote originates from a Bulk Quote message, the Order Outcome message will be followed directly by the Execution Notice message 0105. All the existing values in the execution message 0105 will be identical in the ORDER OUTCOME message.

- The Order Outcome message will also continue to be used in case the LP uses the Single Quote Entry message 0001.

(1) Subscriber's Internal Reference

Purpose

This parameter contains the internal reference that the SLE entered in the message to which this ORDER OUTCOME message is responding.

(2) Function Code

Purpose

Identifies the function of the message (acknowledgement of a message).

Description

Has a value of 0172.

(3) Date of the Order

Purpose

Identifies the date of the quote on which the ORDER OUTCOME message was sent.

(4) Sequential Order Number

Purpose

This number, assigned by NSC VW identifies the entered quote in NSC VW.

The number is assigned sequentially and is unique per day and security.

(5) Updated Order Status

Purpose

This parameter indicates the status of the Quote to the SLE. Contrary to the NSC VE system and the ORDER OUTCOME message that is sent in reply to a Single Quote message 0001 on NSC VW, this field does not make a distinction between a partial or full execution of the outstanding Quote.

Description

Case 1: An ORDER OUTCOME message is sent immediately in case the outstanding Quote was partially executed and the remaining quantity remains in the book.

X ==> Order was partially executed

Case 2: An ORDER OUTCOME message is sent immediately in case the outstanding Quote was fully executed and no quantity remains in the book.

X ==> Order was fully executed

(6) Security Code

Purpose

This parameter specifies the code of the security in the SLE message to which this ORDER OUTCOME message is responding.

The security code used on NSC VW is the ISIN code.

(7) Total Quantity

Purpose

In the case the ORDER OUTCOME originates from a Bulk Quote message, this parameter corresponds to the number of shares traded in the transaction, ie the number of shares of the order that found a counterpart in this transaction.

(8) Side of the Order

Case 1: An ORDER OUTCOME message is sent in response to an order entry:

This parameter specifies the side of the order that the ORDER OUTCOME message is acknowledging.

This parameter can have one of the following values:

- A ==> Buy
- V ==> Sell.

(9) Price Entered

Purpose

If the ORDER OUTCOME originates from a Bulk Quote message, this parameter indicates the price of this transaction.

(10) Member Code

Purpose

Identifies the member firm receiving the message.

Description

This parameter indicates the code of the member firm that sent the Bulk Quote message.

(12) Response Time

This parameter indicates the official time that NSC VW processed the execution of the Bulk Quote.

(13) Type of Price Entered

Purpose

Identifies the nature of the price in the quote to which the ORDER OUTCOME message is responding. This field will have the same value as the originating Bulk Quote message.

(14) Quantity Executed upon Introduction

Not available.

(15) Function Code of Originating Message

This parameter indicates the function code of the SLE message to which this ORDER OUTCOME message is responding.

(16) Date of the Initial Order

Not available.

(17) Sequential Order Number (of the Initial Order)

Not available.

(18) Validity Type of the Order

This parameter indicates the validity type of the originating Bulk Quote message.

(19) Validity Date of the Order

Not available.

(21) Minimum Quantity

Not available.

(22) Disclosed Quantity

Not available.

(23) Order Type

This field will take the value of the initial Bulk Quote message.

(24) Confirmation Indicator

Not available.

(25) Remaining Quantity from Initial Order

Not available. This field will always take a value of zero, even if there is a remaining quantity in the outstanding Quote.

(26) Stop Order Activation Price

Not available.

(28) Allocated Member code

Identifies the code of the member receiving the clearing allocation. This field takes the value of the initial Bulk Quote message.

(29) Account Type of the Order

This field takes the value of the initial Bulk Quote message and the value is always 6.

(30) Client Account Number

Identifies the number of the client's account.

This field takes the value in the initial Bulk Quote message.

(31) Trader Order Number

Number assigned by the trader.

This field takes the value in the initial Bulk Quote message.

(33) Originating Order Message Entry Date

Date and time at which the Quote was entered on the trader's workstation.

This field takes the value in the initial Bulk Quote message.

(34) Memo

Free text entry field.

This field takes the value in the initial Bulk Quote message.

(35) Posting Action

This field takes the value in the initial Bulk Quote message.

Can have one of the following values:

O=> Opening

C=> Closing

3.5 EXECUTION NOTICE (CODE = 0105)

EXECUTION NOTICE (0105)	type	length
MMTP HEADER		
Subscriber's Internal Reference (1)	X	16
Function Code (2)	N	4
Date of the Order (3) YYYYMMDD	N	8
Sequential Order Number (4)	N	6
Security Code (5)	X	12
Security Group Code (5 bis)	X	2
Side of the Order (6)	X	1
Amount Traded in This Transaction (7)	N	9
Transaction Price (8)	Px	10
<i>Format indicator = variable or blank</i>	X	1
<i>Price</i>	N	9
Remaining Shares Indicator (9)	N	1
Remaining Quantity (10)	N	9
Counterpart Broker Identification (11)	X	8
Filler (12)	X	1
Order Type (13)	X	1
Filler (14)	X	6
Response Date (15)	N	8
Response Time (16) HHMMSS	N	6
Trade Number (17)	N	7
System Date of the Trade (18)	N	8
Type of Price Entered (19)	X	1
Validity Type of the Order (20)	X	1
Filler (21)	X	8
Security Type (22)	X	1
Filler (23)	X	8

Allocated Member Code (24)	X	8
Order Account Type (25)	X	1
Client Account Number (26)	X	12
Trade Order Number (27)	X	8
Filler (28)	X	1
Filler (28 bis)	N	1
Filler (28ter)	X	3
Originating Order message Entry Date (29)	N	14
Memo (30)	X	18
Posting Action (31)	X	1
Filler (32)	X	1
Clearing of Operation Mode (33)	X	1
Filler (34)	X	91
LENGTH (excluding header)		302

An EXECUTION NOTICE message notifies the appropriate SLEs that a Quote or part of a Quote has found a match (counterpart). The message contains all the necessary information related to the transaction that occurred.

(1) Subscriber's Internal Reference

This parameter contains the internal reference that the SLE entered in the message to which this EXECUTION NOTICE message is responding.

(2) Function Code

Identifies the function of the message, which here is the execution of a transaction. The value of the function code is 0105.

(3) Date of the Order

This parameter indicates the date that the order on which this transaction is based was entered into the system.

The format is: YYYYMMDD

where YYYY = Year, MM = Month, DD = Day

(4) Sequential Order Number

This parameter identifies the order for which a transaction has been made.

This parameter indicates to the SLE the sequential order number of the executed order.

(5) Security Code

This parameter specifies the code of the security involved in this transaction.

(5bis) Security Group Code

This parameter specifies the group code to which the security belongs.

(6) Side of the Order

This parameter indicates the side of the order taking part in the transaction.

This parameter can have one of the following values:

- A ==> Buy

- V ==> Sell.

(7) Amount Traded in This Transaction

This parameter indicates the number of shares traded in the transaction, ie the number of shares of the order that found a counterpart in this transaction.

(8) Transaction Price

This parameter indicates the price of this transaction.

(9) Remaining Shares Indicator

Not available. This field will always take the value "0", even if there is a remaining quantity in the outstanding Quote.

(10) Remaining Quantity

Not available. This field will always take the value "0", even if there is a remaining quantity in the outstanding Quote.

(11) Counterpart Broker identification

Not available on NSC VW.

(13) Order Type

This field takes the value in the initial Bulk Quote message.

(15) Response Date

This parameter indicates the official date that NSC VW generated the EXECUTION NOTICE message.

(16) Response Time

Format: HHMMSS

This parameter indicates the official time that NSC VW generated the EXECUTION NOTICE message.

(17) Trade Number

This parameter indicates the number of the Trade.

(18) System Date of the Trade

This parameter indicates the real date of the Trade.

(19) Type of Price Entered

Identifies the nature of the price of the Quote. This field takes the value of the initial Bulk Quote message.

(20) Validity type of the order

Identifies the validity type of the Quote.

(22) Security's type

Identifies the type of the security of the Quote.

The possible values are:

A: Stock

O: Bond

D: Other

T: Tracker

W: Warrant

(24) Allocated Member code

Identifies the code of the subscriber receiving the clearing allocation.

This field takes the value in the initial Bulk Quote message.

(25) Account type of Order

This field takes the value in the initial Bulk Quote message.

(26) Client Account Number

Identifies the number of the client's workstation.

This field takes the value in the initial Bulk Quote message.

(27) Trader Order Number

Number assigned by the trader.

This field takes the value in the initial Bulk Quote message.

(29) Originating Order Message Entry Date

Date and time at which the order was entered on the trader's workstation.

This field takes the value in the initial Bulk Quote message.

(30) Memo

Free text entry field, can serve to transmit additional information for logging purposes.

This field takes the value in the initial Bulk Quote message.

(31) Posting Action

This field takes the value in the initial Bulk Quote message.

Can have one of the following values:

- O ==> Opening
- C ==> Closing

(33) Clearing of Operation Mode

Indicates whether the operation should be performed automatically by C21 upon receipt of the trade or whether it requires prior member validation.

Can have one of the following values:

- 0 ==> Manuel Mode
- 1 ==> Automation extraction
- 2 ==> Automation allocation

This field takes the value in the initial Bulk Quote message.

3.6. ASK FOR QUOTE (CODE = 0502)

ASK FOR QUOTE (0502)	type	length
MMTP HEADER		
Subscriber's Internal Reference (1)	X	16
Function Code (2)	N	4
Member Code (3)	X	8
Security Code (4)	X	12
Action Code (5)	X	1
Filler	X	14
LENGTH (excluding header)		55

The NSC Trading Engine sends an Ask For Quote message to the LP in one of the following cases:

Case 1:

The LP is not present in a specified instrument 15 minutes before the group opening.

Case 2:

The LP is not present in a specified instrument 2 seconds before the group or the instrument opening.

Case 3:

The LP or Cash Market Operations cancels a quote so that there is no longer any quote present in the specified instrument.

Case 4:

A quote is completely matched so that there is no longer any quote present in the specified instrument.

(1) Subscriber's Internal Reference

This field will be blank for this type of message.

(2) Function Code

Identifies the function of the message, which is here Ask For Quote. The value of the function code is 0502.

(3) Member Code***Purpose***

Identifies the member firm receiving the message.

Description

This parameter indicates the code of the member firm.

(4) Security Code***Purpose***

This parameter specifies the code of the security in the SLE message to which this message is responding.

The security code used on NSC VE / NSC VW is the ISIN code.

(5) Action code***Purpose***

The action code indicates the type of event that caused the AFQ for the instrument.

Description

Possible values are:

Space -> Not provided

A ==> Quote cancelled by the LP

C ==> Quote cancelled by the Market Control

M ==> No quote provided 15 minutes before the group Opening

R ==> No quote recall

S ==> No quote provided 2 seconds before the Opening (Group or Instrument)

X ==> Quote completely matched

3.7. REQUEST FOR EXECUTION (CODE = 0503)

REQUEST FOR EXECUTION (0503)	type	length
MMTP HEADER		
Subscriber's Internal Reference (1)	X	16
Function Code (2)	N	4
Member Code (3)	X	8
Security Code (4)	X	12
Filler	X	15
LENGTH (excluding header)		55

The NSC Trading Engine sends a Request For Execution message to an LP to allow him to confirm or change the quotes in the specified instrument.

(1) Subscriber's Internal Reference

This field will be blank for this type of message.

(2) Function Code

Identifies the function of the message, which is here Request For Execution. The value of the function code is 0503.

(3) Member Code

Purpose

Identifies the member firm receiving the message.

Description

This parameter indicates the code of the member firm.

(4) Security Code

Purpose

This parameter specifies the code of the security in the SLE message to which this message is responding.

The security code used on NSC VW is the ISIN code.

3.8. START ONE SIDE ONLY PERIOD (CODE = 0504)

START ONE SIDE ONLY PERIOD (0504)	type	length
MMTP HEADER		
Subscriber's Internal Reference (1)	X	16
Function Code (2)	N	4
Member Code (3)	X	8
Security Code (4)	X	12
Side of Quote (5)	X	1
Filler	X	14
LENGTH (excluding header)		55

A Start One Side Only Period message can be sent by the Liquidity Provider per instrument to indicate the start of a period in which the LP will only send buy or sell quotes for a specific instrument.

If the LP sends the One Side Only Period message there should not be any outstanding quotes in the orderbook. If there are any outstanding quotes these should be deleted by the LP to prevent the One Side Only Period message being rejected by NSC VW.

To end the One Side Only period, the Liquidity Provider sends a quote on the opposite side of the orderbook.

(1) Subscriber's Internal Reference

This field will be blank for this type of message.

(2) Function Code

Identifies the function of the message, which is here Start For One Side Only Period. The value of the function code is 0504.

Validity Checks Performed by NSC VW	Associated Error Code
Must be numeric	9016
Must be recognised by NSC VW	1001
The function code must be authorised for member firms (a member firm cannot perform a function reserved for Euronext Cash Market Operations)	1002

(3) Member Code

Purpose

Identifies the member firm receiving the message.

Description

This parameter indicates the code of the member firm.

Validity Checks Performed by NSC VW	Associated Error Code
Must be alphanumeric	1028
The ID must be recognised by NSC VW	2033
The ID must belong to the member firm that sent the message (a member firm cannot place a quote on behalf of another member firm)	2035

(4) Security Code

Purpose

This parameter specifies the code of the security in the SLE message to which this message is responding.

The security code used on NSC VW is the ISIN code.

Validity Checks Performed by NSC VW	Associated Error Code
Must be alphanumeric or numeric	9019
Must be a valid security	1000
If the status of the instrument is already "One Side Only Period" the 0504 message will be rejected	3433

(5) Side of the Quote

Purpose

The period side indicator specifies the side of the One Side Only period.

Description

The possible values are:

A -> Bid only period

V -> Offer only period.

Validity Checks Performed by NSC VW	Associated Error Code
Must be alphanumeric	9020
Must have one of the following values: -A ==> Buy -V ==> Sell	9020

3.9. START ONE SIDE ONLY PERIOD CONFIRMATION (CODE = 0505)

START ONE SIDE ONLY PERIOD CONFIRMATION (0505)	type	length
MMTP HEADER		
Subscriber's Internal Reference (1)	X	16
Function Code (2)	N	4
BDM Date and Time (3) <i>Date of market session (YYYYMMDD)</i> <i>Official BDM time (HHMMSS)</i>	X X	8 6
Member Code (4)	X	8
Security Code (5)	X	12
Side of the Quote (6)	X	1
Filler	X	15
LENGTH (excluding header)		70

A Start One Side Only Period Confirmation message is sent by NSC VW to the appropriate SLE to confirm receipt of the Start One Side Only Period message (0504).

(1) Subscriber's Internal Reference

This parameter contains the subscriber's internal reference that was specified by the SLE in the Start One Side Only message (0504).

(2) Function Code

Identifies the function of the message, which is here Start For One Side Only Period Confirmation. The value of the function code is 0505.

(3) BDM Date and Time

Date of market session

This parameter indicates the date of the market session.

Format of the field: YYYYMMDD

Official BDM time

This parameter indicates the official time when the instrument started or stopped a Start One Side Only Period.

Format of the field: HHMMSS.

(4) Member Code

Purpose

Identifies the member firm receiving the message.

Description

This parameter indicates the code of the member firm.

(5) Security Code

Purpose

This parameter specifies the code of the security in the SLE message to which this message is responding.

The security code used on NSC VW is the ISIN code.

(6) Side of the Quote

Purpose

The period side indicator specifies the side of the One Side Only period.

The possible values are:

- A ==> Bid only period
- V ==> Offer only period.

3.10. WARRANT PHASE CHANGE NOTICE (CODE = 0506)

WARRANT PHASE CHANGE NOTICE (0506)	type	length
MMTP HEADER		
Subscriber's Internal Reference (1)	X	16
Function Code (2)	N	4
BDM Date and Time (3)		
<i>Date of market session (YYYYMMDD)</i>	N	8
<i>Official BDM time (HHMMSS)</i>	N	6
Security Code (4)	X	12
Security State (5)	X	2
Action Affecting the Security State (6)	X	1
Filler (7)	X	6
System Date and Time (8)		
- <i>Session date (YYYYMMDD)</i>	N	8
- <i>BDM entry time (HHMMSS)</i>	N	6
Side (9)	X	1
Filler	X	15
LENGTH (excluding header)		85

This message can be compared to the 0106 message. The 0506 message is sent by NSC VW each time the instruments start or stop a One Side Only Period. These messages are sent asynchronously with respect to ACKNOWLEDGEMENT and RESPONSE messages.

(1) Subscriber's Internal Reference

This field will be blank for this type of message.

(2) Function Code

This parameter identifies the function of the message (information about a security). The value of the function code is 0506.

(3) BDM Date and Time

Date of market session

This parameter indicates the date of the market session.

Official BDM time

This parameter indicates the official time when the security changed states in NSC VW.

(4) Security Code

This parameter indicates the code of the security described in the message.

(5) Security State

This parameter indicates the new state of the security. The security state is defined by a 2-character code, with each character providing different information. All combinations of characters are possible.

The first character has one of the following values:

I ==> Forbidden
A ==> Authorised

The second character has one of the following values:

" " ==> Open
S ==> Halted
R ==> Reserved
G ==> Frozen

(6) Action Affecting the Security State

This parameter indicates the type of action that caused the change (or non-change) of the security state.

This parameter can have one of the following values:

Y ==> Beginning of a One Side Only period
Z ==> End of a One Side Only period

(8) System Date and Time

This parameter indicates the system date and the system time when the security has changed state. The system date can be different from last BDM date field in the case of non stop trading (24/24).

(9) Side of the Quote

The period side indicator specifies the side of the One Side Only period.

The possible values are:

A -> Bid only period
V -> Offer only period

3.11 GLOBAL ORDERS ELIMINATION (CODE = 0139)

GLOBAL ORDERS ELIMINATION	type	length
MMTP HEADER		
Subscriber's Internal Reference (1)	X	16
Function Code (2)	N	4
Trade Date (3)	X	8
	X	6
Trade Time (4)	X	8
Security Code (5)	X	12
ID of Member Code (5)	X	1
Group Code (6)	X	15
Instrument Code (7)	X	12
Side of the Order (8)	X	1
Type of Clearing Account (9)	X	1
Code of the Technical Origin of the Order (10)	X	1
Interactor ID (HUB subscriber ID) (11)	X	11
Order Type (12)	X	1
Filler	X	28
LENGTH (excluding header)		99

NSC VW sends this message if the LP has subscribed to the optional service "Quote cancellation in the event of abnormal disconnection". The reception of the message will confirm that all outstanding quotes for the specific instrument have been purged by the system.

This message is sent per instrument and won't be sent if the instrument has a frozen or a forbidden status at the time of the disconnection of the SLE.

(1) Subscriber's internal reference

This parameter provides the internal reference that the SLE entered in the order entry or order modification message that is related to this order execution.

(2) Function Code

Identifies the function of the message, which here is the execution of a transaction. The value of the function code is 0139.

(3) Trade Date

This parameter indicates the official date that NSC VE / NSC VW processed the order entry, order modification, or order cancellation message that caused this Trade Retransmission message to be generated.

(4) Trade Time

Format: HHMMSS

This parameter indicates the official time that NSC VE / NSC VW processed the order entry, order modification or order cancellation message that caused this Trade Retransmission message to be generated.

(5) ID of the member code

Identifies the member firm that sent the global cancellation message and that is the recipient of this confirmation message.

(6) and (7) group and instrument codes

Identifies the security or security group for which the confirmation of global cancellation is performed.

(8) (9) (10) (12) Not available

For future use.

(11) Interactor ID (HUB subscriber ID)

Indicates the interactor ID (HUB subscriber ID) for which the global cancellation was performed.

3.12 CONFIRMATION OF GLOBAL CANCELLATION OF ORDERS (0175)

CONFIRMATION OF GLOBAL CANCELLATION OF ORDERS	type	length
MMTP HEADER		
Subscriber's Internal Reference (1)	X	16
Function Code (2)	N	4
BDM Date and Time (3) <i>Date of the session</i> <i>Official BDM Time</i>		8 6
Member Code (4)		8
Security Group Code (5)		2
Security Code (5*)		12
Side of the Order (6)		1
Order Account Type (7)		1
Order type (12)		1
Interactor ID (HUB subscriber ID) (9)		11
LENGTH (excluding header)		70

NSC VW sends this message if the LP has subscribed to the optional service "Quote cancellation in the event of abnormal disconnection". This message 0175 will indicate that all 0139 messages have been sent and thus all outstanding quotes for the specific SLE have been sent.

(1) Subscriber's Internal Reference

This parameter enables a link to be made between a message sent by the SLE and the corresponding messages (responses) received from NSC VE / NSC VW.

(2) Function Code

Identifies the function of the message, which here is the confirmation of the global cancellation of orders. The value of the function code is 0175.

(3) BDM Date and Time

Not intended for use by the SLE.

(4) Member Code

Identifies the member firm that sent the global cancellation message and that is the recipient of this confirmation message.

(5) and (5*): A value is provided for only 1 of the 2 parameters

Identifies the security or security group for which the confirmation of global cancellation is being made.

(6) Side of the Order (if applicable)

Indicates the side of the order that was used as a selection criterion in the global cancellation request. Can be " ", 1, 2, 6 or 7.

(8) Order Type (if applicable)

The values for this parameter are currently being defined.

(9) Interactor ID (HUB subscriber ID) (if applicable)

Indicates the interactor ID (HUB subscriber ID) that was used as a selection criterion in the global cancellation request.

If a value is not provided, all appropriate orders (from all interactors) of the member firm that sent the global cancellation request were cancelled.

APPENDIX 1. NSC VW ERROR MESSAGES

The table below lists the values that can appear in the Error Code field and the associated Error Description field that are specific for the new Warrants & Certificates market model.

3411	Order Quote already in the book
3412	Quote order entry mode is not allowed
3413	Cross quote forbidden
3414	Incoherent number of quotes
3433	Quotes still in the order book