Liquidity Flag Enhancement Protocol specification changes

Liquidity Flag Enhancement

Based on member request Nasdaq Nordic has decided to enhance the current messaging for both FIX and OUCH when it comes to the Liquidity Flags representation. Liquidity Flags are typically used by the Member to follow up on Billing, as baseline for Best Execution Calculation and Transaction Reporting. Currently the Liquidity Flag includes a number of values to represent how the trade was executed. E.g. if the trade was a passive execution (Added Liquidity) or an aggressive execution (Removed Liquidity).

The current Liquidity Flag representation has not been complete, and there are trading scenarios that have not been covered in an optimal way. E.g. Internalized trades have never been separated into Added/Removed Liquidity. These shortcomings have caused concerns among Members.

The New Liquidity Flags Representation is based on a reduction on the current Liquidity values, combined with new fields and values in order to cover all trading scenarios at Nasdaq Nordic.

Nasdaq

Enhancement Overview – FIX

The following is the basis of the enhancement proposal:

- Replace the away market specific liquidity values (0-6) in FIX Tag [9882] – LiquidityFlag by including the applicable MIC code in the LastMkt [30] field for all fills & partial fills. A single liquidity value can thereby be used (7 = Away Venue Trade).
- Remove Oslo Market Member (8).
- Reduce the number of liquidity values by breaking out the aggressiveness (add/remove liquidity) to a new field (the FIX standard LastLiquidityInd [851]).
- Further reduce the number of values by breaking out Internalization, Top-of-Book and Self-Trade values to a new fields (user defined LastExecFlagINT [20104], LastExecFlagTOP [20105] and LastExecFlagSTP [20106]).

Nasdaq

Current Liquidity Flags - FIX

Execution Report Message:

Tag	Field	Reqd	Comments
9882	LiquidityFlag	N	Returned on ExecType [150] = 1 (Partial Fill) and 2 (Fill) messages. For execution algos, returns the child LiquidityFlag [9882]. Valid values: 0 = Unspecified destination 1 = Chi-X 2 = Turquoise 3 = BATS 5 = Oslo market 6 = Liquidnet 8 = Oslo market member A = Nordic added liquidity C = Auction trade E = Trade cancel M = Nordic@Mid trade P = Auction On Demand (AOD) trade Q = Auction On Demand (AOD) trade, internalized R = Nordic removed liquidity S = Self-Trade, added liquidity (no clear, no publish) T = Self-Trade, removed liquidity (no clear, no publish) V = Self-Trade, Nordic@Mid (no clear, no publish) W = Nordic added liquidity, Top-of-Book X = Continuous market trade, internalized Y = Auction trade, internalized Z = Nordic@Mid trade, internalized

Nasdaq

New Liquidity FIX Tag descriptions

LiquidityFlag [9882] – Revised

Enum	Description	Explanation
A	Continuous Market Trade	Lit Continous book. Symbol state: ”T” = Continuous Trading
C	Auction Trade	Lit auction book. Symbol state: ”O” = Opening Auction ”I” = Scheduled Intraday Auction ”L” = Closing Auction ”Q” = Auction Period
M	Nordic@Mid Trade	Trade in Nasdaq Nordic Dark book (DSTO, DCSE, DHEL etc)
P	Auction On Demand	Trade in Nasdaq Nordic AOD book (MSTO, MCSE, MHEL etc)
7	Away Market Trade	Mirrored routed trade
E	Trade Cancel	

LastLiquidityInd [851] – New

Enum	Description
1	Added Liquidity
2	Removed Liquidity
3	Liquidity Routed Out
4	Auction

LastExecFlagINT [20104] – New

Enum	Description
1	Internalized

LastExecFlagTOP [20105] – New

Enum	Description
1	Top-of-Book

LastExecFlagSTP [20106] – New

Enum	Description
1	Self-Trade (no clear, no publish)

Nasdaq

Proposed new implementation (FIX)

Proposed New Indicators						
Liquidity Flag Description	Revised Liquidity Code [9882]	Exec Type [150]	Last Mkt [30]	Applicable Last Exec Flag: LastExecINT [20104], LastExecTOP [20105], LastExecSTP [20106]	Last Liquidity Ind [851]	Comment
Away venue execution	7	1 = Partial Fill 2 = Fill	CHIX; TRQX; BATE; XOSL; LIQU, etc	NULL;	3 = Liquidity Routed Out	
Continuous	A	- " -	XSTO, XHEL, XCSE, etc	[20104] NULL; 1 [20105] NULL; 1 [20106] NULL; 1	1 = Added Liquidity; 2 = Removed Liquidity	"STP Transfer" trades are not printed or cleared
Auction	C	- " -	XSTO, XHEL, XCSE, etc	[20104] NULL; 1 [20105] NULL [20106] NULL	4 = Auction	STP and TOP not active in auctions.
Nordic@MID	M	- " -	XSTO, XHEL, XCSE, etc	[20104] NULL; 1 [20105] NULL [20106] NULL; 1	1 = Added Liquidity; 2 = Removed Liquidity	"STP Transfer" trades are not printed or cleared. TOP not active in the book.
Auction On Demand	P	- " -	MSTO, MHEL, MCSE, etc	[20104] NULL; 1 [20105] NULL [20106] NULL	4 = Auction	STP and TOP not active in auctions.
Trade Cancel	E	- " - + Exec Trans Type [20] = 1 = Cancel	NULL	NULL	NULL	

Nasdaq

Enhancement Overview – OUCH

The OUCH protocol will be updated to match the new implementation for FIX described above but keep all information within the existing Liquidity Flag field (no new fields) by:

- Change the current Liquidity Flag field from an alpha-numeric character to a bit map field. This allows for multiple values to be represented in one field
- Reduce the number of liquidity values by breaking out the type of trade to the new bit map field LiquidityFlag (Bit 1-3), the aggressiveness (add/remove liquidity) to LiquidityIndicator (bit 4-5).
- Further reduce the number of values by breaking out Internalization, Top-of-Book and Self-Trade values to the new bit fields LiquidityInternalized (bit 6), LiquidityTopOfBook (bit 7) and LiquiditySelfTrade (bit 8).
- Liquidity Flag representation on FIX DROP for OUCH according to the FIX proposal

Nasdaq

Current Liquidity Flags - OUCH

Executed Order Message (Alpha-Numeric):

Liquidity Flag	31	1	Alpha	"A" - Added Liquidity "R" - Removed Liquidity "C" - Executed in one of the auctions "X" - Internalized during the continuous market "Y" - Internalized during one of the auctions "W" - Added Liquidity, Top-of-Book "S" - Self-Trade, added liquidity (no clear, no publish) "T" - Self-Trade, removed liquidity (no clear, no publish) "P" - Auction On Demand (AOD) trade "Q" - Auction On Demand (AOD) trade, internalized

Nasdaq

New Liquidity Flags - OUCH

Executed Order Message (Liquidity Flag field – Bit map):

LiquidityFlag [bit 1-3]

Bit value	Description	Explanation
000	Continuous Market Trade	Lit Continous book. Symbol state: "T"= Continuous Trading
001	Auction Trade	Lit auction book. Symbol state: "O" = Opening Auction, "I" = Scheduled Intraday Auction, "L" = Closing Auction, "Q" = Auction Period
010	Reserved	
011	Auction On Demand	Trade in Nasdaq Nordic AOD book (MSTO, MCSE, MHEL etc)
100	Reserved	
101	Trade Cancel	
110	Reserved	
111	Reserved	

LiquidityIndicator [bit 4-5] *

Bit value	Description
00	Added Liquidity
01	Removed Liquidity
10	Reserved
11	Auction

LiquidityInternalized [bit 6] *

Bit value	Description
0	Not Internalized
1	Internalized

LiquidityTopOfBook [bit 7] *

Bit value	Description
0	Not Top-of-Book
1	Top-of-Book

LiquiditySelfTrade [bit 8] *

Bit value	Description
0	Non Self-Trade
1	Self-Trade (no clear, no publish)

* Bit 4-8 should be ignored with Trade Cancel (LiquidityFlag, bit 1-3 = 101)

Nasdaq

Liquidity Flag implementation timeline

The Liquidity Flag changes will be mandatory for Members and ISVs using the Liquidity Flags in the FIX "Execution Report" and OUCH "Executed Order Message" available in FIX and OUCH protocol specifications, and their respective FID DROP protocols.

Note! When the change is implemented, current values 0-6, 8, Q, R, S, T, V, W, X, Y and Z in the Liquidity Flag field will not be disseminated).

Nasdaq