
Release Notes

10 September 2019

CurveGlobal Markets

SOLA Trading System - Version 14

Release Notes

10th September 2019

Version 1.0



London

Stock Exchange Group

1.0 Document history

This document has been through the following iterations:

Version	Date	Section	Description
1.0	10 th September 2019		First issue of this document

2.0 Purpose

This document provides CurveGlobal Markets' customers with a high-level functional description of the changes introduced in Version 14 of the SOLA[®] Trading System, as well as guidelines for the technical impacts of these business enhancements. Full details of the changes to the SOLA[®] protocols are described in the specification documents reported in paragraph 4 (SAIL, FIX 4.2 and HSVF technical specifications). A summary of these changes is reported in paragraphs 7, 8 and 9 of these Release Notes. In case of any discrepancy between this document and the SAIL, FIX and HSVF technical specifications, technical specifications shall prevail.

Confirmation of release in CDS environment, Customer Dress Rehearsal and go-live dates will be provided in due course.

3.0 Readership

This document is particularly relevant to technology teams within CurveGlobal Markets' member firms, as it describes the changes to the technical interfaces in use to connect to the CurveGlobal Markets market.

4.0 Document series

This document is part of a series of documents which provide technical specifications for the SOLA[®] Trading System. This series of documents includes:

- CurveGlobal Markets - Guide to the Trading System
- SOLA Connectivity Guide
- SAIL Protocol: SAIL Specification
- FIX Protocol: FIX 4.2 Specification
- HSVF Market Data
- CurveGlobal Markets - Guide to PTV functionality

The latest version of these documents can be found in the [CurveGlobal Markets Document Library](#).

5.0 Enquiries

Please contact Client Technology Services if you have any functional questions about the services outlined in this document. Client Technology Services can be contacted at:

Service-Desk – Incident Management

- Toll Free: 0080026772000
- From Mobile: +390245411399
- Email: service-desk@borsaitaliana.it

Market-Access – Certification Testing & User / Connectivity Enablement

- Telephone: +39 0272426 668
- Email: market-access@borsaitaliana.it

Technical Account Management – Customer Onboarding / Technical & Functional Advice

- Telephone: +44 (0)20 7797 3939
- Email: londontam@lseg.com

6.0 New functionalities supported in Version 14 of the SOLA[®] Trading System

Version 14 of the SOLA[®] Trading System will support the following main functional enhancements:

- introduction of a UDP multicast version of the native market data protocol (“HSVF multicast”) in addition to the existing TCP solution;
- introduction of “execution source code” in native and FIX trading protocols (tag 1031);
- dissemination of trading venue transaction identification code (TVTIC) and “aggressive/passive” indicator in SAIL and FIX trading protocols.

A description of the key features of these enhancements, reason for change and relevant protocol changes are described in the following paragraphs.

6.1 HSVF multicast

Currently, the HSVF service is provided via TCP protocol only. Version 14 of the SOLA[®] Trading System will introduce a new HSVF service, technically disseminated using a multicast (UDP) protocol in order to improve the performance of the market data feed.

Market participants are reminded that:

- the HSVF service offered via TCP protocol will NOT be decommissioned. Support for HSVF via UDP is not mandatory and customers not interested in the UDP service are not required to implement any change to their existing setup;
- the two versions (UDP and TCP) of the HSVF service will disseminate the same data content (all messages / fields);
- there will be no impact on existing GTP services in place for the IDEM market (GTP and GTP Lite services).

The new service will have two different UDP feeds (A and B feed) in the Primary Data Centre (PDC) instance, for resiliency purposes. The “replay and recovery” service (implemented using the existing HSVF TCP feed) will give customers the possibility to retrieve any missed message.

In case of disaster recovery into the Secondary Data Center, the HSVF service will be available via TCP protocol only.

For further information, please contact Client Technology Services.

6.2 “Execution source code” in trading protocols

Version 14 of the SOLA[®] Trading System will introduce support to the Futures Industry Association’s (“FIA”) simplified “Execution Source Code” schema. The Execution Source Code (also known as the “Rate Identifier”) is intended to classify the method of execution used for ETD, so that executing and clearing brokers can readily identify the appropriate brokerage rate to be applied to an executed transaction. As reported by the FIA in its Guidelines,

“ensuring that brokerage is correctly calculated, reconciled, accrued and paid is a major challenge facing the exchange traded derivatives industry. Industry adoption of this initiative has previously faltered due to uncertainty regarding how the set of values should be used, leading to a variety of bespoke solutions being implemented by firms, and a focus on post-trade reconciliation. Population of the Execution Source Code at the point of order origination has been identified as a key initiative in meeting this challenge”.

The Execution Source Code is a 1-character field, with the allowed values reported in the table below. It will be added to order entry, order modification, bulk quote data and related execution notice / execution report messages, in both SAIL native and FIX protocols. In the FIX protocol, the Execution Source Code will be identified by Tag 1031.

Population of this field will not be mandatory. In case this field is left blank at order entry, it will be defaulted to “D” (desk). Orders with an invalid Execution Source Code will be rejected.

For full guidelines to populate this new field, please refer to FIA’s Guidelines for the simplified FIA Execution Source Code Schema:

- Guidelines for the simplified FIA Execution Source Code Schema ([link](#));
- Guidelines for the simplified FIA Execution Source Code Schema – Summary Version ([link](#)).

According to FIA’s simplified Execution Source Code schema, the following values will be supported:

Value	Description	High / Low touch	Mandatory
W (default value)	Desk	High	Yes
Y	Electronic	Low	Yes
C	Vendor-provided Platform billed by Executing Broker	Low	Optional for complex model
G	Sponsored Access via Exchange API or FIX provided by Executing Broker	Low	Optional for complex model
H	Premium Algorithmic Trading Provider billed by Executing Broker	Low	Optional for complex model
D	Other, including Other-provided Screen	Low	Optional, used with discretion

6.3 Other interface changes

The following improvements will also be introduced in Version 14 of the SOLA[®] Trading System:

- a) dissemination of “aggressive/passive indicator” in SAIL execution notices (field “liquidity status”) and FIX execution reports (field “aggressor indicator”): already available in SAIL Drop Copy execution report messages (NT message), this field will indicate whether a trade derives from the execution of a passive or aggressive order. It can be used by market participants to analyse their own execution flows, as well as in the context of their regulatory reporting obligations (as an example, please refer to “market quality reports” from CDR 2017/576¹ and, more specifically, to article 3 comma (1)(e)).

- b) dissemination of a unique “trading venue transaction identification code” (TVTIC) in trading protocols: a new transaction identification code, that is unique for the whole trading day and across all instruments traded on the CurveGlobal Markets, will be disseminated in native execution reports and FIX execution notices. The dissemination of this new trade identifier in trading protocols aims to facilitate market participants in complying with their MiFIR / MiFID 2 transaction reporting obligations, as it the TVTIC will be now provided directly by the trading system in a format that is immediately compatible with ESMA’s transaction reporting system². Other existing trade identifiers will remain unchanged. The TVTIC is currently made available by CurveGlobal Markets only via the “Reconciliation Report” service for CurveGlobal Markets. Market participants must be aware that the rules for the generation of the TVTIC will change, as described below.

Current procedure: the TVTIC is created as follows:

- [Instrument ID + GroupID + Trade Number], converted into numeric format via Base 62->Base10 decoding;

New procedure: with SOLA 14, the TVTIC will be of 16 characters, created by concatenation of the following fields:

- [Instrument ID] (4 chars) + [GroupID converted into numeric format via Base 62->Base10 decoding] (4 chars) + [Trade Number] (8 chars).

- c) ClientReferenceID field made mandatory for billing purposes: starting from Version 14 of the SOLA[®] Trading System the ClientReferenceID field in order and quote messages is made mandatory to allow CurveGlobal Markets to calculate trading and clearing fees in a more accurate and reliable way. Members, or clients of the Members, subscribing to any fee

¹ Commission Delegated Regulation (EU) 2017/576 of 8 June 2016 supplementing Directive 2014/65/EU of the European Parliament and of the Council with regard to regulatory technical standards for the annual publication by investment firms of information on the identity of execution venues and on the quality of execution.

² ESMA requires a TVTIC composed by numeric and capital letters only.

10 September 2019

discount scheme (please refer to the Fee Schedule document published the [CurveGlobal Markets Document Library](#)) will have to properly fill in this field in order to be charged discounted fees. Standard fees will be charged if the field is left empty or populated with an incorrect value.

7.0 Interface changes: SAIL protocol

The following table provides a description of the changes to the native SOLA[®] Access Information Language (SAIL) protocol, that are introduced by the functional enhancements described in these Release Notes.

Field	Messages	Description of the change	Linked to
Liquidity Status	NT (Execution Notice) NL (Leg Execution Notice) NX (Execution Cancellation Notice) NY (Leg Execution Cancellation Notice)	New field (already present in SAIL Drop Copy) to indicate whether a trade derives from the execution of a passive or aggressive order sent by the market participant: <ul style="list-style-type: none"> - "M": Maker (trade from execution of a passive order) - "T": Taker (trade from execution of an aggressive order) - (blank): None 	Other interface changes (par. 6.3 letter a) – Liquidity Status
TVTIC Code	NT (Execution Notice) NL (Leg Execution Notice) NX (Execution Cancellation Notice) NY (Leg Execution Cancellation Notice)	New field indicating the value of the TVTIC. The TVTIC is a unique trade identifier: (i) across all instruments traded on the IDEM market and (ii) for the current trading day.	Other interface changes (par. 6.3 letter b) - TVTIC
Execution source code	OE (Order Entry) + ack (KE) OM (Order Modification) + ack (KM) OX (Cross Entry), for both buyer and seller) BO (Bundle Order) + ack (KB) OB (Order Proposal) + ack (KB) BD (Bulk Quote Data) + ack (KD) NT (Execution Notice) NL (Leg Execution Notice) IV (Order in book) Also reported in order cancellation acks (KZ, NZ) and trade cancellation acks (NX, NY) See also note (1).	New field to indicate how the order has been managed by the execution broker: <ul style="list-style-type: none"> • "W" (default value) = Desk • "Y" = Electronic • "C" = Vendor-provided Platform billed by Executing Broker • "G" = Sponsored Access via Exchange API or FIX provided by Executing Broker • "H" = Premium Algorithmic Trading Provider billed by Executing Broker • "D" = Other, including Other-provided Screen 	"Execution source code" in trading protocols (par. 6.2)

(1) A corresponding 1-char filler field has been added to PN, PU and PR messages.

8.0 Interface changes: FIX 4.2 protocol

The following table provides a description of the changes to the FIX protocol in use by the SOLA[®] Trading System, that are introduced by the functional enhancements described in this Release Notes.

Field	Messages	Description of the change	Linked to
[Tag 1057] Aggressor Indicator	8 (Execution Report)	New field (already present in SAIL Drop Copy) to indicate whether a trade derives from the execution of a passive or aggressive order sent by the market participant: <ul style="list-style-type: none"> - "N": Maker (trade from execution of a passive order) - "Y": Taker (trade from execution of an aggressive order) - (blank): None 	Other interface changes (par. 6.3 letter a) – Liquidity Status
[Tag 1907] Number Regulatory TradeIDs	8 (Execution Report)	New field Indicating the number of regulatory IDs in the repeating group.	Other interface changes (par. 6.3 letter b) - TVTIC
<i>New repeating group with Tags 1903 and 1906</i>			
[Tag 1903] Regulatory TradeID	8 (Execution Report)	New field indicating the value of the TVTIC. The TVTIC is a unique trade identifier: (i) across all instruments traded on the CurveGlobal Markets and (ii) for the current trading day.	Other interface changes (par. 6.3 letter b) - TVTIC
[Tag 1906] Regulatory TradeIDType	8 (Execution Report)	New field specifying the type of trade identifier provided in the field RegulatoryTradeID (tag 1903). It will always be equal to 5 = "Trading Venue Transaction Identification Code (TVTIC)" for CurveGlobal Markets.	Other interface changes (par. 6.3 letter b) – TVTIC

10 September 2019

<i>[Tag 1031]</i> Execution source code	D (New order – Single) AE (Trade Capture Report) + ack (AR) G (Order Cancel/Replace Requests (New Cross Order) 8 (Execution Report)	New field to indicate how the order has been managed by the execution broker: <ul style="list-style-type: none">- “W” (default value) = Desk- “Y” = Electronic- “C” = Vendor-provided Platform billed by Executing Broker- “G” = Sponsored Access via Exchange API or FIX provided by Executing Broker- “H” = Premium Algorithmic Trading Provider billed by Executing Broker- “D” = Other, including Other-provided screen	“Execution source code” in trading protocols (par. 6.2)
--	--	---	---

9.0 Interface changes: HSVF protocol

No changes to the HSVF protocol.