



LSEG

LONDON STOCK EXCHANGE GROUP

GROUP TICKER PLANT

**GTP 008 -
MARKET ATTRIBUTES GUIDE**

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One product, **infinite possibilities.**

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Guide Disclaimer

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For further information, please contact your usual London Stock Exchange Group contact.

1. Documentation

1.1 This Guide

The purpose of this document is to provide an overview of market or service specific differences in the operation or provision of data from the Group Ticker Plant platform.

It will be updated and reissued when appropriate to do so.

1.2 Readership

This document is particularly relevant to technical and business teams within member firms, information vendors and other market participants who are currently developing to or are interested in receiving London Stock Exchange Group data.

1.3 Document Series

This guide, **GTP008 – Market Attributes Guide**, forms part of the documentation library supporting those clients interacting with the Group Ticker Plant. For information, the full series of currently available documentation is outlined below:

- GTP001 – Product Guide;
- GTP002 – Technical Guide;
- GTP003 – Statistics Guide;
- GTP004 – Parameters Guide;
- GTP005 – Testing Services Guide;
- GTP006 – External Sources Guide;
- GTP007 – GTP Lite Guide
- GTP008 – Market Attributes Guide (this document).

Further documentation to support displaying our data will be released in due course.

The full library of Group Ticker Plant documentation can be found at:

<https://www.lseg.com/areas-expertise/technology/group-technology/group-ticker-plant>

1.4 Document History

This document has been subject to the following iterations:

Issue	Date	Description
1.0	10 March 2017	First issue of this document.
2.0	16 June 2017	2.1 – added text regarding order of System Event and Instrument Status messages 2.1 – Corrected mapping of Halt and Suspended states
3.0	15 December 2017	2.1 – Added TradeEcho support for negative prices
4.0	5 April 2017	2.1 – Added _A to indicate Turquoise Lit Auctions™
4.1	26 July 2019	2.1 – Added Turquoise venues for Turquoise Global Holdings Limited (tGHL) and Turquoise Global Holdings Europe (TGHE)
4.2	30 September 2020	2.1 – Added Turquoise NYLON™ Cash Order Book as a Source Venue
4.3	01 December 2020	All sections – Removed content related to Borsa Italiana and associated venues

In subsequent issues of this document, where amendments have been made, these changes will be indicated through the use of **red text** and sidebars (example left).

1.5 Enquiries

For further information on Group Ticker Plant, please contact either your Technical Account Manager or the Client Technology Services (UK):

- Telephone: (+44) 207 797 3939
- Email: lsetam@londonstockexchange.com

Please contact the LSEG market data team for further information regarding data licensing for this service by emailing marketdata@lseg.com

Further information can also be found on our project websites:

<https://www.lseg.com/areas-expertise/technology/group-technology/group-ticker-plant>

2. Overview

The Group Ticker Plant publishes real-time data in a fixed-width standard API, designed to support all markets, and all service lines irrespective of asset-class. The protocol is expected to evolve as additional functionality is introduced, but wherever possible the Group intends to maintain the core format and characteristics of the protocol, irrespective of the market being consumed.

However, in limited cases some service lines and supported markets may differ in their approach to publishing real-time data – this may be due to functionality or in an effort to ensure efficient data publication.

This document is published to support customers intending to use the TRADEcho market data services but will be reissued to support all markets in due course.

2.1 TRADEcho

Table 1: Standard and TradeEcho Behavior

	Standard Behavior	TRADEcho Behavior
System Event / Instrument Status	<p>One System Event message is disseminated per multicast channel to indicate the start and end of day.</p> <p>Instrument status and session transitions are advertised on a per instrument basis via the Instrument Status message.</p>	<p>Session transition is advertised via one System Event message for all instruments allocated to the same multicast channel. Should a specific instrument be subject to individual status change – such as suspension or halt – this will be communicated by the Instrument Status message.</p> <p>The System Event message will also be broadcast at the end of day on TRADEcho. Customers should consider the SI quote order book to be empty following receipt of this message. No explicit Order Book Clear or Delete Order messages will be sent.</p> <p>Customers should note that at go-live the System Event message is not available via the Recovery service. However, Group can confirm that all instruments will follow a standard daily schedule. The Group anticipates making the System Event message recoverable in the Recovery service in due course.</p> <p>Customers should note that Instrument Status messages may be disseminated prior to System Event – Start of Day message.</p>
SI Quoting	<p>All order types modifications, including quotes, are advertised via the Order Modify message.</p>	<p>SI Quote modifications are advertised by an Order Delete message followed by an Add Order message to advertise the changes applied.</p> <p>Customers should also note that SI quotes are advertised as being applicable to the Firm Quote book.</p>
Instrument Directory	<p>An Instrument Directory message is disseminated on a per instrument basis as part of Start of Day. Customers can also request asset-class specific Instrument Directory messages from the Recovery Service for additional static data sets.</p>	<p>The Instrument Directory messages disseminated on the multicast channels are the only Instrument Directory messages available via Recovery.</p>

Order Book Clear/Product Failure	In the unlikely event of a market data gateway failover, customers should expect to receive an Order Book Clear message as part of the failover. Order books will be repopulated as part of the recovery process.	Customers should expect to receive an Order Book Clear message only on the SI Quoting channels as part of a failover scenario. TRADEcho off-book trade market data channels will not disseminate an Order Book Clear message as part of the failover sequence.
Statistics	Full details of the statistics services can be found in GTP003 – Statistics Guide	TRADEcho supports off-book trade reporting and SI Quoting only. Statistics supported on TRADEcho are therefore off-book only..
Negative Prices	GTP standard behavior supports positive and negative prices	TRADEcho now has the ability to send negative prices. It is possible to observe negative prices in MiFID II Trade report messages.

To assist customers with their development, in particular instrument status management, a explanatory table is provided below:

TRADEcho Instrument Status	SI Quoting		GTP Firm Quote Book Status	Accept On Exchange Trade Report	Accept OTC Trade Report	Accept SI Trade Report	GTP Off Book Status
	Cancel	Accept					
Active	No	Yes	Active	Yes	Yes	Yes	Active
Inactive	Yes	No	Inactive	No	No	No	Inactive
Halt	No	Yes	Reg. Halt	Yes	Yes	Yes	Reg. Halt
SI Quote Prohibited	Yes	No	Suspended	Yes	Yes	Yes	Active
Instrument Suspended	No	Yes	Suspended	No	Yes	Yes	Suspended

Customers are reminded that GTP Instrument Identifiers are specific to a venue and are not currently mirrored across multiple venues, irrespective of the instrument's credentials. Instruments that may be considered 'similar' across London Stock Exchange and TRADEcho markets will therefore carry different GTP Instrument Identifiers from go-live.

2.1 Turquoise

	Standard Behaviour	Turquoise Behavior						
Venue Instrument ID	The instrument ID as used by the upstream trading venue is communicated as part of the Instrument Directory	Venue Instrument IDs contain the suffixes as specified in the table below: <table border="1"> <thead> <tr> <th>Suffix</th> <th>Source</th> <th>Venue</th> </tr> </thead> <tbody> <tr> <td> </td> <td> </td> <td> </td> </tr> </tbody> </table>	Suffix	Source	Venue			
Suffix	Source	Venue						

	messages.	<table border="0"> <tr> <td data-bbox="804 208 938 338">_I</td> <td data-bbox="938 208 1235 338">Turquoise Lit™ Order Book (TGHL)</td> </tr> <tr> <td data-bbox="804 338 938 468">_M</td> <td data-bbox="938 338 1235 468">Turquoise Plato™ Order Book (TGHL)</td> </tr> <tr> <td data-bbox="804 468 938 629">_A</td> <td data-bbox="938 468 1235 629">Turquoise Plato Lit Auctions™ Order Book (TGHL)</td> </tr> <tr> <td data-bbox="804 629 938 759">_EI</td> <td data-bbox="938 629 1235 759">Turquoise Lit™ Order Book (TGHE)</td> </tr> <tr> <td data-bbox="804 759 938 889">_EM</td> <td data-bbox="938 759 1235 889">Turquoise Plato™ Order Book (TGHE)</td> </tr> <tr> <td data-bbox="804 889 938 1050">_EA</td> <td data-bbox="938 889 1235 1050">Turquoise Plato Lit Auctions™ Order Book (TGHE)</td> </tr> <tr> <td data-bbox="804 1050 938 1189">_B</td> <td data-bbox="938 1050 1235 1189">Turquoise NYLON™ Cash Order Book</td> </tr> </table> <p data-bbox="804 1189 1461 1279">Customers can purge this suffix to identify the upstream trading venue ID.</p>	_I	Turquoise Lit™ Order Book (TGHL)	_M	Turquoise Plato™ Order Book (TGHL)	_A	Turquoise Plato Lit Auctions™ Order Book (TGHL)	_EI	Turquoise Lit™ Order Book (TGHE)	_EM	Turquoise Plato™ Order Book (TGHE)	_EA	Turquoise Plato Lit Auctions™ Order Book (TGHE)	_B	Turquoise NYLON™ Cash Order Book
_I	Turquoise Lit™ Order Book (TGHL)															
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