



**Turquoise**

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# Broker Access

**Turquoise Plato Block Discovery™  
and Turquoise Plato Lit Auctions™**



**London**  
Stock Exchange Group

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“Plato Partnership and Turquoise share values and vision of an Open Access marketplace that delivers the best result on a continuous basis.”

**Dr Robert Barnes, CEO of Turquoise**

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# 1 Accessing **Turquoise Plato Block Discovery™**

This document provides a guide on how to participate in **Turquoise Plato Block Discovery™**, and a list of the firms who have provided details of how to access to the service.

Participants generally access the service either (but not limited to):

1. as part of a broker algorithm with **Turquoise Plato Block Discovery™** as a destination, or
2. via direct access through a custom broker algorithm or otherwise, enabling end participants to send their instruction in its entirety.

## Identifying **Turquoise Plato Block Discovery™** Executions

### Where did my order execute?

All **Turquoise Plato Block Discovery™** trades are consummated in **Turquoise Plato Uncross™**, with recommended FIX LastMkt(30) tag value of TRQM.

### What was the nature of my execution?

Turquoise encourages use of FIX LastLiquidityInd(851) Tag as the method to identify executions originating from **Turquoise Plato Block Discovery™** Block Indications, consistent with FIX Execution Venue Reporting Recommended Best Practices guidelines in October 2015.

Turquoise publishes **Trade Liquidity Indicator** field, (FIX Tag 9730 / Native 120) in Execution Reports which can be mapped directly to LastLiquidityInd(851) as follows:

The values of the LastLiquidityInd(851) can be used for <b>Turquoise Plato Block Discovery™</b>	LastLiquidityInd(851) Tag value	Turquoise Trade Liquidity Indicator value
Executions in <b>Turquoise Plato Uncross™</b> originating from Block Indications	9	S
Executions arising during continuous trading originating from Block Indications	8	T
Executions in <b>Turquoise Plato Uncross™</b> originating from Block Discovery Notifications	4	C

## 2 Accessing **Turquoise Plato Lit Auctions™**

**Turquoise members are able to participate in Turquoise Plato Lit Auctions™ by using their existing technical interface to Turquoise and workflow into the new mechanism with Market Identifier Code ("MIC") of TRQA.**

**Participants generally access the service either (but not limited to):**

1. as part of a broker algorithm with **Turquoise Plato Lit Auctions™** as a destination, or
2. via direct access through a custom broker algorithm or otherwise, enabling end participants to send their instruction in its entirety.

## How **Turquoise Plato Lit Auctions™** work

**Turquoise Plato Lit Auctions™** is a pre-trade transparent, MiFID II compliant, matching mechanism offering frequent transparent price forming auctions within the Primary Best Bid Offer (PBBO) throughout the day.

**Turquoise Plato Lit Auctions™** is triggered when Turquoise receives orders it can potentially match from its members within the PBBO (which acts as a reference Price Collar), or on receipt of a GFA order which is valid for a single Auction (which ever happens soonest). Once the Auction has started, Members have 50 milliseconds in which to submit further orders to the auction, before a further 50 millisecond randomised uncrossing period commences. Indicative Auction Price and Aggregated Volume will be published if there are Orders that would execute in the next auction uncrossing. No Individual Order details will be published.

**Turquoise Plato Lit Auctions™** supports orders pegged to the PBBO midpoint (with or without a limit price acting as a cap) and standard limit orders and includes 'member priority' on an 'opt-in' basis. Minimum Execution Quantity (MES) is supported on both persistent and non-persistent Order types.

Please see **Turquoise Plato Lit Auctions™** details in Turquoise Trading Services Description found here: <https://www.lseg.com/markets-products-and-services/our-markets/turquoise/information-centre/document-library>

## List of Member firms offering access to Turquoise Plato Block Discovery™ and Turquoise Plato Lit Auctions™\*

● Member providing client access

\* Turquoise Plato Block Discovery™ member only

I In progress

\* The list below doesn't include all members that offer Turquoise Plato Block Discovery™ or Turquoise Plato Lit Auctions™. It only includes those members who have consented to be published.

Member	Turquoise Plato Block Discovery™	Broker Customisation	Turquoise Plato Lit Auctions™
	Block Indications (BI)	Block Discovery Notifications (BDN)	
ABG	*	*	
Bank of America Merrill Lynch	●	●	
Barclays	●	●	●
Bernstein	●	●	●
Canaccord Genuity	●	●	●
Citi	●	●	●
Credit Suisse	●	●	
Danske Bank	●	●	
Deutsche Bank	●	●	●
Exane BNP Paribas	●	●	●
Gilbert Dupont			●
Goldman Sachs	●	●	●
Instinet	●	●	●
Investec	●	●	●
J.P. Morgan	●	●	●
Jefferies	●		●
Kepler Cheuvreux	●	●	●
Liquidnet	●	●	●
Morgan Stanley	●	●	●
Numis	*	*	
Pictet	*	*	
RBC	●	●	●
Redburn	●	●	●
SEB	●	●	●
Société Générale	●	●	●
UBS	●	●	
Virtu ITG Europe Ltd.	●	●	●
Vontobel		●	●

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## Bank of America Merrill Lynch

### Turquoise Plato Block Discovery™

Algo Name	Behaviour	Broker Customisation
BlockSeeker – DARK ONLY, <b>Turquoise Plato Block Discovery™</b> exclusively	Entire order represented in <b>Turquoise Plato Block Discovery™</b> as a Block Indication. No other venue participation. Automatically applies a MES (e.g. 25% of LIS) if client does not specify one. Client receives real-time alerts whenever an OSR is received (highlighting trades/fades).	Can be enabled as default behaviour by client/trader, or based on any combination of standard/custom tags. FIX Tags 30 & 851 used to identify <b>Turquoise Plato Block Discovery™</b> fills unless customisation required. Ability to customise selection of other dark venues including Instinct X, BATS/Chi-x Dark, Turquoise Plato™, POSIT etc.
BlockSeeker – DARK ONLY, multiple venues	Entire order represented in <b>Turquoise Plato Block Discovery™</b> as a Block Indication. Child slices represented in other dark venues. Automatically applies a MES (e.g. 25% of LIS) if client does not specify one. Client can optionally receive real-time alerts whenever an OSR is received (highlighting trades/fades).	
INSTINCT (1-5), AMBUSH	Dark-Overlay (I Would) portion of order (determined by Urgency/Strategy) represented in <b>Turquoise Plato Block Discovery™</b> as a Block Indication. Child slices of Dark-Overlay participate in other dark venues (with same MES). Lit participation per Urgency setting. Automatically applies a MES (e.g. 25% of LIS) to dark orders if client does not specify one. Client can optionally receive real-time alerts whenever an OSR is received (highlighting trades/fades).	
VWAP, POV, TWAP, IS	Client-specified Dark-Overlay (I Would) portion of order (up to 70% of total order) represented in <b>Turquoise Plato Block Discovery™</b> as a Block Indication. Child slices of Dark-Overlay participate in other dark venues (with same MES). Lit participation per Strategy selection. Automatically applies a MES (e.g. 25% of LIS) to dark orders if client does not specify one.	
CUSTOM	Potential to support various customisations including: – Ability to rest in <b>Turquoise Plato Block Discovery™</b> for a period prior to participating in other venues – Alternate logic to set MES.	

**Contact details:** For more information on any customisations or further questions, contact your sales representative or call +44 207 996 4521

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## Barclays

### Turquoise Plato Block Discovery™

Algo Name	Behaviour	Broker Customisation
All algorithms	All Barclays EMEA Algos can be configured to have their order component access <b>Turquoise Plato Block Discovery™</b> using BIs when the thresholds are met. This can be configured on a per client basis.	<b>Turquoise Plato Block Discovery™</b> is available from all EMS providers that have access to Barclays.

### Turquoise Plato Lit Auctions™

Algo Name	Behaviour	Broker Customisation
All algorithms	All Barclays EMEA Algos can be configured to have their non-displayed midpoint order component access <b>Turquoise Plato Lit Auctions™</b> . This can be configured on a per client basis.	<b>Turquoise Plato Lit Auctions™</b> is available from all EMS providers that have access to Barclays.

**Contact details:** For more information on any customisations and settings please contact your Barclays Sales Representative on +44 207 773 8500

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## Bernstein

### Turquoise Plato Block Discovery™

Algo Name	Behaviour	Broker Customisation
All algorithms	All algorithms can support BI and BDNs. <b>Turquoise Plato Block Discovery™</b> will be used by default when an appropriate strategy is selected.	Use of <b>Turquoise Plato Block Discovery™</b> can be enabled or disabled based on trader, client, strategy or algo aggression. If requested <b>Turquoise Plato Block Discovery™</b> can be preferenced over other venues. MES can be customised as a default or controlled per order.
DMA	A customised set up can be provided to direct orders exclusively to <b>Turquoise Plato Block Discovery™</b> .	MES can be customised as a default or controlled per order.

*Continued on page 06*



## Bernstein [continued]

**Turquoise Plato Lit Auctions™**

Algo Name	Behaviour	Broker Customisation
All algorithms	<b>Turquoise Plato Lit Auctions™</b> will be used by default where an appropriate strategy is selected.	Use of <b>Turquoise Plato Lit Auctions™</b> can be enabled or disabled based on trader, client, strategy or algo aggression. If requested <b>Turquoise Plato Lit Auctions™</b> can be preferred over other venues. MES can be customised as a default or controlled per order.
DMA	A customised set up can be provided to direct orders exclusively to <b>Turquoise Plato Lit Auctions™</b> .	MES can be customised as a default or controlled per order.

**Contact details:** For more information, please contact algo@bernstein.com

## 6 Canaccord Genuity

**Turquoise Plato Block Discovery™**

Algo Name	Behaviour	Broker Customisation
All proprietary algorithms	All Canaccord Genuity proprietary EMEA algorithms can be configured to interact with <b>Turquoise Plato Block Discovery™</b> , provided the order meets the required criteria. This is configurable on a per client basis and also on an individual trader basis.	<b>Turquoise Plato Block Discovery™</b> is available from all EMS providers that have access to Canaccord Genuity.

**Turquoise Plato Lit Auctions™**

For more information on accessing Turquoise Plato Lit Auctions™ via Canaccord, please contact Canaccord Electronic Trading Desk

**Contact details:** For more information, please contact Canaccord Genuity Electronic Trading Desk electronictrading@canaccordgenuity.com or +44 (0)207 523 8089

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## Turquoise Plato Block Discovery™

Algo Name	Behaviour	Broker Customisation
Dagger	<p>Liquidity seeking algorithm that simultaneously trades across lit and dark venues. Utilises Citi's proprietary Price Gauge technology and dynamic min fill size logic to prevent information leakage and adverse selection.</p> <p>Turquoise Block Indications are used where size thresholds are met.</p>	<p>Various customisations available including an overall MES (Notional, Avg Trade Size Multiple) or venue specific MES.</p> <p>Supported by the leading EMS providers including but not limited to – Trading Screen, Real Tick, Portware, Fidessa, Bloomberg, REDI, CRD, LatentZero, Longview, Triton.</p>
Citi Match	<p>Citi's dark pool aggregation algorithm. In addition to crossing within Citi Match the algorithm can represent your order on other external dark venues as per your requirements.</p> <p>Turquoise Block Indications are used where size thresholds are met.</p>	
VWAP/TWAP/IS/Participate/Scaling/SmallCap	<p>When 'Opportunistic' (would dark) is enabled these strategies will represent your order on dark venues including <b>Turquoise Plato Block Discovery™</b>.</p> <p>Turquoise Block Indications are used where size thresholds are met.</p>	
MultiStep	<p>Citi's MultiStep framework allows an order to dynamically switch between any of our regular strategies according to a criteria you specify (For example: price move/ % executed/time elapsed etc).</p> <p><b>Turquoise Block Plato Discovery™</b> can be included as an integral part of these strategies.</p>	
Custom	<p>Citi's modular algo framework and realtime configuration manager allows a Custom algo strategy to be assembled according to a clients specification.</p> <p><b>Turquoise Block Plato Discovery™</b> can be included as an integral part of this Custom strategy.</p>	

**Contact details:** For more information, please contact Citi Electronic Trading for more details: +44 203 569 4541 or [exservices@citi.com](mailto:exservices@citi.com)

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## Credit Suisse

### Turquoise Plato Block Discovery™

Algo Name	Behaviour	Broker Customisation
Crossfinder+	Unexecuted portion of the order is fully represented in <b>Turquoise Plato Block Discovery™</b> as a Block Indication, where size permits, whilst also being split across other dark pools.	<b>Turquoise Plato Block Discovery™</b> is a default venue for CS. Clients may choose to opt-out if they wish.
Any strategy that contains a dark block seeking component	These strategies post intelligently into dark pools. Where a dark slice is sent to the SOR to be posted, the entire slice will be represented in <b>Turquoise Plato Block Discovery™</b> as a Block Indication, where size permits, whilst also being split across other dark pools.	
Any strategy with "Blockfinder" parameter selected	A large percentage of the unexecuted portion of the order is fully represented in <b>Turquoise Plato Block Discovery™</b> as a Block Indication, where size permits, whilst also being split across other dark pools.	

**Contact details:** For more information, please contact [aes-sales-europe@credit-suisse.com](mailto:aes-sales-europe@credit-suisse.com) and +44 (0)20 7888 0006

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## Deutsche Bank

### Turquoise Plato Block Discovery™

Algo Name	Behaviour	Broker Customisation
All algorithms	All DB algorithms that support external dark liquidity are enabled to participate in <b>Turquoise Plato Block Discovery™</b> Notifications or Block Indications when size thresholds are met.	Please contact the Autobahn Equity desk (details below) or your DB representative for further details.

### Turquoise Plato Lit Auctions™

Algo Name	Behaviour	Broker Customisation
All algorithms	All DB algorithms that source mid-point liquidity are enabled to participate in <b>Turquoise Plato Lit Auctions™</b> .	Please contact the Autobahn Equity desk (details below) or your DB representative for further details.

**Contact details:** For more information, please contact [autobahnequity.emea@list.db.com](mailto:autobahnequity.emea@list.db.com) and +44 207 547 2022

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## Exane BNP Paribas

### Turquoise Plato Block Discovery™

Algo Name	Behaviour	Broker Customisation
All Exane BNP Paribas algorithms with a dark option have access to <b>Turquoise Plato Block Discovery™</b>	Our algorithms are enabled, by default, to access <b>Turquoise Plato Block Discovery™</b> using the conditional (Block Indication) interaction.	Unless otherwise specified <b>Turquoise Plato Block Discovery™</b> is enabled by default as one of our accessible dark venues. We can customise access in many different ways, including the option to use Block Discovery Notifications. Customisation can be at a granular level e.g. per strategy, per trader, etc.

**Contact details:** For more information, please contact our Electronic Trading Team, on +44 (0) 203 430 8710 or email us at [electronictrading@exanebnpparibas.com](mailto:electronictrading@exanebnpparibas.com), to discuss the options available.

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## Goldman Sachs

### Turquoise Plato Block Discovery™

Algo Name	Behaviour	Broker Customisation
All algorithms	By Default, all Goldman Sachs algorithms with a Dark Liquidity Seeking instruction interact with <b>Turquoise Plato Block Discovery™</b> via BlockFinder, our true conditional liquidity router.	For more information, please contact Goldman Sachs Electronic Trading.

**Contact Details:** For more information, please contact our Electronic Trading Team, on +44 (0) 207 051 8191 or email us at [gseteurope@gs.com](mailto:gseteurope@gs.com)

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## Instinet

### Turquoise Plato Block Discovery™

Algo Name	Behaviour	Broker Customisation
All dark enabled algos	Multiple customisations are available and can be accessed via Instinet's Newport EMS platform and leading EMS providers.	For any further information or if you have any questions, please contact your sales representative.
<b>Turquoise Plato Block Discovery™</b>	Accesses <b>Turquoise Plato Block Discovery™</b> service directly.	Minimum fill size available in ticket or by default. Available via Instinet's Newport EMS platform and leading EMS providers.

**Contact details:** For more information, please contact the Instinet Team on +44 207 154 7444

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## Jefferies

### Turquoise Plato Block Discovery™

Algo Name	Behaviour	Broker Customisation
All algorithms	All Jefferies algorithms that include dark venue usage (either as default or as part of customised parameters) can utilise the full Block Indication functionality subject to orders being of sufficient size, and the destination being deemed optimal at the specific point in the order lifecycle.	Clients can utilise explicit or defaulted MES based on qty, notional, %LIS or % of order. Clients can use custom instruction COND to access only Conditional venues, or INCL= <b>Turquoise Plato Block Discovery™</b> to access just <b>Turquoise Plato Block Discovery™</b> .

### Turquoise Plato Lit Auctions™

Algo Name	Behaviour	Broker Customisation
All algorithms	All Jefferies algorithms that have tactics to source non-displayed liquidity can utilise Periodic Auctions.	Clients can utilise explicit or defaulted MES based on qty, notional, % LIS or % of order. If clients wish to solely access Periodic Auction destinations they can utilise DarkSeek, with custom instruction LITPA.

**Contact details:** For more information, please contact Jefferies Electronic Trading on +44 20 7898 7381 or jets-eu@jefferies.com

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## J.P. Morgan

### Turquoise Plato Block Discovery™

Algo Name	Behaviour	Broker Customisation
AQUA (and Customised DMA)	AQUA algo has the capability of sending Block Indications (BIs) to <b>Turquoise Plato Block Discovery™</b> . Additionally JPMS plc offers directed routes to <b>Turquoise Plato Block Discovery™</b> via a custom setup where the clients can choose to specify the Minimum Execution Size (MES) as a percentage of a transaction benefitting from the Large in Scale (LIS) waiver.	Capability to specify MES is made available as a customisation. JPMS plc will be accessing the <b>Turquoise Plato Block Discovery™</b> network (BDN) functionality to allow clients to interact with conditional liquidity on their dark firm orders where appropriate.

**Contact details:** For more information, please contact J.P. Morgan directly: [emea\\_ecs\\_trading@jpmorgan.com](mailto:emea_ecs_trading@jpmorgan.com)

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## Kepler Cheuvreux

### Turquoise Plato Block Discovery™

Algo Name	Behaviour	Broker Customisation
All algorithms with dark access	All Kepler Cheuvreux algorithms that support external dark liquidity access can be enabled to participate in <b>Turquoise Plato Block Discovery™</b> .	For more information, please contact the Electronic Trading Team at Kepler Cheuvreux.

**Contact details:** For more information, please contact the Electronic Trading team at Kepler Cheuvreux; [est@keplercheuvreux.com](mailto:est@keplercheuvreux.com) or +44 (0) 207 621 5200

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## Liquidnet

### Turquoise Plato Block Discovery™

Algo Name	Behaviour	Broker Customisation
Dark	Dark represents 100% of your order in the Liquidnet pool while also efficiently sourcing liquidity across a variety of other dark venues. Access to <b>Turquoise Plato Block Discovery™</b> can be enabled on a per client basis when certain order size thresholds are met.	Available to Liquidnet institutional Members via the Liquidnet desktop application as well as EMS vendors with access to Liquidnet's full algo suite.
Barracuda	Barracuda opportunistically executes across both displayed and dark venues, based on symbol-specific price and liquidity models. Barracuda also represents 100% of your order in the Liquidnet pool. Access to <b>Turquoise Plato Block Discovery™</b> can be enabled on a per client basis when certain order size thresholds are met.	Multiple strategy customisations are available upon request, including minimum fill sizes and venue access.

### Turquoise Plato Lit Auctions™

Algo Name	Behaviour	Broker Customisation
Dark	Dark represents 100% of your order in the Liquidnet pool while also efficiently sourcing liquidity across a variety of other dark venues. Access to <b>Turquoise Plato Lit Auctions™</b> can be enabled on a per client basis when certain order size thresholds are met.	Available to Liquidnet institutional Members via the Liquidnet desktop application as well as EMS vendors with access to Liquidnet's full algo suite.
Barracuda	Barracuda opportunistically executes across both displayed and dark venues, based on symbol-specific price and liquidity models. Barracuda also represents 100% of your order in the Liquidnet pool. Access to <b>Turquoise Plato Lit Auctions™</b> can be enabled on a per client basis when certain order size thresholds are met.	Multiple strategy customisations are available upon request, including minimum fill sizes and venue access.

**Contact details:** For more information on any customisation requests, please contact Liquidnet EQS at +44 207 614 1717 and EQS-EMEA@liquidnet.com

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## Morgan Stanley

### Turquoise Plato Block Discovery™

Algo Name	Behaviour	Broker Customisation
All Morgan Stanley liquidity-seeking algorithms	All Morgan Stanley liquidity-seeking algorithms are enabled to participate in <b>Turquoise Plato Block Discovery™</b> .	For more information please contact Morgan Stanley Electronic Trading (“MSET”).

### Turquoise Plato Lit Auctions™

Algo Name	Behaviour	Broker Customisation
All Morgan Stanley liquidity-seeking algorithms	All Morgan Stanley liquidity-seeking algorithms are enabled to participate in <b>Turquoise Plato Lit Auctions™</b> .	For more information please contact Morgan Stanley Electronic Trading (“MSET”).

**Contact details:** For more information, please contact Morgan Stanley Electronic Trading on +44-20-7425-3222 or alternatively email [mset-eu@morganstanley.com](mailto:mset-eu@morganstanley.com)

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## RBC

### Turquoise Plato Block Discovery™

Algo Name	Behaviour	Broker Customisation
All RBC algorithms which access dark venues	All RBC algorithms which employ dark venue participation are enabled to access <b>Turquoise Plato Block Discovery™</b> , subject to orders satisfying relevant Large In Scale requirements.	No customisation is required to access <b>Turquoise Plato Block Discovery™</b> through these algorithms. Customisation is only required to opt OUT of accessing <b>Turquoise Plato Block Discovery™</b> .

**Contact details:** For more information, please contact RBC EMEA Electronic Sales & Trading on +44 20 7029 0259 or email [ElectronicSalesandTrading@rbccm.com](mailto:ElectronicSalesandTrading@rbccm.com)



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## Redburn

**Turquoise Plato Block Discovery™**

Algo Name	Behaviour	Broker Customisation
Navigator	Redburn uses conditional order functionality to send Block Indications.	We are able to enter Minimum Quantity on an order.

**Turquoise Plato Lit Auctions™**

Algo Name	Behaviour	Broker Customisation
Navigator	Redburn posts resting orders pegged to the Primary mid-point.	We are able to enter Minimum Quantity on an order.

**Contact details:** For more information, please contact Charles Taylor on +44 (0)20 7000 2010 or Charles.taylor@redburn.com

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## SEB

**Turquoise Plato Block Discovery™**

Algo Name	All Algos//Behaviour	Broker Customisation
All algorithms	The suite of liquidity seeking algos collectively named Beacon all make extensive use of the <b>Turquoise Plato Block Discovery™</b> using BIs, in parallel to ordinary Turquoise dark and auction venues. Other algos, including VWAP and TWAP, may utilize BIs when invoked with a would-if-good limit.	Clients may opt out from using BIs. MES/MAQ may be controlled by the client. BIs to <b>Turquoise Plato Block Discovery™</b> are available from all EMS providers with connection to SEB.

**Turquoise Plato Lit Auctions™**

Algo Name	All Algos//Behaviour	Broker Customisation
All algorithms	All SEB algos may utilize <b>Turquoise Plato Lit Auctions™</b> as a source of liquidity.	Clients may opt out from using the lit auction venue. All algos use MES to control trade sizes and information leakage.

**Contact details:** For more information, please contact Daniel Wendin, Chief Quantitative Trader, SEB Equities, daniel.wendin@seb.se or +46 703 88 33 70, or Simon Taylor, Head of Electronic Execution, SEB Equities, simon.taylor@seb.se or +46 850 62 32 53

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## Société Générale

### Turquoise Plato Block Discovery™

Algo Name	Behaviour	Broker Customisation
All algorithms	By default, all SG algorithms that support dark access are enabled to participate in <b>Turquoise Plato Block Discovery™</b> notifications or block indications, subject to the minimum % LIS threshold being met.	Behaviour can be configured on a individual client basis, with various customisation options available, including minimum fill sizes expressed as % LIS, shares, or nominal value. Accessible via all major EMS/ OMS providers.
DMA	DMA access is also available.	For further information, please contact the SG Electronic Trading Team.

**Contact details:** For more information, please contact [executionsales@sgcib.com](mailto:executionsales@sgcib.com) or tel. 44 207 762 540

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## UBS

### Turquoise Plato Block Discovery™

Algo Name	Behaviour	Broker Customisation
UBS Tap and other dark complete algorithms	Access to <b>Turquoise Plato Block Discovery™</b> is provided as part of the standard dark complete functionality. This logic is embedded within UBS Tap and other algos where dark-complete is selected. Orders are routed on a conditional basis in order to maximize liquidity.	Contact your UBS account manager for further details.
All dark enabled algos	UBS make firm orders sent to Turquoise continuous dark book available within <b>Turquoise Plato Uncross™</b> . Firm orders to <b>Turquoise Plato Uncross™</b> with BDN enablement can be enabled additionally to, or in place of, the continuous dark book at client request.	Contact your UBS account manager for further details.

**Contact details:** For more information please contact [OL-ETEQ-UK@ubs.com](mailto:OL-ETEQ-UK@ubs.com) or +44 20 7 568 8313

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## Virtu ITG Europe Ltd.

### Turquoise Plato Block Discovery™

Algo Name	Behaviour	Broker Customisation
All algorithms	All Virtu ITG Europe Ltd. algorithms that support external dark liquidity access can be enabled to participate in <b>Turquoise Plato Block Discovery™</b> Notifications or Block Indications when the size thresholds are met. This can be configured on a per client basis.	Available from all EMS providers that have access to Virtu ITG Europe Ltd. algorithms. Various customisation options are available including Minimum fill sizes expressed as % of LIS, shares, or nominal value.  For any customisations, contact your Virtu ITG Europe Ltd. sales representative.

**Contact details:** For more information, please contact the Virtu ITG Europe Ltd. Team on +44 207 670 4000

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## Vontobel

### Turquoise Plato Block Discovery™ and Turquoise Plato Lit Auctions™

Algo Name	Behaviour	Broker Customisation
TVOL – Target Volume	A first print will be enforced if no passive hit could be achieved at start. For optimized performance and price improvement, flexibility, hybrid trading signals and the usage of all available venue types are incorporated.	<p>Various customisations are available, depending on the Client's needs and strategies.</p> <p><b>Turquoise Plato Block Discovery™ and Turquoise Plato Lit Auctions™</b> are enabled in all our algorithms and smart order routing policies by default.</p>
TWAP	Trades equally across a desired time range whilst being opportunistic at dark and grey pools at the same time. Volume is sliced into time frames and tried to be filled using dark, grey and lit pools in order to minimize aggressive and cross-spreading activities as much as possible.	
VWAP	Trades alongside expected market volumes and work against the public VWAP. For performance improvements, target volume is achieved by not slicing volume into smaller time frames but rather by following continuous progress and flexibility bands. For further improvement, all liquidity pool types such as dark, grey and lit are taken into account.	
PACE	Works against the arrival price or the order limit at a desired pace, addressing all available venue types such as lit, dark, periodics and SIs.	
DARK	Minimizes signaling and information leakage by never trading on lit markets but making use of dark pools only.	
GREY	Minimizes signaling and information leakage by only making use of dark and grey markets. This may be useful for sub-LIS orders on capped out instruments (MiFiD Markets).	
SNIPER	Optimizes signaling and information leakage by never exposing quantity on lit markets and resting in dark or grey markets only. Lit markets are still addressed aggressively which increases accessible liquidity vs dark or grey.	

**Contact Details:** For more information please contact +41 58 283 70 58 or AccountManagementTB@vontobel.com



# London

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## Stock Exchange Group

This document describes algos used by members of Turquoise to access Turquoise Plato Block Discovery™ and Turquoise Plato Lit Auctions™. All information in this document has been provided by the respective members and has been reproduced with their permission. Turquoise has not verified the accuracy or completeness of information in this document, which is provided on an “as is” and “as available basis”. No responsibility is accepted by or on behalf of Turquoise for any errors, omissions, or inaccurate information in this document. Please note that this document is intended as a guide only, and may be updated from time to time. All customers should seek advice from the members before choosing to use any particular algo.

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**Turquoise Team**  
**[sales@tradeturquoise.com](mailto:sales@tradeturquoise.com)**  
**+44 (0) 20 7382 7650**  
**[www.tradeturquoise.com](http://www.tradeturquoise.com)**

 **@tradeturquoise**  
 **Turquoise**