

BROKER ACCESS



Turquoise Plato Block Discovery™
Turquoise Plato Trade At Last™ and
Turquoise Plato Lit Auctions™



**LONDON
STOCK
EXCHANGE**

An LSEG Business

TURQUOISE

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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 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 LastMkt (FIX Tag 30) value of TRQM on Turquoise® or TQEM on Turquoise Europe™.

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 June 2020.

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

The values of the LastLiquidityInd (FIX Tag 851) can be used for Turquoise Plato Block Discovery™	LastLiquidityInd (FIX Tag 851) Tag value	Turquoise Trade Liquidity Indicator value
Executions in Turquoise Plato Uncross™ originating from Block Indications	9	S
Executions in Turquoise Plato Uncross™ originating from Block Discovery Notifications	4	C

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Accessing Turquoise Plato Trade At Last™

Access to the service is automatically provided through existing connections to **Turquoise Plato®** and its same MIC (TRQM on Turquoise® and TQEM on Turquoise Europe™), thereby requiring little or no additional operational effort to implement.

Turquoise Plato Trade At Last™ provides a post-close liquidity opportunity without information leakage due to the nature of remaining a fully anonymous, undisclosed service. It complements end of day processes with a finish time of 16:45 UK time.

How Turquoise Plato Trade At Last™ works

Turquoise Plato Trade At Last™ is a new and different offering to those Trade At Last functionalities currently existing on lit venues. **Turquoise Plato Trade At Last™** is effectively an extension of **Turquoise Plato®** during a different time phase after the closing auction. This can be especially useful if monitoring quality block executions coming back from Turquoise® via Tag30 and Tag851 towards the end of the trading day. **Turquoise Plato Trade At Last™** provides a unique service to capture additional opportunity, same day as soon as the closing price is known.

With **Turquoise Plato Trade At Last™**, investors have the opportunity to seek further liquidity following the closing auction of the relevant Primary Market via a dark undisclosed execution channel. Once the underlying Primary Market has completed its natural price formation process and made public the official closing price, both firm and conditional orders can be submitted into **Turquoise Plato Trade At Last™** (until 16:45 UK time). Using the same **Turquoise Plato®** and **Turquoise Plato Block Discovery™** functionality that currently provides award winning midpoint electronic block liquidity during continuous trading, **Turquoise Plato Trade At Last™** will simply reference the close price instead of the mid-point of the Primary Best Bid and Offer.

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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 on Turquoise®, and TQEA on Turquoise Europe™.

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 mechanisms, offering frequent transparent price forming auctions throughout the day.

Turquoise Plato Lit Auctions™ is triggered when Turquoise® receives orders it can potentially match from its members. Once the Auction has started, Members have 50 milliseconds during which to submit further orders to the auction, before a further 50 millisecond randomised uncrossing period commences (during which Members can continue submitting or amending orders). 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), GFA orders that are good for a single auction event and standard limit orders and includes ‘member group’ and ‘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 Document, which can be found here: <https://www.londonstockexchange.com/resources/securities-trading-resources>

List of Member firms offering access to **Turquoise Plato Block Discovery™**,
Turquoise Plato At Last™ and **Turquoise Plato Lit Auctions™***

Member	Turquoise Plato™			
	Turquoise Plato Block Discovery™		Turquoise Plato Trade At Last™	Turquoise Plato Lit Auctions™
	Block Indications (BI)	Block Discovery Notifications (BDN)		
Bank of America Merrill Lynch	●	●	●	
Barclays	●	●	●	●
Bernstein	●	●	●	●
BNP Paribas Exane	●	●	●	●
Canaccord Genuity	●	●		●
Citi	●	●		●
Credit Suisse	●	●		●
Danske Bank	●	●	●	
Goldman Sachs	●	●	●	●
Instinet	●	●	●	●
Investec	●	●	●	●
J.P. Morgan	●	●	●	●
Jefferies	●		●	●
Kepler Cheuvreux	●	●		●
Liquidnet	●	●	●	●
Morgan Stanley	●	●	●	●
Numis	*	*	●	
RBC	●	●	●	●
Redburn	●	●	●	●
Société Générale	●	●	*	●
UBS	●	●	●	
Virtu ITG Europe Limited (VIEL)	●	●	●	●
Vontobel		●		●

● Member providing client access

* Turquoise Plato Block Discovery™ member only

| In progress

* The list above doesn't include all members that offer Turquoise Plato Block Discovery™, Turquoise Plato At Last™ and Turquoise Plato Lit Auctions™.

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Bank of America Merrill Lynch

Turquoise Plato Block Discovery™

Algo name	Behaviour	Broker customisation
All algorithms	All Bank of America algorithms that support external dark liquidity are enabled to participate in Turquoise Plato Block Discovery™ .	Level of dark exposure and price/size protection can be customised.

Turquoise Plato Trade At Last™

Algo name	Behaviour	Broker customisation
N/A	Access to Turquoise Plato Trade At Last™ is available on a direct access basis.	For more information on customisation, contact your BofA sales representative.

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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Turquoise Plato Block Discovery™

Algo name	Behaviour	Broker customisation
All Algorithms with liquidity seeking component and Direct SOR orders seeking midpoint liquidity	All Algorithms and Orders with a liquidity seeking component are enabled to access Turquoise Plato Block Discovery™ .	Clients may opt-out or customise their minimum execution quantity on request.

Turquoise Plato Trade At Last™

Algo name	Behaviour	Broker customisation
All Algorithms that trade into Trading at Last Phase	Order balance can be represented conditionally on Turquoise Plato Trade At Last™ through Barclays Smart Trade At Last.	Please contact your Barclays sales representative for more information.

Turquoise Plato Lit Auctions™

Algo name	Behaviour	Broker customisation
All Algorithms with liquidity seeking component and Direct SOR orders seeking midpoint liquidity	All Algorithms and Orders with a Liquidity seeking component are enabled to access Turquoise Plato Lit Auctions™ .	Clients may opt-out or customise their minimum execution quantity on request.

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. Turquoise Plato Block Discovery™ will be used by default when an appropriate strategy is selected.	Use of Turquoise Plato Block Discovery™ can be enabled or disabled based on trader, client, strategy or algo aggression. If requested, Turquoise Plato Block Discovery™ 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 Turquoise Plato Block Discovery™ .	MES can be customised as default or controlled per order.

Turquoise Plato Trade At Last™

Algo name	Behaviour	Broker customisation
All algorithms	All Bernstein algorithms that interact with the close have the ability to interact with Turquoise Plato Trade At Last™ .	The decision to interact with Turquoise Plato Trade At Last™ is dynamic based on the close price relative to the selected performance benchmark. The level of aggression parameter can be linked to the level and style of Turquoise Plato Trade At Last™ interaction
EU Target Close Algorithm	A dynamic strategy dedicated to the nuances of the European close and Turquoise Plato Trade At Last™ functionality. Includes full control of Turquoise Plato Trade At Last™ , with interaction based on price level relative to the selected performance benchmark.	Preset styles of Turquoise Plato Trade At Last™ interaction that are linked to the chosen level of aggression parameter.

Turquoise Plato Lit Auctions™

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

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

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BNP Paribas Exane

Turquoise Plato Block Discovery™

Algo name	Behaviour	Broker customisation
All BNP Paribas Exane algorithms with a dark option have access to Turquoise Plato Block Discovery™	Our algorithms are enabled, by default, to access Turquoise Plato Block Discovery™ using the conditional (Block Indication) interaction.	Unless otherwise specified, Turquoise Plato Block Discovery™ 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...

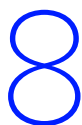
Turquoise Plato Trade At Last™

Algo name	Behaviour	Broker customisation
All algorithms	All BNP Paribas Exane algorithms which can trade in the closing auction are also able to automatically route to Turquoise Plato Uncross™ as a user controlled parameter or by default.	By default, Turquoise Plato Trade At Last™ is not enabled for all flow. Please contact us if you wish to enable this on your orders, either by default, or via your algo ticket, or using more complex criteria - e.g., depending on the price move in the close or residual on your order.

Turquoise Plato Lit Auctions™

Algo name	Behaviour	Broker customisation
All algorithms	All BNP Paribas Exane algorithms can access Turquoise Plato Lit Auctions™ unless otherwise specified.	Please contact the BNP Paribas Exane Electronic Trading Team for more information.

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



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 Turquoise Plato Block Discovery™ , provided the order meets the required criteria. This is configurable on a per client basis and also on an individual trader basis.	Turquoise Plato Block Discovery™ is available from all EMS providers that have access to Canaccord Genuity.

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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Citi

Turquoise Plato Block Discovery™

Algo name	Behaviour	Broker customisation
Dagger	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. Turquoise Block Indications are used where size thresholds are met.	Various customisations available including an overall MES (Notional, Avg Trade Size Multiple) or venue specific MES. Supported by the leading EMS providers including, but not limited to – Trading Screen, Real Tick, Portware, Fidessa, Bloomberg, REDI, CRD, LatentZero, Longview, Triton.
Citi Match	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. Turquoise Block Indications are used where size thresholds are met.	
VWAP/TWAP/IS/ Participate/ Scaling/ SmallCap	When 'Opportunistic' (would dark) is enabled, these strategies will represent your order on dark venues including Turquoise Plato Block Discovery™ . Turquoise Block Indications are used where size thresholds are met.	
MultiStep	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...). Turquoise Block Plato Discovery™ can be included as an integral part of these strategies.	
Custom	Citi's modular algo framework and realtime configuration manager allows a Custom algo strategy to be assembled according to a clients specification. Turquoise Block Plato Discovery™ can be included as an integral part of this Custom strategy.	

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

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Credit Suisse

Turquoise Plato Block Discovery™

Algo name	Behaviour	Broker customisation
Crossfinder+	An unexecuted portion of the order is fully represented in Turquoise Plato Block Discovery™ as a Block Indication, where size permits, whilst also being split across other dark pools.	Turquoise Plato Block Discovery™ 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 Turquoise Plato Block Discovery™ 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 Turquoise Plato Block Discovery™ 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 and +44 (0)20 7888 0006

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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 non-displayed instruction interact with Turquoise Plato Block Discovery™ , subject to orders meeting relevant size thresholds.	For more information, please contact Goldman Sachs Electronic Trading.

Turquoise Plato Trade At Last™

Algo name	Behaviour	Broker customisation
All Goldman Sachs liquidity seeking algorithms as well as Target Close	All Goldman Sachs liquidity-seeking algorithms as well as our TargetClose algorithm are enabled to participate in Turquoise Plato Trade At Last™ by default.	For more information, please contact Goldman Sachs Electronic Trading.

Turquoise Plato Lit Auctions™

Algo name	Behaviour	Broker customisation
All algorithms	By default, all algorithms that source mid-point liquidity will interact with Turquoise Plato Lit Auctions™ .	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

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Instinet

Turquoise Plato Block Discovery™

Algo name	Behaviour	Broker customisation
All dark/ non-displayed liquidity enabled algos, and certain custom strategies have access to Turquoise Plato Block Discovery™ .	All liquidity seeking strategies are eligible, as well as strategies with Nighthawk allocations, subject to meeting the required minimum order size thresholds. Interaction can be configured by urgency with calibrated defaults based on the client's chosen style. Balances liquidity access vs impact. Access is available via Instinet's Newport® EMS platform, other leading EMS providers or by direct electronic access.	Access can be set by default. Price, size, and timing limits can be customised for each algo strategy, including custom strategies. Minimum fill size is available with multiple metrics on order tickets and can also be set by default. Please contact your Instinet relationship manager if you would like more information.

Turquoise Plato Trade At Last™

Algo name	Behaviour	Broker customisation
Turquoise Plato Trade At Last™ is available as an option for "On Close" enabled algos and custom strategies.	Client-specific customisations can be configured to allow interaction with Turquoise Plato Trade At Last™ for clearing residuals at the end of the order. Access is available via Instinet's Newport® EMS platform, other leading EMS providers or by direct electronic access .	Please contact your Instinet relationship manager if you would like more information.

Turquoise Plato Lit Auctions™

Algo name	Behaviour	Broker customisation
All dark/ non-displayed liquidity enabled algos, and certain custom strategies can access Turquoise Plato Lit Auctions™ .	All liquidity seeking strategies are eligible, as well as all strategies with Nighthawk allocations. Defaults are calibrated based on the client's chosen style and seek to balance liquidity access vs potential impact. Access is available via Instinet's Newport® EMS platform, other leading EMS providers or by direct electronic access.	Access can be set by default. Price, size, and timing limits can be customised for each algo strategy, including custom strategies. Minimum fill size is available with multiple metrics on order tickets and can also be set by default. Please contact your Instinet relationship manager if you would like more information.

Contact details: If you have questions or would like further details, please contact us at +44 207 154 8544

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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= Turquoise Plato Block Discovery™ to access just Turquoise Plato Block Discovery™ .

Turquoise Plato Trade At Last™

Algo name	Behaviour	Broker customisation
DarkSEEK, BLITZ, TOUCHDOWN	Posting of non-displayed conditional order for residual quantity at uncross price.	Default on for DarkSEEK, Opt-in request required for other strategies.

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
All algorithms	All JPMorgan algos configured to source non-displayed liquidity are able to send Block Indications (BIs) to Turquoise Plato Block Discovery™ .	For more information, please contact the JPMorgan ECS team.

Turquoise Plato Trade At Last™

Algo name	Behaviour	Broker customisation
Custom Algo	JPMorgan is able to configure clients to directly access Turquoise Plato Trade At Last™ on request.	For more information, please contact the JPMorgan ECS team.

Turquoise Plato Lit Auctions™

Algo name	Behaviour	Broker customisation
All algorithms	All JPMorgan algos configured to source non-displayed liquidity are able to participate in Turquoise Plato Lit Auctions™ on request.	For more information, please contact the JPMorgan ECS team.

Contact details: For more information, please contact J.P. Morgan directly: emea_ecs_trading@jpmorgan.com

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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 Turquoise Plato Block Discovery™ .	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 or +44 (0) 207 621 5200

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Turquoise Plato Block Discovery™

Algo name	Behaviour	Broker customisation
All algorithms with dark access	All Liquidnet algorithms with access to dark are enabled to send conditional orders to Turquoise Plato Block Discovery™ , subject to the order satisfying relevant Large In Scale requirements.	Minimum Execution Size (MES) and venue access. For more information, please reach out to your Liquidnet representative.

Turquoise Plato Trade At Last™

Algo name	Behaviour	Broker customisation
Close strategy and liquidity seeking strategies	Liquidnet's Close strategy and liquidity seeking strategies can be enabled to access Turquoise Plato Trade At Last™ .	For more information, please reach out to your Liquidnet representative.

Turquoise Plato Lit Auctions™

Algo name	Behaviour	Broker customisation
All algorithms with dark access	All Liquidnet algorithms with access to dark are enabled to participate in Turquoise Plato Lit Auctions™ .	Minimum Execution Size (MES) and venue access. For more information, please reach out to your Liquidnet representative.

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 Turquoise Plato Block Discovery™ .	For more information, please contact Morgan Stanley Electronic Trading ("MSET").

Turquoise Plato Trade At Last™

Algo name	Behaviour	Broker customisation
Close strategy and liquidity seeking strategies	All Morgan Stanley liquidity-seeking algorithms, on a client opt-in basis, participate in Turquoise Plato Trading At Last™ .	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 Turquoise Plato Lit Auctions™ .	For more information, please contact Morgan Stanley Electronic Trading ("MSET").

Contact details: For more information, please contact Morgan Stanley Electronic Trading on +44 207 425 3222 or email 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 that employ dark venue participation are enabled to access Turquoise Plato Block Discovery™ , subject to orders satisfying relevant Large In Scale requirements.	No customisation is required to access Turquoise Plato Block Discovery™ through these algorithms. Customisation is only required to opt OUT of accessing Turquoise Plato Block Discovery™ .

Turquoise Plato Trade At Last™

Algo name	Behaviour	Broker customisation
RBC Close & Liquidity Seeking	Turquoise Plato Trade At Last™ access is automated as part of RBC's Close and Liquidity Seeking algos.	Use of Turquoise Plato Trade At Last™ access is automated as part of RBC's Close algo and all Liquidity Seeking algos, respecting parent order limits and any offsets stipulated. This is available on an opt-in basis and can be configured to incorporate lit Turquoise Plato Trade At Last™ phase logic too.

Turquoise Plato Lit Auction™

Algo name	Behaviour	Broker customisation
All RBC Liquidity Seeking algorithms	Turquoise Plato Lit Auction™ will be used by default where an appropriate strategy is selected.	No customisation is required to access Turquoise Plato Lit Auction™ . Access forms part of our core routing logic within our Liquidity Seeking algos.

Contact details: For more information, please contact RBC EMEA Electronic Sales & Trading on +44 207 002 2552 or email 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 Trade At Last™

Algo name	Behaviour	Broker customisation
All algorithms	Redburn can access Turquoise Plato Trade At Last™ .	Access available on request.

Turquoise Plato Trade At Last™

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 Algorithmic Solutions on +44 20 7000 2110 or email algo@redburn.com

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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 Turquoise Plato Block Discovery™ notifications or block indications, subject to the minimum % LIS threshold being met	Behaviour can be configured on an individual client basis, dependent on the underlying tactic required.

Turquoise Plato Lit Auctions™

Algo name	Behaviour	Broker customisation
All Algorithms	All SG algorithms have the ability to source liquidity from a variety of displayed and non-displayed venues, including Periodic Auctions.	Custom routing options are available upon request.

Contact details: For more information, please contact SG Quantitative Services on +44 207 762 5400 or executionsales@sgcib.com

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UBS

Turquoise Plato Block Discovery™

Algo name	Behaviour	Broker customisation
UBS Tap and other dark complete algorithms	Access to Turquoise Plato Block Discovery™ 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 Turquoise Plato Uncross™ . Firm orders to Turquoise Plato Uncross™ 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

Turquoise Plato Trade At Last™

Algo name	Behaviour	Broker customisation
All algorithms	UBS supports “would at last” functionality, which can be enabled on any algo participating in the closing auction. When enabled UBS will access the full range of Turquoise plato liquidity, as well as Primary Turquoise Plato Trade At Last™ , to complete the order at the closing auction price. The functionality will ignore any volume cap which may have constrained the order during the close. The behaviour can be opportunistically enabled with the protection of a dynamic limit based on a pre-close reference price.	Contact your UBS account manager for further details.

Contact details: For more information, please contact OL-ETEQ-UK@ubs.com or +44 20 7 568 8313

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Turquoise Plato Block Discovery™

Algo name	Behaviour	Broker customisation
All algorithms	All VIEL's EMEA Algos access Turquoise Plato Block Discovery™ using conditional orders types to seek liquidity.	Turquoise Plato Block Discovery™ is available from Triton, Virtu's EMS platform and all other EMS providers that have access to VIEL EMEA Algos.

Turquoise Plato Trade At Last™

Algo name	Behaviour	Broker customisation
OASIS, TARGET CLOSE, CATCH, COVERT	VIEL's EMEA Algos may access Turquoise Plato Trade At Last™ with any balance remaining at the end of closing auction, depending on the close price.	Turquoise Plato Lit Auctions™ is available from Triton, Virtu's EMS platform and all other EMS providers that have access to VIEL EMEA Algos.

Turquoise Plato Lit Auctions™

Algo name	Behaviour	Broker customisation
All algorithms	All VIEL's EMEA Algos have access Turquoise Plato Lit Auctions™ .	Turquoise Plato Lit Auctions™ is available from Triton, Virtu's EMS platform and all other EMS providers that have access to VIEL EMEA Algos.

Contact details: To learn more, please contact your sales representative or call our desk at:
 APAC +852.2846.3592 | CAN +1.416.874.0800 | EMEA +44.20.7670.4066 | US +1.212.444.6250
 info@virtu.com | www.virtu.com

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Turquoise Plato Block Discovery™ and Turquoise Plato Lit Auctions™

Algo name	Behaviour	Broker customisation
EDGE	Trades on quantitative trading signals across a desired time range. Aims to improve price against the public VWAP whilst observing market volatility to increase execution velocity if necessary. May incorporate all liquidity pool types such as lit, dark, periodics and SIs.	Various customisations are available, depending on the Client's needs and strategies. Turquoise Plato Block Discovery™ and Turquoise Plato Lit Auctions™ are enabled in all our algorithms and smart order routing policies by default.
TSTOP	Monitors and updates the trigger price while not sending orders to the market until the trigger price is touched. Once triggered, the order is immediately implemented at the market addressing all liquidity pool types such as lit, dark, periodics and SIs.	
TVOL – Target Volume	A first print will be enforced if no passive hit could be achieved at start. For optimised performance and price improvement, flexibility, hybrid trading signals and the usage of all available venue types are incorporated.	
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 minimise 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	Minimises signaling and information leakage by never trading on lit markets but making use of dark pools only.	
GREY	Minimises 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	Optimises 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.	

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