

ALGO DUE DILIGENCE DISCLOSURE

In line with our Statement of Commitment to the principles of the FX Global Code of Conduct, NWM has adopted the GFXC's standardised format to highlight certain points related to its FX Execution Algos. If you would like further information on our FX Execution Algos or to discuss any of the points below, please contact your NatWest Markets sales representative.

Question	Question	Peg Clipper	Peg Time Slice	Time Slice
GENERAL				
This general section autlines the core features of the algorithm. Providers may consolidate answers 1-5 into a table or grid if they wish to cover multiple algorithms with the same templote.				
	Algo Provider (also referred to as "you" or "your" below as			
1	required):	Ndtwest Markets (NWM)	Natwest Markets (NWM)	Notwest Markets (NWM)
3	Liquidity type (internal, external, hybrid):	reg clipper Hybrid	Hybrid	Internal
5	Products covered (spot, NDF): Description of algo(s):	Spot The Peg Clipper is an algo which is predominantly used for 'passive' execution that has the ability to capture spread and reduce market impact, through placing 'pegged' child orders in COMS (Client Order Matching System) and other venues	Spot The Peg Time Slice is an algo which is predominantly used for 'passive' execution that has the ability to capture spread and reduce market impact, through placing 'pegged' child orders in COMS and other venues such as Hotspot, Curex and Siege.	Spot The Time Slice algo is a simple clip based execution which executes in a uniform manner between user's specified start c end times. It's main use case if in currency pairs where there is little direct activity and where placing resting orders is no
		such as Hotspot, Curex and Siege. The user can select and amend the choice of resting order venue at any time. The most common use-case is for the algo to accumulate files by being present in these venues in a passive manner, however the user also has complete control over	The user defines a start and end time for the order, along with a time step; clips are placed into the selected venue(s)at the start of each time step and any part of the clip that is not filled at the end of the time step will aggress against either the NWM principal price or external liquidity (user choice).	viable. It is available in>400 pairs and uses NWM principal liquidity.
		where in the order book the resting orders are placed, meaning that the level of urgency can be varied from very passive to very aggressive as desired.	The user also has complete control over where in the order book the resting orders are placed, meaning that the level of urgency can be varied from very passive to very aggressive as desired. No-worse-than levels are supported.	
(Discussion of the second state of the second s	No-worse-than levels are supported, as are 'Get Done' levels where more aggressive sweeping of all available external	Hadroch Total constructions and	National Tatal consultate to tools
0	Please describe any parameters or controls the user may adjust:	Notional: Total quantity to trade Peg Type: Indicates where pegged orders will be placed with respect to a neutral reference 2-way price. Peg Offset: (Optional) Offsets the pegged order from the level determined by the Peg Type. Entered as an absolute price shift, can be positive/regative withich roises/lowers the order level irrespective of budysel direction. Peg Cip Size: (Optional) Amount worked at any one time. Defaults to 1 million of base currency if blank. No Worse Thous: (Optional) The digo will a tobuy or sell worse than this level. The use of this field may affect the probability of fills and may result in partial order execution. Start Time: (Optional) The digo will as the specified time, otherwise it will start immediately. Site Mode: (Optional) The digo will no thember of slices, the length of the slice, or the size of the slice. Get Done Level: (Optional) If present, the algo will sweep external liquidity at or better than this level. The sweeping can be throtted using the size/time fields.	Notion: 1 tota quantity to trade Peg Type: Indicates where pegged orders will be placed with respect to a neutral reference 2-way price. Peg Offset: (Optional) Offsets the pegged order from the level determined by the Peg Type. Entered as an absolute price shift, can be positive/negative which arises/lowers the order level irrespective of buykell direction. Peg Cipi Size: (Optional) Amount worked at any one time. Defaults to 1 million of base currency if blank. No Worse Thrum: (Optional) The adgo will not buy or sell below this level. The use of this field may affect the probability of fills and may result in partial order execution. Start Time: (Optional) The adgo will start at the specified time, otherwise it will start immediately. Stice Mode: (Optional) Choose between the number of slices, the length of the slice, or the size of the slice. Duration: The length of the execution in HH:MM:S5 form. Forward Rol: (Optional) The server, will auto-ratio to this value date once the algo is completed.	Notional: Total quantity to trade Start Time: (Optional) The algo will start at the specified time, otherwise it will start immediately. Duration: The length of the execution in HH:MMSS form. Slice Mode: (Optional) Choose between the number of slices, the length of the slice, or the size of the slice. No Worse Than: (Optional) The algo will not buy or sell below this level. The use of this field may affect the probability of and may result in partial affect execution. Forward Roll: (Optional) If present, will auto-roll to this value date once the algo is completed.
		Forward Roll: (Optional) If present, will auto-roll to this value date once the algo is completed. Liauidity Pool: Choose 1 or more of the available venues. Defaults to COMS	Liquidity Pool: Choose 1 or more of the available venues. Defaults to COMS	
7	Please specify if the product is built internally or externally:	Internally	Internally	Internally
Some conflic	OF INTEREST ts of interest may be expected but it is important to know what they are a	Ind what steps have been taken to manage them. This way the Algo User can make an informed decision.		
0	If which is all the data to be a state of the	We have a set of a start the state for a state of a large start of the start of the start of the start of the state sta	. With the star when a start the second the second start and the second start and start	The start of the second start of the State of the State is and set of the second start of the st
8	In principal inquiatry interacts with the Augo User's order, now does this happen and what steps are taken to ensure the fill is a fair one from th order's point of view?	This ago only uses principal ingulary for residual balances on the final cap as such small passive orders can take some time in Fill. The principal price that the algo uses is intended to be competitive, and bath internal and external users see the same pricing. NWM monitors hit rates internally to ensure the principal price used by the algo is competitive.	to writes the algo has the capacity to fin is much as possible by matching an low-market-impact vehues during each sile, any amount left unfilled at the end of each silec may fill against either NWM principal liquidity or ECN liquidity at the discretion of the user.	This algo only traces on principal injustry. Inits algo is used only in trace cross curtences pars where there is no usable direct liquidity on any venue. The principal priore that the algos uses is intended to be competitive, and both internal and external users see the same pricing. NWM monitors hit rates internally to ensure the principal price used by the algo is competitive.
		For ALL fills the venue where it is traded is disclosed transparently on the NWM TCA, along with various metrics to allow the fill quality to be easily judged by the algo user.	The principal price that the algos uses is intended to be competitive, and both internal and external users see the same pricing. NWM monitors hit rates internally to ensure the principal price used by the algo is competitive.	For ALL fills the venue where it is traded is disclosed transparently on the NWM TCA, along with various metrics to allow fill quality to be easily judged by the algo user.
		NWM has an Order Execution Policy Disclosure which sets out NWM's approach to providing Best Execution to customers when executing client orders including an obligation to monitor the effectiveness of its execution arrangements and this Policy. For further information see the Order Execution Policy Disclosure available at	For ALL fills the venue where it is traded is disclosed transparently on the NWM TCA, along with various metrics to allow the fill quality to be easily judged by the algo user.	NWM has an Order Execution Policy Disclosure which sets out NWM's approach to providing Best Execution to customer when executing client orders including an obligation to monitor the effectiveness of its execution arrangements and this
		https://www.natwest.com/corporates/support/disclosures.html	NWM has an Order Execution Policy Disclosure which sets out NWMs approach to providing Best Execution to customers when executing client orders including an obligation to monitor the effectiveness of its execution arrangements and this Policy. For further information see the Order Execution Policy Disclosure available at	Policy. For further information see the Order Execution Policy Disclosure available at https://www.natwest.com/corporates/support/disclosures.html
9	If another part of your business needs to hedge or trade in the same direction as the Algo User's order, how are fills allocated between the two?	Each algo parent order is treated individually, any given algo has no knowledge of any other algo and no aggregation is performed.	Each algo parent order is treated individually, any given algo has no knowledge of any other algo and no aggregation is performed.	Each algo parent order is treated individually and any given algo has no knowledge of any other algo. As this algo only trades on principal price using IOC (Immediate or Cancel) child orders, all child orders are filled in strict
		Any child fills on any given venue will be filled according to those venue rules which are usually strict price-time priority. Where there are two parent algos with similar settings operating in the same pair and direction, the generation of child	Any child fills on any given venue will be filled according to those venue rules which are usually strict price-time priority. Where there are two parent algos with similar settings operating in the same pair and direction, the generation of child	price-time priority. Where there are two parent algos with similar settings operating in the same pair and direction, the generation of child
10	Are there any particular commercial interests in trading venues or	orders effectively becomes randomised and therefore, although price-time priority is not supported at the parent level, neither algo is ever systematically fovoured above the ather. No. The venues that are made available to any algo are those that meet certain performance metrics such as law.	orders effectively becomes randomised and therefore, although price-time priority is not supported at the parent level, neither algo is ever systematically favoured above the other. No. The venues that are made available to any algo are those that meet certain performance metrics such as low.	orders effectively becomes randomised and therefore, although price-time priority is not supported at the parent level, neither algo is ever systematically favoured above the other. No. The venues that are made available to any algo are those that meet certain performance metrics such as low.
	other relevant service providers that interact with the algorithm	information leakage and low rejection rates. The venue costs are not a factor.	information leakage and low rejection rates. The venue costs are not a factor.	information leakage and low rejection rates. The venue costs are not a factor.
11	Please elaborate on your role as regards market risk, counterparty risk	, When an algo order is placed the user is assuming the market risk for the duration of the order. NWM is responsible for	When an algo order is placed the user is assuming the market risk for the duration of the order. NWM is responsible for	When an algo order is placed the user is assuming the market risk for the duration of the order. NWM is responsible for
12	Is there anything else of which you feel the Algo User should be aware?	Please see the NWM Order Execution Policy and other disclosures:	Please see the NWM Order Execution Policy and other disclosures:	Please see the NWM Order Execution Policy and other disclosures:
		https://www.natwest.com/corporates/support/disclosures.html	https://www.natwest.com/corporates/support/disclosures.html	https://www.natwest.com/corporates/support/disclosures.html
ALLOCATIO There are me	N POLICY any different approaches to allocations. It is important to understand what	happens in circumstances where multiple clients wish to trade or, indeed, when one order would be used to fill the order of an	nother client.	
13	If you have more than one client order wishing to trade in the same pa and on the same side, how are fills allocated amongst these orders?	ir Each algo parent order is treated individually, any given algo has no knowledge of any other algo and no aggregation is performed. Any child fills on any given venue will be filled according to those venue rules which are usually strict price-time priority. Where there are two parent algos with similar settings operating in the same pair and direction, the generation of child orders effectively becomes randomised and therefore, although price-time priority is not supported at the parent level, neither alon is ever systematically forwared hows the other.	Each algo parent order is treated individually, any given algo has no knowledge of any other algo and no aggregation is performed. Any child fills on any given venue will be filled according to those venue rules which are usually strict price-time priority. Where there are two parent algos with similar settings operating in the same pair and direction, the generation of child orders effectively becomes randomised and therefore, although price-time priority is not supported at the parent level, neither alons is ever systematically forwared hows the other	Each algo parent order is treated individually and any given algo has no knowledge of any other algo. As this algo only tr an principal price using IOC (Immediate or Cancel) child orders, all child orders are filled in strict price-time priority. Whe there are two parent algos with similar settings operating in the same pair and direction, the generation of child orders effectively becomes randomised and therefore, although price-time priority is not supported at the parent level, neither a very superiorital forwarde above the other
		·····		
14	If two client orders are eligible for execution netting, how does this process work?	Netting with other client orders is not supported for this algo.	Netting with other client orders is not supported for this algo.	Netting with other client orders is not supported for this algo.
ROUTING PO Routing polic	DLICY y is an important topic. There are several components such as how execu	tion venues are evaluated, curated, and prioritised. Also covered is the question of what fair-value mid the algo uses to make r	routing decisions and how information leakage is avoided when placing lit orders. Finally, internalisation is defined: some provide	ars have a strict definition such as 'two algo orders netting' whereas others will include midbooks and trades where they have
15	How are hedging execution venues evaluated, including both observable (spread, impact) and implicit costs (information leakage)?	This algo primarily achieves its aims by placing resting orders on a small selection of venues that are made available to the user, and which venues are used on any given order is determined solely by the algo user.	This algo primarily achieves its aims by placing resting orders on a small selection of venues that are made available to the user, and which venues are used on any given order is determined solely by the algo user.	This algo only trades on NWM principal liquidity and does not use resting orders.
		The venues are limited to those that NWM have either tested extensively with NWM own principal risk hedging and know to be low impact (COMS and Hotspot), or are those with well-defined curation or matching mechanisms that clients have expressed interest in using (Curex and Siege).	The venues are limited to those that NWM have either tested extensively with NWM own principal risk hedging and know to be low impact (COMS and Hotspat), or are those with well-defined curation or matching mechanisms that clients have expressed interest in using (Curex and Siege).	
		In the cases where the algo interacts with other liquidity providers (LPs), NWM engages in a regular dialogue; LPs receive monthly opportunity reports from NWM which indicates where profiles are soft and rankings are low, therefore, LPs tighten the prices they show.	In the cases where the algo interacts with other liquidity providers (LPs), NWM engages in a regular dialogue; LPs receive monthly opportunity reports from NWM which indicates where profiles are soft and rankings are low, therefore, LPs tighten the prices they show.	
		NWM also monitor market impact upon trading with LPs. There are automated checks carried out twice a month to ensure	NWM also monitor market impact upon trading with LPs. There are automated checks carried out twice a month to ensure	
16	How do you prioritise between different execution venues (both	The choice of venues for resting orders is solely determined by the algo user.	The choice of venues for resting orders is solely determined by the algo user.	This algo only trades on NWM principal liquidity and does not use resting orders.
	external and internal sources) when routing orders?	There is no further logic which makes any decision-making about which venues to use until near the end of the algo in the case when the remaining number of child clips has dropped below the number of venues that the user has selected, if greater than 1. At that point the remaining venues are selected in order to maximise the probability of fill.	There is no further logic which makes any decision-making about which venues to use until near the end of the algo when the remaining number of child clips has dropped below the number of venues that the user has selected, if greater than 1. At that point the remaining venues are selected in order to maximise the probability of fill.	
		When sweeping external liquidity, a Smort Order Router is used which selects venues based on price (adjusted by a factor which takes into account executions costs), market impact and reject rates. If there is a price tie, then it prioritises the venue which takes into account executions costs), market impact and reject rates. If there is a price tie, then it prioritises the venue which takes into account executions costs).	When sweeping external liquidity a Smart Order Router is used which selects venues based on price (adjusted by a factor which takes into account executions costs), market impact and reject rates. If there is a price tie, then it prioritises the venue with larges are the second se	
17	If multiple clients enter orders in the same pair, will you appreciate	With wight area. Each algo order is treated individually and any given algo has no knowledge of any other algo and no appreciation is	Each algo order is treated individually and any given algo has no knowledge of any other algo and no appreciation is	This also only trades on NWM principal liquidity and does not use resting orders. When trading on principal liquidity IOC
	these orders before placing orders externally or treat each client order individually and place multiple similar orders, which may compete with one another for fills?	performed. There may be multiple similar child orders being placed concurrently and these will fill according to the venue rules, typically price-time priority.	performed. There may be multiple similar child orders being placed concurrently and these will fill according to the venue rules, typically price-time priority.	orders are used which fill in strict price-time priority

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	Limit Pro
	NatWest Markets (NWM)
	Limit Pro Hybrid
and ot	Soot The Limit Pro algo will sweep ECN liquidity at or better than a user defined price level (the Liquidation Price). When no liquidity is available at or better than the Liquidation Price, passive pegged orders are placed in COMS to capture any spread- crossing activity that may be present.
	Notional: Total quantity to trade.
fills	Liquidation Price: The spot price that will trigger sweeping if there is any visible liquidity on any venue at or better than this price. Forward Roll: (Optional) If present, will auto-roll to this value date once the algo is completed.
	Internally
	N/A - does not use NWM principal liquidity
the	
s	
	Each algo parent order is treated individually, any given algo has no knowledge of any other algo and no aggregation is performed
	Any child fills on any given venue will be filled according to those venue rules which are usually strict price-time priority. Where there are two parent algos with similar settings operating in the same pair and direction, the generation of child orders effectively becomes randomised and therefore, although price-time priority is not supported at the parent level,
	No. The venues that are made available to any algo are those that meet certain performance metrics such as low Information leakage and low rejection rates. The venue costs are not a factor.
	When an olgo order is placed the user is assuming the market risk for the duration of the order. NWM is responsible for counterparty risk and settlement risk.
	Please see the NWM Order Execution Policy and other disclosures: https://www.natwest.com/corporates/support/disclosures.html
	m
rades re Ilgo	Each algo parent order is treated individually, any given algo has no knowledge of any other algo and no aggregation is performed. Any child fills on any given venue will be filled according to those venue rules which are usually strict price-time priority. Where there are two parent algos with similar settings operating in the same pair and direction, the generation of child orders effectively becomes randomised and therefore, although price-time priority is not supported at the parent level, neither algo is ever systematically favoured above the other.
	Netting with other client orders is not supported for this algo.
ave sl	nown a skew through mid externally to incentivise another counterparty to fill them.
	When placing resting orders, this algo only uses COMS, which is an internal matching engine curated on an ongoing basis to reduce information leakage and therefore market impact.
	In the cases where the algo interacts with other liquidity providers (LPs), such as when sweeping, NWM engages in a regular dialogue; LPs receive monthly opportunity reports from NWM which indicates where profiles are soft and rankings are low, therefore, LPs tighten the prices they show.
	NVMA loss manifor market impact upon trading with LPs. There are automated checks carried out twice a month to ensure no LP is adversely moving the market away when traded upon. If LPs/tags are shown to move the market adversely then they are removed from NWM liquidity pool
	For resting orders only one venue (COMS) is used.
	When sweeping external liquidity a Smart Order Router is used which selects venues based on price (adjusted by a factor which takes into account executions costs), market impact and reject rates. If there is a price tie, then it prioritises the venue with larger size.
	Each algo order is treated individually and any given algo has no knowledge of any other algo and there will not be any aggregation. There may be multiple similar child orders being placed concurrently and these will fill according to the venue rules, typically price-time priority.

Question	Question	Peg Clipper	Peg Time Slice	Time Slice
18	What – if any – ongoing work do you do in order to curate execution venues, where curation is possible? Approximately how often is this conducted?	Our algos leverage our client franchise by using a proprietary liquidity pool (COMS). This is a pool over which we have complete control and it is curated on a regular and angoing basis. Additionally NWM has a regular dialogue with ather liquidity provides (LPs) that algos can interact with. LPs receive monthly appartuity reports from NWM which indicates where profiles are soft and rankings are low, therefore, LPs tighten the prices they show. NWM also monitor market impact upon trading with LPs. There are automated checks carried out twice a month to ensure no LP is adversely moving the market away when traded upon. If LPs/tags are shown to move the market adversely then they are removed from NWM liquidity pool.	NWM have a regular dialogue with their LPs that algos can interact with. LPs receive monthly opportunity reports from NWM which indicates where profiles are soft and rankings are low, therefore, LPs tighten the prices they show. NWM doso monitor market impact upon trading with LPs. There are automated checks carried out twice a month to ensure no LP is adversely moving the market away when traded upon. If LPs/tags are shown to move the market adversely then they are removed from NWM liquidity pool.	NWM have a regular dialogue with their LPs that algos can interact with. LPs receive monthly opportunity reports from M which indicates where profiles are soft and rankings are low, therefore, LPs tighten the prices they show. NWM disc monitor market impact upon trading with LPs. There are automated checks carried out twice a month to ens. no LP is adversely moving the market away when traded upon. If LPs/tags are shown to move the market adversely the they are removed from NWM liquidity pool.
19	Do you have any logic to avoid orders on venues where the order book is visible to all participants (lit execution venues) causing information leaknage If so please describe it	No, the venues that this algo uses are always chosen by the algo user alone.	No, the venues that this algo uses are always chosen by the algo user alone.	This algo only trades on NWM principal liquidity.
20	Does the mid/fair-value used by the algorithm differ from the one used by your own market making system for pricing and risk management? If yes, please specify.	No	No	N/A
21	Pieses define your understanding of "internalisation" and, using an example, describe how this works in practice, demonstrating if/how your Algo Clients benefit from this pracess. If you wish to do so you may provide an indication of how much volume is internalised on average.	In the context of this digo, internalisation means the obliky of the algo to 'match-off' volume with opposing aggressive (spread-crossing) flow from either the NWM client base or internal trading desks. This is achieved using the NWM COMS system, where the algo child order is blended with our market making price before being shown to clients and internal risk takers. If any user crosses the spread onto a blended price the algo order takes orceedence for the fill.	In the cortext of this algo, internalisation means the oblifty of the algo to "match-off" volume with opposing aggressive (spread-crossing) flow from either the NWM client base or internal trading desks. This is achieved using the NWM COMS system, where the algo child order is blended with our market making price before being shown to clients and internal risk takers. If any user crosses the spread onto a blended price the algo order takes precedence for the fill.	The Time Slice algo daes not attempt to internalise as it simply crosses the spread on either a NWM or external price by design. This algo is only used in less liquid currency pairs where there is no inherent spread -crossing activity in the mark and hence attempting to achieve internalisation is no feasible.
		There are several benefits for the algo user from this process: the algo can capture spread, because the apposing flow has crossed the spread onto the algo bid or offer. The market impact is also minimised because the algo has not had to place a resting order on any external venue.	There are several benefits for the algo user from this process: the algo can capture spread, because the apposing flow has crossed the spread onto the algo bid or offer. The market impact is also minimised because the algo has not had to place a resting order on any external venue.	
		We can also curate the list of taking clients that the blended price is shown to in order to ensure that only those takers where information leakage is low are involved in the process. The internalisation rate for the Peg Clipper is typically between 80% and 90% depending on settings, and 100% can be achieved if desired at the expense of the rate of fill.	We can also curate the list of taking clients that the blended price is shown to in order to ensure that only those takers where information leakage is low are involved in the process. The internalisation rate for the Peg Time Slice varies widely as a function of user settings and the currency pair. Rates near 100% can be achieved in liquid pairs where the desired execution rate is not too quick.	

Segregation policy is all about keeping order information private and reducing the risk of signalling.

22	Diagon departing if and how the size orders are concreted within your	There is a clear visibility framework to answe that all alignst along are any visible to the client themselves the relevant EV	There is a clear visibility framework to ensure that all alignst along are only visible to the client themselves the relevant EV	There is a clear visibility framework to ensure that all clear class are only visible to the client themselves the relevant EX
22	institution.	Sales coverage team and the eFX Sales team.	Sales coverage team and the eFX Sales team.	Sales coverage team and the eFX Sales team.
		No trading desks can see any algo parent orders, except for the Segregated Order Execution Desk. The Segregated Order Execution Desk sole mandate is for client execution, the desk does not do any principal risk trading. In the case where a child fill is filled by the NWM principal price the risk traders can see the economic detail to enable them to manage their risk book, but are not privy details on parent order or counterparty.	No trading desks can see any algo parent orders, except for the Segregated Order Execution Desk. The Segregated Order Execution Desk sole mandate is for client execution, the desk does not do any principal risk trading. In the case where a child fill is filled by the NWM principal price the risk traders can see the economic detail to enable them to manage their risk book, but are not privy details on parent order or counterparty.	No trading desks can see any algo parent orders, except for the Segregated Order Execution Desk. The Segregated Ord Execution Desk sole mandate is for client execution, the desk does not do any principal risk trading. In the case where a child fill is filled by the NWM principal price the risk traders can see the economic detail to enable them to manage their book, but are not privy details on parent order or counterparty.
23	Can sales and trading personnel who provide intraday 'market colour' view algo orders at any stage? If so, what steps have been taken to minimize the right of information before a	The relevant FX Sales coverage team and the eFX Sales team can see client algo orders. There is a visibility model which ensures a salesperson only sees orders from clients that are relevant to them.	The relevant FX Sales coverage team and the eFX Sales team can see client algo orders. There is a visibility model which ensures a salesperson only sees orders from clients that are relevant to them.	The relevant FX Sales coverage team and the eFX Sales team can see client algo orders. There is a visibility model which ensures a salesperson only sees orders from clients that are relevant to them.
	mininise ure risk of mormous reakage?	The Segregated Orders Execution Desk can see client algos. This team is fully physically segregated from sales and trading personal and has no position-taking mandate. No traders on any other desk can ever see the parent order details of any client order. In the case where a child fill is filled by the NWM principal price ther risk traders can see the economic detail to enable them to manage their risk book, but are not privy to details on the parent order.	The Segregated Orders Execution Desk can see client algos. This team is fully physically segregated from sales and trading personal and has no position-taking mandate. No traders on any other desk can ever see the parent order details of any client order. In the case where a child fill is filled by the NWM principal price ther risk traders can see the economic detail to enable them to manage their risk book, but are not privy to details on the parent order.	The Segregated Orders Execution Desk can see client algos. This team is fully physically segregated from sales and tradi personal and has no position-taking mandate. No traders on any other desk can ever see the parent order details of any client order. In the case where a child fill is filled by the NWM principal price the risk traders can see the economic detail enable them to manage their risk book, but are not privy to details on the parent order.
24	Can discretionary traders who may enter or exit risk for your institution view algo orders at any stage? If so, what steps have been taken to minimise the risk of information leakage?	NVM traders cannot view client algo parent orders. In the case where a child fill is filled by the NVMA principal price the risk traders can see the economic detail to enable them to manage their risk book, but are not privy details on parent order or counterporty.	NWM traders cannot view client alga parent orders. In the case where a child fill is filled by the NWM principal price the risk traders can see the economic detail to enable them to manage their risk book, but are not privy details on parent order or counterparty.	NWM traders cannot view client algo parent orders. In the case where a child fill is filled by the NWM principal price the r traders can see the economic detail to enable them to manage their risk book, but are not privy details on parent order a counterparty.
25	Can an electronic market making system view algo orders at any stage? If so, what steps have been taken to minimise the risk of information leakage or misuse of information?	The NWM market making system cannot view the parent algo orders at any stage. However, if COMS has been chosen as a liquidity pool the COMS matching engine allows a child order from an algo to become part of our market-making price. Such a blended price is only shown to a heavily curated subset of 'taking' counterparties in order to minimise any information leakage from the algo.	The NWM market making system cannot view the parent algo orders at any stage. However, if COMS has been chosen as a liquidity pool the COMS matching engine allows a child order from an algo to become part of our market-making price. Such a blended price is only shown to a heavily curated subset of 'taking' counterparties in order to minimise any information leakage from the algo.	The NWM market making system cannot view the parent algo orders at any stage. This algo does not trade on any liquid except NWM principal liquidity, and the hedging process to manage the principal positions is designed to cause the least market impact.
26	Are algo order flows included in any market positioning tools or analyses that other clients may use?	We do not make available any market positioning tools or similar to clients. NVM Sales do share internally generated market position reports with clients, however these are aggregated at a sufficiently high level to ensure that no individual client flows can be discerned. Such reports will include trades from all NVM activity, including client algo orders.	NWM do share market positioning reports with clients, however they cannot use any tools themselves. The reports the clients see are at a high enough level to ensure a large degree of aggregation so that no individual client flows can be discerned.	NWM do share market positioning reports with clients, however they cannot use any tools themselves. The reports the cl see are at a high enough level to ensure a large degree of aggregation so that no individual client flows can be discerned
SAFETY FEA	TIPES			

SAFETY FEATURES Safety features might include fat-finger limits, kill switches or protections that automatically suspend the order when it trades too fast or in certain market conditions.

27	Please describe any in-built safety features you have that may cause of	In This algo has a comprehensive set of safety features which are designed to pause or cancel the algo if they are triggered.	This algo has a comprehensive set of safety features which are designed to pause or cancel the algo if they are triggered.	This algo has a comprehensive set of safety features which are designed to pause or cancel the algo if they are triggered.	This algo has a comprehensive set of safety features which are designed to pause or cancel the algo if they are triggered.
	order to be suspended or rejected.	These are separate to the usual credit controls and are intended to prevent 'fat finger' errors and other potential problems	These are separate to the usual credit controls and are intended to prevent 'fat finger' errors and other potential problems	These are separate to the usual credit controls and are intended to prevent 'fat finger' errors and other potential problems	These are separate to the usual credit controls and are intended to prevent 'fat finger' errors and other potential problems
		which could cause an unwanted outcome for the client. The controls cover but are not limited to the max size of parent	which could cause an unwanted outcome for the client. The controls cover but are not limited to the max size of parent	which could cause an unwanted outcome for the client. The controls cover but are not limited to the max size of parent	which could cause an unwanted outcome for the client. The controls cover but are not limited to the max size of parent
		order, the rate of execution, unexpected rejection or latency, price collars, and further details can be provided on request	order, the rate of execution, unexpected rejection or latency, price collars, and further details can be provided on request	order, the rate of execution, unexpected rejection or latency, price collars, and further details can be provided on request	order, the rate of execution, unexpected rejection or latency, price collars, and further details can be provided on request
28	Please explain what you have done, and will continue to do, to ensure the integrity of the electronic trading system you provide for clients to	NWM has a range of measures to ensure the reliability, security and capacity or our electronic trading systems as well as a variety of contingency measures, including (but not limited to) incident monitoring and reviews, controls/circuit	NWM has a range of measures to ensure the reliability, security and capacity or our electronic trading systems as well as a variety of contingency measures, including (but not limited to) incident monitoring and reviews, controls/circuit	NWM has a range of measures to ensure the reliability, security and capacity or our electronic trading systems as well as a variety of contingency measures, including (but not limited to) incident monitoring and reviews, controls/circuit	NWM has a range of measures to ensure the reliability, security and capacity or our electronic trading systems as well as a variety of contingency measures, including (but not limited to) incident monitoring and reviews, controls/circuit
	use (including the system's reliability, security, capacity and	breakers/throttles/limits to restrict usage/capacity utilisation/risk, audited and regularly reviewed permissioning and an IT	breakers/throttles/limits to restrict usage/capacity utilisation/risk, audited and regularly reviewed permissioning and an IT	breakers/throttles/limits to restrict usage/capacity utilisation/risk, audited and regularly reviewed permissioning and an IT	breakers/throttles/limits to restrict usage/capacity utilisation/risk, audited and regularly reviewed permissioning and an IT
	contingency measures).	resilience Policy with adequate disaster recovery plans/periodic testing	resilience Policy with adequate disaster recovery plans/periodic testing	resilience Policy with adequate disaster recovery plans/periodic testing	resilience Policy with adequate disaster recovery plans/periodic testing
TCA		L			
TCA is an	increasingly important part of the service. Where the TCA is not third party	it is important to understand internal metrics. For example, if you have 'beaten risk transfer price' by 3bp how is that risk trans	sfer price calculated?		
29	Do you support any TCA or analytics? If so, please specify which	NWM provide in-house TCA (Transaction Cost Analysis) and analytics as well as post trade TCA via SFTP (Secure File	NWM provide in-house TCA and analytics as well as post trade TCA via SFTP to external providers: BestX, ITG, and Trade	NWM provide in-house TCA and analytics as well as post trade TCA via SFTP to external providers: BestX, ITG, and Trade	NWM provide in-house TCA and analytics as well as post trade TCA via SFTP to external providers: BestX, ITG, and Trade
	providers.	Transfer Protocol) to external providers: BestX, ITG, and Trade Feeder.	Feeder.	Feeder.	Feeder.
30	If you provide proprietary analytics, please describe how relevant	he inception mid, inception bid-offer and child fill spread capture metrics are all calculated using the relevant primary market	et he inception mid, inception bid-offer and child fill spread capture metrics are all calculated using the relevant primary marke	et he inception mid, inception bid-offer and child fill spread capture metrics are all calculated using the relevant primary marke	t he inception mid, inception bid-offer and child fill spread capture metrics are all calculated using the relevant primary market
	metrics are calculated (mid-price, risk-transfer benchmarks, etc.).	pricing data. The Risk-Transfer metrics use the NWM price at the time of the order inception. This is the same pricing feed	pricing data. The Risk-Transfer metrics use the NWM price at the time of the order inception. This is the same pricing feed	pricing data. The Risk-Transfer metrics use the NWM price at the time of the order inception. This is the same pricing feed	pricing data. The Risk-Transfer metrics use the NWM price at the time of the order inception. This is the same pricing feed
		that the algo uses if it fills any part on NWM principal liquidity.	that the algo uses if it fills any part on NWM principal liquidity.	that the algo uses if it fills any part on NWM principal liquidity.	that the algo uses if it fills any part on NWM principal liquidity.
31	If you provide proprietary analytics, is there a difference in data	There is no difference in data when providing proprietary analytics to different users	There is no difference in data when providing proprietary analytics to different users.	There is no difference in data when providing proprietary analytics to different users	There is no difference in data when providing proprietary analytics to different users.
	provided to different users? If so, please elaborate.	·····			
SWADS	· · ·				
Algo User	s may have a need to roll an algo execution entirely/partially to one or more	forward value date/s. If roll forwards are executed with the Algo Provider, it is crucial to understand if the respective swap private the state of	ces are competitive and whether potentially sensitive order information is exposed. For example, does the swaps trader know i	which side of the quote the algo execution is on or do they receive a two-sided RFQ? Also, does the swap trader know they are	quoting a captive spot fill or does it appear the same as RFQs that are priced in competition with other banks?
32	What information is provided to the STIRT desk when there is a reques	It Any swap pricing associated with an algo order only takes place once the algo has completed and all the child fills have been appreciated and and and all the child fills have been appreciated and and	en Any swap pricing associated with an algo order only takes place once the algo has completed and all the child fills have bee	en Any swap pricing associated with an aigo order only takes place once the algo has completed and all the child fills have bee	n Any swap pricing associated with an algo order only takes place once the algo has completed and all the child fills have been
	for swap pricing from an algo order?	netted into a single spot ticket. At this point the UMS will initiate an KPQ for the required swap, where size, airection, tenor and counterparty are provided for the swap pricing	netted into a single spot ticket. At this point the OMS will initiate an KPQ for the required swap, where size, direction, tenor and counterparty are provided for the swap pricing	netted into a single spot ticket. At this point the UMS will initiate an KPQ for the required swap, where size, direction, tenor and counterparty are provided for the swap pricing	netted into a single spot ticket. At this point the OMS will initiate an KPQ for the required swap, where size, airection, tenor and counternative are provided for the swap pricing
1		and counterparty are provided for the strap priority.	and counterparty are provided for the strop priority.	and counterparty are provided for the sweep priority.	and counterparty are provided for the strap priority.

	Limit Pro
NWM	We monitor the quality of fills from the liquidity pools that are used by the Limit Pro algo and where possible will take steps to curate the liquidity. This takes place on an ad-hoc basis.
ure	
n	
	This algo only places resting orders on COMS
	No
	This also is arimatily intended to super-subscrat liquidity and therefore achieving any internalization is not family a date
leas	This digits primarily interface to sweep external radiativy and therefore achieving any internalisations into reasting and the construction of the
Ket	place resulting orders into the Cows inquicity pool, and any his resulting can be regarded as having been internalised,
	nowever the induction of COMS hin is generally not large.

х	There is a clear visibility framework to ensure that all client algos are only visible to the client themselves, the relevant FX Sales coverage team and the eFX Sales team.
der o risk	No trading desks can see any algo parent orders, except for the Segregated Order Execution Desk. The Segregated Order Execution Desk sole mandate is for client execution, the desk does not do any principal risk trading. In the case where a child fill is filled by the NWM principal price the risk traders can see the economic detail to enable them to manage their risk
	book, but are not privy details on parent order or counterparty.
h	The relevant FX Sales coverage team and the eFX Sales team can see client algo orders. There is a visibility model which ensures a salesperson only sees orders from clients that are relevant to them.
ling / l to	The Segregated Orders Execution Desk can see client algos. This team is fully physically segregated from sales and trading personal and has no position-taking mandate. No traders on any other desk can ever see the parent order details of any client order. In the case where a child fill is filled by the NWM principal price the risk traders can see the economic detail to enable them to manage their risk book, but are not privy to details on the parent order.
risk or	NVM traders cannot view client algo parent orders. In the case where a child fill is filled by the NVM principal price the risk traders can see the economic detail to enable them to manage their risk book, but are not privy details on parent order or counterparty.
dity	The NWM market making system cannot view the parent algo orders at any stage. If this algo places child orders into COMS, the COMS matching engine allows a child order from an algo become part of aur market-making price. Such a blended price is only shown to a heavily curated subset of 'taking' counterparties in order to minimise any information leakage from the algo.
lients d.	NWM do share market positioning reports with clients, however they cannot use any tools themselves. The reports the clients see are at a high enough level to ensure a large degree of aggregation so that no individual client flows can be discerned.