HSBC Customized Execution Services (CES)

Global Algorithmic Strategies

	HSBC Strategy	Description	Example	Good when…	Careful…
Liquidity Seeking	**Tiger**	Dynamic liquidity seeking algorithm designed to trade opportunistically in the lit markets while taking advantage of dark liquidity	Buy 100,000 XYZ at or close to the strike price take advantage of liquidity where available – happy to pay the spread and prepared for some impact to get done quickly	You are prepared to pay the spread and have some impact in order to extract liquidity/when you do not want to show your order on the book	Tiger will generally pay the spread. It is advisable to use a limit price to minimize impact especially with wide spread stocks
Dynamic	**DynaPov**	Dynamically varies participation as the stock moves relative to the chosen benchmark – Would feature is available (see below)*	Buy 100,000 XYZ, initially targeting 25% of the lit volume – I think the market is range bound so increase participation if the price falls OR I think the market is trending so increase participation if the price rises	When you want to dynamically increase/decrease your participation rate to reflect your view on prevailing market conditions	Use a Min/Max participation rate in order to constrain the behavior
	DynaClose	Will trade the order in the closing auction. If required, DynaClose option can be used to intelligently start the order during continuous-trading where appropriate	Buy 100,000 XYZ in the close. If my order is too big for the expected auction volume then start trading early according to my aggression setting	Your benchmark is the Close	Orders may start early according to the aggression setting selected. Orders will only complete if there is sufficient liquidity
Benchmark Driven	**IS**	Optimizes the trade off between market impact and opportunity cost using quantitative modeling	Buy 100,000 XYZ at or close to the strike price – trade over the optimum time period to complete this trade taking into account historical volume patterns. I am prepared for some opportunity cost in order to minimize impact	Taking a methodical calculated approach to an order. IS will not be distracted by unusual price/volume changes	Tiger/POV will be more reactive to market volume so may be more appropriate where there is urgency
	VWAP	Designed to achieve the volume weighted average price of electronic order book traded volume	Buy 100,000 XYZ allocating portions of the order according to the expected volume profile. Try to be passive but cross the spread if required to keep up with the historical volume pattern	VWAP over the traded time period is the benchmark	VWAP will not take into account unexpected price moves/volume distribution and will continue to trade according to the historical volume pattern
	TWAP	Designed to execute equal amounts of the order over a defined time period	Buy 100,000 XYZ and spread the order evenly over the required trading time period	You need a methodical, predictable trading schedule	TWAP will pay the spread to keep up with the intended trading schedule. Attention must be paid to illiquid stocks and a maximum volume parameter is advisable (in which case your order may not complete)
	POV	Participates in the market in order to achieve a target percentage of volume – Would feature is available (see below)*	Buy 100,000 XYZ by targeting 25% of the lit volume. Trade passively where possible but do not get behind volume and pay the spread when necessary	You want to track a proportion of lit volume	POV will pay the spread to keep up with volume. It is advisable to use a price limit as POV will follow volume at the prevailing price
Dark Only	**Dragon**	A Dark only order designed to capture hidden liquidity on a variety of venues	Buy 100,000 XYZ by resting portions of my order in Dark venues only. Please continuously peg my order to the MID price of the lit order book	You wish to advantage of Dark liquidity only	Using an ultimate limit is advisable as orders will match at the prevailing MID of the lit order book as volume becomes available
	* "Would" Parameter	This feature rests the majority of the order in Dark venues allowing for an immediate mid point cross if liquidity is available. HSBC's proprietary dark cross logic manages this interaction to maximize liquidity and minimize information leakage	This feature is available on the POV, DynaPov and IS algos	You wish to trade using a selected strategy but are prepared to execute the majority of our order at the prevailing MID using Dark liquidity if available	Not to be used for orders where a strict adherence to the volume participation is required. A separate "Would" limit price is available which will only apply to the Dark portion of your order

Customized Execution Services (CES) Algorithms by Market

Legend: ● Live ○ Not Available

Algorithm	Brazil	Canada	Chile	Mexico	US	Austria	Belgium	Czech Republic	Denmark	Finland	France	Germany	Greece	Hungary	Ireland	Israel	Italy	Netherlands	Norway	Poland	Portugal	South Africa	Spain	Sweden	Switzerland	UK	Australia	Hong Kong	India	Indonesia	Japan	Korea	Malaysia	Singapore	Taiwan	Thailand
Specialized																																				
Arrival Price/IS	●	●	●	●	●	●	●	○	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	○	●	●	●	●	●	●	●
Tiger	●	●	●	●	●	●	●	○	●	●	●	●	●	●	●	●	●	●	●	●	●	○	●	●	●	●	●	●	○	●	●	●	●	●	●	●
Dragon	○	○	○	○	○	●	●	○	●	●	●	●	●	●	●	●	●	●	●	●	●	○	●	●	●	●	○	●	○	○	○	○	○	○	○	○
POV																																				
POV	●	●	●	●	●	●	●	○	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	○	●	●	●	●	●	●	●
DynaPOV	●	●	●	●	○	●	●	○	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	○	●	●	●	●	●	●	○
MOC																																				
DynaMOC	●	○	○	○	○	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	○	○	○	○	○	○	○	○	○	○
Weighted Average																																				
TWAP	●	●	●	●	●	●	●	○	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	○	●	●	●	●	●	●	●
VWAP	●	●	●	●	●	●	●	○	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	○	●	●	●	●	●	●	●

● Live
○ Not Available

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