





#### 1. Introduction

This Annex provides information on how, where and when best execution is delivered by Deutsche Bank's Listed Derivatives business when handling or executing transactions with Professional Clients, as required by MiFID II and Applicable UK Rules. The term "Client" should therefore be interpreted as referring to Professional Clients only in the context of this Annex.

This Annex should be read in conjunction with Deutsche Bank's overarching Order Execution Policy, available at https://www.db.com/order-execution-policy (the Policy). All defined terms which have not been defined in this Annex shall have the meaning given in the Policy.

## 2. Scope

This Annex covers Orders in the following asset classes:

- Interest rate derivatives;
- Currency derivatives;
- · Equity derivatives; and
- Commodities derivatives and emission allowances derivatives.

### 3. Legitimate Reliance and Application of the Four Fold Test

In the context of the Listed Derivatives Business, Deutsche Bank provides a range of execution methods to its Clients. The Bank's assessment of whether a Client places legitimate reliance on it is determined in accordance with the Four Fold Test.

Although Deutsche Bank has concluded that best execution does not typically apply in certain circumstances outlined below, there may be limited circumstances in which, following the application of the Four Fold Test, it cannot be clearly established whether or not a Client is placing reliance on Deutsche Bank. In such circumstances, Deutsche Bank will consider if, on balance, the Client is likely to be placing legitimate reliance on it and, if it determines that it is, Deutsche Bank will provide best execution when executing the Order.

It is important to be aware that even in the circumstances described above where the best execution obligation does not apply, Deutsche Bank is still required to treat Clients fairly and to manage any conflicts of interest that may arise.

The application of best execution to the execution methods offered by Deutsche Bank in the context of the Listed Derivatives Business is set out below:

## 3.1 Worked Orders on Venue

Worked Orders are also commonly referred to as high touch sales trading and execution services. Deutsche Bank considers that best execution is owed when executing Orders on a Clients behalf in respect of worked Orders as it believes that the Client is legitimately relying on Deutsche Bank to look after its interests. This is where Deutsche Bank accepts an instruction to "work" an Order, as Deutsche Bank will



be exercising discretion in an "agency like" way or on a riskless principal basis. Deutsche Bank can do this by executing the Order using its trading algorithms, or manual Order entry to the Venue.

Occasionally, Deutsche Bank may become aware of Client Orders on both sides of the market and will facilitate a Client to Client cross at the requested price according to the crossing rules of the relevant exchange (refer to Block Trades, below).

In certain circumstances there may be no visible liquidity on a market and, in order to work the Order, Deutsche Bank will post a Request for Quote (RFQ) to the Venue.

## 3.2 Block Trades (and Exchange for Related Positions (EFRP))

Pre-negotiated trades are subject to the EFRP or block trade rules of the relevant exchange. Block trades are not subject to the usual price rules of an order book and may be executed away from the bid offer price.

Deutsche Bank will give more weight to the Execution Factors of speed and certainty of execution, and not just price and cost when executing such trades. If a Client wishes to pre-negotiate a trade with Deutsche Bank as principal, then Deutsche Bank will not act on a Client's behalf but as dealer, and best execution will not apply. Similarly, where a Client negotiates a Client to Client cross through Deutsche Bank, best execution will not apply.

## 3.3 Direct Market Access ("DMA")

Deutsche Bank may provide a Client with DMA to one or more Execution Venues.

The system functionality may allow the Client to enter specific instructions in respect of any Order that it places.

Instructions which the Client enters via DMA may constitute specific instructions and if so will accordingly override DB's Order Execution Policy to the extent of those instructions (see section 2.2 of the Policy). Deutsche Bank will owe best execution with regard to any remaining parameters such as latency or Order timeliness.

## 3.4 Sponsored Market Access ("SMA")/Sponsored Access ("SA")

Best Execution will not apply.

#### 4. Execution Factors and Order Handling

## 4.1 Determining the relative importance of Execution Factors

The decision making process concerning the routing of, and therefore execution or transmission of, an Order in a way that achieves the best possible result for the Client will be assessed by reference to the Execution Factors as part of Deutsche Bank's obligation to take all sufficient steps to obtain the best possible result for its Clients.

When determining the relative importance to be assigned to each of the Execution Factors, Deutsche Bank has regard to the nature of the transaction, such as the size of the transaction, any specific terms and the overall complexity of the transaction (including the type and duration of the Order that Deutsche Bank receives, including limit Orders, stop/loss Orders, at the open / close, market, good for day or good till date) and any other consideration which it considers relevant to the execution of the Order, such as available internal and/or external liquidity for the relevant instrument and the potential impact on the



market of execution. By considering these factors as an initial step, Deutsche Bank is able to determine which of the Execution Factors are most important and the weight that it should give to each.

Typically, the price of the transaction excluding our own execution charges is given the greatest weight. However, where circumstances exist such that the usual prioritisation of the Execution Factors would not result in the best outcome for a Client, Deutsche Bank will determine the relative priority of each Execution Factor on an order-by-order basis. This means that there may be circumstances in which other factors are assigned a greater weight than price. These factors may include:

- likelihood of execution or settlement: this is the likelihood that Deutsche Bank are able to fill an Order in the size specified (or at least a substantial part of it), in its entirety, and the likelihood that Deutsche Bank can settle the transaction in a timely fashion once executed;
- speed: this the pace at which Deutsche Bank is able to progress and Order; and
- costs: these are the costs incurred by a Client that relate to the execution of the Order.

An example of where other factors may be assigned a greater weight than price is where access to liquidity in the relevant product is constrained in some way, such as where the product is illiquid. In such a case, the likelihood of execution in view of the size of the Order may be assigned a greater weight than price by Deutsche Bank. Speed is usually something that is assigned a greater weight if the nature of the Client Order or market conditions means that this factor is more important than price, but this will depend on the nature of the Order and other relevant considerations, which will be considered upon receipt of the Order. Given the nature of transactions in listed derivatives instruments, likelihood of settlement is generally not considered to be an important factor.

Ultimately, the Execution Factors will vary depending on (i) general market conditions during the period of execution, including volatility and available market liquidity, and (ii) the precise terms and complexity of the transaction.

Deutsche Bank reserves the right to consider all the Execution Factors and their relative weighting in light of the specific circumstances and instructions relating to individual transactions.

## 4.2 Worked Orders, including Block Trades

In the process of working Orders, Order information may be shared with various parties depending on the markets involved or the Clients' instructions, for example:

- If the Order is to be executed on a Trading Venue but no quote is visible, Deutsche Bank will post a Request for Quote (RFQ) to the Venue.
- If the Order is to be executed via the "call around" market, limited details of the Order may be shared with several market makers, as required in our discretion to obtain the best quote, balanced against timeliness and the risk of market movements
- If the Client requests Deutsche Bank to provide it with a "DB Price", it will share the necessary
  information with internal desks in order to obtain the requested quote
- If Deutsche Bank becomes aware of suitable opposing Orders, it may notify the parties with limited details, in order to seek further instruction on whether a Client to Client cross should be negotiated

## 4.3 DMA

For DMA flow, Deutsche Bank will transmit an Order according to a Client's specific instructions (see section 2.2 of the Policy) as promptly as possible, subject to its necessary checks and controls. Where the use of an algorithm is not specified, best execution will not typically apply.

Where the use of an algorithm is specified, the Client's choice of algorithm and any set parameters will determine or influence the execution approach and factor weightings. The core Deutsche Bank Listed Derivatives algorithmic suite contains, but is not limited to, the following algorithms:



**Stealth**: The Stealth strategy identifies short-term market signals for smarter executions. By continually adapting to intraday market conditions, Stealth rapidly captures trading opportunities while reducing market impact.

**Iceberg / Smart Iceberg / Waterfall:** The Iceberg, Smart Iceberg and Waterfall strategies will execute the Client's Order while only displaying a limited amount of the total Order quantity. For STIR (Short Term Interest Rate) and spread orders the Client can ensure that it keeps a constant amount in the market using the Waterfall variant.

**VWAP**: The VWAP strategy is designed to pace the execution of Orders to match the historical distribution of volume within user-specified time periods. Expected market volume is estimated from historical volume profiles calculated on a per instrument basis.

**TWAP / Time Slice**: The TWAP and Time Slice trading strategies seek to reduce the expected negative deviation of the average trade price compared to the time weighted average price during the life of the Order. The TWAP strategy gives Clients the added flexibility of controlling participation levels to limit impact.

**Smart Peg**: The Smart Peg strategy seeks to "peg" Orders to a specified price level while displaying on the market only a limited amount of the total order at any time. The strategy periodically evaluates the peg expression and adjusts its position in the market accordingly. Clients can use "With a Tick" discretion to become aggressive if the far touch size is decreasing.

**POV**: The Percentage of Volume strategy aims to pace the execution to match a target percentage of market volume.

**IS**: The IS strategy trades along with the market and increases participation if the market moves in a Client's favour and decreases participation as the market moves away. For less volatile products the strategy will be more flexible in capturing spread.

**P&L Neutral**: A P&L Neutral basket aims to trade when the current market value of the basket is at or better than a pre-defined reference basket. The value of the reference basket is calculated from reference prices defined per product. The basket control aims to ensure that if a fill is received a Client will immediately attempt to hedge in the remaining components and be onside of that Client's P&L constraint.

## 5. Execution Venues on which DB places significant reliance

Deutsche Bank executes its Client Orders either directly or through affiliates or third party brokers on the following Venues and considers that these Venues enable it to obtain best execution and therefore satisfy its best execution obligation on a consistent basis. This list contains those Venues on which Deutsche Bank places significant reliance. It is therefore not exhaustive and will be subject to change as described in this Policy and will be re-issued from time to time. Any additional Venues used, but not listed here, will nevertheless still have been selected in accordance with this Policy.

The list of Execution Venues used for the execution of all Orders, along with a list of the entities to which Deutsche Bank may transmit Client Orders for execution on such Execution Venues, in respect of each asset class is set out in the table below.

The penultimate column in the table identifies the venues on which Deutsche Bank may execute Client Orders directly, and the final column, titled "Deutsche Bank AG (non EEA & UK branches and affiliates)



and Third Party Brokers", sets out the entities to which Deutsche Bank may transmit Client Orders for execution on the relevant Execution Venue.

	Interest Rate Derivatives	Currency Derivatives	Equity Derivatives	Commodity Derivatives	Direct execution by Deutsche Bank AG (branches and relevant affiliates in the EEA & UK)	Deutsche Bank AG (non EEA & UK branches and affiliates) and Third Party Brokers
EEA & UK regulated markets						
Eurex	YES	YES	YES	YES	YES	Avalon Capital Partners Ltd AFS Group B.V. Makor Securities London LLP Mariana UFP LLP Mint Partners (BGC Brokers I.P.) Vantage Capital Markets LLP Sunrise Futures LLC Newedge Group SA
ICE Futures Europe	YES	NO	YES	YES	YES	Avalon Capital Partners Ltd AFS Group B.V. Makor Securities London LLP Mariana UFP LLP Mint Partners (BGC Brokers I.P.) Vantage Capital Markets LLP Sunrise Futures LLC Newedge Group SA



Order Execution Policy -CB IB & C	RU EEA & UK

	Interest Rate Derivatives	Currency Derivatives	Equity Derivatives	Commodity Derivatives	Direct execution by Deutsche Bank AG (branches and relevant affiliates in the EEA & UK)	Deutsche Bank AG (non EEA & UK branches and affiliates) and Third Party Brokers
London Metal Exchange	NO	NO	NO	YES	NO	INTL FCStone Ltd
Euronext Paris	NO	NO	YES	YES	YES	Avalon Capital Partners Ltd AFS Group B.V. Makor Securities London LLP Mariana UFP LLP Mint Partners (BGC Brokers I.P.) Vantage Capital Markets LLP Sunrise Futures LLC Newedge Group SA
Euronext Amsterdam	YES	YES	YES	NO	YES	Avalon Capital Partners Ltd AFS Group B.V. Makor Securities London LLP Mariana UFP LLP Mint Partners (BGC Brokers I.P.) Vantage Capital Markets LLP Sunrise Futures LLC Newedge Group SA



	Interest Rate Derivatives	Currency Derivatives	Equity Derivatives	Commodity Derivatives	Direct execution by Deutsche Bank AG (branches and relevant affiliates in the EEA & UK)	Deutsche Bank AG (non EEA & UK branches and affiliates) and Third Party Brokers
Euronext Brussels	NO	NO	YES	NO	YES	Avalon Capital Partners Ltd AFS Group B.V. Makor Securities London LLP Mariana UFP LLP Mint Partners (BGC Brokers I.P.) Vantage Capital Markets LLP Sunrise Futures LLC Newedge Group SA
Euronext Lisbon	NO	NO	YES	NO	YES	Avalon Capital Partners Ltd AFS Group B.V. Makor Securities London LLP Mariana UFP LLP Mint Partners (BGC Brokers I.P.) Vantage Capital Markets LLP Sunrise Futures LLC Newedge Group SA
Italian Derivatives Exchange Market	NO	NO	YES	NO	YES	Not applicable

	Interest Rate Derivatives	Currency Derivatives	Equity Derivatives	Commodity Derivatives	Direct execution by Deutsche Bank AG (branches and relevant affiliates in the EEA & UK)	Deutsche Bank AG (non EEA & UK branches and affiliates) and Third Party Brokers
MEFF	YES	NO	YES	YES	YES	Avalon Capital Partners Ltd AFS Group B.V. Makor Securities London LLP Mariana UFP LLP Mint Partners (BGC Brokers I.P.) Vantage Capital Markets LLP Sunrise Futures LLC Newedge Group SA
Warsaw Stock Exchange	NO	NO	YES	NO	NO	Erste Bank Hungary Zártkörűen Működő Részvénytársa ság
Nasdaq OMX	NO	NO	YES	YES	YES	Avalon Capital Partners Ltd AFS Group B.V. Makor Securities London LLP Mariana UFP LLP Mint Partners (BGC Brokers I.P.) Vantage Capital Markets LLP Sunrise Futures LLC Newedge Group SA
Oslo Stock Exchange	NO	NO	YES	NO	YES	Not applicable

# Deutsche Bank



Order Execution Policy -CB IB & CRU EEA & UK

	Interest Rate Derivatives	Currency Derivatives	Equity Derivatives	Commodity Derivatives	Direct execution by Deutsche Bank AG (branches and relevant affiliates in the EEA & UK)	Deutsche Bank AG (non EEA & UK branches and affiliates) and Third Party Brokers
Borsa Istanbul	YES	YES	YES	YES	NO	Deutsche Bank Istanbul (Branch)



	Interest Rate Derivatives	Currency Derivatives	Equity Derivatives	Commodity Derivatives	Direct execution by Deutsche Bank AG (branches and relevant affiliates in the EEA & UK)	Deutsche Bank AG (non EEA & UK branches and affiliates) and Third Party Brokers
Non EEA & UK regulated markets						
Chicago Mercantile Exchange	YES	YES	YES	YES	NO	Deutshe Bank Securities Inc. TJM Institutional Services LLC X-Change Financial Access LLC CNHD Enterprises DT Trading LLC E D & F Man Holdings Ltd DRW Holdings LLC Liquid Capital Management LLP Mako Global Derivatives Partnership LLP Maven Capital Partners UK LLP Winchmore Capital LLP Atlantic Brokers Ltd ROCA Sanitario SA Ronin Capital LLC Optiver Holding B.V. CTC Innovations LLC Sequoia Capital LLP ADG Market Making LLP



	Interest Rate Derivatives	Currency Derivatives	Equity Derivatives	Commodity Derivatives	Direct execution by Deutsche Bank AG (branches and relevant affiliates in the EEA & UK)	Deutsche Bank AG (non EEA & UK branches and affiliates) and Third Party Brokers
						Tower Trading Group Ltd
Chicago Board of Trade	YES	NO	YES	YES	NO	Deutshe Bank Securities Inc. TJM Institutional Services LLC X-Change Financial Access LLC CNHD Enterprises DT Trading LLC E D & F Man Holdings Ltd DRW Holdings LLC Liquid Capital Management LLP Mako Global Derivatives Partnership LLP Maven Capital Partners UK LLP



	Interest Rate Derivatives	Currency Derivatives	Equity Derivatives	Commodity Derivatives	Direct execution by Deutsche Bank AG (branches and relevant affiliates in the EEA & UK)	Deutsche Bank AG (non EEA & UK branches and affiliates) and Third Party Brokers
						Winchmore Capital LLP Atlantic Brokers Ltd ROCA Sanitario SA Ronin Capital LLC Optiver Holding B.V. CTC Innovations LLC Sequoia Capital LLP ADG Market Making LLP Tower Trading Group Ltd
New York Mercantile Exchange	NO	NO	NO	YES	NO	Deutshe Bank Securities Inc. TJM Institutional Services LLC X-Change Financial Access LLC CNHD Enterprises DT Trading LLC E D & F Man Holdings Ltd DRW Holdings LLC Liquid Capital Management LLP Mako Global Derivatives Partnership LLP Maven Capital Partners UK LLP



	Interest Rate Derivatives	Currency Derivatives	Equity Derivatives	Commodity Derivatives	Direct execution by Deutsche Bank AG (branches and relevant affiliates in the EEA & UK)	Deutsche Bank AG (non EEA & UK branches and affiliates) and Third Party Brokers
						Winchmore Capital LLP Atlantic Brokers Ltd ROCA Sanitario SA Ronin Capital LLC Optiver Holding B.V. CTC Innovations LLC Sequoia Capital LLP ADG Market Making LLP Tower Trading Group Ltd
ICE Futures US	NO	YES	YES	YES	NO	Deutshe Bank Securities Inc.
One Chicago	NO	NO	YES	NO	NO	Deutshe Bank Securities Inc.
CBOE Futures Exchange (CFE)	YES	YES	YES	NO	NO	Deutshe Bank Securities Inc.
СВОЕ	NO	NO	YES	NO	NO	Deutshe Bank Securities Inc.
International Securities Exchange	NO	NO	YES	NO	NO	Deutshe Bank Securities Inc.
Boston Options Exchange	NO	NO	YES	NO	NO	Deutshe Bank Securities Inc.
NYSE AMEX	NO	NO	YES	NO	NO	Deutshe Bank Securities Inc.
NYSE ARCA	NO	NO	YES	NO	NO	Deutshe Bank Securities Inc.



	Interest Rate Derivatives	Currency Derivatives	Equity Derivatives	Commodity Derivatives	Direct execution by Deutsche Bank AG (branches and relevant affiliates in the EEA & UK)	Deutsche Bank AG (non EEA & UK branches and affiliates) and Third Party Brokers
Nasdaq Options Market	NO	NO	YES	NO	NO	Deutshe Bank Securities Inc.
Nasdaq OMX PHLX	NO	NO	YES	NO	NO	Deutshe Bank Securities Inc.
US Options Exchange	NO	NO	YES	NO	NO	Deutshe Bank Securities Inc.
Electronic Liquidity Exchange	YES	NO	NO	NO	NO	Deutshe Bank Securities Inc.
Minneapolis Grain Exchange	NO	NO	NO	YES	NO	UBS Securities LLC
Montreal Exchange	YES	YES	YES	YES	NO	BMO Nesbitt Burns Inc.
ICE Futures Canada	NO	NO	NO	YES	NO	BMO Nesbitt Burns Inc.
BM&F Bovespa	YES	YES	YES	NO	NO	Banco Bradesco Argentina SA
ASX 24 (formerly Sydney Futures Exchange)	YES	NO	YES	YES	NO	Deutsche Bank AG, Sydney branch
National Stock Exchange	NO	NO	YES	NO	NO	Deutsche Equities India Private Limited
Osaka Exchange (part of the Japan Exchange Group)	YES	NO	YES	NO	NO	Deutsche Securities Inc.
Tokyo Financial Exchange	YES	NO	NO	NO	NO	Deutsche Securities Inc.
Korea Exchange	YES	YES	YES	NO	NO	Deutsche Securities Korea
Taiwan Futures Exchange	NO	NO	YES	YES	NO	Deutsche Securities Asia Taipei Ltd.

	Interest Rate Derivatives	Currency Derivatives	Equity Derivatives	Commodity Derivatives	Direct execution by Deutsche Bank AG (branches and relevant affiliates in the EEA & UK)	Deutsche Bank AG (non EEA & UK branches and affiliates) and Third Party Brokers
Hong Kong Exchange Limited	YES	NO	YES	NO	NO	Deutsche Securities Asia Ltd.
Singapore Exchange	YES	YES	YES	YES	NO	Deutsche Bank AG, Singapore branch
Malaysian Derivatives Exchange	YES	NO	YES	YES	NO	Kenanga Futures Sdn. Bhd.
Thailand Futures Exchange	YES	YES	YES	YES	NO	Phatra Capital Public Company Limited KGI Securities (Singapore) Pte. Ltd.
Johannes- burg Stock Exchange	YES	YES	YES	YES	NO	DB Johannesburg (Branch) ICAP plc

In some cases Orders may be executed over-the-counter (*OTC*). See Section 8 of the Policy for the risks associated with OTC execution.

In selecting the Execution Venues listed above, Deutsche Bank has had regard to the following factors (in order of importance):

- The relevant contract being available on the relevant venue in respect of an Order;
- Liquidity available on the relevant venue;
- Volume available on the relevant venue.

Deutsche Bank selects the Execution Venues which it considers consistently provides best execution for the execution of client Orders. When selecting whether to include a particular Execution Venue on the list of entities to which Orders may be transmitted, or the list of venues on which Orders are executed, Deutsche Bank reviews the order execution policy of the relevant venue, and also takes into account information and data published by the relevant venue, which it compares against other comparable venues to ensure that the venue does provide best execution on a consistent basis.

The execution strategies employed by Deutsche Bank are set out in sections 3 and 4.3 above.



## 6. Order Routing

In general, the specification of a particular contract will dictate the Venue directly.

## 7. Order Monitoring and Governance

Deutsche Bank will monitor the effectiveness of its execution arrangements and Policy, including this Annex, in accordance with section 6 of the Policy.

Reviews will be undertaken to consider (i) the list of Venues in section 5, (ii) the contents of the Policy and this Annex and (iii) execution quality.