DWS Order Execution Policy

As of January 2024

Applicable to:
DWS International GmbH
DWS Investment GmbH
DWS Investment S.A.

// DWS

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0 / Glossary

'Client' means professional client as defined under MiFID II. Professional client is a client who possesses the experience, knowledge, and expertise to make its own investment decisions and properly assess the risks that it incurs. To be considered to be professional client, the client must comply with the criteria covered under Annex II of MiFID II.

'CPRM' means counterparty risk management.

'DWS' (hereinafter "DWS", "we" or "us") refers to legal entities within DWS to which this policy apply and that require to meet Best Execution requirements because they operate in the European Economic Area (EEA) as Investment Services Provider in accordance with Markets in Financial Instruments Directive 2014/65/CE ("MiFID II") OR as Alternative investment fund managers in accordance with Alternative Investment Fund Managers Directive 2011/61/EU ("AIFMD") OR as UCITS Management Companies in accordance with Undertakings for Collective Investment in Transferable Securities Directive 2009/65/EC ("UCITS"). These legal entities are listed in Appendix Section C.

'Execution Venue' includes a regulated market ("RM"), a multilateral trading facility ("MTF"), an organised trading facility ("OTF"), a systematic internaliser ("SI"), or a market maker or other liquidity provider or an entity that performs a similar function in a third country to the functions performed by any of the foregoing.

'Financial Instruments' means financial instruments as defined under Section C Annex I of MiFID which exclude foreign exchange spot contracts.

'Market Maker' means a person who holds himself out on the financial markets on a continuous basis as being willing to deal on own account by buying and selling Financial Instruments against that person's proprietary capital at prices defined by that person.

'Material Change' means a significant event that could impact parameters of Best Execution such as cost, price, speed, likelihood of execution and settlement, size, nature or any other consideration relevant to the execution of the order.

'MiFID II' means Directive 2014/65/EU of the European Parliament and of the Council of 15 May 2014 on markets in financial instruments and amending Directive 2002/92/EC and Directive 2011/61/EU including any applicable amending and/or supplementing directive and/or regulation.

'Multilateral Trading Facility ("MTF")' means a multilateral system, operated by an investment firm or a market operator, which brings together multiple third-party buying and selling interests in Financial Instruments – in the system and in accordance with non-discretionary rules – in a way that results in a contract in accordance with Title II of MiFID II.

'Organised Trading Facility ("OTF")' means a multilateral system which is not a regulated market or an MTF and in which multiple third-party buying and selling interests in bonds, structured finance products, emission allowances or derivatives are able to interact in the system in a way that results in a contract in accordance with Title II of MiFID II.

'Over the Counter ("OTC")' means a method of trading that does not take place on a RM. It can take various shapes from bilateral trading to via permanent structures (such as systematic internalisers and broker networks).

'TCA ("Transaction Cost Analysis")' means a study of trade prices to determine whether the trades were arranged at favourable prices.

'Policy' means this Order Execution Policy in accordance with MiFID II, UCITS and AIFMD.

Regulated Market ("RM")' means a multi-lateral system operated and/or managed by a market operator, which facilitates the bringing together of multiple third-party buying and selling interests in Financial Instruments – in the system and in accordance with its non-discretionary rules – in a way that results in a contract, in respect of the Financial Instruments admitted to trading under its rules and/or systems, and which is authorised and functions regularly as defined and in accordance with the provisions of MiFID II.

'Request for Quote ("RFQ")' means an electronic message for soliciting quotes for a financial instrument.

'Securities financing transactions ("SFTs")' means stock lending transactions and security repurchasing transactions which are generally carried out under a Global Master Securities Lending Agreement, a Global Master Repo Agreement, or a German Master Agreement.

'Specific instructions' means a specific instruction by a Client as to how the order should be executed, including specifying price limit, execution time, broker or venue to be used, or other parameter.

'Systematic Internaliser ("SI")' means an investment firm which, on an organised, frequent, systematic and substantial basis, deals on own account by executing client orders outside a RM, a MTF, an OTF, without operating a multilateral system.

'Investor' means investor in a collective investment undertaking subject to UCITS or AIFMD.

'Fund' means a collective investment undertaking subject to UCITS or AIFMD.

1 / Introduction and Scope

This Policy sets forth information relating to how DWS seeks to provide Best Execution in accordance with the regulatory requirements.

This Policy sets out our business practice of taking all sufficient steps to obtain the best possible result when we execute orders on behalf of Clients or the Funds on Execution Venues and also transmit or place orders with brokers.

The Order Execution Policy applies where we undertake transactions in Financial Instruments on behalf of Professional Clients or the Funds.

This Policy is published on our website: https://www.dws.com/footer/Legal-Resources/

2 / Best Execution Obligations

Where DWS acts as Management Company of the Funds it will take all sufficient steps to obtain the best possible result when executing decisions to deal on behalf of the managed Funds.

Where DWS acts as Investment Services Provider it will take all sufficient steps to obtain the best possible result when executing decisions to deal on behalf of Clients. We owe a duty of best execution to our Client when we act in a discretionary capacity as agent and make decisions that will affect the interests of our Client i.e. when the Client relies on us to protect their interests in relation to the pricing and other elements of the transaction.

3 / Client Specific Instruction

Where we receive Specific Instructions from a Client regarding the execution of a Client order when providing an investment service, we will ensure execution is performed in adherence with those Specific Instructions. By doing so, we will consider as having satisfied our Best Execution obligations under MiFID II to the extent that an order or a specific aspect of an order is executed following Specific Instructions from the Client relating to the order or the specific aspect of the order.

Any Specific Instruction received from a Client may prevent us from taking the steps we have designed and implemented in this Policy to obtain the best possible result for the execution of those orders in respect of the elements covered by those instructions. Hence, our ability to provide Best Execution will be limited to the extent that we are following Specific Instructions from our Clients.

4 / Best Execution factors

When executing orders, we will take all sufficient steps to obtain the best possible result taking into account price, costs, speed, likelihood of execution and settlement, size, nature or any other consideration relevant to the execution of the order.

When executing or transmitting an order to other firms for execution, we must take all sufficient steps to obtain, the best possible result on a consistent basis by taking into account following execution factors, such as:

- Price
- Costs
- Speed
- Likelihood of execution and settlement
- Size
- Nature
- · Any other consideration relevant to the execution of a particular order

The relative importance of these execution factors will be determined based on the following criteria:

- · The characteristics of the order
- The Financial Instruments that are the subject of the order
- The characteristics of the Execution Venues to which the order can be directed
- The current market circumstances
- Specifically for Funds: the objectives, investment policy and risks of the Fund as indicated in the prospectus, articles of association or offering documents of the Fund

Generally, we will regard price and cost as the important factors for Best Execution, however there may be circumstances when we may determine that other execution factors have a greater influence in achieving the best possible result.

Please refer to the following product specific sections for a better understanding regarding how Best Execution will be achieved.

5 / Selection of Brokers and Execution venues

In general, the execution strategy and associated execution methods, including where and how to execute an order, are made based on the functional and economic merits e.g. liquidity, suitability, certainty, and settlement infrastructure of a broker or a venue.

Our selection of a particular broker to execute an order is based on a number of criteria, including their:

- Market and security familiarity
- Access to liquidity or willingness to commit risk to principal trade
- Financial stability and certainty of settlement
- · Reliability and Integrity of maintaining confidentiality
- Soundness of technological infrastructure and operational capabilities
- In case of new Issues: The broker's capability to provide subscription facility in the primary market
- Safeguards and compliance controls to protect Clients
- Pricing and costs for execution-only services
- Ability to provide transaction cost analysis (TCA)
- Access to Centralized Risk Book (CRB)
- Ability to provide analysis of speed of execution
- Level of control over interactions with internal and external Systematic Internalisers (SIs)
- Approach to double caps and new large-in-size (LIS) venues
- Smart order routing (SOR) logic and Algorithmic trading strategies
- Ability to produce customized reports, trade related performance data, performance attribution, risk reports (including breach violations and rejection) on a periodic basis
- Ability to provide assisted trade reporting

When we pass orders to external brokers who have connectivity, special expertise, or the country exposure required for execution of the orders the following will have also to be considered:

- Rely on broker for Best Execution: When doing so, we would take into account if the broker has MiFID II
 compliant Policy, if applicable, and also has the ability to evidence Best Execution at our request;
- Rely on broker for use of order execution algorithms: we do not host our own algorithms but do make use of algorithms offered by brokers. When doing so, we would make the broker selection based on the defined trading strategy of the algorithm that the broker makes available and the Execution Venues that the broker executes on.

We aim to make use of electronic venues including MTFs, SIs, OTFs, wherever possible. This means that the order will be made available on the venues (i.e. request for quote submitted) on a best effort basis to avoid market movements adversely impacting execution.

We determine the Execution Venue for order execution in respect of a particular order by taking into consideration of the followings factors:

- The instrument types mainly traded on the particular venue where the competitive prices are available
- The depth of liquidity and the relative volatility of the market
- The speed and likelihood of execution
- The creditworthiness of the counterparty on the venue
- The quality, cost, and arrangements supporting clearing and settlement

We have identified the brokers and Execution Venues, as listed in Appendix Sections A and B, on which we place significant reliance in meeting our Best Execution obligations on a consistent basis.

There may, however, be occasions when achieving the best possible result in carrying out a Client order will require executing the order outside trading venues.

The Best Execution obligation requires us to make a trade-by-trade and product specific decisions as described in the sections below.

Equity

Equities and Equity derivatives

Orders of cash equity and Equity derivatives are generally passed to executing brokers for execution who are exchange members with access to the relevant exchange, or who have special expertise and country exposure required for Best Execution.

The price is generally regarded as the primary factor for obtaining Best Execution unless any Specific Instruction requires otherwise. There may be circumstances where factors other than price will take precedence in order to achieve Best Execution result. For example, speed, higher likelihood of execution and settlement are prioritised when market disruption or system outage take place. In certain situations where a market is illiquid or the order is of a large size, in order to reduce market impact, we execute the order directly with market maker or liquidity provider to seek liquidity needed, hence high likelihood of execution and settlement are more important than price.

The relative importance of the following secondary criteria is determined on a trade-by-trade basis:

- The nature of the instrument and size of the order: Whether an instrument to be traded has a unique feature requires special attention when selecting a broker and how liquidity is available at the time of execution
- Likelihood of the execution: The broker's knowledge, exposure, and capability to execute the order

- Likelihood of settlement (settlement risk): The broker's ability to ensure securities will be delivered on settlement date
- Broker's willingness and capacity: In case of a high volume transaction, whether a broker can commit own
 capital to enter into a principal trade; whether the broker specializes in block orders or large program trades
- Speed: How fast a counterparty can react and process the order of a certain size

Equity – like instruments (Convertibles, Certificates, ETFs, and similar instruments)

ETFs are mainly executed via RFQ directly with brokers on an MTF venue (e.g. Tradeweb). We will typically ask multiple brokers for a price and will then execute at the best prevailing price. The competition among brokers on MTF is advantageous for price-discovery process. The ETF price is transparent and available as reference for selecting quotation obtained from brokers. The price is the primary factor of execution decision.

Orders related to certificates may be either executed directly with its issuer or passed to broker for execution (listed instrument).

The execution of convertibles often takes place via RFQ in Tradeweb (Operating company: Tradeweb Europe Limited) by considering primarily the following factors (unless instructed differently):

- Order size: it needs to be considered in relation to both the size of the issuance of the security and to the market capacity and volatility
- The Likelihood of the execution
- Access to Liquidity

Fixed Income

The fixed income market is fragmented and often subject to limited liquidity and price transparency. Therefore, these instruments are mainly traded OTC (except listed instrument). We will, where possible, obtain competing quotes to achieve the best possible results at the given market circumstance.

Debt Instruments

When trading Debt instruments on an MTF (e.g. Tradeweb, Bloomberg Trading, MarketAxess), this is typically done on a RFQ basis and, multiple counterparties are put into price competition simultaneously to achieve a fair price. This execution type is deemed to be reasonable for instruments, where sufficient liquidity is provided through a reasonable number of Execution Venues (counterparties) quoting prices electronically.

When possible, we typically consider various venues and source quotes from multiple market counterparties before accepting the quote that achieves the best possible result.

Unless specifically instructed, the primary execution factor is price. We also take into account the following factors as secondary determinants, such as:

Order Size

- Speed
- · Complexity: the instrument to be traded is bespoke (tailor-made) and illiquid in nature
- Likelihood of Execution and Settlement
- Sufficient level of market liquidity is available at the time of execution

For orders of large sizes, certainty of execution, reduction of market impact and speed of execution might have greater importance than price. Therefore, the choice of available venues and number of potential counterparties, as well as the relative importance given to execution factors are determined on a trade-by-trade basis.

In case of illiquid securities, we can only execute the orders by contacting potential counterparty via phone or email to screen the possibility on the market, as there is no electronic trading facility available for trading this type of securities. In absence of price competition, we will verify the fairness of the available price by assessing the valuation based on available prices of related or comparable securities with adjustment of certain parameters, such as credit rating, maturity and, size. Hence, the primary factor to be considered in these circumstances is the likelihood of execution.

Money market instruments are mainly liquid and at short maturity which can be traded in the same way as liquid debt instruments as above mentioned. The price competition via RFQ is possible and we execute orders by taking the price as primary determinant, unless the Client instructs otherwise.

When executing orders on OTC derivatives via RFQ on trading venues or with a market maker bilaterally, the relevant agreements with the counterparties will be the primary execution factor, followed by price. We shall check the fairness of the price by gathering market data used in the estimation of the price of such product where possible or by referencing similar or comparable products.

In addition to the secondary determinants covered for debt instruments in general, the following factors will also be considered:

- Collateral and associated credit risk
- Other related costs e.g. novation and balance transfer
- Trading Capacity: Broker maintains positions in the underlying security and have significant flow when trading on the other side (buyer/seller)
- Expertise/Skill: Broker's experience and skill to the particular instrument and underlying securities
- Information Flow: Broker provides superior market intelligence

Listed Derivatives (Interest rates derivatives and credit derivatives)

Orders for listed derivatives are transmitted to the registered intermediaries (brokers) with access to the relevant exchanges, or who have special expertise and country exposure required for Best Execution. Secondary determinants are:

- Access and connectivity to the relevant Execution Venues & exchanges
- Financial stability and certainty of settlement

- · Soundness of technological infrastructure and operational capabilities
- · Market and security familiarity
- Information Flow: Broker provides superior market intelligence

Foreign Exchange (Currency Derivatives)

We execute orders on various FX instruments including: FX-future, FX-option (both exchange-traded and OTC), FX-forward, FX-Swaps, as well as NDF (Non-deliverable FX forward).

We use trading venues, as listed in Appendix <u>Section B</u>, to obtain several simultaneous competitive quotes and select the most advantageous one to achieve Best Execution. Therefore, the price is the primary execution factor.

Certain FX OTC derivative instruments are not standardized products due to their tailor-made nature, for instance, with unusual long maturity to meet special needs of the investors. Therefore these instruments are traded OTC where we need to verify the prices through specific pricing tools considering all relevant pricing parameters such as interest rates, volatility, and the spread. We generally ask for quotes from two or more market makers for comparison, if applicable.

Securities Financing Transactions

We execute all SFTs in accordance with the relevant Client agreements or Fund statutes. The transactions are all conducted on OTC basis and therefore no official market price or level is available for SFTs.

The relevant agreements with the counterparties and the lending rate that we are able to achieve will be the most significant factors, however there are other determinants which affect a loan and its level. Therefore, in order to achieve the best possible result on a consistent basis, we also take into account the following factors:

- Approval of counterparties
- Rating of lent security
- Market liquidity in lent security
- Whether a proposed counterparty meets credit risk criteria that we impose
- · Settlement arrangements and costs of entering into the loan
- Terms of trade
- Value of loan
- Collateral criteria

We will get in contact with potential counterparties directly through matching systems or they may contact us. The SFTs brokers / venues on which we place significant reliance in meeting our Best Execution obligations on a consistent basis are listed in Appendix Section A. We will only lend securities at the standard collateral schedule approved by Risk Management. In certain specific cases, the Client may also give us Specific Instructions

about the loan that they are prepared to offer, we will follow these instructions to meet our Best Execution obligation. We establish a "fair allocation" process with the aim of ensuring that loans are allocated fairly.

Other Assets

When we buy or sell assets other than Financial Instruments, we act in the best interest of the Funds or our Client when placing orders to deal on behalf of the Funds or a Client with other entities for execution. Whenever there is no choice for different execution venues, execution factors set out above, such as price, costs, speed, likelihood of execution and settlement, size, nature or any other considerations may not apply.

6 / Monitoring and Review

The purpose of our monitoring and review of execution arrangements is to evaluate the effectiveness of our overall execution arrangements.

We will review the execution arrangements on an on-going basis. This review will include a combination of some or all of the following key activities depending on the product type:

- The daily supervisory oversight to ensure that the order execution on Execution Venues and by brokers follow our execution policy and that decision-making for non-standard executions is exercised at sufficient level of authority
- 2) Periodic review of execution effectiveness based on information obtained from brokers and Execution Venues and/or TCA provided by independent third party data providers and exception report with information including trade details, reason and justifications for deviations
- Periodic independent reviews of execution arrangements and sample execution analysis supported by TCA data conducted by our control functions
- 4) Regular update summary on system functionality, technical enhancement, and back office settlement
- 5) Periodic reporting to various governance bodies covering all Best Execution related topics including the appropriateness of the Best Execution procedure and Policy

As result of periodic review, the list of our Execution Venues as well as the list of our top brokers may be updated accordingly to meet our Best Execution objective.

The escalation and improvement will be addressed under supervision of the relevant broker governance forums and other governing committee focusing on specific product lines.

Review of Brokers

We will take sufficient steps to ensure that when transmitting or placing on order with another legal entity to execute, or executing an order directly with a counterparty, that legal entity has execution arrangements that will enable us to meet our Best Execution obligations and to act in the best interest of the Funds and its Investors.

With relation to legal entities subject to the MiFID II requirements, we will obtain, and review information related to their order execution policy, annual top five report and execution arrangements. In case of entities not in scope for MiFID II, we will take sufficient steps to ensure that the legal entity has execution arrangements that allow them to comply with our Best Execution requirements.

We will leverage our control framework and review process to perform periodical broker monitoring. This process includes (but is not limited to) the following key activities:

- Review of execution quality obtained from selected brokers based on TCA
- Broker review based on information disclosed by the broker, if applicable, such as:
 - Order execution policy
 - Annual top-five report
 - > Affirmation of adherence to their order execution policy
 - > Identify shortcomings in execution quality such as execution losses caused, if any
 - Trade concentration report by trader and by broker

All brokers that we trade with are selected from a pre-approved broker list issued and monitored by our CPRM. CPRM established a standardized broker on boarding and due diligence process where the counterparty risk for all transactions undertaken on behalf of our Clients is assessed and controlled. The broker list is reviewed and updated periodically.

Review of Execution Venues

We will periodically review whether Best Execution was achieved satisfactorily from the venues which we used for order execution in the past period. Our review will consider, among others, the following factors:

- Execution quality based on quality metric published and/or provided by the trading venues
- TCA report in respect of performance of the execution taken place on the venues
- Cost of execution
- Infrastructure to support clearing and settlement
- Best Execution governance framework and policy

We will regularly assess the Execution Venues available to identify those that will enable us, consistently, to obtain the best possible results. As result of our regular review, we may add or remove any Execution Venue from the list.

7 / General Terms of Order Handling

We implement procedures and arrangements, which allow orders to be processed in a prompt, fair, and expeditious manner, unless the characteristics of the order or prevailing market conditions make this impracticable, or the specific interests of the Client or the Fund require otherwise. We will exercise independent judgement and a high level of professionalism, taking into account all execution factors when applying Best Execution considerations.

We don't receive any remuneration or non-monetary benefits for routing orders to a particular Execution Venue or broker. We implement a conflict of interest policy to ensure circumstances which constitute or may give rise to a conflict of interest are identified and well managed. We have designed our processes to ensure that all transactions are executed on an arm's length basis.

We operate procedures to ensure the prompt, fair and expeditious execution and allocation of Client/Fund orders relative to other Client/Fund orders. The procedures include arrangements, where appropriate and where permitted for the Fund, for the aggregation of Client/Fund orders with those of other Clients/Funds to ensure that the aggregation of orders will not work overall to the disadvantage of any Fund or Client. Where an aggregated order is partially executed, we shall allocate the related trades in the best interests of all relevant Clients and/or Funds in accordance with our order allocation policy.

8 / Reporting

We will publish on our website https://www.dws.com/de/footer/Impressum/ on an annual basis and per class of Financial Instruments, a list of top five execution venues and a list of top five firms to whom we transmit Client orders. These reports will be produced individually for each of the DWS legal entities in scope for MiFID II top five reporting requirements (separate reports for SFTs).

9 / Client Notification and Consent

This Policy will be provided to a new Client of our investment services (subject to MiFID II) as part of the relevant Client agreement or will be made available on our website https://www.dws.com/de/footer/Impressum/, in order that we can evidence the provision of appropriate information. We will request the Client's prior consent to this Policy.

There may be occasions when achieving the best possible result in carrying out a Client order will require executing the order outside trading venues. Clients consent to us acting under discretion is such circumstances by providing express consent in the relevant Client agreement. This only applies to client orders in financial instruments admitted to trading on a trading venue.

10 / Review of Execution Policy

This Policy will be reviewed at least annually. Such a review shall also be carried out whenever a Material Change occurs that affects our ability to continue to obtain the best possible result for the execution of Client orders on a consistent basis using the venues included in this Policy. We shall assess whether a Material Change has occurred and shall consider making changes to the Execution Venues or legal entities on which we place significant reliance in meeting the overarching Best Execution requirement. Consequently this Policy document will be updated to reflect these changes. This policy will be made available on our website

https://www.dws.com/de/footer/Impressum/ to Investors in Funds and Clients of our investment services. Additionally, Clients of our investment services will be notified (by email) of any material change that affects our ability to obtain the best possible result for the execution of our Client's orders.

11 / Appendix

This section below provides a non-exhaustive list of brokers/venues used by us to execute orders. Only those brokers/venues are listed that we place significant reliance on. Any additional brokers/venues used, but not listed here, will nevertheless still have been selected in accordance with this Policy.

Our annual MiFID II top five reports are available on our website https://www.dws.com/footer/Legal-Resources/.

A. Brokers (Non-Exhaustive List in Alphabetical order)

Equity:

- BOFAML Securities Europe SA
- Barclays Bank Ireland PLC
- Citigroup Global Markets Europe AG
- Deutsche Bank AG
- Flow Traders B.V.
- Goldman Sachs Bank Europe SE
- Jane Street Financial Limited
- J.P. Morgan AG, Frankfurt
- Morgan Stanley Europe SE
- Nomura Financial Products Europe GmbHRoyal Bank of Canada
- UBS AG (LONDON)

Fixed Income:

- BOFAML Securities Europe SA
- Barclays Bank Ireland PLC
- BNP Paribas S.A.
- Citigroup Global Markets Europe AG Deutsche Bank AG
- Goldman Sachs Bank Europe SE
- HSBC FRANCE
- J.P. Morgan AG, Frankfurt
- Morgan Stanley Europe SE
- Nomura Financial Products Europe GmbHRoyal Bank of Canada
- Societe Generale S.A.

SFTs:

- BOFAML Securities Europe SA
- Barclays Bank Ireland PLC
- BNP Paribas
- Citigroup Global Markets Europe AG
- Credit Agricole Corporate and Investment Bank
- DekaBank Deutsche Girozentrale
- Deutsche Bank AG
- Morgan Stanley Europe SE
- Societe Generale SA
- UBS Limited
- UniCredit Bank AG
- Zürcher Kantonalbank

B. Execution Venues (Non-Exhaustive List in Alphabetical order)

Equity:

- Bloomberg Trading Facility B.V
- Liquidnet Europe Limited
- Tradeweb Europe MTF

Fixed Income:

- Bloomberg Trading Facility B.V
- MarketAxess Europe Limited
- Tradeweb Europe MTF

C. Applicable Legal Entities

- DWS International GmbH
- DWS Investment GmbH
- DWS Investment S.A