



NATIONAL BANK OF GREECE SA

BEST-EXECUTION POLICY

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NATIONAL BANK OF GREECE SA
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I. GENERAL

National Bank of Greece (hereinafter "the Bank") shall take all sufficient steps to achieve the best result either when receiving and transmitting orders to third parties or when executing orders on financial instruments on behalf of its clients.

For this reason, the Bank implements this Best Execution Policy (hereinafter "the Policy"), which sets out the basic principles governing the receipt and transmission of orders to third parties and the execution of orders on behalf of clients. The Bank systematically monitors the implementation of this Policy and evaluates its effectiveness. With this Policy, it is able to demonstrate, whenever requested, that it is implementing all sufficient and enforceable measures foreseen by the relevant legislation to achieve the best execution of orders for all financial instruments whether traded on trading venues or over-the-counter.

For the purpose of drafting this Policy, the Bank has taken into account the applicable regulatory and legislative framework.

II. SCOPE

This Policy is implemented in accordance with the Law for all transactions where the Bank receives and/ or transmits orders to third parties or executes orders on financial instruments for its clients who have been categorized as "Retail" or "Professional".

Clients belonging to the category "Eligible Counterparties" do not fall within the scope of this Policy.

The Policy applies to all countries of the European Economic Area in which the Bank provides investment services related to the financial instruments listed in Annex A of this Policy.

III. GOVERNANCE

The Bank's Senior Management is responsible for maintaining and aligning the Best Execution Policy for Financial Instruments with the applicable legislative and regulatory framework.

The responsible body for the approval of the Best Execution Policy is the Bank's Board of Directors (BoD).

The responsible parties for the implementation of the Best Execution Policy are all the executives and personnel of the Bank who are involved in the receiving and transmitting of orders to third parties and in the execution of orders, regardless of whether a client's account or the Bank's own account is concerned.

IV. DEFINITION AND FACTORS OF BEST EXECUTION

The best execution of orders includes the sufficient measures taken through the mechanisms and procedures applied by the Bank to ensure the best possible result when orders are received and transmitted to third parties for execution as well as when orders are executed on behalf of clients.

The Bank, in order to achieve the best possible result for its clients when executing orders, takes into account the following factors:

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- the nature and the price of the financial instrument,
- the costs associated with the execution of the transaction (e.g. commissions, clearing and settlement fees, execution venue fees, and any other fees paid to third parties involved in the execution of the order) borne by the customer,
- the execution speed that can be achieved,
- the likelihood of execution and settlement of the transaction, and
- the size and nature of the order or any other consideration relevant to the execution of the order.

V. CRITERIA FOR THE EVALUATION OF BEST EXECUTION FACTORS

The above factors are evaluated based on their impact on achieving the best execution of the order, taking into account the following criteria:

- The characteristics of the client, including the categorization of the client as retail or professional,
- the characteristics of the client order, including:
 - i. whether it is a market or limit order,
 - ii. the size of the order and the likely market impact of the order, or
 - iii. whether the order involves a securities financing transaction (SFT).
- the characteristics of the financial instruments that are the subject of that order, such as:
 - i. domestic/ foreign shares,
 - ii. bonds,
 - iii. derivatives (exchange traded/ Over the Counter traded),
 - iv. structured financial instruments, and
 - v. liquid/ illiquid.
- the characteristics of the execution venues to which that order can be directed:
 - i. execution quality as well as ability to provide best results on an ongoing basis, and
 - ii. liquidity of the execution venue.

VI. EVALUATION OF BEST EXECUTION FACTORS

The relevant importance of each execution factor differs according to the abovementioned criteria and is configured through the following criteria:

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- **Client characteristics**

Retail Clients:

The Bank views the total consideration of order execution as a very important factor, and defines the best possible result in terms of this factor, defined as the price of the financial instrument and all fees related to the execution on each execution venue, including all transaction expenses directly related to the execution of order, such as execution venue fees, clearing and settlement fees, and any other fees paid to third parties.

When a financial instrument is traded in more than one venue and each venue ensures the same result based on this total consideration factor, the Bank takes into account the remaining execution factors apart from total consideration, in order to achieve the best possible result for its clients.

Professional Clients:

When dealing with Professional Clients the Bank considers as most important execution factors the price and relevant fees as well as the speed and completeness of the execution.

- **Order characteristics**

The Bank takes into account the characteristics of the order, in order to define the relevant importance of the execution factors.

Regarding large (compared with normal market size) scale transactions that may have a high impact on or exceed the available liquidity of the market, the likelihood of partial or total execution and settlement constitute the most important factors.

- **Financial Instrument characteristics**

The Bank takes into account the type of financial instrument, in order to define the relevant importance of the execution factors.

Securities traded on a regulated market:

With respect to shares and listed securities traded on a regulated market and where there is liquidity available in the market, as well as publicly available prices, the Bank considers the most important execution factors to be the price and costs related to the execution of the order.

Over-the-Counter derivatives:

Products not traded on regulated markets (e.g. forward contracts, OTC options, custom swaps, bespoke products, etc.) for which, due to their nature and characteristics, no public prices are available in the market and their prices cannot be found by means of a Request for Quote, the Bank ensures the fairness of the price proposed to the client through the collection of market data used to calculate the price of the product in question, and, where possible, comparison with similar or commensurate products.

The Bank takes into account external market data and externally verifiable reference prices wherever available, in valuating or influencing OTC prices, including bespoke products, in fulfilling the best execution obligations.

The Bank has the necessary procedures and arrangements in place as well as appropriate valuation systems, through its access to the relevant technology and data analytics. The Bank scrutinizes the

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methodologies and inputs underpinning any valuation processes and pricing models applied with respect to OTC products, thus ensuring the consistency and "fairness" of the price. The aforementioned pre- and post-trade checks and procedures are based on the methodology outlined in Annex D of this Policy. The Bank maintains records of pricing data and models, and makes these records available to the competent authority for review.

Bonds:

For transactions relating to Greek and international bonds, the Bank has adopted appropriate measures to ensure that the most advantageous price for the customer can be identified through an automated process, via a Request for Quote to all counterparties of the international markets who are willing to trade with the Bank. In this way, the best execution of the order is ensured not only in terms of price but also in terms of execution time, especially in fast markets.

Bank products:

Regarding products developed by the Bank on behalf of clients and which incorporate unique characteristics (e.g. structured products), and for which the Bank acts as a counterparty, the Bank provides, upon the client's request, all the required information under the applicable Greek and/ or EU legislation.

Product Distribution:

Regarding products acquired by the Bank on behalf of clients and for which the Bank acts as a counterparty, the Bank provides the client with all relevant information available by the originator of the products under the applicable Greek and/ or EU legislation.

- **Execution Venue characteristics**

The execution of an order may vary depending on the execution venues. The selection of an execution venue may affect the way an order is executed. Through this Policy, the Bank defines the characteristics of the execution venues where the best possible result can be achieved on a continuous basis. In particular, where there are more than one competing venues on which to execute an order for a financial instrument, in order to assess and compare the results that would be achieved for the client by executing the order on each of the execution venues, the assessment shall take into account the following:

- i. the costs borne by the client to execute the order on each of the eligible execution venues,
- ii. the commissions received by the Bank for its own account,
- iii. the execution price of the order,
- iv. the execution speed,
- v. the probability of execution, and
- vi. any other relevant factor.

The Bank anticipates that under normal market conditions the characteristics of the execution venues will not significantly affect factors related with order execution.

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The Bank assesses, on a regular basis, whether the execution venues included in Annex B of this Policy provide for the best possible result for the client or whether it needs to make changes to its execution arrangements, taking account of, inter alia, the information regarding the quality of the execution published by both the execution venues and by the Bank itself, within the provisions of the legislative and regulatory framework.

VII. RECEIPT, TRANSMISSION AND EXECUTION OF ORDERS

The Bank executes clients' orders in accordance with the following arrangements:

- Directly:
 - i. on regulated markets on which the Bank is a member (Multilateral Trading Facilities, Organized Trading Facilities),
 - ii. outside of regulated markets or Multilateral Trading Facilities or Organized Trading Facilities, acting as a counterparty (Over The Counter), and
 - iii. against its own book, acting as an execution venue.
- Via third parties with whom the Bank has entered into a written agreement.

Direct execution:

When a financial instrument is admitted for trading only onto one venue, the Bank considers that it meets the best execution obligation with respect to its clients, by routing the order to that venue. In any other case, it follows the execution venue selection process.

When execution factors other than total consideration are considered to be most important with respect to a specific order, then this order is executed considering the underlying factor.

Order transmission to third parties:

When the Bank transmits the orders for execution to third parties, including intermediaries within the Group, it takes all reasonable steps in order to ensure the best execution of clients' orders.

To this extent, the Bank examines the best execution policies implemented by the third parties, monitors the best execution policies of the third parties on an ongoing basis, and takes all reasonable steps so as to ensure that the selected third parties for the transmission of an order have in place and implement a formal execution policy of similar standards.

The criteria for choosing the third party intermediary include:

- whether they implement execution policies that meet the conditions set by the Bank,
- whether they have adequate infrastructure and partnerships to execute orders in foreign markets,
- whether the third parties used by the intermediaries fall under the provision of Directive 2014/65/EC or similar provisions of third country (non-EU) law, and
- whether they impose or are responsible for the implementation of a relevant policy by third parties that they themselves use by further transmitting the orders they receive from the Bank.

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The Bank reviews this Policy and relevant arrangements, which refer to cases where it sends orders to a third party, at least on an annual basis. This review is also performed whenever there is a material change affecting the Bank's ability to continue achieving the best possible result for its clients.

VIII. CLIENT INSTRUCTIONS FOR ORDER EXECUTION

The Bank deems to have fulfilled its obligation to take all sufficient steps to obtain the best possible result for its client when it executes an order or a component of the order, upon specific client instructions regarding the execution of the order or the specific component of the order.

Where the Bank provides direct market access through an electronic interface, the client is responsible for achieving best execution, since the selection of the timing and price and other execution factors is not part of the service that the Bank provides to the client.

The Bank, through this Policy, warns the client that any specific instructions by the client may prevent the Bank from taking the measures it has designed and included in this Policy in order to achieve the best possible result when executing their orders, regarding the order elements affected by these instructions.

IX. MONITORING OF BEST EXECUTION POLICY

The Bank has established best execution arrangements, which are applied on an ongoing basis.

The Bank monitors the implementation of this Policy during the receipt/ transmission of orders and during their execution, and identifies any deviations from the Policy's principles.

This Policy and the execution arrangements are reviewed at least annually and in the event of material changes that might affect the Bank's ability to continue to obtain the best possible result for its clients on an ongoing basis.

The Bank assesses whether there has been any material change and considers amending the relative importance of best execution factors in order to continue meeting the best execution requirement.

A material change shall be a significant event that could affect 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.

The Bank takes the necessary steps to remedy any weaknesses identified during the assessment, and, where deemed necessary, examines the possibility of changing the execution venues or entities on which it places significant reliance in meeting the overarching best execution requirement.

X. TRANSACTIONS EXECUTED OUTSIDE A REGULATED MARKET OR A TRADING FACILITY

In certain circumstances, the Bank may execute a client's order outside a Regulated Market or a Multilateral Trading Facility or an Organized Trading Facility.

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All Business Units involved in reception/transmission and execution of clients' orders ensure that they have obtained explicit written consent from the client before executing orders outside a Regulated Market or a Multilateral Trading Facility (MTF) or an Organized Trading Facility (OTF). In addition, the client is informed of any consequences, such as counterparty risk arising from execution outside the trading venue, and that, upon request, the Bank is able to provide additional information on the implications of this means of execution.

XI. CLIENT REQUESTS

The Bank shall respond clearly and within a reasonable timeframe when a client submits reasonable and proportionate requests for information on the execution policies or arrangements and the way in which they are reviewed. In addition, the Bank ensures that the information costs borne by the Bank are not disproportionate to the nature of the claim and the importance of the relevant client information.

XII. DISCLOSURE OF INFORMATION ON BEST EXECUTION

Execution Policy:

The Bank provides its clients with appropriate information on this Policy. This information, which is provided to the client upon his categorization, clearly explains, in sufficient detail and in a manner easily understood by the clients, how the Bank will execute orders on their behalf. In addition, it is ensured that the client consensus on the Best Execution Policy is obtained in advance.

In particular, for retail clients, a summary of this Policy is provided, which focuses on the total costs incurred (including execution venues, clearing and settlement fees, regulatory levies, taxes, and other charges). The Bank's official website includes the most recent data on execution quality, published for each execution venue that the Bank has included in this Policy.

In any case, the Bank reserves the right to amend the terms of the Best Execution Policy in the contractual documents, with the express reservation of all other rights, in compliance with the obligation to inform the clients with whom it has a continuous client relationship regarding each substantial change of the Best Execution Policy arrangements.

Fees:

The Bank does not structure or charge its commissions in a manner that introduces unfair discrimination between execution venues.

The client is provided with the differences between the execution venues, where the Bank applies different fees depending on the execution venue, in order to allow the client to understand the advantages and the disadvantages of the choice of any given execution venue.

In addition, where the Bank invites clients to choose an execution venue, fair, clear and non-misleading information shall be provided to prevent the client from choosing one execution venue rather than another on the sole basis of the price policy applied by the Bank.

The Bank informs clients that the inducements that it may receive from the execution venues, or the charging of more than one participant in a transaction, are treated in accordance within the Inducements Policy.

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Execution Venues:

The Bank summarizes and publishes (on its website) on an annual basis, for each class of financial instruments, the top five execution venues in terms of trading volume, through which it executed client orders during the previous year, as well as data on execution quality according to the current legislative and regulatory framework.

For financial instruments for which the Bank acts as an execution venue (e.g. as a multilateral trading facility, organized trading facility, systematic internalizer, market maker, liquidity provider) it publishes, free of charge, data relating to the quality of transactions executed on it on an annual basis in accordance with the current legislative and regulatory framework.

Receiving investment firms:

When the Bank (transmitter) transmits an order for execution to a third party (receiver), it complies with all its best execution obligations and in particular it summarizes and publishes on an annual basis, for each class of financial instruments, the top five investment firms (receivers-brokers) in terms of transaction volume, to which it transmitted or sent client orders for execution during the previous year, as well as data on execution quality.

The above disclosure is performed through a separate (discrete) report from the corresponding report on the top five execution venues.

In addition to the above annual disclosure, the Bank shall ensure the disclosure of information to clients or potential clients, at their reasonable request, on the entities to which the orders to be executed are transmitted or sent.

XIII. PROOF OF BEST EXECUTION

The Bank is able to demonstrate to its clients, at their request, that it has executed their orders according to this Policy, and is also able to demonstrate to the Competent Authority, at its request, that it is compliant with the best execution obligations.

XIV. RECORD KEEPING

The Bank maintains appropriate records and documentation of each executed client order to ensure the completeness and accuracy of the execution data in order to properly fulfill the obligation to annually disclose this information.

In addition, the Bank's Units maintain the necessary records of clients' transactions, which document the execution of orders. The Bank is able to prove to its clients, at their request, that it has executed their orders according to this Policy, and is also able to demonstrate to the Competent Authority, at its request, that it is compliant with the best execution obligations.

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XV. TABLE OF UPDATES

Initial Version (1.0)	14/11/2008
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ANNEX A

FINANCIAL INSTRUMENTS

The Best Execution Policy concerns only the following financial instruments:

1. Transferable securities, i.e.:
 - i. Shares in companies and other securities equivalent to shares in companies, partnership or other entities, and depositary receipts in respect of shares.
 - ii. Bonds or other forms of securitized debt, including depositary receipts in respect of such securities.
 - iii. Any other securities giving the right to acquire or sell any such transferable securities or giving rise to a cash settlement determined by reference to transferable securities, currencies, interest rates or yields, commodities or other indices or measures.
2. Money Market Instruments.
3. Undertakings for Collective Investment in Transferable Securities (UCITS).
4. Structured investment products.
5. Derivatives relating to securities, currencies, interest rates or yields, or other derivatives instruments, financial indices or financial measures.
6. Derivatives relating to commodities that are settled in cash.
7. Derivatives relating to commodities that can be physically settled provided that are traded on a regulated market.
8. Derivative instruments for the transfer of credit risk.
9. Financial contracts for differences.
10. Derivatives relating to climatic variables, freight rates, emission allowances or inflation rates or other official economic statistics.

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ANNEX B

EXECUTION VENUES ON WHICH THE BANK PLACES SIGNIFICANT RELIANCE

1. For derivatives tradable in a regulated market, the Bank operates on the following venues and third parties:

Markets where the Bank has direct access as a member

- Athens Derivative Exchange
- Eurex Frankfurt

Markets where the Bank has indirect access through third parties (Authorized Financial intermediaries):

- Chicago Board of Trade, Chicago
- Chicago Mercantile Exchange – GLOBEX, Chicago
- Euronext, Amsterdam

Other

- Dealing against the Bank's own book

2. For fixed income securities tradable on a regulated market, the Bank operates on the following venues and third parties:

Markets where the Bank has direct access as a member

- Secondary Electronic Securities Market (SESM), Athens
- Euro MTS, London

Other

- Dealing against the Bank's own book
- Bloomberg MTF and other OTC markets

3. For shares admitted for trading on a regulated market, the Bank uses as an intermediary NBG Securities S.A.

4. For derivatives traded outside regulated markets or MTFs (Over the Counter) the Bank conducts transactions acting as a counterparty against the client.

5. For UCITS, execution venues are the Management Companies. The selection factor used is the order execution and settlement.

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ANNEX C

ORDER EXECUTION VENUES PER CATEGORY OF FINANCIAL INSTRUMENT

1. Shares
 - Athens Stock Exchange
2. Bonds or other forms of securitized debt
 - Online Secondary Securities Market (HΔAT)
 - Euro MTS, London
 - Own portfolio of Bank
 - Bloomberg MTF and other OtC markets
 - Other
3. Money Market Instruments
 - Dealing against the Bank's own book
 - OtC markets
4. Undertakings for Collective Investment in Transferable Securities (UCITS)
 - Their Management Companies
5. Derivatives traded in a regulated market
 - Athens Stock Exchange
 - Eurex Frankfurt
 - Chicago Board of Trade, Chicago
 - Chicago Mercantile Exchange – GLOBEX, Chicago
 - Euronext, Amsterdam
 - Dealing against the Bank's own book
 - Other
6. Derivatives which are not traded on a regulated market (relating to physical or non-physical commodities; relating to securities, currencies, interest rates or yields; or to other derivatives instruments, financial indices or financial measures, etc.)
 - Dealing against the Bank's own book
 - OtC markets

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ANNEX D

Valuation methodology for Over-the-Counter (Otc) products

The valuation of Over-the-Counter products requires good “quality” of market data and theoretical valuation models, which are widely accepted by market participants. The data quality depends on the vendors and more specifically, it depends on their experience and the reliability of the data they provide. Correspondingly, the quality and reliability of valuation models is evidenced both by their widespread use and by their “endurance” in time.

The Bank maintains, on a continuous basis, external market data, which are both historical and current. The main types of market data are:

- Interest Rate Curves (Prices and Variation),
- Exchange Rates (Prices and Variation),
- Shares and Share Quotes (Prices and Variation),
- Commodity Prices (Prices and Variation), and
- Other parameters depending on the product.

The Bank also maintains a record of valuation models of Over-the-Counter products, which have been approved by the relevant Valuation Committee. The Bank’s Valuation Committee, among others, approves the product valuation procedures, approves the relevant models, and safeguards the procedures for obtaining reliable market data.

As already mentioned, the above valuation models are widely used as valuation “tools”, with an extended available bibliography and articles which are used by the vast majority of participants in the interbank market.

The above models may be registered in Excel format, in “closed-end” systems, or via providers (Bloomberg, Reuters).

- The Bank has developed pricing modes in Excel, which follow the valuation methodology of the relevant products. These models have been approved by the Valuation Committee.
- The Bank owns a closed-end system for the recording of transactions, which allows the valuation of the majority of products.
- The Bank is a subscriber to both Bloomberg and Reuters, which provide, in addition to live market data, in-house valuation solutions.

When pricing Over-the-Counter products to offer a price to the client, the relevant Trading Desk uses the above-mentioned live data, feeding the above-mentioned models, thus calculating the “fair” price for the product in demand.

In order to hedge the risk that arises from the execution of clients’ transactions, the Trading Desk estimates the transaction costs that could be incurred if it performs the necessary hedging transactions in the market. The final price to the client reflects this transaction cost.

At the time of the transaction, the relevant Trading Desk stores the necessary market data for the pricing, or the corresponding models, in case of use of pricing sources from providers. This way, the Bank is in a position to provide all the information regarding the way in which it has reached the offered price, at the request of the client.