BME Exchange

Market Model Description - Warrants, Certificates and Other Products

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Index

1 INTRODUCTION 4
   1.1 Institutional composition of the Market 4
   1.2 Market model structure 4

2 PRODUCTS 5
   2.1 General product description 5
   2.2 Warrants 5
   2.3 Certificates 7
   2.4 Turbos / Turbos Pro 7
   2.5 Bonus / Bonus Cap 8
   2.6 Inlines 8
   2.7 Discounts 9
   2.8 StayHigh / StayLow 9
   2.9 Multi 9

3 TRADING SYSTEMS 10
   3.2 Block system 10
   3.3 Trades outside the General Trading hours 11

4 ORDERS 12
   4.1 Types of orders and validity periods 12
   4.2 Quote Order 12
   4.3 Order modifications 12
   4.4 Self-match prevention 13

5 TICK SIZE 14

6 TRADING CAPACITY 15

7 BASIC TRADING RULES 16
7.1 Basic trading rules in open market 16
7.2 Rules for setting the auction equilibrium price 16

8 VOLATILITY AUCTIONS AND PRICE RANGES 17
  8.1 Volatility auctions 17
  8.2 Dynamic ranges 17

9 AGENTS INVOLVED IN THE MARKET 19
  9.2 Market makers 19

10 INFORMATION DISSEMINATION 20
1 INTRODUCTION

1.1 Institutional composition of the Market

Warrants, Certificates and Other Products are traded in the corresponding segment of the SIBE-SMART platform. SIBE-SMART is the BME’s current trading platform that is able to satisfy the new needs of the markets: quality, security, scalability, maximum capacity and minimum latency. The Stock Exchange Interconnection System is managed by Sociedad de Bolsas, a limited company that is owned equally by the four Spanish Stock Exchanges.

In this segment we can find warrants, certificates, turbos, bonus, inlines, discounts, multis, stay-high, stay-low... with different underlyings, such as shares, indexes, commodities, exchange rates...

1.2 Market model structure

This document is divided into different sections through which it is intended to provide an overview of the Warrants, Certificates and Other products segment of the SIBE-SMART platform. This segment is characterized by having some particularities such as the absence of opening and closing auctions and static ranges, and the availability of combined orders (quotes) for specialists. Each security traded in this segment must have a single specialist.
2 PRODUCTS

2.1 General product description

The Warrants, Certificates and Other products segment is designed in order to incorporate various financial product types that have in common their evolution and valuation linked to an underlying asset that may be a share, an index, a basket of shares or indexes, commodities, exchange rates or interest rates among others. These products usually have an expiration date. In addition, they are all traded, cleared and settled like shares. The features of each individual product are defined in the following sections.

2.2 Warrants

A warrant is a tradable security issued by an institution for a time period, that gives the right (and not the obligation) by paying a price to buy (call warrant) or to sell (put warrant) a specific amount of an asset (underlying asset) at a specified price over the duration of its life or on its expiration date depending on its style. From this short definition, some basic concepts are taken and defined as follows:

- Time period: This refers to the warrant’s expiration date, which indicates the date from when the warrant no longer exists. The expiration date may or may not coincide with the warrant’s last trading day in the Stock Exchange Interconnection System.

- Warrant price: This is the prime, that is to say, the effective price on which trades are executed on the Stock Exchange Interconnection System. The prime will be closely tied to the price of the underlying asset, the time to maturity, interest rates, volatility and strike.

- Call warrant: this is a purchase warrant, that is to say, it gives the right to buy the underlying asset.

- Put warrant: this is a sales warrant, which gives the right to sell the underlying asset.

- Ratio: This is the number of underlying asset units that a warrant gives the right to buy (call) / sell (put).

- Parity: number of warrants necessary to have the right to buy (call) / sell (put) a specific number of underlying assets.

- Strike: Established by the Issuer, it is the price at which the holder has the right to buy (call) / sell (put) the underlying asset at the time of exercising the warrant.\(^1\)

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\(^1\) The exercise of the warrant is the act by which the holder of the warrant materializes the acquired right by discarding the ownership of the warrant in exchange for the purchase (warrant call) / sale (warrant put) of the underlying asset.
• Style: a warrant can be American or European. If the warrant is American, it may be exercised throughout its life. If the warrant is European-style, it can only be exercised on the exercise date.

• Settlement: The exercise of a warrant involves its settlement that can be "by physical delivery" of the underlying or "by differences" of cash in euros. In the SIBE this last modality is applied.

Below, the position of an investor in a warrant call and in a warrant put is graphically illustrated, according to their expectations about the future evolution of the price of the underlying.

The buyer of a warrant call pays a prime for acquiring the warrant (that right whose exercise involves the acquisition of the underlying asset). The payment of that prime is reflected in the graph as a loss (in the sense that it involves a payment by the buyer). As the price of the underlying increases above the strike, the holder of the warrant call is placed in an increasingly advantageous position (its profits increase) since it has a right to buy the underlying asset at the price of exercise, which is lower than the market price of the underlying asset (price (1) of the chart).
The buyer of a warrant put pays a prime on acquiring the warrant (that right whose exercise involves the sale of the underlying asset). The payment of that prime is reflected in the graph as a loss (in the sense that it involves a payment by the buyer). As the price of the underlying falls below the strike or exercise price, the holder of the warrant put is placed in an increasingly advantageous position (its profits increase) since it has the right to sell the underlying asset at the price of exercise, which is higher than the market price of the underlying asset (price (1) of the chart).

### 2.3. Certificates

Certificates authorize their holder to receive from the issuer, on the settlement date, a determined amount on the certificate nominal value in accordance with the underlying asset variation. Specifically, the holder directly assumes the profit or loss in accordance with the underlying asset evolution.

Given the certificate’s nature, it is based on an initial underlying asset price and, in accordance with its evolution, the returns to be obtained for the certificate are produced upon its expiration date or on the exercise dates.

The final returns on certificates depend on the investment strategy and performance of the underlying asset.

### 2.4. Turbos / Turbos Pro

Turbo Warrants may have early termination in relation to the expiration date established in the issue conditions. The early termination possibility is determined by a barrier level. When the underlying asset price reaches or exceeds the barrier level, the Turbo Warrant is terminated early (knocked-out).
In the case of **Turbo Call** warrants, early termination is produced if the underlying asset level is “less than or equal to” the barrier established in the issue conditions.

In the case of **Turbo Put** warrants, early termination is produced if the underlying asset level is “more than or equal to” the barrier established in the issue conditions.

When the aforementioned conditions are met, Turbo Warrants terminate early without any value and are delisted.

Taking the previous information into account, Turbo Warrants are characterized by high leverage that is reflected in the prime level (or Turbo Warrant price). Similarly, its price evolution is mainly determined by the underlying asset price evolution and not so much by its volatility or expiration term.

Within this same product category, we also find the so-called **Turbo Pro**. These instruments incorporate two thresholds (knock-in barriers) that form an activation price range. Therefore, Turbo Pros will remain inactive in the market until the level of the underlying asset trades within the mentioned range. Once activated, Turbo Pros act as any other Turbo warrant.

### 2.5. Bonus / Bonus Cap

Bonus warrants offer the profitability of its underlying asset and, as long as the level of the latter does not reach a determined lower barrier during the lifecycle of the product, the issuer guarantees a minimum selling price or ‘bonus’. Therefore, if the level of the underlying asset reaches this lower barrier, then the Bonus Warrant loses its ‘bonus’ guarantee but remains active on the market and the investor would receive the value of the underlying asset at maturity.

Within this same product category, we also find the so-called ‘Bonus Cap’. These products incorporate a limit to the potential profitability of the product that is placed at the same level of the ‘bonus’ guarantee, whether it is still active or not at its expiration date.

### 2.6. Inlines

This type of warrant grants the right to receive a fixed amount of money on the expiration date, assuming that the value of the underlying asset is still within the limits or established barriers.

Inline warrants have both an upper and lower barrier between which the underlying asset’s price must stay during its lifecycle. If the underlying asset's price touches either of the barriers, the inline warrant will expire automatically without value and it will be delisted.
2.7. Discounts

The Discounts are investment products, with the characteristic of offering a maximum return calculated from the difference between the upper and lower barriers. They can be either bullish, Call Discount, or bearish, Put Discount.

The **Call Discounts** offer a maximum yield when the level of the underlying asset is equal or higher than the upper barrier on the maturity date, or whenever it has remained above the lower barrier during the entire life of the product. If it breaches the lower level, the product will remain active in the market but it will no longer deliver the maximum yield, unless the first previously described circumstance occurs. If at maturity the underlying asset is below the lower barrier, the Discount would be worth 0.

The **Put Discounts** have a similar behaviour but in reverse.

2.8. StayHigh / StayLow

The StayHigh and StayLow Warrants incorporate a mechanism of knock-out that offers the holder of the product a maximum potential performance.

The holder of the **StayHigh** will receive the maximum profit if during the life of the product the price of the underlying asset is above the lower barrier predetermined. The warrant will be deactivated if the price of the underlying asset reaches the lower barrier, in which case its value will be 0.

The behaviour of the **StayLow** is similar but in the opposite direction. The holder of the warrant will receive the maximum profit if the price of the underlying asset is below the upper barrier. In case it exceeds this upper barrier, its value will be 0.

2.9. Multi

The Multi are products that allow to follow the evolution of strategy indexes with a daily and constant leverage level (x3, x5, x8 and x10). They have a fixed expiration date, which results in their automatic settlement. The greater the leverage, the greater the movement experienced with the Multi with respect to the underlying, that is, the gains or losses are multiplied by a factor equal to the leverage. The Multi do not have a barrier level.

There are Multis to invest both up and down.
3 TRADING SYSTEMS

3.1 General Trading

Trading in this segment does not have opening and closing auctions.

The open market schedule is from 9.00am to 5.30pm. During this phase, orders may be entered, modified or canceled, carrying out negotiations at the price that in each case is set according to the price-time priority criteria of the orders (see section 7.1). During this phase volatility auctions may occur (see section 8.1). The order book is known to the members of the market, although it is a blind market, in the sense that the buyer and seller members of each of the positions are not identified, as well as of the trades.

The open session ends without auction at 5.30 pm, being the closing price of the session the midpoint of the best bid and ask positions shown by the specialist, rounded up. In absence of any of those positions or if the closing price was out of the dynamic range of the security, or if the security was suspended, the closing price would be the last traded price in the session. In absence of the previous ones, the closing price would be the reference price for the session.

The reference price will be the closing price of the previous session. In the event of financial operations in the underlying of a security that may influence the reference price, it may be modified as deemed necessary.

3.2 Block system

It is a trading system that allows market members to execute, outside the order book and without the possibility of interacting with it, previously agreed trades, provided that the turnover requirements are met.

Only orders valid for the day and coming from a single originator can be entered, considering as such those received from a natural or legal person with the capacity to decide about the whole order, groupings are not allowed.

Trading hours for this system are from 9:00am to 5:30pm. However, when a security is in a volatility auction, no block trading can be executed.

These orders are covered by a waiver from pre-trade transparency obligations for large in scale orders.

The System will allow the execution of trades with a minimum turnover of 60,000 euros, the limit established for securitized derivatives by Commission Delegated Regulation (EU) 2017/583, of July 14, 2016.

The details of the executed trades will be disseminated through the System.
3.3 Trades outside the General Trading hours

This trading system allows market members to execute trades in the System outside the General Trading hours between 5:40 p.m. and 8:00 p.m. Trades with a minimum turnover of 60,000 euros can be entered.
4 ORDERS

4.1 Types of orders and validity periods

Warrants, Certificates and Other products segment only allows limit orders.

They are orders to be executed at their limit price or better. Buy orders are executed at this price or at a lower price on the opposite side of the order book. Sell orders are executed at the limit price or at a higher price on the opposite side of the order book. Once placed in the order book, the limit order is always executed at its limit price (except if it is included in an auction and the auction price is more favorable than its limit price).

These orders allow:

- The wish to trade up to/ from a certain price to be expressed.

- The execution of an order against existing orders in the market at a price no lower than the limit price with the rest being left on the market at the limit price.

These orders can be entered both in the open market and during auctions.

All of them are valid for one day, that is, they are valid until the end of the current session. This means that any of these orders, in case of not being traded or being partially traded, the non-traded part is automatically removed from the System after the close of the session.

4.2 Quote Order

The quote order allows the specialist to carry out his activity more easily and efficiently.

The quote order is made up of two individual orders of opposite side, each one with its identification. Quote orders are attackable at all times, can attack single orders, and may activate auctions just like any other order.

Each specialist can only have one quote order active for each security.

4.3 Order modifications

When an order is entered, the System will assign a number of order to it, which remains invariable during the whole life of the order. To every order modification a new number of history will be generated (consecutively to be able to follow the evolution of the order). If the modification of an order has an impact on its priority, a new number of priority will be generated.
4.4 Self-match prevention

Market members may prevent their orders from being matched with other orders of their own, of the opposite side, by identifying them as not self-matching. When an incoming order thus identified, whose counterpart in the order book is another order from the same member, also identified as not self-matching, the System will reject the incoming order, the order positioned in the book or both, depending on the instructions established by the market member, so that such orders are not crossed.
Price units or tick size (minimum variation between two different prices on the same security) in the Warrants, Certificates and Other products segment is 0.01 euro irrespective of the price and the average daily number of transactions that the security has. Any price expressed with maximum 4 whole and 2 decimal numbers is accepted.
6 TRADING CAPACITY

Orders can be submitted by the member or participant of the trading venue trading on their own account (DEAL), matched principal trading (MTCH), or in any other trading capacity (AOTC). In addition, they can be presented within the framework of a market making strategy or liquidity provision activity based on the deal that the members have signed and marking a specific flag in the order.
7 BASIC TRADING RULES

7.1 Basic trading rules in open market

Several basic criteria govern open market trading:

- **Price-time priority of orders**: orders with the best price (highest bid and lowest ask) have priority in the order book. When prices are the same, those orders entered first have priority.

- **Best opposite side price**: orders entered in the System are executed at the best opposite side price. In other words, a buy order which can be executed will be executed at the price/s of the first order/s on the sell side of the order book. Equally, a sell order entered in the System which can be executed at that moment will be executed at the price/s of the first order/s on the buy side of the order book.

Orders may be fully executed (in one or several executions), partially executed or not executed. Accordingly, each new order can generate several trades.

7.2 Rules for setting the auction equilibrium price

There are four rules for fixing the auction price:

- The price at which the largest volume of securities is executed.

- If there are two or more prices at which the same number of securities can be executed, the auction price shall be that which leaves the smallest surplus. The surplus is the difference between bid and ask volumes susceptible of being negotiated at the same price.

- If the two conditions stipulated above are the same, the price of the side with the largest volume (the largest weight) shall be taken.

- If the three conditions stipulated above are the same, the price which is closest to the last executed price shall be taken. If this price is within the range of potential auction prices (upper and lower limit), the last executed price is taken. If there is no last executed price or it is outside the range of dynamic range prices, the price shall be the closest to the reference price.
8 VOLATILITY AUCTIONS AND PRICE RANGES

8.1 Volatility auctions

In this segment volatility auctions take place when the price at which a value is about to be traded is in the limit of the dynamic price range.

Volatility auctions last five minutes, plus a 30-second random end, during which the auction may close at any moment without prior warning and the shares allocation process begins (trades made at the resulting auction price).

If the price resulting from a volatility auction is outside the dynamic range, the security will remain at auction and the Surveillance Department of Sociedad de Bolsas will be in charge of establishing the appropriate measures to resolve it.

If the market closes, there is one or more securities up for auction, the System will automatically assign at the close of the session (5:30 pm).

8.2 Dynamic ranges

In the Warrants, Certificates and Other products segment, only a range type called dynamic range is established.

The dynamic range is defined as the maximum variation permitted (symmetric) with regard to the dynamic price and it is expressed as a percentage. It is operational both in the open session and in the volatility auctions.

- For warrants, the dynamic range levels are determined by the warrant price as follows:
  - Warrants with price lower than 0.10 euro: 500%
  - Warrants with price higher than or equal to 0.10 euros and lower than or equal to 1.00 euro: 50%
  - Warrants with price higher than 1.00 euro: 15%
- In the case of Certificates, the range will be 15%
- For Turbo and Turbo Pro warrants, the dynamic range applicable will be 500%
- For Bonus and Bonus Cap, it will be 15%
- For Inlines, it will be 500%
- For Discounts, it will be 5%
• For Stay High and Stay Low, it will be 500%
• For Multi, it will be 100%
• For Other products, the dynamic range applicable will be 500%.

At the start of the session, the updating of the dynamic price with which the dynamic range is applied is the reference price. During the session, the dynamic price and range is applied regarding the last price traded; whether the execution of the incoming order is in the open market or the result of a volatility auction.
9 AGENTS INVOLVED IN THE MARKET

9.1 Specialists

Specialists carry out an essential role in the Warrants, Certificates and Other products segment, especially regarding the daily quotation of bid and ask prices and volumes. Each security is required to have a specialist and there can only be one specialist per security.

In order to be considered a specialist of a security listed in this segment, market members must register an agreement with the issuer. The specialists must comply at all times with current regulations, which establish, among others, the parameters of presence in the market related to minimum effective amount, maximum spread and reaction time.

On the other hand, as already mentioned above, these specialists have an agile and simple instrument to quote bid and ask prices in the market: the quote order.

9.2 Market makers

Market members who, during half of the trading days of a month, publish simultaneous quotes for buying and selling whose magnitude does not differ by more than 50% and at competitive prices\(^2\); and trade on their own account at least one financial instrument in a trading center, for at least 50% of the daily trading hours of the corresponding trading venue, they must sign a market making deal with Sociedad de Bolsas.

Furthermore, those market members who, without developing algorithmic trading to apply a market making strategy, want to hold the status of market maker must also sign a market making agreement with Sociedad de Bolsas.

Market members that have signed a market making deal will have to comply with spread and turnover parameters, which will be set by Operating Instruction.

The Trading and Surveillance Commission will permanently supervise the effective compliance of the market making agreements by the relevant members.

\(^2\) Competitive prices are those that are within the range of purchase and sale prices established by Sociedad de Bolsas by means of an Operating Instruction.
10 INFORMATION DISSEMINATION

Warrants, Certificates and Other products segment has a specialized information dissemination system, designed to disseminate detailed information in real time on what is happening in the market, both from the point of view of the trades that are taking place, and from the System order book. This objective is justified with the intention of providing a service that faithfully reflects the transparency of the market.

In this way, this information flow informs the recipient institutions of each trade that is taking place in the market in real time and of the order book evolution during the session.

The following content is offered:

- Trades: a message is issued each time there is a trade in the System. Information regarding the price, volume and trade time is given (buyer and seller of this trade do not appear).

- Order Book: a message is issued each time there is a change in the best five (5) bid and/or ask positions.