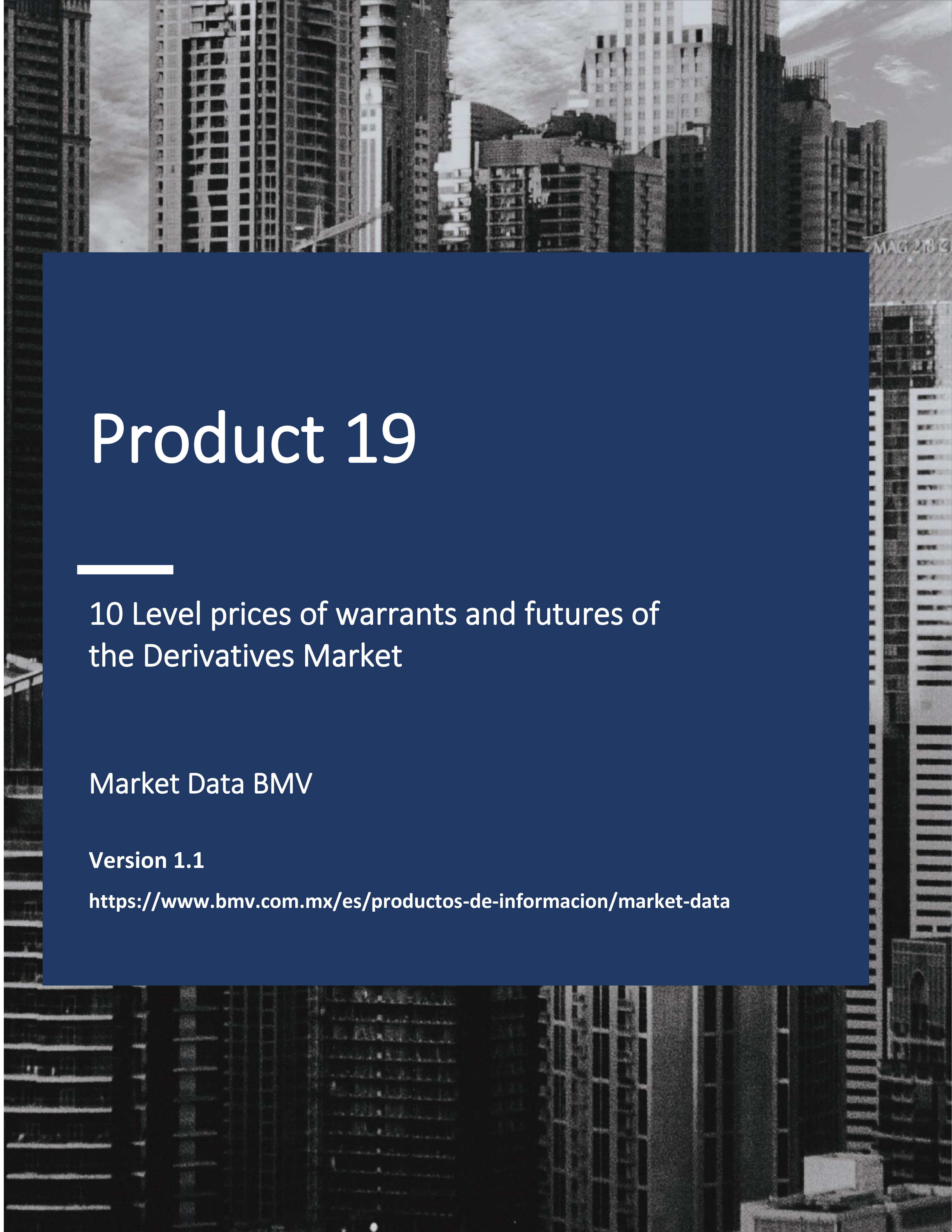

# Product 19

10 Level prices of warrants and futures of the Derivatives Market

Market Data BMV

**Version 1.1**

**https://www.bmv.com.mx/es/productos-de-informacion/market-data**

# Contents

"INTRA Multicast" instruments characteristics of the Derivatives Market traded through MoNeT, Mexder’s trading engine. 10 level Positions ordered by Price/Rate: "INTRA Multicast" offers the 10 best positions ordered by price or rate depending on the instrument. Buy and sell positions of the Derivatives Market are disclosed in a single message.

Multicast: 1 Message

## 1: Depth

The message will contain only the 20 best sale or buy prices. Sent at the beginning of the day with current offers and updated during normal trading session.

Will be sent every time a value (whichever side) of the 20 levels changes. However, 20 levels are not always sent as this depends on the number of existing levels on the instrument being this smaller.

The levels are grouped by price with number of orders and stocks at such level. Purchase or sale levels indicates how many prices are received by message.

| Data Type | Offset | Size | Value | Notes |
|---|---|---|---|---|
| Message type | 0 | 1 | "1" | Market depth |
| Instrument number | 1 | 4 | Int32 | Unique code during instruments life |
| Side | 5 | 1 | Int8 | O - Buy, 1 - Sell |
| Purchase or sale levels | 6 | 1 | Int8 | Number of buy or sale levels to be sent |
| Price-1 | 7 | 8 | Precio (8) | First level price |
| Number of orders-1 | 15 | 2 | Int16 | First level number of orders |
| Volume-1 | 17 | 4 | Int32 | First level accrued volume |
| **...** | | ... | | |

Back

Multicast: 4 Message

## 4: Status changes

All instruments are in a certain status before and during trading session. Instrument status message is generated at the beginning of the day and when the instrument enters a trading phase: Offers cancellation, Opening Auction, Continuous Trading or when entered into operating mode, for example: Auctions and Suspensions.

| Data type | Offset | Size | Value | Notes |
|---|---|---|---|---|
| Message type | 0 | 1 | "4" | Change of Instrument Status |
| Instrument number | 1 | 4 | Int32 | Unique code during instruments life |
| Instrument status | 5 | 1 | ALPHA | See Instrument Status Catalog on the Connections and Appendix document |
| | **Total:** | 6 | | |

Back

Multicast: H Message

## H: Trade Cancellation

This message is sent when a transaction is cancelled from the BMV system. The operation is identified with the Instrument and Number fields. Currently, it can only be sent during trading session.

| Data type | Offset | Size | Value | Notes |
|---|---|---|---|---|
| Message type | 0 | 1 | "H" | Trades cancellation |
| Instrument number | 1 | 4 | Int32 | Unique code during instruments life |
| Trade Number | 5 | 4 | Int32 | Stamp number by instrument |
| | **Total:** | 9 | | |

Back

Multicast: I Message

## I: Open Interest

| Data Type | Offset | Size | Value | Notes |
|---|---|---|---|---|
| Message type | 0 | 1 | "I" | Open Interest |
| Instrument number | 1 | 4 | Int32 | Unique code during instruments life |
| Open interest | 5 | 4 | Price (4) | |
| **Total:** | | 9 | | |

Back

Multicast: M Message

## M: Weighted Average Price - Settlement prices

For equities market, this message will be sent for each operation containing weighted average price per instrument generated within WAP calculation period (last 20 minutes of trading). When trades cease to exist within this period, WAP will be just zeros.

As for the derivatives market, this message will be sent when settlements prices have ceased to be generated.

| Data type | Offset | Size | Value | Notes |
|---|---|---|---|---|
| Message type | 0 | 1 | "M" | Weighted Average Price / Settlement price |
| Instrument number | 1 | 4 | Int32 | Unique code during instruments life |
| Weighted average price | 5 | 8 | Price (8) | Average price instrument. |
| Volatility | 13 | 8 | Price (8) | Volatility instrument. |
| **Total:** | | 21 | | |

Back

# Q: Derivatives market trades

Contains information on any MexDer accepted transaction.

| Data Type | Offset | Size | Value | Notes |
|---|---|---|---|---|
| Message type | 0 | 1 | "Q" | Derivatives market trades |
| Instrument number | 1 | 4 | Int32 | Unique code during instruments life |
| Trade time | 5 | 8 | Timestamp(2) | Time the operation was carried out |
| Volume | 13 | 4 | Int32 | Traded stocks |
| Price/Rate | 17 | 8 | Price (8) | Operation price |
| Concertation type | 25 | 1 | ALPHA | See Concertation Type Catalog on the Connections and Appendix document |
| Trade number | 26 | 4 | Int32 | Stamp number by instrument |
| Operation type | 30 | 1 | ALPHA | See Operation Type Catalog on the Connections and Appendix document |
| Amount | 31 | 8 | Price (8) | |
| Parent trade number | 39 | 4 | Int32 | Will only contain a value if and only if is about a strategy leg. |
| Leg type | 43 | 1 | ALPHA | L-Long leg<br>C-Short leg<br>X-Forwards chain leg<br>P-Indicates if its parent strategy<br>""-Fact not generated from a strategy |
| | **Total:** | 44 | | |

Back

# R: Statistics of instruments

Update message from derivatives statistics sent each time there is an update on the trading floor at any level price.

| Data Type | Offset | Size | Value | Notes |
|---|---|---|---|---|
| Message type | 0 | 1 | "R" | Statistics per instrument |
| Instrument number | 1 | 4 | Int32 | Unique code during instruments life |
| Previous settlement price | 5 | 8 | Price (8) | Last day settlement price |
| Opening price | 13 | 8 | Price (8) | First price of the day or opening price |
| Max price of the day | 21 | 8 | Price (8) | Max price recorded on the day |
| Lower price of the day | 29 | 8 | Price (8) | Lower price recorded on the day |
| Last price of the day | 37 | 8 | Price (8) | Last price recorded on the day |
| **Total:** | | 45 | | |

Back

## S: System Events

The system of events message is used to inform that an event has occurred, which needs to be of public domain.

| Data type | Offset | Size | Value | Notes |
|---|---|---|---|---|
| Message type | 0 | 1 | "S" | System event |
| Instrument number | 1 | 4 | Int32 | Always zero |
| Event code | 5 | 1 | ALPHA | See System Event Codes Catalog on the Connections and Appendix document |
| Market | 6 | 1 | ALPHA | See Markets Catalog (only used when there is an official recess) on the Connections and Appendix document |
| Sending time | 7 | 8 | Timestamp(2) | Recess's official sending time. Only used when official recess has occurred. |
| Ending time | 15 | 8 | Timestamp(2) | Recess official ending time. Only used when an official recess or automatic recess occurred. |
| | **Total:** | 23 | | |

Back