Functionning of HPC OTF

1. Voice Trading System

> **HPC Voice OTF**
> **MIC Venue Code: HPCX**
> **MIC Segment Code HPCV**
> Day of operation: Each Business Day, other than TARGET holidays,
> 8:00-18:00 (London Time) / 8:00-19:00 (Paris Time)

The below description refers to the VOICE OTF. Instruments considered are

1. Bonds
2. Interest Rate Derivatives (excl. Swaptions)
3. Equity Derivatives

The HPC OTF operates the two types of systems that are identified in Article 20(6) of MiFID II:

(i) systems that cross client orders (without prejudice to the restrictions placed on matched principal trading) and;

(ii) systems that arrange transactions in non-equities where the operator of the OTF may facilitate negotiations between clients to bring together two or more potentially compatible trading interests in a transaction.

Client order reception

Clients place their order directly with the OTF Broker:

▪ by voice through the recorded phone lines;
▪ electronically initiated via Bloomberg IB Chat.

During trading days, the OTF Broker can receive:

▪ simple orders specifying the instrument, side (buy or sell), size and price;
▪ specific orders detailing precise execution indications;
▪ or more general issues:

   o order defines entirely in terms of risk;

   o order conditioned by an event (for example, the course of a reference instrument reaches that level);

   o specific modality of execution (for example, all size or nothing, price from an upcoming fixing, etc.);

   o special rules of execution, inter alia.

Following factors are usually taken into account when deciding whether to place an order:

- Size of the order;
- Market fluctuations (uncorrelated price);
- Market mover order.

The OTF Broker, with his knowledge of conventions (written or not) and market techniques is able to complete the information if necessary to work the order. As such, once when all references are confirmed, and within its knowledges of trading interests available within system, the OTF Broker decides to place of not the order into the OTF with the agreement of the client. In this circumstance, the client is informed of the "out of the OTF dealing process".

The order maybe placed as a whole or partially under the discretion of the OTF Broker.

Negotiation process

Pre-trade obligation

In order to meet its Pre-trade obligation set up by MIFIR Article 8, the OTF Broker enters each order on an eligible financial instrument in the Pre-trade screen of the OTF Platform. This screen is connected to a publishing system for Pre-trade transparency compliance obligations. All orders received, exception made of those that are waived are thus made publicly available and shared with the clients through an APA.

For this purpose, an order means a price range (bid or offer) which meets a formal Client trading interest. "Formal" means the Client has confirmed with the OTF Broker by voice on a recorded line or using IB Chat its willingness to trade.

Order interaction

When receiving an initial buying or selling interest, the OTF Broker will reach out to other clients to find a potential match to such initial buying or selling interest.

When executing an order into the system, the OTF Broker makes sure that there are always at least two other existing interests that could interact with the order he executes.

The OTF Broker uses its discretion to facilitate the matching of the orders.

As such, in the case there are better execution conditions outside the OTF, he may retract the order for executing it outside the OTF (as OTC transaction or within another venue). Retraction of an order from the OTF is done with the agreement of the clients and the OTF Broker indicate to other existing parties that the order is cancelled within the venue.

Matching orders and execution

The OTF Broker, in order to fulfill its task of execution in a context of imperfect liquidity, carries out a fine management of the information. For example, he ensures that a significant size order relating to a non-liquid instrument is given priority to the clients who have presented a symmetrical issue on this instrument or its zone.

Similarly, the OTF Broker will consider the size of the order in its execution: he will make sure to execute the highest proportion of the order in priority and a partial execution will not be done below a certain appropriate threshold. It will therefore be able to realize any type of size arrangement that will optimize the execution.

In addition, from a facilitation point of view, the OTF Broker may propose strategies or orders that it considers compatible with the needs of one or more clients, in particular to enable Clients to meet around common instruments.

The OTF Broker is in charge of organizing bid and offer on eligible financial instruments.

This price communication aims at finding counterparties that have opposite interest in the transaction. To do so, the OTF Broker can perform a voice "blast" to selected Clients.

The counterparty selection is made on a discretionary basis and relies on the own experience and knowledge of the OTF Broker regarding the other Clients usual needs or practices and transaction specificities.

The Operator observes that the OTF Broker may need to find several counterparties to match a deal.

The OTF Broker matches two clients buying and selling interest at its execution discretion with all necessary conditions to do so are met. To help matching interest, the OTF Broker may propose to a client to modify its order in order to make opposite orders meet their matching point.

Matching conditions are reached where trade price, volume and terms have been agreed by two clients holding opposite interest. The orders are then executed and the OTF Broker discloses the counterparties' names and the OTF Operator steps away from the transaction and the transaction is then legally formalized between the counterparties. However, upon request of the counterparties, for Bonds, the transaction maybe executed as a Match Principal Trade. As such, the two counterparties execute their transaction against the OTF Operator.

Post-trade transparency

Following the matching of the two opposites orders, the resulting transaction is executed and the OTF Operator publish the transaction under the condition of the related deferral timing through an APA.

Miscellaneous

Order cancellation

Unless the Client elects otherwise, unmatched orders will be automatically cancelled at the end of the Trading Day.

The OTF Broker has the authorization to cancel unmatched orders on behalf of a Client, following authorization from that Client or on a discretionary basis, in accordance with the Rules of the OTF.

The OTF Broker reserves the right to require the parties to cancel any trade executed on the OTF if the OTF Broker unreasonably considers that:

- the Trade was a result of an OTF system error;
- the Trade appears to be deceptive or fraudulent;
- such cancellation is necessary to preserve the integrity of the market and maintain fair and orderly trading;
- the Trade is contrary to applicable law.

Trade Error

In case of Trade error, the OTF Broker may cancel trades in the following circumstances:

- upon mutual agreement by the counterparties to a trade;
- where the OTF Broker has reason to believe that a Trade is a clearly erroneous trade.

Confirmation of execution

Once the OTF Broker has found counterparties and matched order characteristics, the execution is pre-confirmed by voice or by Bloomberg message to the counterparties.

Settlement

For Nave Give Up Transactions, each Client is responsible for the settlement of all transactions it executes on the OTF and each Client must ensure that it has the ability, including legal and regulatory capacity, to settle such transactions accordingly. The Operator is not responsible or liable for the settlement of the transactions executed by a Client on the OTF. However, The Operator will provide or make available to each Client the details of each transaction that the Client effects on the OTF in order to facilitate the prompt settlement of these transactions by that Client.

For Matched principal transactions matched on HPC OTF, HPC takes part to the transaction. Clients do not know each other and deal with HPC simultaneously. Both trading and settlement are called "blind". Matched principal transactions are settled by HPC SA through its settlement agent, CACEIS. HPC SA shall provide or make available to each Client the details of the transaction in order to facilitate the prompt settlement of these transactions.

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2. Hybrid/Electronic System via Akurates (Smartpills)

HPC : Akurates

MIC Venue Code : HPCX

MIC Segment Code HPCO

8:00-18:00 (London Time) / 8:00-19:00 (Paris Time)

Preamble: The below description refers to the Akurates Electronic Platform. Instruments considered are only: Swaptions (Average 0 et 5 operations /day)

Client order reception

During trading days as defined above, the OTF Options Broker can receive:
- simple orders specifying the instrument, side (buy or sell), size and price;
- complex orders detailing a strategy such as a combination of one or more instruments. For example:
    o Option out of the money with straddle hedge (volatility risk) and swap hedge (interest rate risk);
- or more general issues:
    o area of interest which may include several alternative instruments;
    o order defines entirely in terms of risk;
    o order conditioned by an event (for example, the course of a reference instrument reaches that level);
    o specific modality of execution (for example, all size or nothing, price from an upcoming fixing, etc.);
    o special rules of execution, inter alia.

The OTF Options Broker, with his knowledge of conventions (written or not) and market techniques is able to complete the information if necessary to work the order. For example, the OTF Options Broker may:
- translate the concept of "market size" into an effective quantity when a consensus exists (for example, standard sizes of interest rate options);
- translate a price into an equivalent notion to realize the order;
- judge whether an order is still valid given the price fluctuations of other instruments;
- determine the appropriate sensitivity ratios for the nominal of a strategy;
- determine the exercise price of an option expressed in relation to the currency, inter alia.

In any case, when it is made available to them, Clients can directly register their orders into the OTF. Otherwise, Clients can also transmit them to the OTF Options Broker:
- by voice through the recorded phone lines;
- electronically initiated via Bloomberg IB Chat.

Pre-trade obligation

Main process

In order to meet its Pre-trade obligation set up by MIFIR Article 8, the OTF Options Broker will enter each order on an eligible financial instrument in the OTF Platform. The Platform is connected to APA systems for Pre-trade transparency compliance obligations.

For this purpose, an order means a price range (bid or offer) which meets a formal Client trading interest. "Formal" means the Client has confirmed with the OTF Options Broker by voice on recorded line or IB Chat its willingness to trade.

Electronic auction session

Without any prejudice of paragraph above, when the OTF Options Broker may organise an electronic auction session, Pre-trade transparency is fulfilled by the OTF platform which is connected to APA systems.

Matching orders

Main process

The OTF Options Broker, in order to fulfill its task of execution in a context of imperfect liquidity, must carry out a fine management of the information. For example, it must ensure that a significant size order relating to a non-liquid instrument is given priority to the clients who have presented a symmetrical issue on this instrument or its zone.

Similarly, the OTF Options Broker will consider the size of the order in its execution: he will make sure to execute the highest proportion of the order in priority and a partial execution will not be done below a certain appropriate threshold. It will therefore be able to realize any type of size arrangement that will optimize the execution (for example: purchasing order against two orders of sale or serving at a minimum size).

The OTF Options Broker may also choose to unleg a strategy or not according to the orders available to optimize the liquidity of the market.

In addition, from a facilitation point of view, the OTF Options Broker may propose strategies or orders that it considers compatible with the needs of one or more clients, in particular to enable agents to meet around common instruments.

The OTF Options Broker is in charge of organizing bid and offer on eligible financial instruments.

This price communication aims at finding counterparts that have opposite interest in the transaction. To do so, the OTF Options Broker performs a voice "blast" to selected Clients.

The counterparty selection is made on a discretionary basis and relies on the own experience and knowledge of the OTF Options Broker regarding the other Clients usual needs or practices and transaction specificities.

The Operator observes that The OTF Options Broker may need to find several counterparties to match a deal. The OTF Broker uses its discretion to facilitate the matching of the orders. As such, in the case there are better execution conditions outside the OTF, he may retract partially or totally the order for executing it outside the OTF (as OTC transaction or within another venue).

Electronic auction session:

When the OTF Options Broker set up and organises an electronic auction session on the platform, matching orders is completed by the platform automaton.

Post-trade transparency

The OTF is connected to APA systems in order to meet Post-trade transparency requirements.

Order cancellation

The fact that an order is taken in charge by the OTF Options Broker will not, in itself, be a guarantee to trade. The OTF Options Broker will use reasonable endeavours to get the order filled.

Unless the Client elects otherwise, unmatched orders will be automatically cancelled at the end of the Trading Day.

The OTF Options Broker has the authorization to cancel unmatched orders on behalf of a Client, following authorization from that Client or on a discretionary basis, in accordance with the Rules from time to time.

The OTF Options Broker reserves the right to require the parties to cancel any trade executed on the OTF if the OTF Options Broker unreasonably considers that:
- the Trade was a result of an OTF system error;
- the Trade appears to be deceptive or fraudulent;
- such cancellation is necessary to preserve the integrity of the market and maintain fair and orderly trading;
- the Trade is contrary to applicable law.

Trade Error

In case of Trade error, the OTF Options Broker may cancel trades in the following circumstances:
- upon mutual agreement by the counterparties to a trade;
- where the OTF Options Broker has reason to believe that a Trade is a clearly erroneous trade.

Confirmation of execution

Once the OTF Options Broker has found counterparties and matched order characteristics, the execution is pre-confirmed by voice or by Bloomberg message to counterparties of each legs of the transaction.

Once a trade is executed on the OTF Platform by the OTF Options Broker, a MarkitWire trade confirmation is generated and sent electronically to counterparties (if the instrument is not supported by MarkitWire, a confirmation email will be sent to counterparties).

Reconciliation

The counterparties receive and validate electronically the trade confirmation into MarkitWire (if the instrument is not supported by MarkitWire, the trade confirmation will be received by email).

The electronic trade confirmation is then automatically (through a vortex) registered into the OTF booking system (SPHERES).

Ultimately, the OTF booking system allows transaction reporting in accordance with regulatory requirements.

Settlement

Each Client is responsible for the settlement of all transactions it executes on the OTF and each Client must ensure that it has the ability, including legal and regulatory capacity, to settle such transactions accordingly.

The Operator is not responsible or liable for the settlement of the transactions executed by a Client on the OTF. However, The Operator will provide or make available to each Client the details of each transaction that the Client effects on the OTF in order to facilitate the prompt settlement of these transactions by that Client.

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3. Hybrid/Electronic System via Trayport

> **HPC Commodities OTF**
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> **MIC Venue Code: HPCX**
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> **MIC Segment Code HPCS**
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> Day of operation: Each Business Day, other than TARGET holidays,
>
> 8:00-18:00 (London Time) / 8:00-19:00 (Paris Time)

The below description refers to the COMMODITIES OTF. Instruments considered are

Wholesale energy products that must be physically settled (REMIT Carve Out)

The HPC OTF operated the two types of systems that are identified in Article 20(6) of MiFID II:

(i) systems that cross client orders and;

(ii) systems that arrange transactions in non-equities where the operator of the OTF may facilitate negotiations between clients to bring together two or more potentially compatible trading interests in a transaction.

Client order reception

Clients directly place their order with the OTF Broker :

- Directly into the TRAYPORT GLOBAL VISION Broker System (using the trading version Joule Direct)
  - by voice through the recorded phone lines;
  - electronically initiated via Thomson Reuters Eikon messenger .

During trading days, the OTF Broker can receive:

- simple orders specifying the instrument, side (buy or sell), size and price;
- complex orders detailing a strategy such as a combination of one or more instruments.
- or more general issues:
  - area of interest which may include several alternative instruments;
  - order defines entirely in terms of risk;
  - order conditioned by an event (for example, the course of a reference instrument reaches that level);
  - specific modality of execution (for example, all size or nothing, price from an upcoming fixing, etc.);
  - special rules of execution, inter alia.

The OTF Broker, with his knowledge of conventions (written or not) and market techniques is able to complete the information if necessary to work the order. As such, once when all references are confirmed, and within its knowledges of trading interests available within system, the OTF Broker decides to place of not the order into the OTF with the agreement of the client. The order maybe placed as a whole or partially under the discretion of the OTF Broker.

Negotiation process

Pre-trade obligation

All Gas products are physically settled and falls under the carve out regulation.

All orders go directly into the live trading screen and are shared with the clients that are presents

Order interaction

When receiving an initial buying or selling interest, the OTF Broker will reach out to other clients to find a potential match to such initial buying or selling interest.

When placing an order into the system, the OTF Broker uses its discretion to facilitate the matching of the orders.

As such, in the case there are better execution conditions outside the OTF, he may retract the order for executing it outside the OTF (as OTC transaction or within another venue). Retraction of an order from the OTF is done with the agreement of the clients and the OTF Broker indicate to other existing parties that the order is cancelled within the venue.

Matching orders and execution

-The OTF Broker uses TRAYPORT GLOBAL VISION trading platform. The system manages records each client transaction limit credits and is used by customers to input orders and execute them directly when credit is permitting.

-The OTF Broker can match two clients with NO credit, buying and selling interest at its execution discretion with all necessary conditions to do so are met. To help matching interest, the OTF Broker may propose to a client to modify its order to make adverse orders meet their matching point.

Matching conditions are reached where trade price, volume and terms have been agreed by two clients holding opposite interest. The orders are then executed and the OTF Broker discloses the counterparties' names and the OTF Operator steps away from the transaction and the transaction is then legally formalized between the counterparties.

Post-trade transparency

-the OTF Broker uses paper confirmations, EFETnet credit matching System, as all physical required to be matched in order to be dispatch on the Gas Grid. (***entsog*** for gas, ***entsoe*** for power)

- Orders that have been matched and executed are indicated and shared with the clients on the system and can be viewed by them

Miscellaneous

Order cancellation

Unless the Client elects otherwise, unmatched orders will be automatically cancelled at the end of the Trading Day

The OTF Broker has the authorization to cancel unmatched orders on behalf of a Client, following authorization from that Client or on a discretionary basis, in accordance with the Rules of the Commodities OTF.

The OTF Broker reserves the right to require the parties to cancel any trade executed on the Commodities OTF if the OTF Broker unreasonably considers that:

- the Trade was a result of an OTF system error;
- the Trade appears to be deceptive or fraudulent;
- such cancellation is necessary to preserve the integrity of the market and maintain fair and orderly trading;
- the Trade is contrary to applicable law.

Trade Error

In case of Trade error, the OTF Broker may cancel trades in the following circumstances:

- upon mutual agreement by the counterparties to a trade;
- where the OTF Broker has reason to believe that a Trade is a clearly erroneous trade.

Confirmation of execution

Once the OTF Broker has found counterparties and matched order characteristics, the execution is pre-confirmed by voice or by Thomson Reuters Eikon message to the counterparties.

Settlement

Each Client is responsible for the settlement of all transactions it executes on the Commodities OTF and each Client must ensure that it has the ability, including legal and regulatory capacity, to settle such transactions accordingly.

The Commodities OTF Operator is not responsible or liable for the settlement of the transactions executed by a Client on the OTF. However, the Operator will provide or make available to each Client the details of each transaction that the Client effects on the OTF in order to facilitate the prompt settlement of these transactions by that Client.