TP ICAP EU MTF PRODUCT SPECIFICATIONS

I) CASH EQUITY AND ETF PRODUCTS (excluding Liquidnet Equity Products)

1. Introduction

These are the Product Specifications of the "Cash Equity and ETF Products" Segment of the TP ICAP EU MTF. They are to be read together with the Venue Rules and supplement the Venue Rules of the TP ICAP EU MTF.

2. Definitions and Interpretation

The following definitions shall apply in these Product Specifications, in addition to the definitions contained in the Venue Rules:

"Cash Equities" means the Financial Instruments and Transactions set out in Part A of these Product Specifications.

"Exchange Traded Funds" or "**ETF**" means the Financial Instruments and Transactions set out in Part B of these Product Specifications.

3. MIC

The segment MIC code for the "Cash Equity and ETF Products" Segment of the TP ICAP EU MTF is TPEE.

4. Operating Hours

The "Cash Equity and ETF Products" Segment is available during the normal market hours of the TP ICAP EU MTF, subject to the Operator's sole decision-making authority. Please see the website for normal market hours under section "Trading hours".

5. Submission of Executed Transactions

Eligible Transactions submitted for registration on the "Cash Equity and ETF Segment" are deemed to have been Executed:

at the time that the material terms of the Transaction have been agreed, in the case of a Bilaterally Settled Transaction; or

at the time that the Executing Broker has provided a written confirmation to each of the parties to the Transaction, in the case of an Anonymous Transaction or a Transaction agreed with the facilitation of an Executing Broker. Participants are responsible to ensure that Transactions Executed under the Venue Rules are submitted in a timely manner and with all of the information required by the Operator.

A. Cash Equity Products

1. Tradable Instruments

Trading is permitted for Transactions in the following Products (**Cash Equity Products**):

Products	Parameters (where applicable)
Cash Equities	All currencies
Stock Loans	All currencies
ADRs	USD
Global Depositary s	All currencies

Trading is permitted for the following Transaction types:

Transaction Types	Parameters (where applicable)
Outright Cash Equities	A Transaction in a single Cash Equity instrument
Outright Stock Loans	A Transaction which is a stock loan in a Cash Equity instrument
Cash Equity v ADR	N/A
Cash Equity v GDR	N/A

2. Submission Mechanism

The following trading system and submission mechanisms are available:

Protocol	Sub-Protocol
Request for Quote trading System	GUI, email
Trade Registration	Designated telephone lines, Email addresses, and other electronic communications systems

3. Execution Methodology

The "Cash Equity and ETF Products" Segment supports Cash Equity trading in Anonymous Transactions and Bilaterally Settled Transactions.

Anonymous Transactions are settled transactions against a pre-selected Matched Principal Facilitator. Participants must notify the Operator of the Matched Principal Facilitator they wish to enter into a Transaction with, and the Matched Principal

Facilitator must have notified the Operator that they will accept to enter into Transactions with the Participant.

The following Submission mechanisms and Trading Systems are available for Cash Equity Products:

A) Trade Registration Submission mechanism – Voice Business Model

Registered Trades in Cash Equity Products may be submitted by Participants for registration in the "Cash Equity and ETF' Segment, if they are Transactions that are Large in Scale or otherwise exempt from the requirements to publish Pre-Trade Data.

Brokers will attempt to match corresponding Trade Requests through interaction with those received or provided by other Brokers or Venue members by publicising them using Voice. If there is a match, then, unless the Broker has been instructed by the Venue member to seek confirmation from the relevant Venue member of their intention to enter into a Transaction prior to its Execution, the Broker may indicate that a Transaction has been entered into, which shall be binding on each relevant Venue member

The Registered Trade is registered through the GUI provided or by email as soon as practicable and no later than one (1) minute after the time of arrangement.

The submitting Participant must meet the Operator's operational and technical requirements to register Registered Trades. Such requirements will be published through Market Notices from time to time.

B) Request For Quote (RFQ) Trading System - Fusion RFQ

The Fusion RFQ Platform is a trading platform for Cash Equity and ETFs whose main characteristics are as follows:

- (A) A requester (the "RFQ Requester") can through the Fusion RFQ Platform anonymously request two-way prices in any size from the network of liquidity providers including investment banks. The requesting Participant must specify the time period during which the RFQ will be open. An RFQ can be launched for a set time which the initiator decides when requesting a price, i.e. 2 mins, 3 mins, 5 mins... By default, this time is set on Fusion RFQ as 3 minutes. During this time, the RFQ is live and the receiving participants may provide updated quotes in response, which shall be deemed to be live until the expiry of the RFQ period which is also the end of the session.
- (B) The RFQ Requester will be notified of the best prevailing two-way price from responders which it may decide or not to execute anonymously, with minimal market

impact. Indeed, the RFQ protocol is designed to minimise market impact by allowing for large orders to executed without seeing the typically price moves associated when executing large orders directly on Central Limit Order Books.

- (C) The RFQ Requester may leave resting Orders in the Request for Quote Trading System. Resting orders are limit orders that Requesters may input into Fusion. These limits are not visible to responding participants, and are executed if and only if, prices returned are at the limit or better. The fill price is always in the favourable direction for the requester, The resting will be valid until cancelled or the Request for Quote Trading System session ends.
- (D) The liquidity providers will be market makers, investment firms and banks, and most of the liquidity takers will be smaller investment managers (e.g. hedge funds, brokers and tier 2-3 banks).
- (E) Liquidity providers quotes are either firm orders or actionable indications of interest ("AIOI"). AIOI's are re-confirmed with the LP upon an execution of a quote generated by an AIOI.
- (F) TP ICAP EU MTF reserves the right to exclude LPs providing AIOIs who then decline execution of them on a regular basis
- (G) All trades are executed and reported on the TP ICAP EU MTF.

4. Clearing and Settlement

Transactions in Cash Equity products within the "Cash Equity and ETF" segment will be either uncleared Bilaterally Settled Transactions, against a pre-selected Match Principal Facilitator, or Cleared Transactions. The following Clearing Houses are eligible to receive trade feeds from this segment:

- EuroCCP N.V.
- LCH Ltd.
- SIX X-Clear Ltd.

Participants are required to provide for the settlement of Transactions in Cash Equity Products in a timely manner and no later than T+2, as per the market standard settlement period, unless a non-standard settlement date is agreed at point of Execution.

B. Exchange Traded Funds

1. Tradable Instruments

Trading is permitted for Transactions in the following Products (Cash Equity Products):

Products	Parameters (where applicable)
Exchange Traded Funds (ETF)	All currencies

2. Submission Mechanism

The following submission mechanisms are available:

Protocol	Sub-Protocol
Request for Quote trading System	GUI, email
Trade Registration	Designated telephone lines, Email addresses, and other electronic communications systems

3. Execution Methodology

The "Cash Equity and ETF Products" Segment supports ETFs trading in Anonymous Transactions and Bilaterally Settled Transactions.

Anonymous Transactions are Bilaterally Settled Transactions against a pre-selected Matched Principal Facilitator. Participants must notify the Operator of the Matched Principal Facilitator they wish to enter into a Transaction with, and the Matched Principal Facilitator must have notified the Operator that they will accept to enter into Transactions with the Participant.

The following Submission mechanisms and Trading Systems are available for ETFs Products:

(A) Trade Registration Submission mechanism – Voice Business Model

Registered Trades in ETFs may be submitted by Participants for registration in the "Cash Equity and ETF Segment", if they are Transactions that are Large in Scale or otherwise exempt from the requirements to publish Pre-Trade Data.

Brokers will attempt to match corresponding Trade Requests through interaction with those received or provided by other Brokers or Venue members by publicising them using Voice. If there is a match, then, unless the Broker has been instructed by the Venue member to seek confirmation from the relevant Venue member of their intention to enter into a Transaction prior to its Execution, the Broker may indicate that a Transaction has been entered into, which shall be binding on each relevant Venue member.

The Registered Trade is registered through the GUI provided or by email as soon as practicable and no later than one (1) minute after the time of arrangement.

The submitting Participant must meet the Operator's operational and technical requirements to register Registered Trades. Such requirements will be published through Market Notices from time to time.

(B) Request For Quote (RFQ) Trading System - System: Fusion RFQ

The Fusion RFQ Platform is a trading platform for Cash Equity and ETFs whose main characteristics are as follows:

- (A) A requester (the "RFQ Requester") can through the Fusion RFQ Platform anonymously request two-way prices in any size from the network of liquidity providers including investment banks. The requesting Participant must specify the time period during which the RFQ will be open. An RFQ can be launched for a set time which the initiator decides when requesting a price, i.e. 2 mins, 3 mins, 5 mins... By default, this time is set on Fusion RFQ as 3 minutes. During this time, the RFQ is live and the receiving participants may provide updated quotes in response, which shall be deemed to be live until the expiry of the RFQ period which is also the end of the session.
- (B) The RFQ Requester will be notified of the best prevailing two-way price from responders which it may decide or not to execute anonymously, with minimal market impact. Indeed, the RFQ protocol is designed to minimise market impact by allowing for large orders to executed without seeing the typically price moves associated when executing large orders directly on Central Limit Order Books.
- (C) The RFQ Requester may leave resting Orders in the Request for Quote Trading System. Resting orders are limit orders that Requesters may input into Fusion. These limits are not visible to responding participants, and are executed if and only if, prices returned are at the limit or better. The fill price is always in the favourable direction for the requester, The resting will be valid until cancelled or the Request for Quote Trading System session ends.
- (D) The liquidity providers will be market makers, investment firms and banks, and most of the liquidity takers will be smaller investment managers (e.g. hedge funds, brokers and tier 2-3 banks).
- (E) Liquidity providers quotes are either firm orders or actionable indications of interest ("AIOI"). AIOI's are re-confirmed with the LP upon an execution of a quote generated by an AIOI.
- (F) TP ICAP EU MTF reserves the right to exclude LPs providing AIOIs who then decline execution of them on a regular basis

4. Clearing and Settlement

Transactions in ETF products within the "Cash Equity and ETF" segment will be either uncleared Bilaterally Settled Transactions, whereby the parties to the Transaction can agree alternative settlement terms bilaterally following Execution, or Cleared Transactions. The following Clearing Houses are eligible to receive trade feeds from this segment:

- Euro CCP N.V.
- LCH Ltd.
- SIX X-Clear Ltd.

Participants are required to provide for the settlement of Transactions in ETF Products in a timely manner and no later than T+2, as per the market standard settlement period, unless a non-standard settlement date is agreed at point of Execution.

II) ORDER BOOK SEGMENT (excluding Liquidnet Debt & Equity Products)

1. Introduction

These are the Product Specifications of the Order Book Segment of the TP ICAP EU MTF. They are to be read together with the Venue Rules and form part of the Venue Rules of the TP ICAP EU MTF.

2. Definitions and Interpretations

The following definitions shall apply in these Product Specifications, in addition to the definitions contained in the Venue Rules:

"Central Limit Order Book" means a non-discretionary trading system that Matches and Executes Orders electronically on a price-time priority basis.

"**Repos**" means the Transactions set out in Part AA of these Product Specifications.

3. MIC Code

The Segment MIC code for the Order Book Segment is TPIO.

4. Trading Hours

The Order Book Segment is available for trading during the normal market hours for trading, subject to the Operator's sole decision-making authority. Please see the website for normal market hours under section "Trading hours".

AA Repo

1. Tradable Instruments

Trading is permitted in the following Tradable Instruments:

Financial Instruments	Parameters
Government bonds	As part of a permitted Transaction Type in the table above
Corporate Bonds	As part of a permitted Transaction Type in the table above
Covered Bonds	As part of a permitted Transaction Type in the table above
Other Bonds including SSAs, ABS and FRNs (as defined in MiFID II RTS 2, Annex III Table 2.2)	As part of a permitted Transaction Type in the table above

Trading is permitted in the following types of Transactions in the eligible Tradable Instruments listed below:

Transaction Types	Parameters
Repo	A single Transaction for the sale and repurchase of a Tradable Instrument from the list of Tradable Instruments set out in the table below
Reverse repo	A single Transaction for the sale and repurchase of a Tradable Instrument from the list of Tradable Instruments set out in the table below

2. Order Types

Only limit Orders are permitted for Repos. The following table lists the variable attributes that are allowed when submitting a limit Order:

Protocol	Sub-Protocol
Time to live	Good until date/time
	 Orders will default to user session disconnection or end of day if no value specified
Size	Visible quantity
	Hidden quantity

3. Trade Requests

Trade requests for Repo Transactions may be submitted as Orders only.

All Orders for Repo Transactions with specified expiry times or dates will remain active in the Order Book Segment until such time as they are cancelled by the Participant (or the Operator in accordance with the Venue Rules) or the expiry date of the Order has been reached.

Operator may impose a minimum order size in respect of any Product. Any order smaller in size may be rejected by the Operator.

4. Submission Mechanism

The following Trading System is available for Repo Transactions:

Protocol	Sub-Protocol
Continuous Auction Order Book trading system	GUI, API

5. Execution Methodology

The Order Book Segment supports Repo trading in Bilaterally Settled Transactions and Cleared Transactions.

6. Trading Systems

The following Trading Systems are available for Repo trading:

"eRepo": Continuous Auction Order Book trading system: Central Limit Order Book

Orders submitted in the E-repo CLOB (Via GUI or API) interact and are matched though a click-to trade mechanism to generate an order match or automatic matching when price levels meet.

For each financial instrument, the aggregate number of orders and the volume they represent at each price level, for at least the five best bid and offer price levels are visible by all participants.

Matching is on a price time priority basis. Up until the point in time when and order match occurs, the Participant who submitted the order may cancel or amend the order. It will be visible to all active CLOB participants that the order has been cancelled or amended.

Orders will remain active until the specified expiry time or the end of the trading session is reached. The CLOB can admit limit and iceberg orders.

When an order match occurs the transaction can be partially or fully executed. Participants have the choice to leave any remaining unexecuted quantity in the order book (Fill& Save) or cancel it (Fill & Kill).

The relevant participant are sent an automatic confirmation of the match The transaction executed can be bilaterally settled or cleared through LCH upon client instruction.

7. For bilaterally settled transaction the relevant participant can agree alternative settlement terms. Clearing and Settlement

Transactions in Repo Transactions within the Order Book Segment will be Executed as either uncleared Bilaterally Settled Transactions, whereby the parties to the Transaction can agree alternative settlement terms bilaterally following Execution, or as Cleared Repo Transactions. The following Clearing Houses are eligible to receive trade feeds from the Order Book Segment:

- o LCH Repoclear Ltd London
- o LCH Repoclear SA, Paris

III) LIQUIDNET EQUITY SEGMENT

1. Introduction

These are the Product Specifications of the Liquidnet Equity Segment of the TP ICAP EU MTF. They are to be read together with the Venue Rules and supplement the Venue Rules of the TP ICAP EU MTF.

2. Definitions and Interpretation

The following definitions of Liquidnet Equity Products shall apply in these Product Specifications, in addition to the definitions contained in the Venue Rules:

"Liquidnet Equity Products" means the Financial Instruments and Transactions set out in Part AAA of these Product Specifications and as defined in the Venue Rules.

3. MIC

The segment MIC code for the Liquidnet Equity Segment of the TP ICAP EU MTF is LNEO.

4. Operating Hours

The Liquidnet Equity Segment is available during the normal market hours of the TP ICAP EU MTF, subject to the Operator's sole decision-making authority. Please see the website for normal market hours under section "Trading hours".

5. Submission of Executed Transactions

Eligible Transactions submitted as Registered Trades on the Liquidnet Equity Segment are deemed to have been Executed at the time that the material terms of the Transaction have been agreed Participants are responsible to ensure that Transactions Executed under the Venue Rules are submitted in a timely manner and with all of the information required by the Operator.

AAA. Liquidnet Equity Products

1. Tradable Instruments

Trading is permitted for Transactions in the following Products (Liquidnet **Equity Products**):

Products	Parameters (where applicable)
Cash Equities	All currencies
ETFs	All currencies
Depositary Receipts	All currencies
Certificates	All currencies

Trading is permitted for the following Transaction types:

Transaction Types	Parameters (where applicable)
Outright Cash Equities, ETFs, Depositary Receipts, Certificates	N/A

2. Submission Mechanism

The following submission mechanisms are available:

Protocol	Sub-Protocol
Trade Registration	Electronic or non-electronic matching of interests by Participants.

3. Execution Methodology

The Liquidnet Equity Segment supports trading in Anonymous Transactions.

Anonymous Transactions are Settled through the settlement agent. The following Submission Mechanisms are available for Cash Equity Products:

A) Trade Registration Submission Mechanism

Registered Trades in Liquidnet Equity Products may be submitted by clients for registration in the Liquidnet Equity Segment if they are Transactions that exempt from the requirements to publish Pre-Trade Data and include Reference Price transactions, Negotiated Transactions & Large in Scale transactions.

The Registered Trade is registered as soon as practicable and no later than one (1) minute after the time of arrangement.

The submitting clients must meet the Operator's operational and technical requirements to register Registered Trades. Such requirements will be published through Market Notices from time to time.

4. Clearing and Settlement

Transactions in Cash Equity products within the Liquidnet Equity Segment will be anonymous transactions settled through the settlement agent.

Participants are required to provide for the settlement of Transactions in Liquidnet Equity Products in a timely manner and no later than T+2, as per the market standard settlement period, unless a non-standard settlement date is agreed at point of Execution.

IV) Liquidnet Debt Segment

1. Introduction

These are the Product Specifications of the Liquidnet Debt Segment of the TP ICAP EU MTF. They are to be read together with the Venue Rules and form part of the Venue Rules of the TP ICAP EU MTF.

2. Definitions and Interpretations

The following definitions shall apply in these Product Specifications, in addition to the definitions contained in the Venue Rules:

"Central Limit Order Book" means a non-discretionary trading system that Matches and Executes Orders electronically on a price-time priority basis.

"Liquidnet **Debt Products**" means the Financial Instruments and Transactions set out in Part AAAA of these Product Specifications and as defined in the Venue Rules.

"Optimisation Session Mid-Price" means the price level announced for a Product, by a third party data provider as selected by the Operator from time to time.

"**Optimisation Trading System**" means a periodic auction session based Trading System where Orders are submitted at the Optimisation Session Mid-Price and are Matched during the optimisation process, which Matches on the basis of volume and direction only.

"Volume Matching Price" means the price level announced for a Product, by and in the sole decision-making authority of the Operator, for a trading session.

3. MIC Code

The Segment MIC code for the Liquidnet EU Debt Segment is LNFI.

4. Trading Hours

The Liquidnet Debt Segment is available for trading during the normal market hours, subject to the Operator's sole decision-making authority. Please see the website for normal market hours under section "Trading hours".

AAAA: Liquidnet Debt Products

1. Tradable Instruments

Trading is permitted in the following Tradable Instruments:

Financial Instruments	Parameters (where applicable)
Corporate Bonds	All currencies
Government Bond	All currencies
Convertible Bonds	All currencies
Structured Bonds	All currencies
Medium Term Notes	All currencies
Asset Backed Securities (ABS)	All currencies
Mortgage Backed Securities (MBS)	All currencies

Trading is permitted in the following types of Transactions :

Transaction Types	Parameters
Outright	A Transaction in a single Debt Product

2. Order Types

The following Order types are permitted:

Protocol	Sub-Protocol
Time to live	Good until cancelled
	 Good until date/time
	Orders will default to user session disconnection or end of day if no value specified
Size	Visible quantity

3. Trade Requests

Operator may impose a minimum Order size in respect of any Product. Any Order smaller in size may be rejected by the Operator.

4. Submission Mechanism

The following Trading Systems and submission mechanisms are available for Liquidnet Debt Products:

Protocol	Sub-Protocol
Optimisation system (Periodic auction trading system)	GUI, email, API
Request For Quote trading system	GUI, email, API
Continuous Auction Order Book(Central Limit Order Book Trading System)	GUI, email, API
Trade Registration	GUI, email, API

5. Execution Methodology

The Liquidnet Debt Segment supports Liquidnet Debt Products trading in Matched Principal Transactions or bilaterally settled or through a settlement agent.

6. Trading Systems

The following Trading Systems are available for Liquidnet Debt Products:

A. Request for Quote (RFQ): RFQ

The Liquidnet Debt Segment provides an RFQ trading system for Liquidnet Debt Products whose main characteristics are as follows:

- 1. A requester (the "RFQ Requester") can request one- or two-way prices in any size from the network of liquidity providers including investment banks. The requesting Participant must specify the time period during which the RFQ will be open. An RFQ can be launched for a set time which the initiator decides when requesting a price, i.e. 2 mins, 3mins, 5 mins... By default, this time is set as 10 minutes. During this time, the RFQ is live and the receiving participants may provide updated quotes in response, which shall be deemed to be live until the expiry of the RFQ period which is also the end of the session. Participants can receive a price for a part of the order size, not below the minimum tradable amount and not above their initially requested size.
- The RFQ Requester will be notified of the best prevailing one- or two-way price from responders which it may decide or not to execute on a matched principle anonymous, or name give-up basis. Other competing quotes are displayed and captured on a post-trade basis.
- 3. The functionality currently does not extend to automatically executing the RFQ, users still need to evaluate and manually interact with the RFQ, in order to complete the trade on the best price available only.

- 4. The RFQ operates on an all-to-all trading protocol. Any type of a market participant can act as an RFQ submitter or / and an RFQ responder on either disclosed or anonymous basis.
- 5. Liquidity providers quotes are either firm orders or actionable indications of interest ("AIOI"). AIOI's are re-confirmed with the Liquidity Provider upon an execution of a quote generated by an AIOI.
- 6. Liquidity providers can choose to disclose their identity or remain anonymous for all RFQ activity. In case a liquidity provider opts in for anonymity, they do not get to see the identity of RFQ submitters, nor do they know how many other liquidity providers they are in competition with. Disclosed RFQ responders get to see both.
- 7. TP ICAP EU MTF reserves the right to exclude Liquidity Providers providing AIOIs who then decline execution of them on a regular basis

B. Continuous Auction Order Book(Central Limit Order Book Trading System)

Orders submitted in the CLOB (via GUI or API) interact and are matched though a clickto trade mechanism to generate an order match or automatic matching when price levels meet.

When Orders are submitted into the CLOB, they will be displayed on a screen visible to all active participants. The information that will be visible in respect of each Order will be the instrument identifier, and the price and volume at which the submitting participant is willing to execute. Pre-trade, orders in both liquid & illiquid bonds are displayed (non-attributed) on our GUI, Web-portal & FIX market data API to participants in real-time.

Matching is on a price-time priority basis. Up until the point in time when an Order match occurs, the Participant who submitted the Order may cancel or amend the Order. It will be visible to all active CLOB Participants that the Order has been cancelled or amended. Orders will remain active until the specified expiry time or the end of the trading session is reached. When an order match occurs the transaction can be partially or fully executed.

Participants have the choice to leave any remaining unexecuted quantity in the order book or cancel it.

When an Order has been Executed, the Participants are sent confirmations of the trade.

All transactions are settled through a Settlement Agent.

C. Trade Registration Submission mechanism

Orders can be submitted into the trade registration system via GUI, API or e-mail by clients.

Orders can be matched via electronic and non-electronic means. Where an order does not qualify for one of the applied waivers, typically in the case of an order below LIS in respect of a liquid bond, pre-trade transparency will be ensured through https://fiquotes.liquidnet.com.

Matched orders are submitted to the MTF as Registered Trades by the participant. Transactions are negotiated privately and can be submitted by the Participant of the MTF where the Participant is acting on behalf of both the buyer and seller.

Matching is based on the following parameters:

- Side of the order/indication
- Size (we allow minimum size constraints to ensure orders are large enough to trigger a match)
- Type of client

In case of partial execution, the remaining quantity stays available to trade for the day or until cancelled.

When an Order has Executed, the clients are sent confirmations of the trade.

Transactions are anonymous and are settled through a settlement agent.

7. Clearing and Settlement

Participants are required to provide for the settlement of Transactions in Liquidnet Debt Products in a timely manner and no later than T+2, as per the market standard settlement period, unless a non-standard settlement date is agreed at point of Execution.