

# **Business Process Requirements Document**

## **Triparty (CFD) Matching and CCP Clearing Requirement Specification**

**July 2013**

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## 1. Introduction

The securities processing environment has undergone a period of significant change over the last decade. These changes have impacted all parties to transactions, enhancing processes for Investment Managers, Broker Dealers and the Custodians that support these transactions.

The introduction of central counterparty [CCP] clearing for exchange execution has provided significant benefits to the wider industry. Most notably a significant impact on the process efficiency when providing market execution services to investment managers and hedge funds has been achieved. Additionally, when coupled with other technological advancement, this has removed processing constraints enabling a higher volume of executions to be supported by both Exchanges and Broker Dealers.

Similarly, with regard to buy-side transaction processing, significant process improvements have been achieved. The majority of the larger market participants demonstrate clear support for a Block Level, electronic trade affirmation. The levels of same day trade booking and same day trade confirmation are achieving historical highs, but have not yet penetrated lower volume clients. The result is a fragmented market where the 'haves' achieve low cost STP processing and the 'have not's' remain labour intensive to service without achieving electronic trade economic comparison early in the trade lifecycle.

Further change is anticipated in Europe, including shortened settlement cycles, stricter settlement discipline and potential CSD consolidation. Such proposals will challenge the existing market structure and, if securities markets are to continue to operate in an orderly manner, it will require changes in the behaviour of all market participants.

It is the view of the contributors to this document that the securities landscape is best served by setting out "best practice" standards in order to support the necessary adjustments to processes.

The purpose of this document is to outline proposed standards from the Broker Dealer community and solicit feedback from other industry participants. The aim of this approach is to:

- Adopt a processing model that maximises efficiency based on "best practise" standards.  
Achieve common standards applicable regardless of the participant's scale.  
Lower barriers to entry for full STP
- Introduce competition across the service provider community and influence innovation and pricing given existing market conditions
- This document sets out the view of AFME members with regard to the optimal process that allows Swap Providers to reconcile give-up notifications from Executing Brokers (Liquidity Offer) vs. Client CFD (Contract for Difference) Allocations before Swap Providers book the inter-bank hedge for settlement and write the swap contract to the client.
- The document also sets out the view of AFME members with regards to using the Tri-Party matching platform as a central source of trade data (matched inter-bank hedges) to be passed to a CCP for clearing and netting

### 1.1. Business Benefits

The objective of the matching proposal is to ensure that transactions between client and broker participants achieve a matched status at the earliest opportunity in the trade lifecycle; the aspirational target for matched status is "by end of trade date".

Achieving this target will generate the following benefits;

- Clients will have access to a real-time view allowing exceptions to be identified intraday, reducing operational and market risk.

- Intraday real-time matching service for Portfolio Swaps, allowing transparency into lifecycle events and current status.
- Enable trade identification and resolution of issues, moving exception management to a T process rather than T+1.
- Reduce the market risk posed by un-affirmed transactions, and
- Reduce the effort expended in manual transaction comparison close to settlement date (commonly known as “pre-matching”) as the settlement hedge will be booked once the Liquidity Offer and Client Allocations are reconciled.

The objective of the clearing proposal is to ensure that transactions successfully matched between broker participants are made eligible for CCP clearance and settlement netting

The clearing proposal is expected to generate the following benefits:

- Reduce the number of physical settlements required between EBs and Swap Providers for the inter-bank hedge trades particularly in markets where cross netting of CFD trades with on-exchange trades is permitted
- Reduce inventory issues and improve settlement rates
- Remove counterparty risk by locking in trades against a CCP rather than facing the original broker for settlement
- Reduction in the number of cancellations/corrections made post matching due to the increased focus and importance placed on PB’s providing finality of trade
- Having trades affirmed, cleared and locked in for settlement against a CCP on T will support the market in moving towards T+2 settlement

## 1.2. Assumptions and Constraints

The following assumptions have been made:

- The vendor offering solutions to this process are open to work with the industry participants and to modify processes as required, using this document as preferred business process guide.
- The implementation of T+2 settlement will occur as part of European legislation by 2015.
- The broad number of participants will result in a phased approach to adoption, and therefore an extended period to achieve full benefits.
- For markets which support cross-netting the CCPs will be able to incorporate the off-exchange flow into existing net transactions providing processing deadlines can be met
- Interoperability between the CCPs will be available allowing brokers to choose their own preferred CCP for this flow

## 2. Current State Business Process

Currently CFD / Equity Swap transactions are confirmed between Clients, Liquidity Providers (LP) and Prime Brokers (PB) bi-laterally outside of a central matching platform. The below diagram (figure 3.0) illustrates the booking flow between the parties.

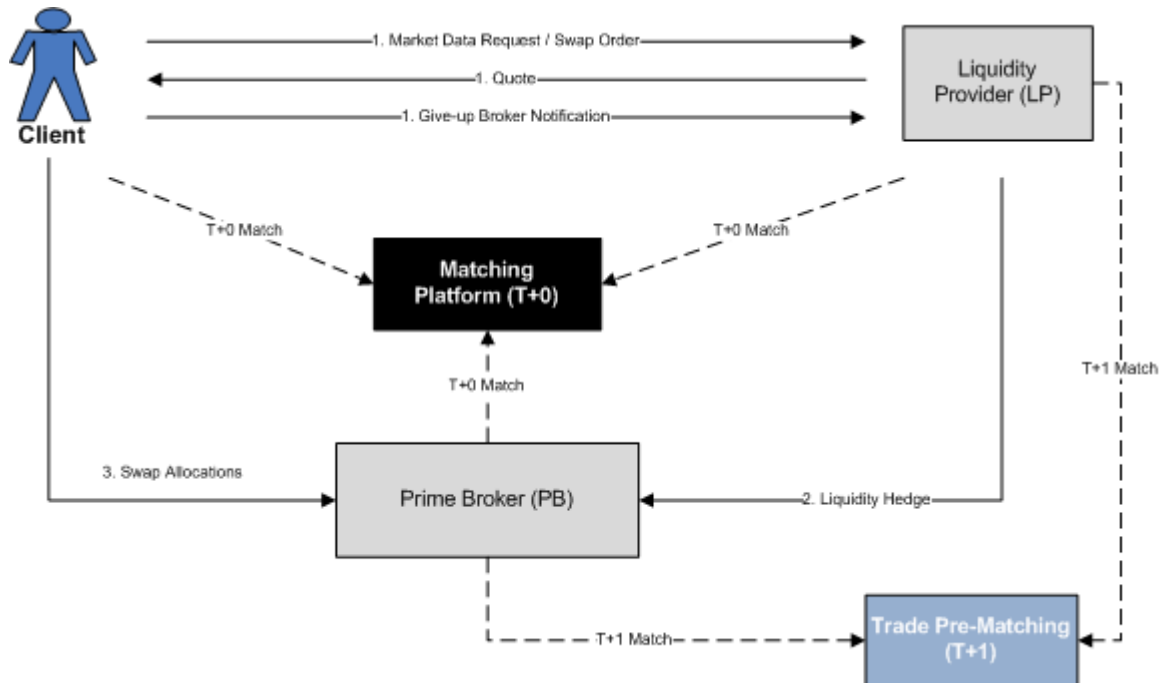


Figure 3.0

Process No:	Process Description	Process Owner
1	Market Data Request between Client and LP. The 'Give-Up Notification' can either be given at time of request placement or post execution. However, the request must be flagged as 'Market Data Request' when initiated.	Client
2	Market Data Request Hedges are confirmed to the Prime Broker (PB) post execution. This can be done a number of ways, with the most common being real-time Bloomberg's.	Liquidity Provider
3	Client submits 'Swap Allocation File' to Prime Brokers prior to or at EOD to ensure Swap Contracts are successfully generated.	Prime Broker

While the above processing model allows for Give-up's to be successfully matched bi-laterally, there are also significant limitations that result in issues for all parties. Below are some of the issues highlighted by the working group community.

- No ability to provide metrics reporting for any party to highlight hot spots.
- Clients are not aware of trade status until the Swap Contract is written.
- Manual effort from all parties in investigating mismatches / incorrect trades.
- Duplication of work.
- Increased cost per trade.
- More complex system and process flows.

With the upcoming regulation changes to drive European markets to a T+2 settlement period, there will be more emphasis to ensure trades are successfully booked and positive affirmation received on trade date (for all trade types).

The introduction of a real-time matching platform will move contractual risk to T rather than being managed near value date.

The proposal outlined in the document is the implementation of a Matching Platform for Give-up / CFD flow, there are already Liquidity Providers, Prime Brokers and Clients connected to various Platforms currently available. However, it has been deemed amongst the community that while the current functionality offered does not benefit all parties to the desired level. This is due to lack of standards and the implementation of bespoke models to accommodate users, which in turn creates an un-scalable model.

A significant issue encountered at LP level is the need to use one Matching Platform to perform the LP vs. PB and PV vs. Client match, yet another Platform to perform the LP:EB Match. This results in the LP's having to pay multiple messaging costs for the same trade.



### 3. Future State Business Process – Tri-Party Matching

In order to close out the risks and issues associated with the current booking process, a central matching platform is required to facilitate trade flow. The below diagram illustrates how the implementation of a central matching platform can assist all parties in a Give-up trade.

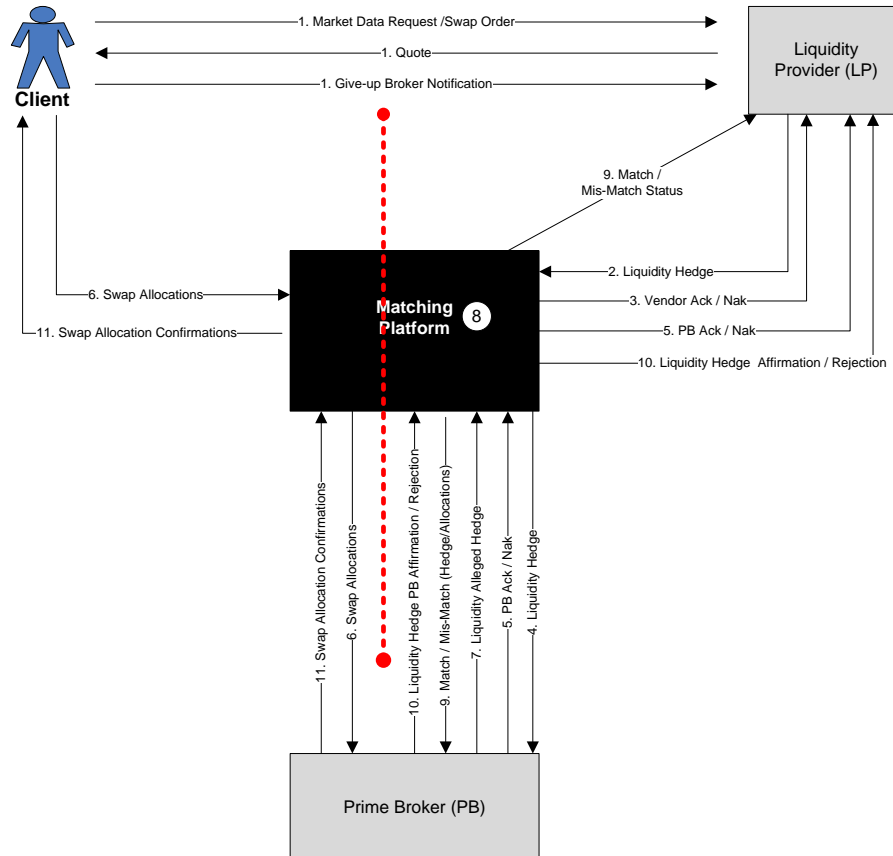


Figure 4.0

Process No:	Process Description	Process Owner
1	Market Data Request between Client and LP. The 'Give-Up Notification' can either be given at time of request placement or post execution. However, the order must be flagged as 'Market Data Request' when initiated. This is the same as current state flow.	Client
2	Liquidity Hedges are confirmed by the LP into the Matching Platform, available for PB consumption.	LP
3	Matching Platform perform initial validation checks to ensure the necessary fields have been provided by the LP, for which a <b>Vendor Ack / Nak</b> status is generated.	LP & Matching Platform
4 / 5	PB takes a drop copy of the Liquidity Hedge booking from the Matching Platform to perform initial checks. Upon completing the checks the PB will provide a <b>PB Ack / Nak</b> status back to the Matching Platform. This status will be consumed by the LP. Should the PB be unable to provide the initial PB Ack / Nak documented further in the document, they can allow the Matching Platform to provide the PB Ack / Nak on their behalf.	PB & LP

	<b>Note:</b> Failure to provide an Ack / Nak status will delay the Matching process.	
6	Client submits / uploads details of the Swap Allocations into the Matching Platform to be booked out by the PB. <b>Note:</b> This step can be done ahead of step 2, it is represented as step 6 for illustration purposes only.	Client
7	A Liquidity Allege Hedge is created to be matched against the corresponding booking. Allege Hedge can be created either from the Swap Allocations or from the Liquidity Provider Hedge, by either the PB or Matching Platform. Details provided further in the document.	PB / Matching Platform
8 / 9	The Matching Platform is to perform a matching process against the Allege Hedge and the LP Hedge bookings / Swap Allocation. Depending on the Matching result, the Platform will be required to publish back a <b>Matched / Mis-Matched</b> status to parties. In addition to the match status, the Swap Allocations / LP Hedge booking is to be provided to the PB's.	Matching Platform
10	Upon the PB's processing the match / mis-match status, they will provide an <b>Affirmation / Rejection</b> status on the LP Hedge, to be consumed by the LP.	PB
11	Allocation Confirmations are sent back to the Matching Platform by the PB once internal processing has been completed. Allocations confirmations are matched in the Matching Platform with the Swap Allocations. Client is then able to consume the confirmations for Books & Records. For those PB's not able to provide Affirmation / Rejection status during process #10, the relevant status will be provided at this point.	PB

### 3.1 Matching Platform Communication Method

Communication of trades between all parties and the Matching Platform is to be standardized where possible. The initial phases may result in multiple communication methods being developed in order to support the broker community, however there would need to be a conscious effort from all parties to conform to a standardised message protocol. Doing so would allow for interoperability between vendors.

#### 3.1.1 Matching Platform Inbound Flow

The communication methods to be used by LP's, PB's and Clients to enter bookings into the Matching Platform for initial go-live are below. Each format is to be configurable per broker / client.

- FIX
- Swift
- Excel / CSV
- Emails
- Bloomberg's
- XML
- Single Input via GUI

#### 3.1.2 Inbound Data Requirements

Across all above mentioned communication methods, the following data requirements must be followed, for which the vendor will need to perform the necessary field mappings per Client, LP, PB as it may differentiate per party.

##### 3.1.2.1 Liquidity Provider - Hedge

LP's are required to provide (but not limited to) the following Mandatory fields on the Hedge bookings. Additional fields should be configurable when required.

Data Field	Comments
Order ID	Mandatory – Same Order ID to be used on Amends / Cancels
Version	Mandatory – Increment Version for Amends / Cancels
Status	Optional – Cancellations only
Client Identifier	Mandatory
Fund ID	Optional
Client Acronym	Optional
Give-up Broker (PB) Identifier	Mandatory
Side	Mandatory – Client Perspective
Product	Mandatory
Quantity	Mandatory
Gross Price	Optional
Net Price	Mandatory
Net Net	Optional
Settlement Amount	Optional
Trade Date	Mandatory
Settlement Date	Mandatory
Traded Currency	Mandatory
Settlement Currency	Optional - Out of Currency Trades Only
FX Rate	Optional - Out of Currency Trades Only
Settlement Price	Optional - Out of Currency Trades Only

### 3.1.2.2 Swap Allocations & Liquidity Allege Hedge

Clients are required to provide (but not limited to) the following Mandatory fields on the Allocations bookings. Additional fields should be configurable when required.

Data Field	Comments
Allocation ID	Mandatory – Same Allocation ID to be used on Amends / Cancels
Version	Mandatory – Increment Version for Amends
Status	Optional – Cancellations only
Client Name	Mandatory
Fund ID	Mandatory
Client Acronym	Optional
Liquidity Provider	Mandatory
Side	Mandatory – Client Perspective
Product	Mandatory
Quantity	Mandatory
Gross Price	Optional
Net Price	Mandatory
Net Net	Optional
Settlement Amount	Optional
Trade Date	Mandatory
Settlement Date	Mandatory
Traded Currency	Mandatory
Settlement Currency	Optional - Out of Currency Trades Only
FX Rate	Optional - Out of Currency Trades Only
Settlement Price	Optional - Out of Currency Trades Only

### 3.1.3 Matching Platform Outbound Flow

The communication methods to be used by LP's, PB's and Clients to receive status messages back from the Matching Platform for initial go-live are.

- FIX – To be the same message / tags across all vendors.
- Swift
- Excel / CSV
- Emails

- Bloomberg's
- XML –To be the same message / tags across all vendors.
- Via the Matching Platform GUI – All statuses to be reflected on the GUI.

Bookings that were manually entered into the Platform, status messages are not required to be sent back to the entering party. The entering party will be required to use the GUI to determine / download the booking status.

### 3.1.4 Outbound Data Requirements

Across all above mentioned communication methods, the following data requirements must be followed.

#### 3.1.4.1 Positive Response Messages

The following table represents the fields to be provided by the Matching Platform to all parties on the below Status Messages.

- Vendor Ack
- PB Ack
- Matched
- PB Affirmation

Data Field	Comments
Order ID	Required to match within internal systems
Version	Required to match within internal systems
Status	Vendor Ack / PB Ack / Matched / PB Affirmation

#### 3.1.4.2 Negative Response Message

The following table represents the fields to be provided by the Matching Platform to all parties on the below Status Messages.

- Vendor Nak
- PB Nak
- Mis-Match
- PB Rejection

Data Field	Comments
Order ID	Required to match within internal systems
Version	Required to match within internal systems
Status	Vendor Nak
Reason Code	Matching Platform Event Code
Event Description	Matching Platform Event Description

#### 3.1.4.3 'Alleged' Trades Response Message

In the event the Liquidity Allege Hedge is generated ahead of the LP or Client submitting the corresponding booking, an 'Alleged' event message will be provided to the LP, as outlined in further in the document. The fields to be provided on the 'Alleged' event message are to be the fields defined in Section 3.1.2

### 3.1.5 Timing

In order to achieve the benefits of Trade Date Matching and Affirmation, timing of messages from all parties is critical to the process.

- Liquidity Providers are required to post Hedge bookings intraday in a near real-time manner where possible.
- Swap Allocations are to be published into the Matching Platform or to the PB directly by the client by the designated cut off time.
- Liquidity Alleges from Prime Brokers are to be published by the designated cut-off time.
- Prime Brokers are to provide Affirmation / Rejection status on individual trades by designated cut off time.

- For Late Give-up's (Post Cut-off), the PB is to Nak the Hedge Booking, advising of new Trade Date be booked. Or the Matching Platform can perform this action on behalf of the PB (if agreed).
- Best practice by all parties is to publish all trade / bookings to the Matching Platform on Trade Date or Real-time.

### 3.1.6 Status Management

The following table illustrates the various statuses a trade can go through. All statuses should be visible in the Matching Platform GUI as well as available for consumption by the entering party.

In the event a trade was manually entered into the Platform, the relevant status message should not be sent back to the entering party for consumption – only visible in the GUI.

All statuses are to be reflected in the GUI as well as being made available to all parties for internal consumption.

GUI Status	Outbound Message (Section 4.1.2)	Description
Invalid	Vendor Nak	Rejection – Vendor has not processed the trade based on the fields outlined in Section 3.1.1
Active	Vendor Ack	Initial status for all trades entered into the Matching Platform that were not deemed 'Invalid'.
PB Ack	PB Ack	Initial Acknowledgement from Prime Broker that initial checks have been completed and passed.
PB Nak	PB Nak	Initial Negative Acknowledgement from Prime Broker that initial checks have been completed and failed.
Matched	Matched	Confirmation that the Hedge vs. Allocations match has been successful based on the criteria set out in Section 4.4
Mis-Matched	Mis-Matched	Rejection that the Hedge vs. Allocations match has been unsuccessful based on the criteria set out in Section 4.4
PB Affirmed	PB Affirmation	Affirmation from PB on Matched Trade.
PB Rejected	PB Rejection	Rejection from PB on Matched Trade.
PB Allocation Confirmation	PB Allocation Confirmation	PB Confirmation on Client Allocations.

## 4. Trade Processing, Matching and Status Management

The Matching Platform will be the central system that will facilitate the matching and status management of all trades. The lifecycle of a given trade will result in various actions being performed either by users directly in the Matching Platform, by users interacting in an automated way with the Matching Platform or by the Matching Platform itself.

The following sections will provide detailed business requirements for each step of a trade illustrated at the start of section 3.0.

### 4.1 Matching Platform Enrichment

The Matching Platform will be required to perform basic enrichment on the bookings received.

#### 4.1.1 Hedge Enrichment

Upon receiving the Hedge from the LP or the Allege Hedge from the PB, the Matching Platform will be required to enrich the following details.

- **Product Information** – Each LP may send different market identifiers for the same product. The Matching Platform must enrich the trade with other market identifiers from the Product static data table (see section 8.0), allowing all parties to use identifiers that suit them.
- **Settlement Amount** – Should the Settlement Amount not be provided on the Hedge booking, the Matching Platform will be required to calculate the Settlement Amount through Qty \* NET Price. Should Settlement Amount be provided by the LP, then no enrichment is required by Matching Platform.
- **Client Details** – Liquidity Providers may provide Client Names, Acronyms, Fund ID's that may potentially require enrichment to the full client name. A mapping table is to be maintained by the Matching Platform (see section 8.0)
- **Prime Broker Details** - Liquidity Providers may provide PB identifiers that may potentially require enrichment to the full PB name. A mapping table is to be maintained by the Matching Platform (see section 8.0)

#### 4.1.2 Swap Allocations Enrichment

Client Swap Allocations will require the same level of enrichment as provided on the Hedge booking outlined above.

#### 4.1.3 Swap Allocation Confirmation Enrichment

PB feedback given during the meeting on 23<sup>rd</sup> February 2012, was that no Enrichment requirements are required for Swap Allocations Confirmations.

## 4.2 LP Hedge Processing

Upon the Liquidity Provider receiving a Market Data Request from the Client, the LP will be responsible to ensure the request is executed within the best execution policy dictated under MiFID. Once executed, the LP will be responsible for the publication of a single Hedge booking into the Matching Platform for consumption / matching.

### 4.2.1 Invalid Status Management

In the event the Matching Platform receives bookings with missing mandatory data, the Matching Platform is to process the trade through to the GUI and display as an '*Invalid*' status. This status should be made available to the entering party for internal consumption via the methods specified in section 3.1.2. Any '*Invalid*' trades should not be passed on to other parties to view.

### 4.2.2 Active Status Management

The initial status of any LP Hedge entered into the Matching Platform that is not missing mandatory data, is to be '*Active*'. Hedge bookings with this status should be made visible to the PB perform Ack / Nak.

#### 4.2.3 PB Ack/Nak Status Management

The Ack / Nak status required on all Hedge bookings is to be provided by the PB to inform the Liquidity Provider that the bookings meets their level one processing checks, defined below.

- Hedge booked to correct PB - Client / PB Relationship is valid.

*Note: The level one check list is to be built out over time, benefiting both LP's and PB's in performing a number of the checks upfront. Next phase of checks to potentially include 'Restricted Product Checks'.*

PB Ack / Nak status updates are to be communicated back to the LP via one of the methods outlined in section 4.1.2, as well as ensuring the status is correctly reflected on the GUI. Should the Prime Broker be willing to have the Matching Platform perform the initial checks and provide an Ack/Nak status back to the LP, then this should be possible. A static table will need to be maintained to retain the PB agreements. Before a match can take place, the Hedge booking is to be Acknowledged by the PB as a valid trade. The PB can provide Ack / Nak status in three ways.

- PB to download the Hedge booking into internal systems to perform the necessary checks and re-upload Ack / Nak statuses.
- PB to review the Hedge booking via the Matching Platform GUI and provide a manual Ack / Nak status directly into the Platform.
- In the event the PB is willing to have the Matching Platform perform the level one check and publish an Ack / Nak status back to the LP, the PB in this instance will be required to provide details of the level one checks to be performed to the Matching Platform.

Trades should be represented with the following statuses

- PB Acknowledged
- PB Neg-Acknowledged

In the event an Ack status is not received by the PB, the Matching Platform **should not** attempt to perform any matching process.

### 4.3 Swap Allocations Processing

The Client is responsible in ensuring Swap Allocations are booked into the Matching Platform in a timely manner allowing for intra-day matching. Allocations can be booked into the Platform in various ways.

- Automated connection to the Matching Platform. Whereby the Client is able to publish Allocations from their internal systems into the Matching Platform STP.
- Email Uploads, whereby the client can provide Swap Allocations via email in a standardised template.
- Allocations processed through the PB, whereby the Client provides the Allocations to the PB to upload into the Matching Platform.
- Via the Matching Platform GUI, whereby the Client can use the GUI to enter Allocations directly into the Platform.

#### 4.3.1 Invalid Status Management

In the event the Matching Platform receives bookings with missing mandatory data, the Matching Platform is to process the trade through to the GUI and display as an '**Invalid**' status. This status should be made available to the entering party for internal consumption via the methods specified in section 3.1.2. Any '**Invalid**' trades should not be passed on to other parties to view.

#### 4.3.2 Active Status Management

The initial status of any Swap Allocation entered into the Matching Platform that is not missing mandatory data, is to be '**Active**'.

#### 4.3.3 PB Ack / Nak Status Management

Prime Brokers will not be providing PB Ack / Nak on Client Allocations.

#### 4.4 Liquidity Allege Hedge Generation

Direct matching of Swap Allocations vs. LP Hedge should not occur. In order to ensure the matching is done either between Client vs. PB or PB vs. LP, a Liquidity Allege Hedge will need to be generated.

In both instances, the Matching Platform is to ensure the 'Entering Party' for the Liquidity Allege Hedge is labelled as that of the Prime Broker.

##### 4.4.1 PB vs. LP Matching

Should the matching criteria set out in Section 4.5 be applied between the Prime Broker and Liquidity Provider, a Liquidity Allege Hedge will need to be generated from the Swap Allocations through one of the following methods.

- PB to download Swap Allocations and generate Liquidity Allege Hedge.
- Matching Platform to generate Liquidity Allege Hedge from the Swap Allocations.

In the event Client submits multiple Swap Allocations for a single Swap Order, the Matching Platform or PB will be required to aggregate the relevant Allocations to generate the Liquidity Allege Hedge.

##### 4.4.2 PB vs. Swap Allocations Matching

Should the matching criteria set out in Section 4.5 be applied between the Prime Broker and Swap Allocations, a Liquidity Allege Hedge will need to be generated from the LP's Original Hedge through one of the following methods.

- PB to download the original LP Hedge and generate Liquidity Allege Hedge.
- Matching Platform to generate Liquidity Allege Hedge from the original LP Hedge.

In the event Client submits multiple Swap Allocations for a single Swap Order, the Matching Platform will be required to aggregate the relevant Allocations to allow for a successful match with the Liquidity Allege Hedge.

In the event a Liquidity Allege Hedge is generated prior to the corresponding booking being booked by the LP or Client, the Matching Platform will be required to provide event notifications to the corresponding party informing them of an impending booking / match.

#### 4.5 Matching Criteria / Processing

The Matching Platform should only attempt to perform one of the matches stated above once the following criteria's are met.

- PB Acknowledged status has been received on LP Hedge booking (PB Ack Status).
- The Liquidity Allege Hedge has been successfully generated / processed in the platform.

The Matching Platform will then attempt to perform a match based on an industry agreed matching criteria and returns a matching status. The below table provides details on the matching fields.

Field Name	Provider	Comments
Client Identifier	LP	Matching Platform to recognise Client on Allocations
LP Identifier	Client	Matching Platform to recognise LP on Hedge/Block
Side	Both	Mandatory – Clients Perspective
Quantity	Both	Mandatory
Security ID	Both	Mandatory
Trading Currency	Both	Mandatory



Net Consideration	Both	Mandatory - Either Price or Net Consideration
Trade Date	Both	Mandatory
Settlement Date	Both	Mandatory
FX Rate	Both	Optional - Mandatory on Out of Currency Trades
Settlement Currency	Both	Optional – Mandatory on Out of Currency Trades

#### 4.5.1 Matched Status

Should the Matching Platform perform a successful match, a **'Matched'** status is to be published back to both the Client & LP, as well as making it visible in the GUI to all parties. The Matched status should also be made available to the PB for consumption (if requested).

#### 4.5.2 Mis-Matched Status

Should the Matching Platform be unsuccessful in performing a match, a **'Mis-Matched'** status is to be published back to both Client and LP, as well as making it available to the PB for consumption (if requested). The returning message should contain field details on the Mis-Match for internal consumption.

### 4.6 Hedge Affirmation & Rejection Processing

The Affirmation / Rejection status of a Hedge booking is a critical requirement between PB's and LP's. For the Liquidity Provider it has the potential to represent the final status for the trade.

There are three possible ways in which an Affirmation / Rejection status can be generated.

- Automated connection to the Matching Platform. Whereby the PB is able to publish an 'Affirmed' status from their internal systems into the Matching Platform STP.
- Via the Matching Platform GUI, whereby the PB can use the GUI to manually Affirm individual trades.
- In the event the PB is willing to have the Matching Platform publish an 'Affirmation / Rejection' status based on the result of the Matching Criteria set out in section 4.4, then this is also acceptable.

#### 4.6.1 Affirmation Status

Upon the Matching Platform successfully generating a **'Matched'** status, the Prime Broker will be required to provide an Affirmation or Rejection back to the LP and Client. For an Affirmed trade, the Platform will be required to show / publish a status of **'Affirmed'** for all relevant trades. Once generated it will represent the final state of the trade between the PB and LP, at which point the LP is no longer involved in further processing for this part of the trade. The **'Affirmed'** Hedge booking can then be moved on for EB:EB / Settlement Matching.

In the event the PB is willing to allow the Matching Platform to provide an **'Affirmed'** status automatically once a **'Matched'** status is received, then the Matching Platform should be able to provide this based on PB's advice. A static table will be required to maintain the PB's agreement.

#### 4.6.2 Rejection Status

In the event the PB is required to Reject the trade, the Matching Platform will be required to show / publish the status of **'Rejected'** for all relevant trades as well as ensuring the status is passed back to the LP and Client for consumption.

In addition to the Rejection status, the PB will be required to provide a Reason Code from the pre-defined list set out in the Static Data section.

### 4.7 Swap Allocation & Confirmation Processing

Following a successful Match and Affirmation process, the Prime Broker will be required to process the Client Swap Allocations into their internal systems and publish out Allocation Confirmations to the client.

#### 4.7.1 Allocation Processing

Prime Brokers will require a download of all Matched and Affirmed Allocations from the Matching Platform in order to process through internal systems and generate the Swap contract to the client. There are various ways in which the PB can accept the Allocation bookings.

- Automatic feed from the Matching Platform that offers a real time booking process into the PB's internal systems.
- Automated file generated at set intervals during the day or EOD, allowing the PB to manually upload into internal systems.
- Manual extract directly from the GUI, whereby the PB is able to select the trades for download using the filters available.

Allocations can be downloaded as and when required by the Prime Broker, regardless of the trade status.

#### 4.7.2 Allocation Confirmation

Once the Allocations have been successfully processed through the PB's systems, a confirmation will be required to be sent back to the Client via the Matching Platform. The Matching Platform will be required to update the status on all relevant Allocations to '**Confirmed**' as well as publishing the status back to the Client for consumption.

The PB can provide a Confirmed status via the below methods.

- Automated connection to the Matching Platform. Whereby the PB is able to publish a 'Confirmed' status from their internal systems into the Matching Platform STP.
- Via the Matching Platform GUI, whereby the PB can use the GUI to manually Confirm individual Allocations.

The Client will be able to consume the '*Confirmed*' status if required back into their internal systems via one of the below methods.

- Automatic feed from the Matching Platform that offers a real time booking process into the Clients internal systems.
- Automated file generated at set intervals during the day or EOD, allowing the Client to manually upload into internal systems.
- Manual extract directly from the GUI, whereby the Client is able to select the trades for download using the filters available.

#### 4.7.3 Allocation Rejection

In the event the Prime Broker is required to Reject the Swap Allocations, the Matching Platform will be required to show a status of '**Rejected**' against all relevant Allocations, as well as ensuring the status is passed back to the Client.

In addition to the Rejection status, the PB will be required to provide a Reason Code from the pre-defined list.

### 4.8 Reject Hedge & Allocation Separately

Prime Brokers are to have the ability to Affirm or Reject LP Hedge Bookings and Client Allocations separately. There may be instances whereby the PB is willing to accept the Client Allocations, without first accepting a Hedge booking from an LP.

### 4.9 Download Status of Trades

Trades will be downloaded in either an automated or manual fashion by all parties. In order to ensure the same trade is not downloaded more than once, the Matching Platform is to maintain a 'Downloaded' status against each booking. Trades that have been previously downloaded should only be made available for re-download if the user overrides the 'downloaded' status via the GUI.

#### **4.10 Tolerance**

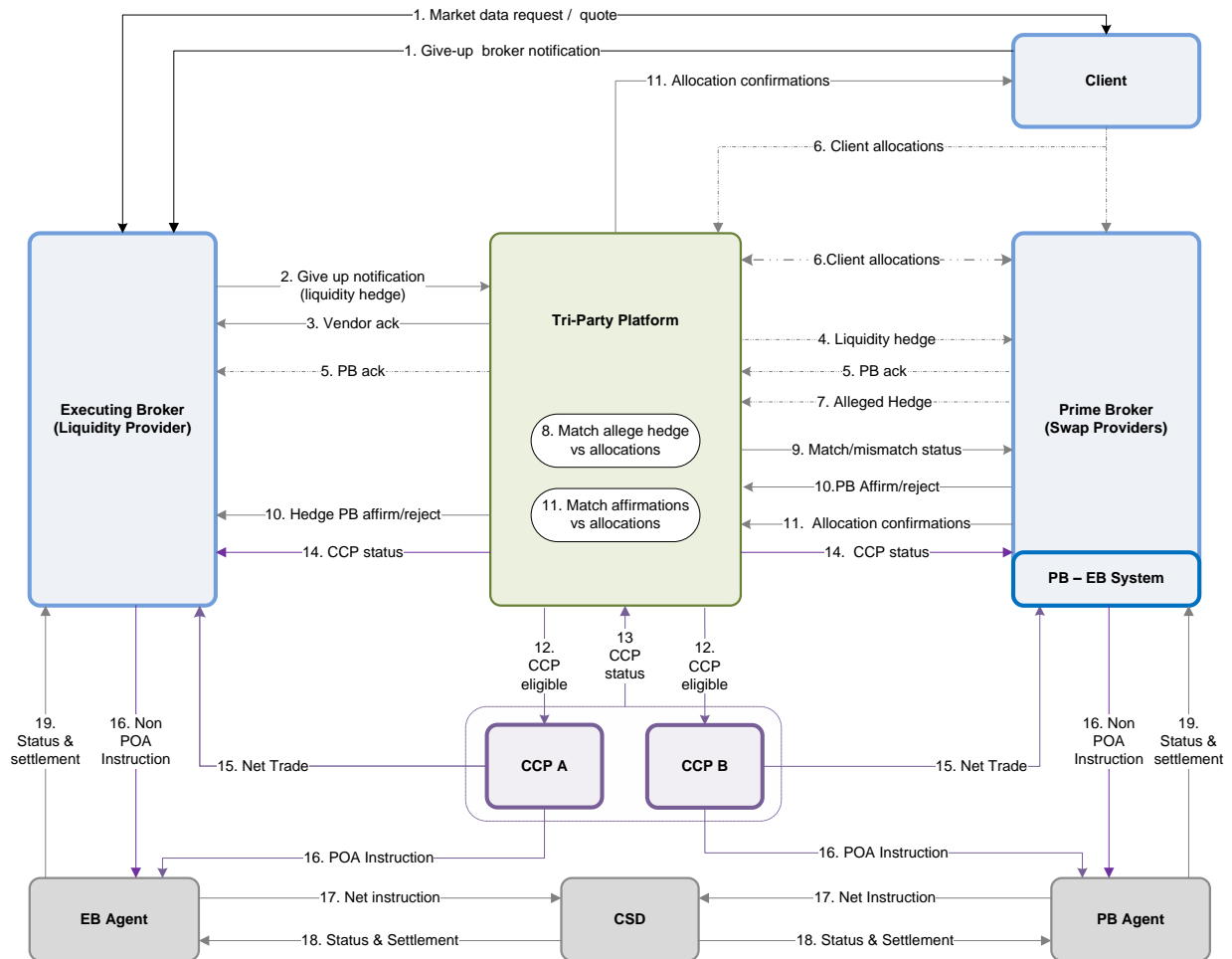
In order to achieve a successful match, not only are the matching fields stated in section 4.4 critical, there would also need to be a defined tolerance level in which trades can be auto matched by the Matching Platform.

Tolerances will be handled using existing standards defined per market, for which the Matching Platform will be required to maintain a static table (see section 8.0).

In order to adhere to market tolerances, PB's will be required to work with / advise clients on the need for LP:EB Settlement within the defined tolerances.

### 5. Future State Business Process - Clearing via a CCP

The following section is a high level overview of the proposed future state for clearing and netting CFD transactions via a CCP.



Process No:	Process Description	Process Owner
1-11	Steps 1-11 from the flow are the same as described previously in section 3. Note while full flow is shown for completeness the successful processing of the client allocations is not a pre-requisite for clearing the inter-bank hedge trade – the only pre-requisite is the PB final affirmation message being provided to the vendor (step 10 above)	All
12	Post receipt of the final affirmation message from the PB on the liquidity hedge the Tri-Party vendor will perform checks to determine whether the hedge trade is eligible for CCP processing (see section 5.1) If all checks are passed and the trade is deemed to be CCP eligible the Tri-Party platform will send the trade to the EBs and PBs CCP of choice (assuming interoperability is in place between the CCPs). If the checks are not passed then a status message is returned to the EB and PB to inform them that the trade is not eligible for CCP clearing and that they will therefore be required to perform a bi-lateral settlement An optional status update can be returned to the EB/PB to confirm that the trade has been sent to the CCP.	Vendor

13	Following some validity checks the CCP will return a status to the Vendor platform to confirm whether the trade has been successfully accepted and novated	CCP
14	The vendor will provide a final status update to the EB/PB to confirm whether the trade has been accepted by the CCP. If the trade has been accepted then the netting process as described in the steps below will be followed. If the trade has not been accepted then the EB and PB will be required to instruct and settle the trade directly between themselves as per the current flow.	Vendor
15	Once the CCP EOD close deadline is reached (expected to be 6:30pm GMT) the CCPs will net all the trades received for each broker for that day. Once the netting process has completed each CCP will return a net report to each broker following the existing process that broker has in place with the CCP. Where the broker is currently receiving gross trade reporting from the CCP the gross reports will be sent out incorporating both the on-exchange flow and the novated hedge trades (not shown on the diagram)	CCP
16	Where a POA agreement is in place the CCP will instruct the market for each broker. Where a POA agreement does not exist between the CCP and the broker then the broker will send an instruction to their agent for the net trade	CCP
17	The agents will forward the instruction to the local CSD for matching and settlement	Agents
18	Status messages and settlement updates are returned to the brokers from their agents as per their current processes	Agents

### 5.1. CCP Eligibility Checks

Where the vendor has the ability to connect to multiple CCP's and the CCP's are interoperable it should be possible for each broker to choose their own preferred CCP for the clearance of the CFD trades. At the time of writing this document it is assumed that the following CCPs will be able to participate in the CFD clearing flow – EuroCCP, X-Clear, LCH Clearnet

CCP eligibility will be switched on at a broker pair level and also at an optional client level – so a particular PB and EB may decide to switch on CCP clearing for all hedge trades between them or only for trades for a particular client.

Brokers should be able to choose a preferred CCP at a market level (so for eg. the broker may choose to send trades in UK securities to one CCP and trades in German securities to another). Brokers should also have the ability to specify that a specific market should be excluded from clearing and therefore handled bi-laterally. Brokers would also like to be able to specifically exclude particular product types from clearing – for eg. in the UK market ordinary shares settling in CREST may be in scope but ADRs/GRDs settling in Euroclear are out of scope.

There is a requirement for the vendor to support receipt of a clearing eligible 'Yes'/'No' flag on individual hedges from either the PB (via the affirm message) or EB (via the original give-up notification). This functionality will help with the initial roll-out of the project particularly for EB's who have in scope trades coming from various different internal platforms – some of which are ready for clearing and others which are not.

- Trades flagged as 'Yes' will be considered for clearing assuming they pass the other eligibility checks
- Trades flagged as 'No' should not be considered even if the flow is turned on for that broker pair and market and the trade is otherwise eligible
- As part of their general vendor setup brokers should be able to set a default value to be used for this flag in the case where they do not specifically include the flag in their messages (ie as per BAU) – for eg. one broker may say that if no flag is provided then the vendor can assume the trade is eligible for

- clearing providing the other checks previously described are passed, while another broker may say that all its trades should be considered out of scope unless a specific ‘Yes’ flag is sent to the vendor
- Both parties will have to either provide a ‘Yes’ clearing flag or have ‘Yes’ set up as their default clearing setting in order for the trade to qualify for clearing

## 5.2. Securities

It is assumed that the securities currently supported by each CCP for the on-exchange flow will also be supported for the OTC flow. It will be the responsibility of the vendor to determine whether securities are CCP eligible. Vendors are required to take in the list of eligible securities from the CCPs and validate the security on each trade against that list to confirm eligibility.

Where the broker pair have chosen two different CCPs then the security will need to be evaluated against the eligibility list of both CCPs and only if accepted at both should the trade be sent through for clearing.

## 5.3. EOD Cut-off

Each of the CCPs will have an EOD deadline by which trades must be received in order to be eligible for clearing. At the time of writing the deadline agreed by the three CCPs in scope is 6:30pm on T. The one exception to this is that at month end X-Clear will move the deadline back to 5:30pm on T.

For the initial go-live it is envisaged that trades which are not matched and affirmed prior to this cut-off will not be eligible for CCP processing and will not be sent by the vendors to the CCP. These trades will be required to be settled bi-laterally between the brokers and the vendor is required to send a status update back to the brokers to inform them that the trade is ineligible for clearing.

In the future there may be a requirement to enter trades which miss the initial deadline into a second netting cycle later in the evening on T or on T+1. This will be considered at a later date depending on the clearing rates seen post the initial go-live.

## 5.4. CCP Trade Statuses

The vendor will be required to support the following additional new status updates necessary for CCP clearing:

GUI Status	Outbound Message Status	Status Description
Not applicable for CCP	Not applicable for CCP	Flow is not switched on for that broker pair or for that particular client. Where it is applicable this status should be sent by the vendor immediately following receipt of the PB affirmation message
Not eligible for CCP	Not eligible for CCP	Flow is switched on for the broker pair and client however it failed the CCP eligibility checks – ie the trade was in an ISIN which is not supported by the CCP or the trade was affirmed post the CCP EOD deadline. Where it is applicable this status should be sent by the vendor immediately following receipt of the PB affirmation message
Sent to CCP	Sent to CCP	Hedge trade passed the eligibility checks and has been sent to the CCP
Accepted by CCP	Accepted by CCP	Hedge trade has passed all CCP checks and has been successfully novated. The trade can no longer be cancelled. Settlement will take place on a net basis between the EB/PB (via their

		EB) and the CCP. Vendor should provide this message to brokers immediately upon receipt of an acceptance message back from the CCP
Rejected by CCP	Rejected by CCP	Trade was not accepted by the CCP. Trade will be required to be settled bi-laterally between the EB and the PB. Vendor should provide this message to brokers immediately upon receipt of a rejection message back from the CCP

It should be possible for each broker to opt to (or not to) receive these status updates at an individual status level (for eg. a particular broker may not be interested in the 'Sent to CCP' status but they wish to receive the others). Brokers should also be able to select the messaging format and method of communication they wish to receive these updates.

All status updates will be returned to brokers real time and the audit history within the GUI updated accordingly. All the communication methods described in section 3.1.3 for the matching statuses are required to also be supported for the CCP statuses.

## 5.5. CCP Net Trade Creation

It should be possible for each broker to agree with their CCP of choice whether the CFD transactions should be netted with on-exchange transactions creating a single net, or if they require CFD transactions to be netted separately to on-exchange transactions to create two settleable nets. It should be possible for each broker to agree this at a market (PSET) level and it should be possible for a particular EB/PB pairing to make different selections (so for eg. the EB would like to cross net while the PB (settling via their EB) would prefer for the trades to remain separate).

It is assumed that each CCP will net OTC transactions for each broker following the same rules and algorithms that are in place for the netting of the on-exchange flow. In the scenario where just one trade is received a net trade should still be created.

For the initial go-live of CCP Clearing it is expected that any trades which are not received and accepted by the CCP before their end of day close of 6:30pm GMT will not be novated and will not be eligible for netting. Post go-live there may be a requirement to introduce multiple netting cycles as described in the AFME "Broker Netting via a CCP Solution" document in order to capture the late trades.

## 5.6. CCP Communication to Brokers

### 5.6.1 Gross and Net Trade Reporting

Upon completion of a netting cycle each CCP will return a net trade report of all the nets for that day to every broker as per the current on-exchange process.

The net trade reports will be returned in the same format as they currently are for the on-exchange flow using the same communication mechanisms the brokers have in place today. Ideally brokers would like the option to be able to determine whether OTC transactions should be returned in a separate net trade report to the on-exchange business or within one report.

In addition, where brokers are currently receiving intraday or EOD gross trade reporting from the CCP this should continue to be provided and should include the CFD trades which were successfully novated. Again brokers would like to have the option to receive either one combined report with both the on-exchange gross executions and the CFD hedges or two separate reports – one for OTC flow and one for on-exchange.

### 5.6.2 Gross Trade Referencing

The vendor will assign a unique reference number to each give-up which is then included in the feed to the CCPs. This reference will be treated by the CCP as the equivalent of an exchange execution reference and will

be returned to the brokers in the CCP's gross trade reporting. The vendor is required to pass this reference to the EB/PBs as part of the status update message for all "Accepted by CCP" statuses. The broker can then use the reference to perform internal reconciliations between the CCP gross trade reports and the novated give-ups.

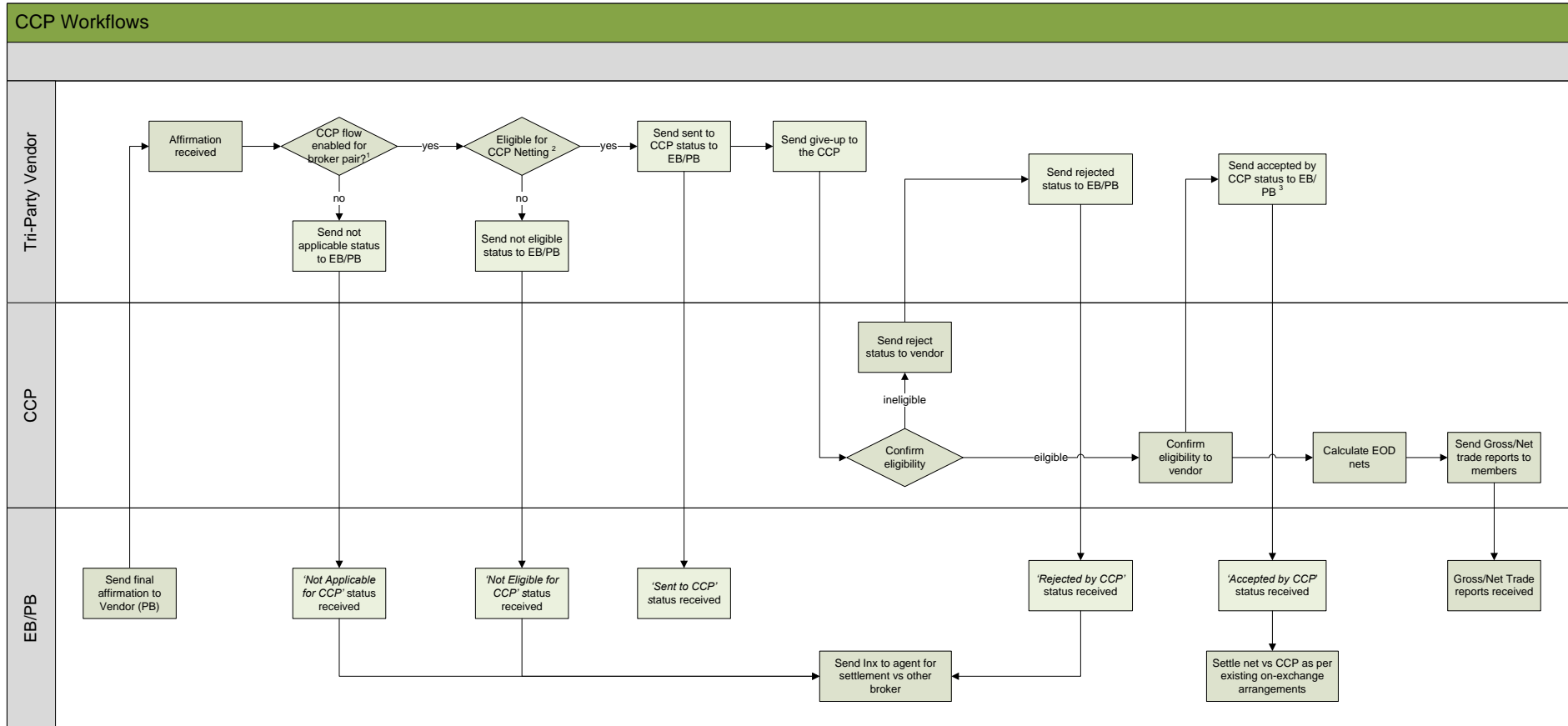
### **5.7. Transaction Reporting**

AFME contacted the FSA for clarity on the transaction reporting requirement in the case where trades have been successfully novated to a CCP. The FSA have specified that the brokers are required to report the other broker involved in the transaction, rather than the CCP, as being the counterparty to the trade and reporting should be performed at the individual hedge level rather than reporting the final net settlement obligation.

### **5.8. Clearing Workflows**

The below diagram demonstrates the use of the various CCP statuses as described in section 5.4 above. As stated previously brokers should be able to subscribe to the particular status updates they are interested in.





1 Vendor checks that the CCP flow has been switched on for the executing broker and prime broker pair in question  
 2. Vendor checks that the security is on CCP ISIN list and that the PB affirmation was received before the CCP's EOD cut-off deadline  
 3. The accepted by CCP status should include the unique reference used to identify that particular give-up at the CCP

## 6. Cancel/Correct Processing

As part of any trade booking process, there will be a need for the Matching Platform to process Cancellations and Amendments to bookings already submitted.

- Cancellations are to be communicated with the same trade facts (including Reference ID's and Versions) as the original message, with a status update as **Cancelled**.
  - Any new booking following the cancellation is to be done under a new Order ID / Version.
- Amendments are to be communicated with the necessary amendments to trade facts, ensuring the same Reference ID is retained with an Increment to the Version.
  - Brokers / Clients using Swift will not have this capability as Swift does not support Amends, only Cancel / New. Therefore they will need to cancel the original booking (as per point 1 above) and book a new trade under a new reference.

Upon receiving a Cancellation message the Matching Platform will be required to update the original trade entered to a '**Cancelled**' status. With a record of the cancellation shown in the Audit trail (see section 7.0).

Upon receiving an Amendment message the Matching Platform will be required to update the original trade entered with the necessary amendments provided. The status is to be updated to '**Amended**', with a record of the amendment shown in the Audit trail (see section 7.0).

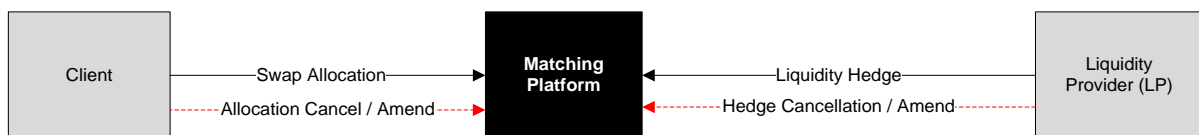
For any given trade there should only be a single entry within the GUI. If an original trade is cancelled, any new bookings should be done so under a new reference by the LP, Client or PB.

It will not be permitted to cancel any give-up trades which have been accepted by a CCP. The vendor will reject any cancellation requests for such trades received from the EB. Where the EB has agreed a cancellation with the client this will need to be managed via contra bookings as described in 6.6 below. Note as trades will not be sent to the CCP until after they are matched and affirmed cancellations will continue to be accepted and processed while the trade remains in an unmatched or unaffirmed state.

### 6.1. Hedge & Allocation Cancellation or Amendment Pre PB Ack / Nak

In the event the Liquidity Provider / Client has submitted an incorrect Hedge or Allocation Booking and wishes to submit a cancellation or amendment while the trade is still in Active status, the Matching Platform is to process the updated message as per below.

- Should the original booking require complete cancellation, the LP / Client are to re-submit the original trade to the Matching Platform with a **Status = Cancelled**.
- Should the original booking only require amendments to the reported fields, the LP / Client is to re-submit the original trade to the Matching Platform with the **same Reference ID, Version Increment** as well as the modified trade facts.



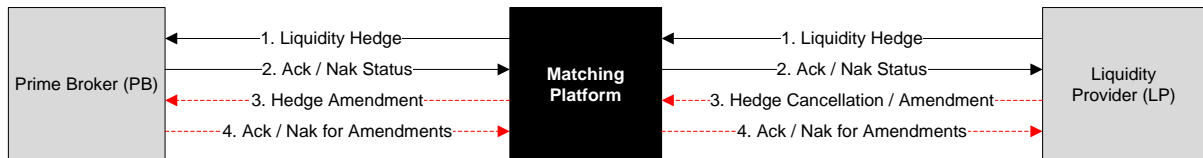
### 6.2. Hedge Cancellation or Amendment Post PB Ack / Nak Status

In the event the Liquidity Provider has submitted an incorrect Hedge Booking and wishes to submit a cancellation / amendment after a PB Ack / Nak status has been received but before a Match / Mis-Match status is derived, the Matching Platform is to process the updated message as per below.

- Should the original booking require complete cancellation, the LP is to re-submit the original trade to the Matching Platform with a **Status = Cancelled**.
  - Any new booking following the cancellation is to be done under a new Order ID / Version, and will require a new PB Ack / Nak status.

- Should the original booking only require amendments to the reported fields, the LP is to re-submit the original trade to the Matching Platform with **same Reference ID, Version Increment** as well as the modified trade facts.
  - Amendments made post PB Acknowledgment, the PB will be required to re-Acknowledge the new / amended booking.

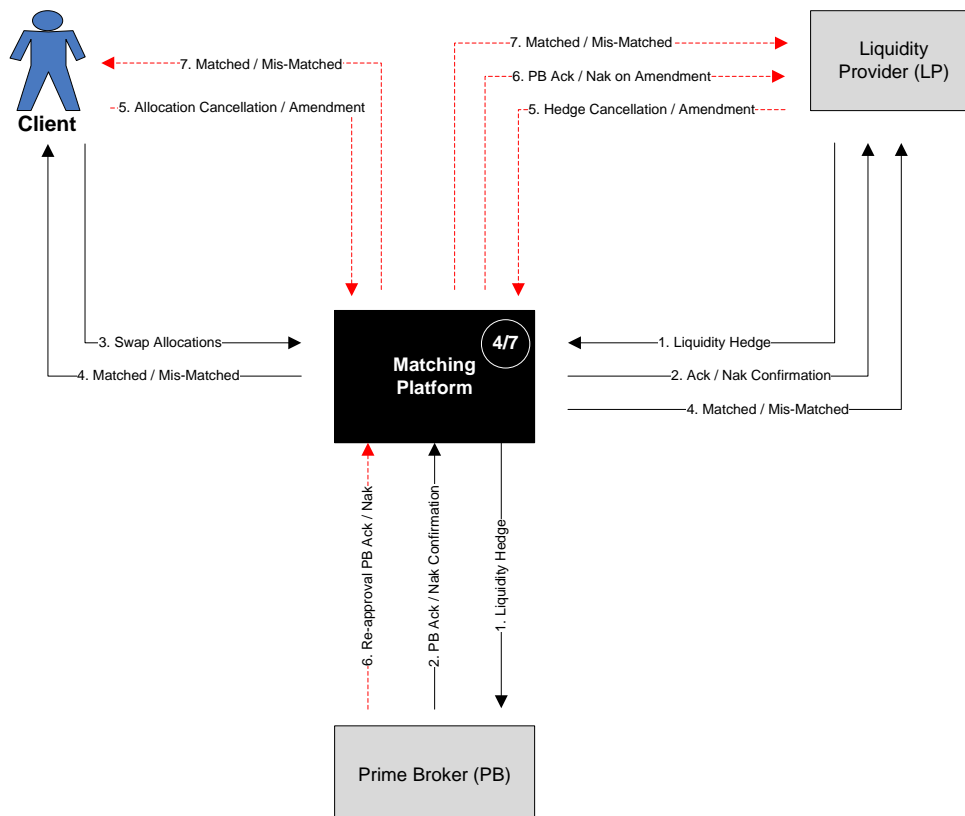
The Matching Platform is to publish the new / updated version of the Hedge to the PB for re-approval on the PB Ack / Nak.



### 6.3. Hedge & Allocation Cancellation or Amendment Pre Affirmation / Rejection

In the event the Liquidity Provider / Client has submitted an incorrect Booking and wishes to submit a cancellation / amendment while the trade is in a Matched / Mis-Matched status, the Matching Platform is to process the updated message as per below.

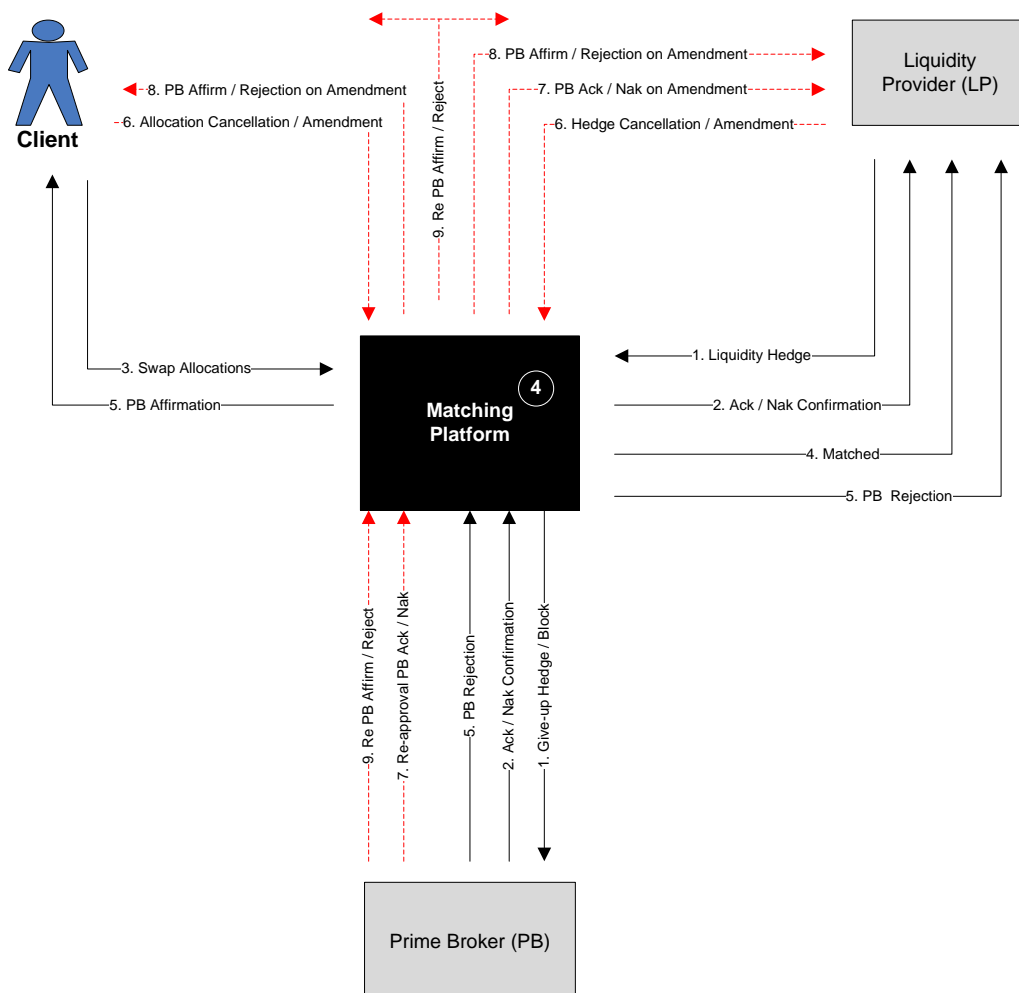
- Should the original booking require complete cancellation, the LP / Client is to re-submit the original trade to the Matching Platform with a **Status = Cancelled**.
  - Any new booking following the cancellation is to be done under a new Order ID / Version, and will require a new Ack / Nak status from the PB.
- Should the original booking only require amendments to the reported fields, the LP / Client is to re-submit the original trade to the Matching Platform with **same Reference ID, Version Increment** as well as the modified trade facts.
  - Amendments made post PB Acknowledgment, the PB will be required to re-Acknowledge the new / amended booking.



#### 6.4. Hedge & Allocation Cancellation or Amendment Post PB Rejection

In the event the Liquidity Provider / Client has submitted an incorrect Booking and wishes to submit a cancellation / amendment after a PB Rejection status has been received from the PB, the Matching Platform is to process the updated message as per below.

- Should the original booking require complete cancellation, the LP/Client is to re-submit the original trade to the Matching Platform with a **Status = Cancelled**.
  - Any new booking following the cancellation is to be done under a new Order ID/ Version, and will require a new Ack / Nak status from the PB.
- Should the original booking only require amendments to the reported fields, the LP/Client is to re-submit the original trade to the Matching Platform with **same Reference ID, Version Increment** as well as the modified trade facts.
  - For any amendment made post PB Rejection, the PB will be required to re-Acknowledge the new / amended Hedge booking before matching criteria can be re-applied by the Platform.

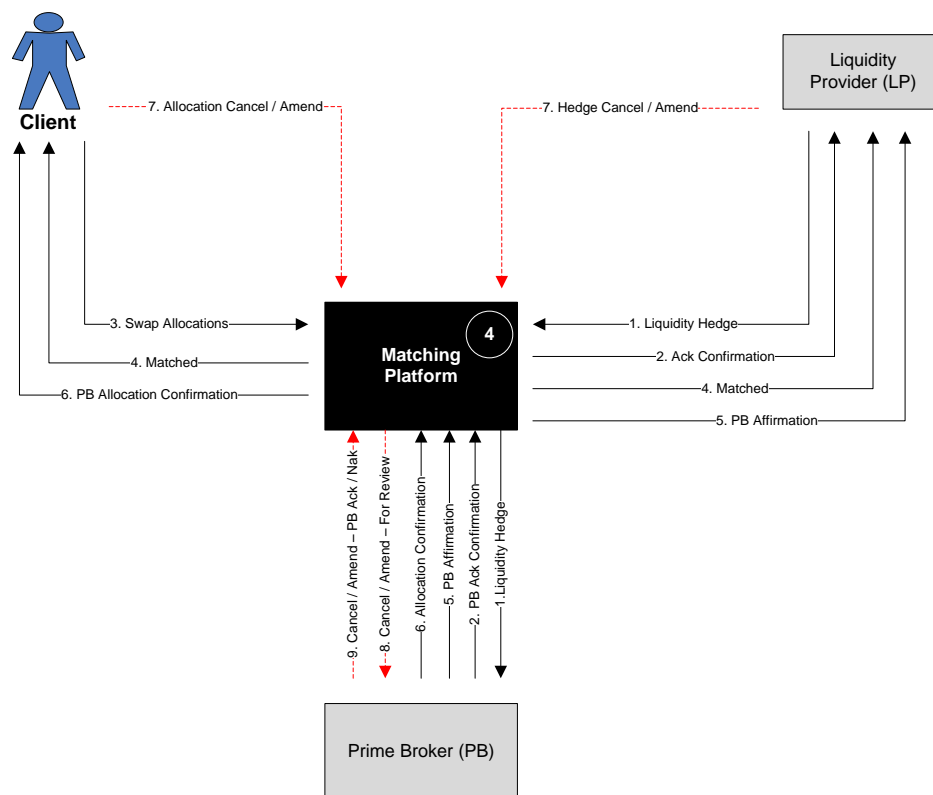


#### 6.5. Hedge and Allocation Cancellation or Amendment Post Affirmation for non CCP trades

Updates cannot be made to Affirmed trades which have been accepted by a CCP. In the event the Liquidity Provider / Client has submitted an incorrect Booking after a PB Affirmation status has been received, the Matching Platform will apply the workflow described here where the trade is not applicable/is ineligible for

clearing, or where the trade has been rejected by the CCP. In the case of trades which have been accepted by the CCP the workflow described in 6.6 will apply instead.

- Updates cannot be made to Affirmed trades without PB approval. In the event the LP / Client submit a Cancellation or Amendment to an Affirmed trade, the Matching Platform is to flag the trade to the PB to Accept or Reject the Cancellation or Amendment.
  - Trades should be marked as '**For Review**' to the PB's, as well as being available for internal consumption.
  - Should the Cancellation or Amendment be *Rejected* then a '**PB Nak**' is to be sent back to the entering party.
  - Should the Cancellation / Amendment be *Accepted* then a '**PB Ack**' is to be sent back to the entering party. In addition to the Ack status, the Matching Platform is to re-run the Matching criteria using the new version(s).
- Should the original booking require complete cancellation, the LP / Client is to re-submit the original trade to the Matching Platform with a **Status = Cancelled**.
  - The Matching Platform is to flag the cancellation to the PB to accept or Reject the cancellation. Trade should be marked as '**For Review**' to the PB's.
    - Should the cancellation be Rejected then a '**PB Nak**' is to be sent back to the entering party.
    - Should the cancellation be Accepted then a '**PB Ack**' is to be sent back to the entering party. In addition to the Ack status, the Matching Platform is to process the cancellation, adjusting the status of any linked / matched bookings accordingly.
  - Any new booking following the cancellation is to be done under a new Order ID / Version, and will require a new Ack / Nak status from the PB for Hedge Bookings.



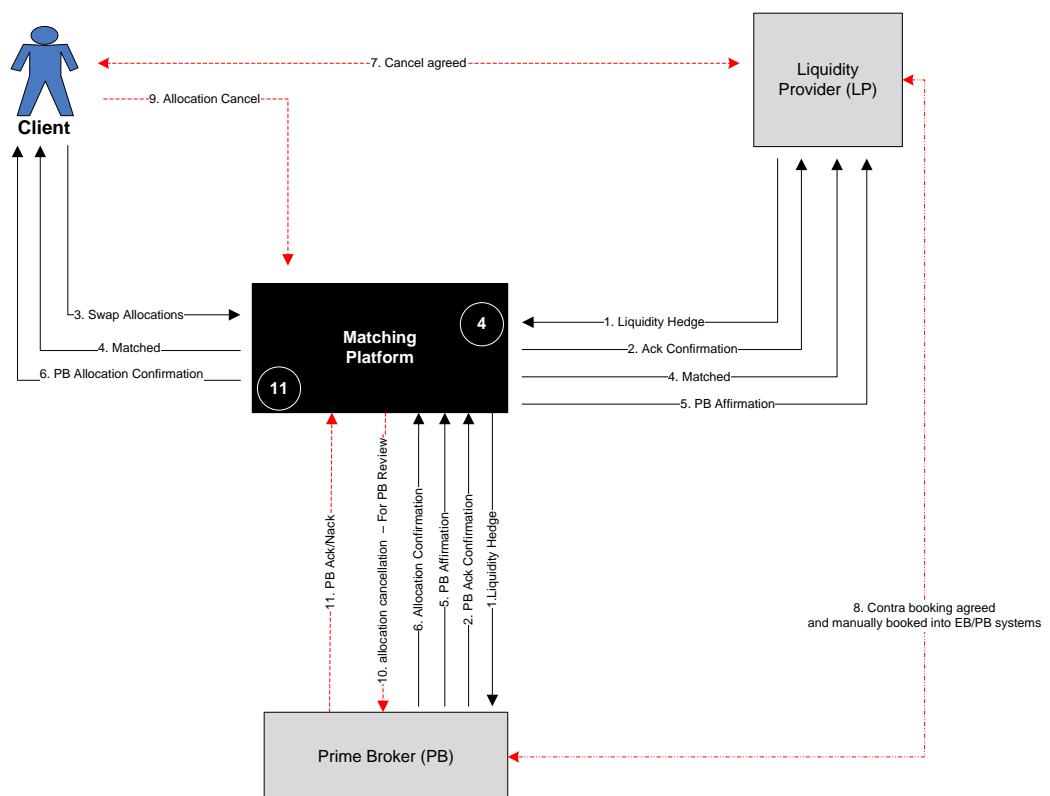
**6.6. Hedge and Allocation Cancellation or Amendment Post Affirmation for CCP trades**

Cancellations/amendments of fully affirmed hedge trades are expected to be performed very infrequently. If a client contacts a PB to make a change to an affirmed and CCP accepted trade the PB will direct the client to speak with their EB. If the EB agrees a cancel with the client and the PB then they will have to book a contra trade as it will not be possible to cancel the original affirmed transaction (any cancellation message sent by the EB to the vendor for the original affirmed hedge booking will be rejected). Note if there has been a price movement on the stock between the booking of the original hedge and the contra booking the EB and PB will need to agree between them on how that will be handled on a case by case basis.

- The EB and the PB will manually book the contra trade into their systems
- The contra booking should not be fed down into the vendor platform – ie a give-up notification should not be generated and sent out to the vendor by the EB
- The EB and PB will settle the contra booking via bi-lateral settlement instructions. Nothing is sent to the CCP for this transaction
- If the client has sent a cancel for the original allocation into the vendor then the vendor will process the cancel as described in 6.5 above – ie the cancel is sent to the PB flagged for review and the PB will send back either a ‘PB Ack’ or a ‘PB Nak’. However whereas previously there was a requirement for the matching platform to adjust the status of any linked/matched bookings, in the case where the linked hedge is in a CCP accepted status no adjustments should be made.

Amendments should be handled as a cancel/new with the cancel following the flow outlined above and the new transaction following the normal matching flow described in section 3.

*Open Question: should there be a different workflow for affirmed trades which have been accepted by the CCP vs affirmed trades which were not eligible for CCP processing or should both set of trades follow this workflow?*



### **6.7. Download Status**

As mentioned in Section 4.8, the Matching Platform is to maintain a 'Downloaded' status against each booking, ensuring that the same trade cannot be downloaded more than once – potentially causing duplicate issues for processing parties.

In the event a previously downloaded trade has been amended, the 'Downloaded' status of that trade should be reset to 'No', thereby making it eligible for a re-download.

## 7. Finality of Trade

Finality of Trade is a firm and final acceptance of a give-up trade by a Swap Provider (PB). The mechanism for communicating finality is the PB affirmation message. Following a successful match between EB and PB the PB is required to provide a final affirmation back to the EB (via the vendor). This final affirmation message should only be sent by the PB once all their internal checks and validations have been successfully completed. Once final affirmation has been provided by the PB back to the EB then both parties can book the hedge trade in their systems for final settlement (note the PB will settle the trades via its EB). If there was a price or amount mismatch within the accepted matching tolerances then the PB is expected to take the EB's price/amount for instruction in the market to avoid any matching issues later in the flow.

Given that both parties are booking their trades for settlement post successful matching and affirmation a further contract match between the Prime Brokers EB and the originating Liquidity Provider is not required to be performed.

Finality of trade is pre-requisite for CCP clearing as it is not possible to cancel or amend trades once they have been accepted by a CCP.



## 8. Graphical User Interface (GUI)

The Matching Platform GUI will form the central point for all parties to not only view trades and query trades, but to also perform various actions if necessary. The following sections provide detailed requirements of the functions to be made available for all parties.

### 8.1 Access Profiles

The following profiles should be made available to all parties.

Profile Type	Description
Read Only	Users to have a view only access.
Read / Write	Users to be able to modify / enter trades directly into the GUI.
Read / Write / Authorisation	Users able to authorise trades modified / entered via the GUI.
Administrator	Super user to approve new users, static data changes, etc.

Upon new users being created, the user details are to be stored in static data, and to be used to report on audit trails.

### 8.2 GUI Separation

In order to ensure there are clear distinctions between the Client and LP, the Matching Platform is to ensure there is a separation of view between the parties. Bookings to be matched against the LP or Client are to be entered into the Matching Platform under the PB's name.

### 8.3 Manual Actions

LP's, PB's and Clients are to strive for full automation of trade matching, however in the circumstances where issues arise in submitting trades into the matching platform an alternative solution is to be made available. The Matching Platform should allow all parties the ability to manually enter trades into the system via the below methods. Each method is to ensure the mandatory fields stated in section 3.1.

- Manual Trade Entry – Single trade entry directly into the GUI.
- Excel Upload – Multiple trade entry via a spreadsheet upload.

### 8.4 Notation on Trades

The Matching Platform GUI should allow users to add notation on trades that were not only manually entered but trades processed STP. Two fields are to be made available.

- **Reason Code – Pre-defined dropdown list**
  - Users must select a pre-defined option when changing the status of any given trade directly in the GUI. The selected option is to be provided back to the parties for consumption into internal systems.
- **Text Field – Free text field**
  - This is an optional field on amendments. Users can provide additional information to the Reason Code that will be published back to the parties for consumption into internal systems.

Upon a comment being added to a trade, the audit history should be updated to reflect the relevant changes.

### 8.5 Trade View

In order to reduce the number of bookings shown in the GUI, any amendment / cancellation is to be shown on the original booking through status management and the audit report. Thereby ensuring there is only one trade per booking.

All trades should be reflected with the correct status on the GUI – See section 3.1.4 (Status Management) for details.

The Matching Platform GUI is to offer filtering capabilities on each field shown on screen. In addition to filtering, users should also be able to 'Sort' rows shown on screen in Ascending or Descending order from any of the available fields.

In addition the main trade facts, the Matching Platform is to keep track of trades that have been downloaded by any party with a 'Downloaded' flag visible in GUI.

## 8.6 Audit

All trades are to have an available 'Audit Report' allowing users to query the history of a trade directly through the GUI. The audit is to show the following information.

Field Name	Description
Order ID	Obtained from the order.
Version ID	Obtained from the order.
Event Date	Today's Date.
Event Type	What was changed on the trade
Trade Status	See section 3.1.4 – Status Management and 5.4 CCP Trades Statuses
Username	For manually amended trades, Username to be obtained from static table
Reason Code	See section 5.2 – Reason Codes
User Comments	
System Comments	

## 8.7 Screen Configurations

All users are to be able to have the ability to configure the Trade View and Dashboard Screens to their own view. With the designated view to be saved as the default view going forward.

## 9. Static Data

### 9.1 Username Tables

In order to ensure users are able to perform the right level of functions within the Matching Platform as outlined in section 7.1 a static data of users will need to be maintained.

### 9.2 Reason Codes

A static list of Reason Codes is to be made available to all users to select from on any manual updates made directly into the GUI. To be maintained in a configurable table that can be updated as and when required. The GUI should hold a Standard Reason Codes table based on the ISO 15022 guidelines.

### 9.3 Product Codes

Due to the number of product identifiers available to identify a single product, it may result in each party using different ID values. For this reason, the Matching Platform is to maintain a product reference table ensuring all identifiers are valid / correct and available to be displayed to the user via the GUI.

### 9.4 Processing Method Tables

In order to ensure trades are processed through successfully by each party, the Matching Platform will be required to maintain a table that defines not only the parties' attributes but also their processing methods.

Broker Details	Description
Broker Identifier	Unique identifier for each Broker
Inbound Message Type and Format	See Section 3.1.1 - Can be multiple methods
Outbound Message Type and Format	See Section 3.1.2 - Can be multiple methods
Broker Status Messages	See section 3.1.4 – Status Management
Status Messages Timing	Real-time, EOD, Specific Time, etc.

### 9.5 LP / PB / Client Relationship Tables

In order to ensure the initial trades entered by each party process through into the Matching Platform, a table representing the client relationships held is to be maintained by the Platform. The Matching Platform will perform a first level check to ensure the trade being entered is valid for the recipient.

**Example:** *Executing Broker A* entering a trade for *Prime Broker X* against *Client Y*. Should a relationship mappings exist between *LP A* vs. *PB X* and *PB X* vs. *Client Y*, then the LP booking can process through successfully. If not, the booking should be shown in the GUI as *'Invalid'* with the relevant event description. To support the CCP flow the vendor platform is also required to keep track of which EB/PB/Client relationships clearing has been enabled for. The clearing static will need to also track which markets the EB/PB wish to enable clearing for and who their preferred CCP is for each market.

In addition the vendor should maintain the broker's default value for the trade level clearing eligibility flag as described in section 5.1.

Example: *Executing Broker A* enters a trade for *Prime Broker X* against *Client Y* in the *UK* market. The platform checks whether CCP clearing is enabled for trades between *EB A*, *PB X* and *Client Y*. It also checks that *EB A* and *PB X* have enabled clearing specifically for the *UK* market and who *EB A* and *PB X* have selected as their *UK* preferred clearer (for eg. *Broker A* is using EuroCCP while *Broker X* is using X-Clear). If the checks are passed then the trades is applicable for CCP clearing. If the checks are not passed then the trade cannot be sent to a CCP.

### 9.6 Tolerance Tables

In order to ensure trades not only match, but would be eligible for settlement in the market without further involvement following a successful match the Matching Platform is to maintain a Tolerance Level table. The Tolerances to be used are based on the market standards, whereby the Settlement Amount is within the given value.

### 9.7 LP-EB Matching Tables

In order to achieve the successful LP-EB Match outlined in Section 6.0 (LP-EB Matching), the relevant static tables outlined in the Broker Matching Solution Business Requirements document are to be implemented. Refer to 'Reference Documents' section for further details.

### 9.8 Restricted Stocks Tables

The Matching Platform is required to maintain a 'Restricted Products' list per Broker, that can be used to perform the initial checks on Hedge and Allocation bookings as outlined in Section 4.2.3. Brokers who wish to utilise the functionality should be able to upload Restricted Lists real-time, throughout the day.

### 9.9 Broker Mapping Tables

For Brokers that will submit trades using Client / Broker acronyms, a mapping table must exist that will translate the acronym to the real world Client / Broker Name before processing through to the GUI.

### 9.10 Broker Message Processing

In order to cater for processing differences across the parties, the Matching Platform is to have the ability to configure specific processing requirements per party. The processing logic is to be configurable via a static table, thereby reducing the need for code changes.

**Example:** Some parties will send in 'Side' from the Clients perspective, where as others may send them in from a Firms perspective. In order to ensure consistency is achieved in the Matching Platform, all trades should be displayed and processed from a Clients perspective. Thereby needing to switch the indicator on for certain parties.

### 9.11 Time Driven Events

The Matching Platform will be required to publish various Exceptions / Status Messages throughout the trade lifecycle, majority of which will be generated as a result of the trade status / action. However, there would be a need to generate events that are triggered should there be an outstanding action for a defined period of time.

- PB Fails to provide PB Ack / Nak in defined time.
- Client Alleges Allocations prior to Hedge being booked by LP.
- PB Fails to provide Affirmation / Rejection in defined time.
- PB Fails to provide Allocation Confirmation in defined time.

### 9.12 CCP Security Lists

In order to support CCP Clearing the Matching Platform is required to take in static data feeds from the CCPs listing all the securities which they clear in order to make a determination of whether a particular trade is eligible for CCP processing.

## 10. MIS Reporting

The Matching Platform is to offer all users the ability to not only have a real-time view into the current state of flow via the use of graphs and tables, but to also have the ability to run be-spoke metric reports using any of the available data fields. The Platform will be required to provide all information to parties either via the GUI or in an automated manner.

### 10.1 Default Dashboard Information

Upon the user logging into the Matching Platform, they should be greeted with a default layout specifically configured by the user previously. Users should be able to configure the screen to contain graphs or tables across the following categories.

- Prime Broker stats
- Executing Broker stats
- Client stats
- Status Management level stats
- Clearing stats

### 10.2 MIS Requirements

In addition to the default Dashboard view described above, users will have the ability to run be-spoke metric reports utilising the fields available within the Matching Platform.

Initial MIS requirements should provide all parties with a view into.

- Number of trades entered on a given Trade Date or over a given period.
- Number of trades booked to / against a given Party.
- Breakdown of trades based on status, with the ability to drill-down into the trades directly from the MIS via the GUI.
- Root cause analysis data of Neg-Acknowledged / Mis-Matched / Rejected trades to assist in increasing matching rates.
- Breakdown of trades based on Reason Code, against each Party.
- Cancel / Correct re-book rates.
- Ability to determine trades booked over a given time period (e.g. Post 6:00PM for Late Give-up's).
- Breakdown of trades based on clearing status – Not Cleared/Cleared - with ability to also drill into the not cleared population to see breakdown across Not Eligible, Not Applicable and CCP Rejected statuses