



Matching Best Practice

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This best practice document has been developed by the International Securities Association for Institutional Trade Communication (ISITC) as a statement of professional practices recommended by ISITC. Institutions providing the information recommended in this document will benefit from the efficiencies inherent in a more automated transaction process. Although all institutions are encouraged to act consistently with this document, none are required to do so, and a failure to do so is not, in and of itself, evidence of negligent or inappropriate conduct.

Document History

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1.0	05/20/2011	Creation of draft Matching Best Practice		Genevy Dimitrion
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1.0 Background

The post-execution trade enrichment space has finally begun to receive the attention that we Operations folks always knew it deserved.

No longer is the front-, middle- and back-offices considered separate when the Investment cycle is discussed.

Increasingly, CIOs and trading staff are aware of all downstream processes.

Several factors are influencing this:

- The volume of cross border trading continues to grow, retail investors are getting exposure as well
- Settlement cycles are shortening
- Penalties for exceptions and failed trades are high in many markets
- The transaction cost of all of the components of the trade life cycle are being considered from a cumulative view
- More 'Frontier' markets have been added to the repertoire of execution venues
- Market participants exist from across all time zones
- Closer scrutiny of operational performance by clients and regulators

It has become generally accepted that pre-settlement trade matching between counterparts has positive downstream effects.

There are no formal business practices for matching between various constituents today. The process is often governed by SLAs implemented on a firm to firm basis, often driven by Investment Managers.

A great deal of investment has occurred, especially in the Equity space over the last 10 years, leading to a high degree of automation.

This has been bolstered by a convergence of data standards, making connectivity between the different stages easier to achieve.

But without a Best Practice for Trade Matching, these positive initiatives may not be enough.

ISITC believes that if all industry constituent's work together to develop a best practice for trade matching continued growth can be achieved without an increase in trade exceptions. This has always been the goal of ISITC – to facilitate dialogue within the industry and push our market forward in developing standards that will benefit all participants.

The goal of this document is to highlight to ISITC member firms the high level business process flows. The end result is to showcase that options do exist within the industry around matching which include Central Matching and Local/Bilateral Matching. Firms can use this document as a reference tool in the design and implementation of their own internal matching needs. It is also strongly recommended that matching occur on Trade Date.

1.1 Scope

The scope of this document covers the following:

- Approaches – local / bilateral matching and central matching
- Financial instrument types/asset classes/product types
- Markets – Our intent is to define best practices that can be applied across all markets globally
- Process flow – starting point: notice of execution; ending point: agreement between counterparties on trade details at the allocation level, including settlement instructions
- Message Syntax – in accordance with the Investment Roadmap

Processes deemed **out of scope** include:

- Trade order/Pre-Trade (Although included in the workflow diagrams for informational purposes)
- Settlement

**As part of the creation of this document discussions were held around matching a block/allocation or allocation level only and it was determined that both options are viable. We do want to emphasize that the preferred would be block/allocation level matching due to the inherent risks related to Fixed Income transactions which are high valued transactions. The process to aggregate the underlying allocations into a block at the Broker is extremely manual and does not guarantee all transactions have been captured.*

1.2 Definitions

Central Matching – Identified as an automated approach to process the details that must be agreed to between the two parties in a trade. Instead of communicating with each other in a conversational mode and waiting for a reply, the Central Match model allows each party to the trade to specify their own version of the trade details whenever they are ready. It is not necessary that the buy side and sell side take turns. Each can submit their information without regard to whether or not the counterparty has submitted any information about the trade. The Central Match system collects information from both sides, and compares the pertinent details to see if the two parties are in agreement.

Local/Bilateral Matching – Is defined as when the buy side and sell side bilaterally agree to communicate transaction details to/from each other and perform the matching internally.

FIX - The Financial Information eXchange (FIX) Protocol is a messaging standard developed specifically for the real-time electronic exchange of securities transactions. FIX is a public-domain specification owned and maintained by FIX Protocol, Ltd.

SWIFT - The Society for Worldwide Interbank Financial Telecommunication, a member-owned cooperative through which the financial world conducts its business operations with speed, certainty and confidence. More than 9,000 banking organizations, securities institutions and corporate customers in 209 countries trust us every day to exchange millions of standardized financial messages.

ISO - International Organization for Standardization is the world's largest developer and publisher of International Standards. ISO is a network of the national standards institutes of 162 countries, one member per country, with a Central Secretariat in Geneva, Switzerland, that coordinates the system.

Omgeo - Omgeo was formed in 2001 as a wholly owned, global joint venture between the Depository Trust & Clearing Corporation (DTCC) and Thomson Reuters. Omgeo automates trade lifecycle events, including allocation, confirmation/affirmation, settlement notification, enrichment, operational analytics and counterparty risk management between trade counterparties.

1.3 Actors and Roles

There are 3 distinct roles involved in the matching process.

- Buy side – A firm concerned with buying assets or securities.
- Sell side - A firm that sells investment services to asset management firms, typically referred to as the buy side, or corporate entities.
- Matching Utility – A platform used by both the buy side and sell side firms to match transactions.

There are multiple actors involved in the process.

Buy side	Sell side	Matching Utility
Investment Manager	Broker Dealer	Central Matching Utility
Prime Broker		
Outsourcer		

1.4 Product Coverage

ISITC Classification Code	ISITC Classification Code Description
Equities	
CS	Common Stock
ETF	Exchange Traded Fund
MF	Mutual Fund
PS	Preferred Stock
RTS	Rights
WAR	Warrant
Fixed Income and Debt	
BA	Bankers Acceptance
CBO	Collateralized Bond Obligation
CD	Certificate of Deposit
CDO	Collateralized Debt Obligation
CLO	Collateralized Loan Obligation
CMO	Collateralized Mort. Obl. (incl. sinking funds)
CORP	Corporate Bond
CP	Commercial Paper
CPP	Corporate Private Placement
DISC	Discount Note
FAD	Federal Agency Discount
FRN	Floating Rate Note
GOVT	Treasuries and Agency Debentures

IET	Mortgage IO-ette
MPP	Mortgage – Private Placement
MUNI	Municipal Bond
SL	Student Loan Marketing Association
STF	Short Term Investment Fund
STRP	Treasury Strips
TIPS	Treasury inflation Protected Security
TN	Treasury Note
TRPS	Trust Preferred Stock
UBWW	Unitized Bonds with Warrants
UNBD	Unitized Bonds
USTB	US Treasury Bill
VRDN	Variable Rate Discount Note
Factor Based - MBS Products	
FHA	Federal Housing Authority
FHL	Federal Home Loan
FN	Federal National Mortgage Association
GN	Government National Mortgage Association
Time Deposit Products	
TD	Time Deposit
Structured Products	
RP	Repurchase Agreement*
RVRP	Reverse Repurchase Agreement*
Bond Forward Products	
BFW	Forwards - Bond
Exchange Traded Derivatives Products	
FUT	Futures
OPT	Option

*Although the document highlights matching at both the block and allocation level, some of the above products are not allocated and are just matched at the block level.

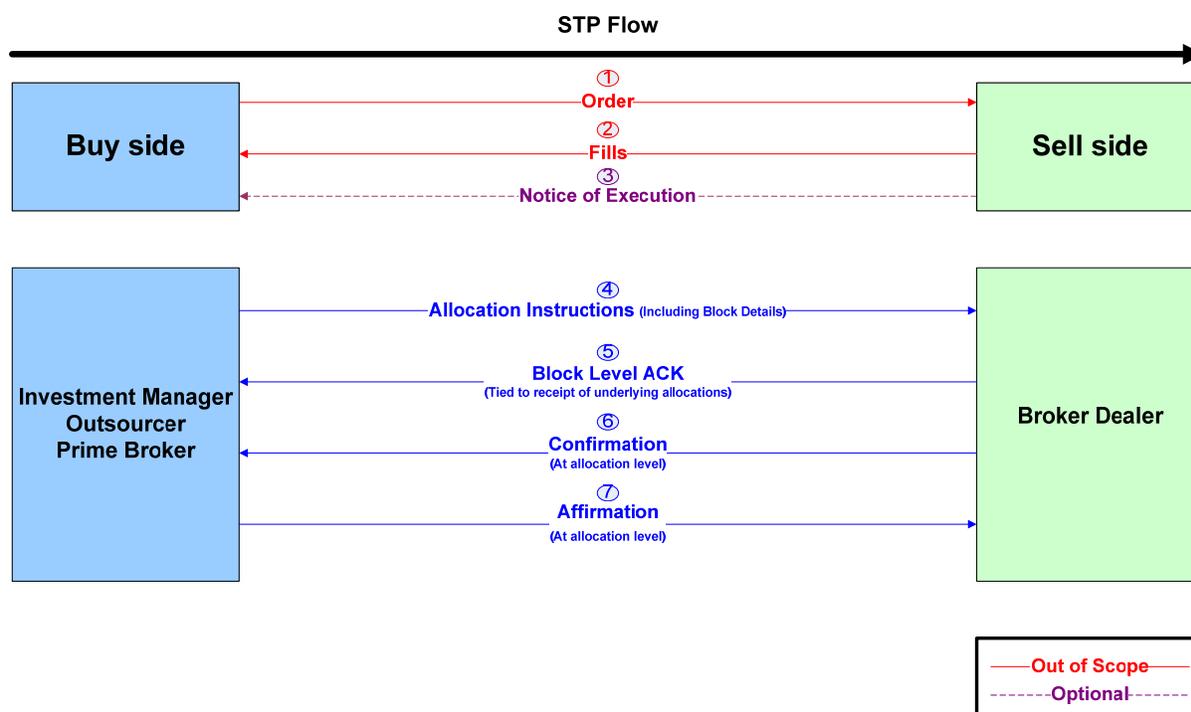
Future Deliverables:

- 1.4.1 **Matching Attributes** – Group will look to consider the identification of matching level data elements by product within the document.
- 1.4.2 **Matching Timeframe Recommendations** – The recommendation from the group is to match on Trade Date.
- 1.4.3 **Product Coverage** – Additional product will be included within the Best Practice as they are defined. – Added FX Options
- 1.4.4 **Securities Lending Flows** – TBD – Inclusion of Sec Lending matching flows in the document. (Refer to Appendix A for flow diagram)
- 1.4.5 **TriParty Agent Matching Flows** – TBD on how to integrate into document.
- 1.4.6 **Payments Matching:** TBD if it needs to be considered.
- 1.4.7 **Foreign Exchange Matching:** To be added.

High Level Flows

1.5 Local /Bilateral Matching - STP Flow

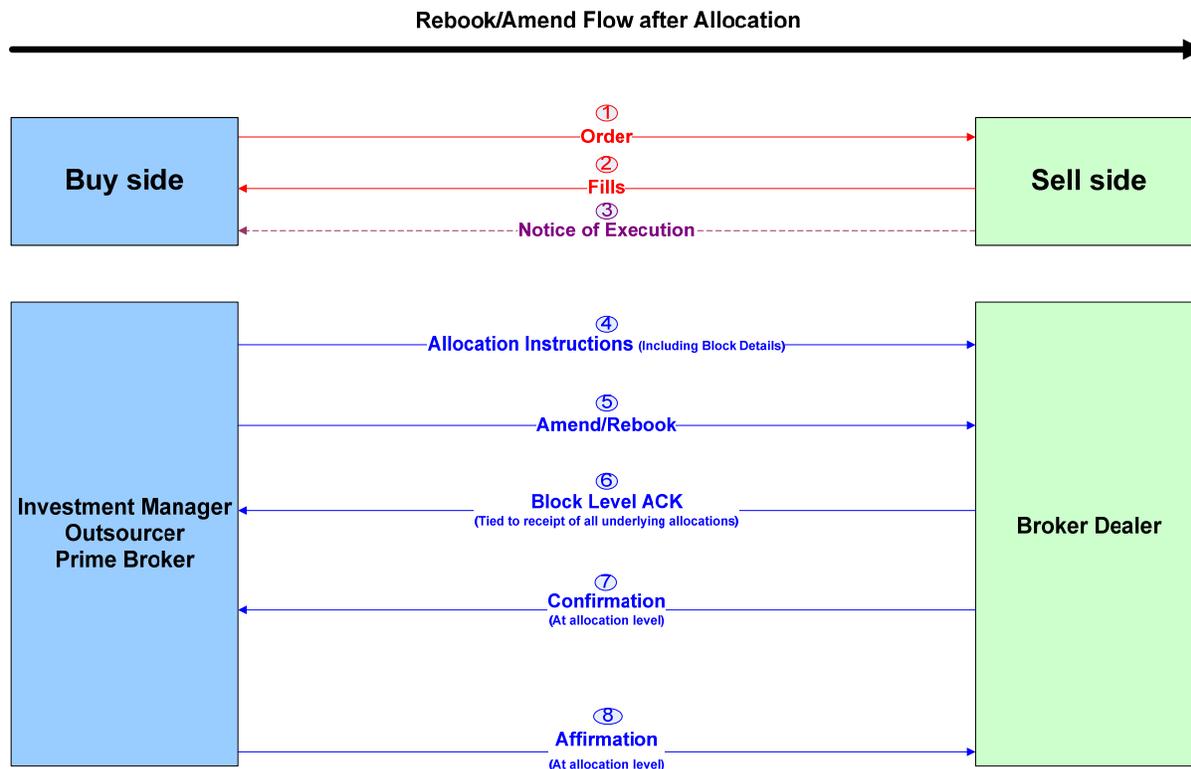
The below flow provide the overall interaction between the buy side and sell side firms in local/bilateral matching in which all details are accurate and the transaction successfully flows through the matching process.



- 1.5.1 Buy side firm sends order to sell side
- 1.5.2 Sell side firm submits fills to buy side.
- 1.5.3 Once order has been completed final notice of execution is sent from sell side to buy side.
- 1.5.4 Buy side firm allocates order to underlying accounts and submits the details to the Sell side. This includes the overall total for the block with the underlying allocation breakdown. This can be instructed in a single message or multiple depending on the preferred syntax.
- 1.5.5 Sell side firm acknowledges receipt of block with allocations.
- 1.5.6 Sell side firm confirms details of all allocation transactions.
- 1.5.7 Buy side affirms the details of the confirmation and the transaction is considered matched.

1.6 Local/Bilateral Matching – Rebook/Amend Flow after allocation

The below flow provide the overall interaction between the buy side and sell side firms in local/bilateral matching in which an amendment or cancel/rebook transaction is initiated by the buy side after allocations are sent.



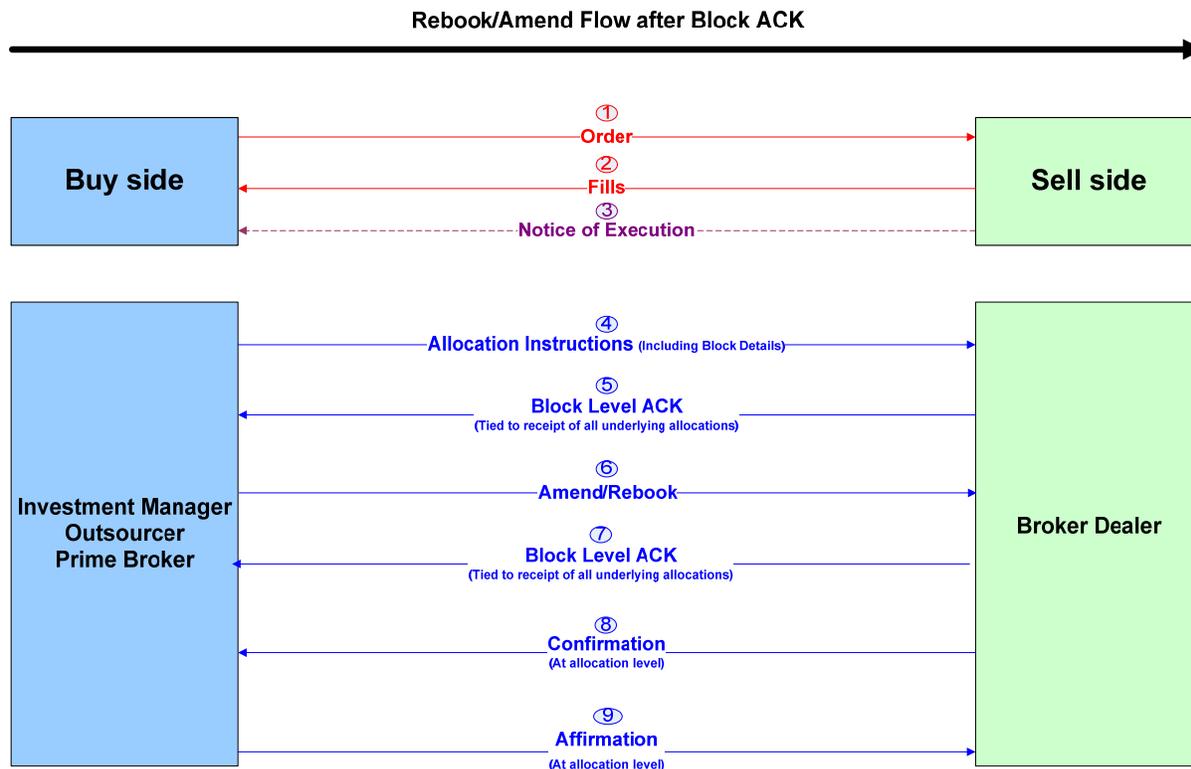
- Cancel/Rebook, Amend, Replace will be handled in this flow.
- These can occur at an point after the Allocations have been sent to the BD. At the point it is sent over we would expect all flows to be resent. i.e. if the Rebook occurs after the Block Level ACK has been sent, upon receipt of the Rebook a new Block Level ACK will be sent as well as any confirms/affirms that were also sent.
- This process can also be triggered by rejects which are the next flow.



- 1.6.1 Buy side firm sends order to sell side
- 1.6.2 Sell side firm submits fills to buy side.
- 1.6.3 Once order has been completed final notice of execution is sent from sell side to buy side.
- 1.6.4 Buy side firm allocates order to underlying accounts and submits the details to the sell side.
- 1.6.5 Buy side firm sends amendment or cancel/rebook instruction(s) to sell side.
- 1.6.6 Sell side firm acknowledges receipt of block with allocations.
- 1.6.7 Sell side firm confirms details of all allocation transactions.
- 1.6.8 Buy side firm sends affirmation details to sell side.

1.7 Local/Bilateral Matching – Rebook/Amend Flow after block ACK

The below flow provide the overall interaction between the buy side and sell side firms in local/bilateral matching in which an amendment or cancel/rebook transaction is initiated by the buy side after block ACK.



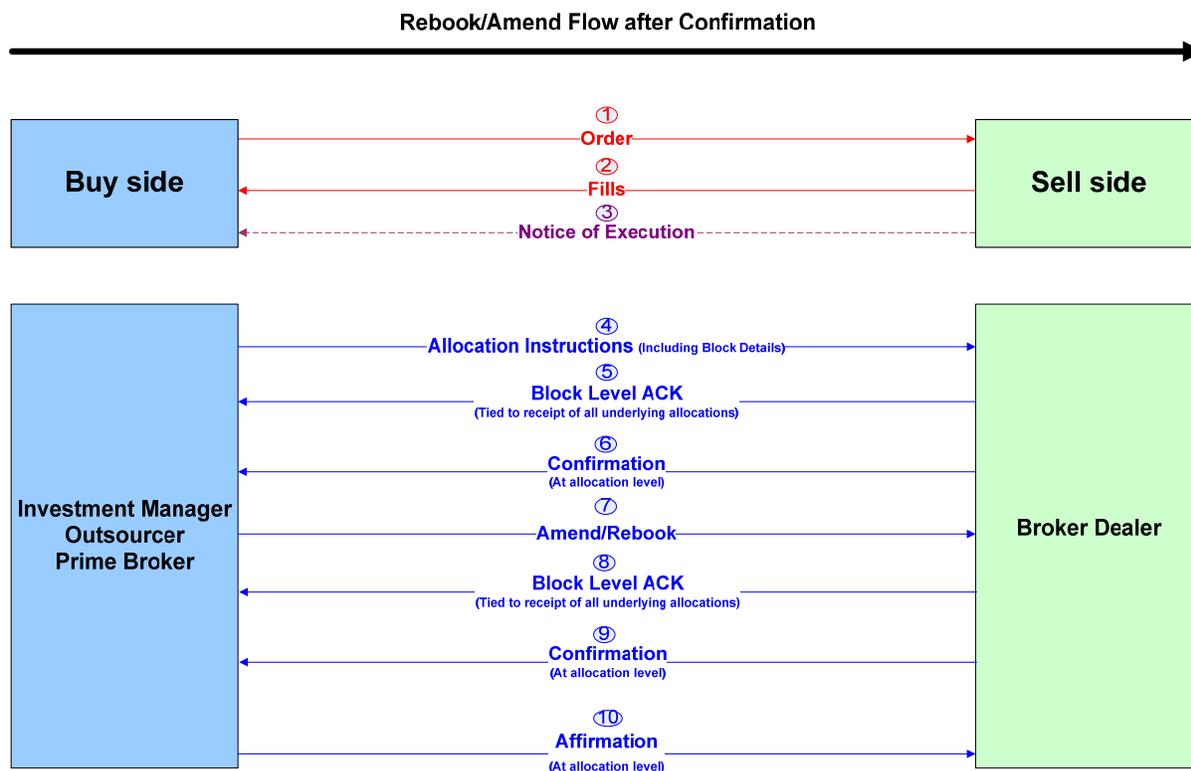
- Cancel/Rebook, Amend, Replace will be handled in this flow.
- These can occur at an point after the Allocations have been sent to the BD. At the point it is sent over we would expect all flows to be resent. i.e. if the Rebook occurs after the Block Level ACK has been sent, upon receipt of the Rebook a new Block Level ACK will be sent as well as any confirms/affirms that were also sent.
- This process can also be triggered by rejects which are the next flow.



- 1.7.1 Buy side firm sends order to sell side
- 1.7.2 Sell side firm submits fills to buy side.
- 1.7.3 Once order has been completed final notice of execution is sent from sell side to buy side.
- 1.7.4 Buy side firm allocates order to underlying accounts and submits the details to the sell side.
- 1.7.5 Sell side firm acknowledges receipt of block with allocations.
- 1.7.6 Buy side firm sends amendment or cancel/rebook instruction(s) to sell side.
- 1.7.7 Sell side firm acknowledges receipt of block with allocations.
- 1.7.8 Sell side firm confirms details of all allocation transactions.
- 1.7.9 Buy side firm sends affirmation details to sell side.

1.8 Local/Bilateral Matching – Rebook/Amend Flow after confirmation

The below flow provide the overall interaction between the buy side and sell side firms in local/bilateral matching in which an amendment or cancel/rebook transaction is initiated by the buy side after confirmation.



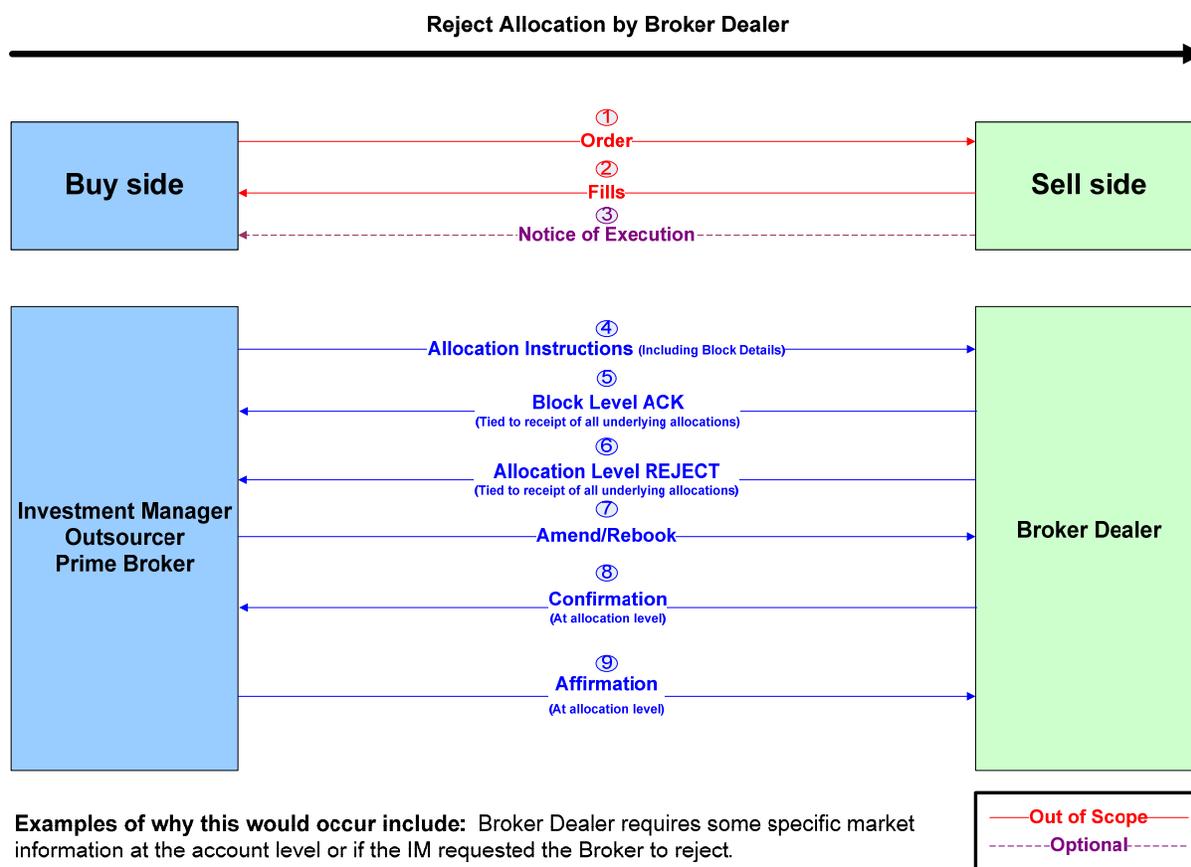
- Cancel/Rebook, Amend, Replace will be handled in this flow.
- These can occur at an point after the Allocations have been sent to the BD. At the point it is sent over we would expect all flows to be resent. i.e. if the Rebook occurs after the Block Level ACK has been sent, upon receipt of the Rebook a new Block Level ACK will be sent as well as any confirms/affirms that were also sent.
- This process can also be triggered by rejects which are the next flow.



- 1.8.1 Buy side firm sends order to sell side
- 1.8.2 Sell side firm submits fills to buy side.
- 1.8.3 Once order has been completed final notice of execution is sent from sell side to buy side.
- 1.8.4 Buy side firm allocates order to underlying accounts and submits the details to the sell side.
- 1.8.5 Sell side firm acknowledges receipt of block with allocations.
- 1.8.6 Sell side firm confirms details of all allocation transactions.
- 1.8.7 Buy side firm sends amendment or cancel/rebook instruction(s) to sell side.
- 1.8.8 Sell side firm acknowledges receipt of block with allocations.
- 1.8.9 Sell side firm confirms details of all allocation transactions.
- 1.8.10 Buy side firm sends affirmation details to sell side.

1.9 Local /Bilateral Matching – Reject Allocation by Broker Dealer

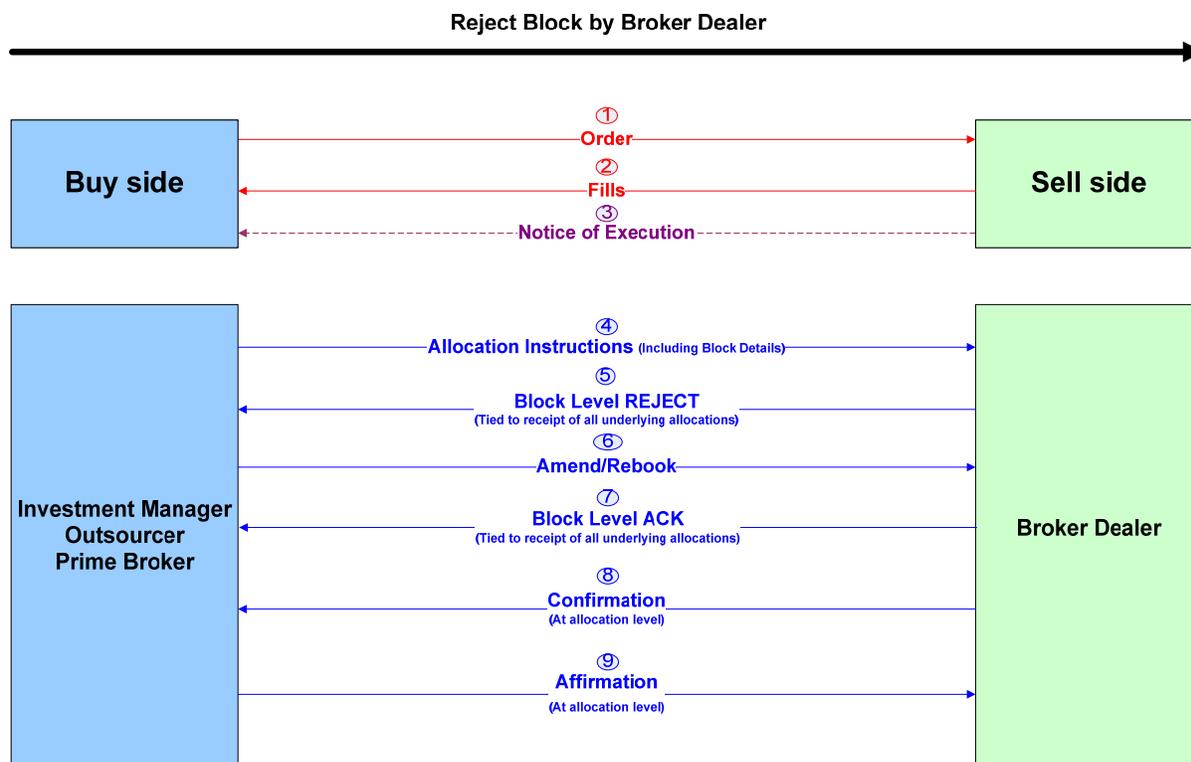
The below flow provide the overall interaction between the buy side and sell side firms in local/bilateral matching in which the sell side firm rejects an allocation(s) to the buy side.



- 1.9.1 Buy side firm sends order to sell side
- 1.9.2 Sell side firm submits fills to buy side.
- 1.9.3 Once order has been completed final notice of execution is sent from sell side to buy side.
- 1.9.4 Buy side firm allocates order to underlying accounts and submits the details to the sell side.
- 1.9.5 Sell side firm acknowledges receipt of block with allocations.
- 1.9.6 Sell side firm rejects allocation(s) details back to buy side.
- 1.9.7 Buy side firm sends amendment or cancel/rebook instruction(s) to sell side.
- 1.9.8 Sell side firm confirms details of all allocation transactions.
- 1.9.9 Buy side firm sends affirmation details to sell side.

1.10 Local/Bilateral Matching – Reject Block by Broker Dealer

The below flow provide the overall interaction between the buy side and sell side firms in local/bilateral matching in which the sell side firm rejects the block to the buy side.



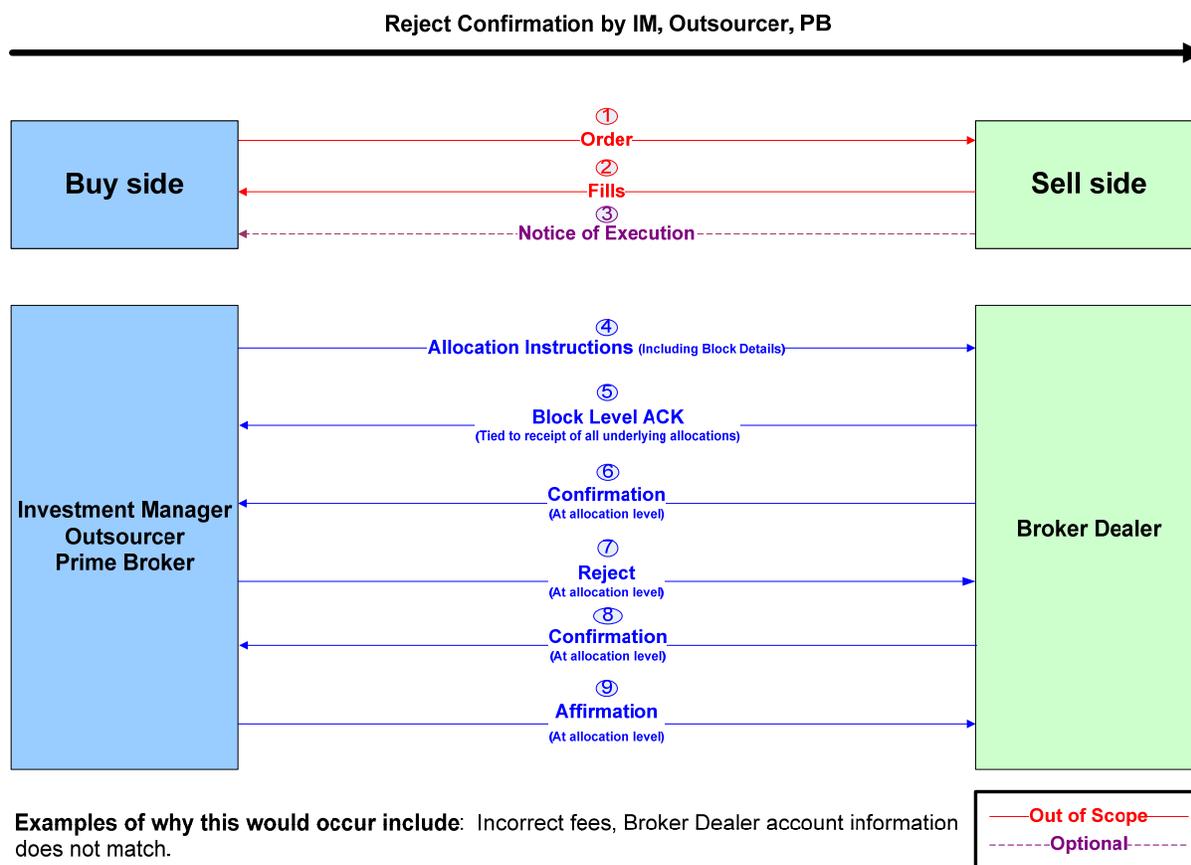
Examples of why this would occur include: Any of the primary block level fields do not match, potential duplicate transaction, attempting to cancel trade but it is too late to send, the sum of allocations does not equal the block values, missing account information, etc.



- 1.10.1 Buy side firm sends order to sell side
- 1.10.2 Sell side firm submits fills to buy side.
- 1.10.3 Once order has been completed final notice of execution is sent from sell side to buy side.
- 1.10.4 Buy side firm allocates order to underlying accounts and submits the details to the sell side.
- 1.10.5 Sell side rejects block transaction back to buy side.
- 1.10.6 Buy side firm sends amendment or cancel/rebook instruction(s) to sell side.
- 1.10.7 Sell side firm acknowledges receipt of block with allocations.
- 1.10.8 Sell side firm confirms details of all allocation transactions.
- 1.10.9 Buy side firm sends affirmation details to sell side.

1.11 Local/Bilateral Matching – Reject Confirm by Investment Manager/Outsourcer/Prime Broker

The below flow provide the overall interaction between the buy side and sell side firms in local/bilateral matching in which the buy side firm rejects a confirm to the sell side.



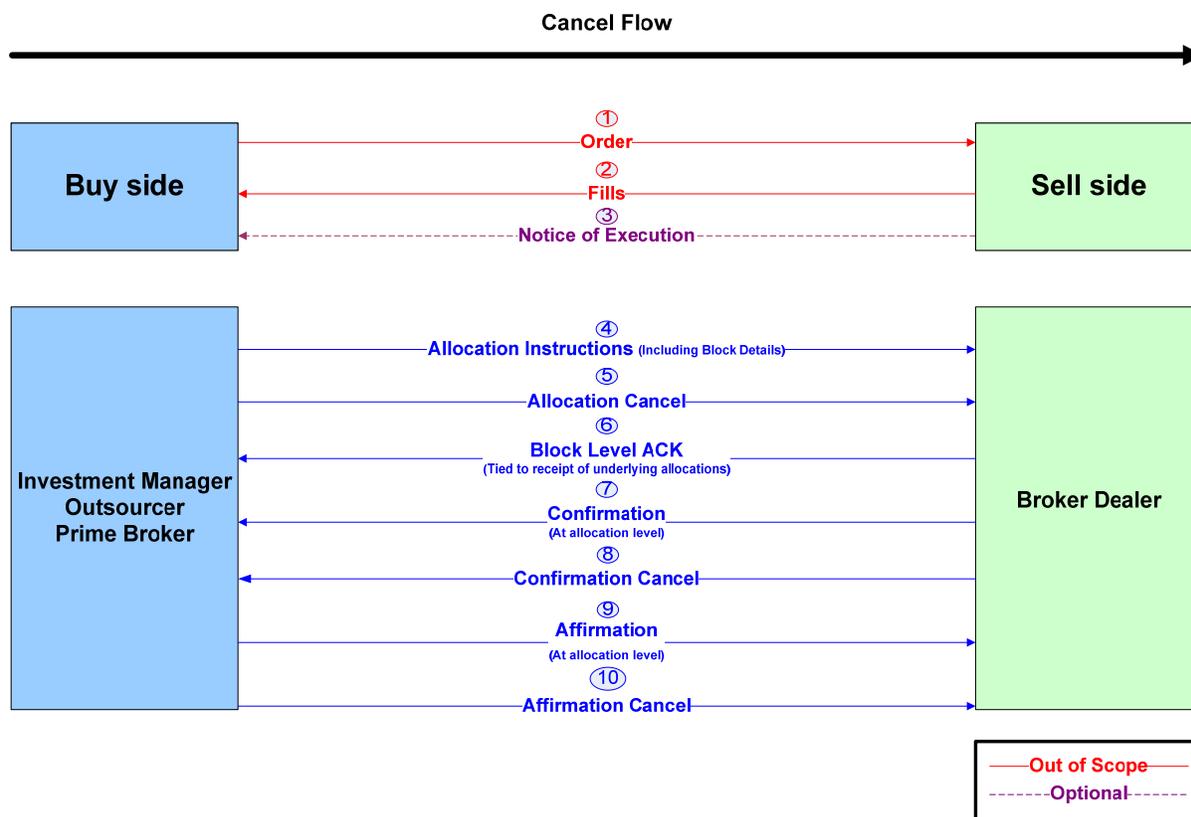
Examples of why this would occur include: Incorrect fees, Broker Dealer account information does not match.

- 1.11.1 Buy side firm sends order to sell side
- 1.11.2 Sell side firm submits fills to buy side.
- 1.11.3 Once order has been completed final notice of execution is sent from sell side to buy side.
- 1.11.4 Buy side firm allocates order to underlying accounts and submits the details to the sell side.
- 1.11.5 Sell side firm acknowledges receipt of block with allocations.
- 1.11.6 Sell side firm confirms details of all allocation transactions.
- 1.11.7 Buy side firm rejects confirm(s) back to sell side
- 1.11.8 Sell side firm provides updated confirm(s) back to buy side.
- 1.11.9 Buy side firm sends affirmation details to sell side.

*Note that the Broker Dealer can choose to reject the IM reject.

1.12 Local/Bilateral Matching – Cancel Flow

The below flow provide the overall interaction between the buy side and sell side firms in local/bilateral matching in which a cancel transaction is initiated from either party.



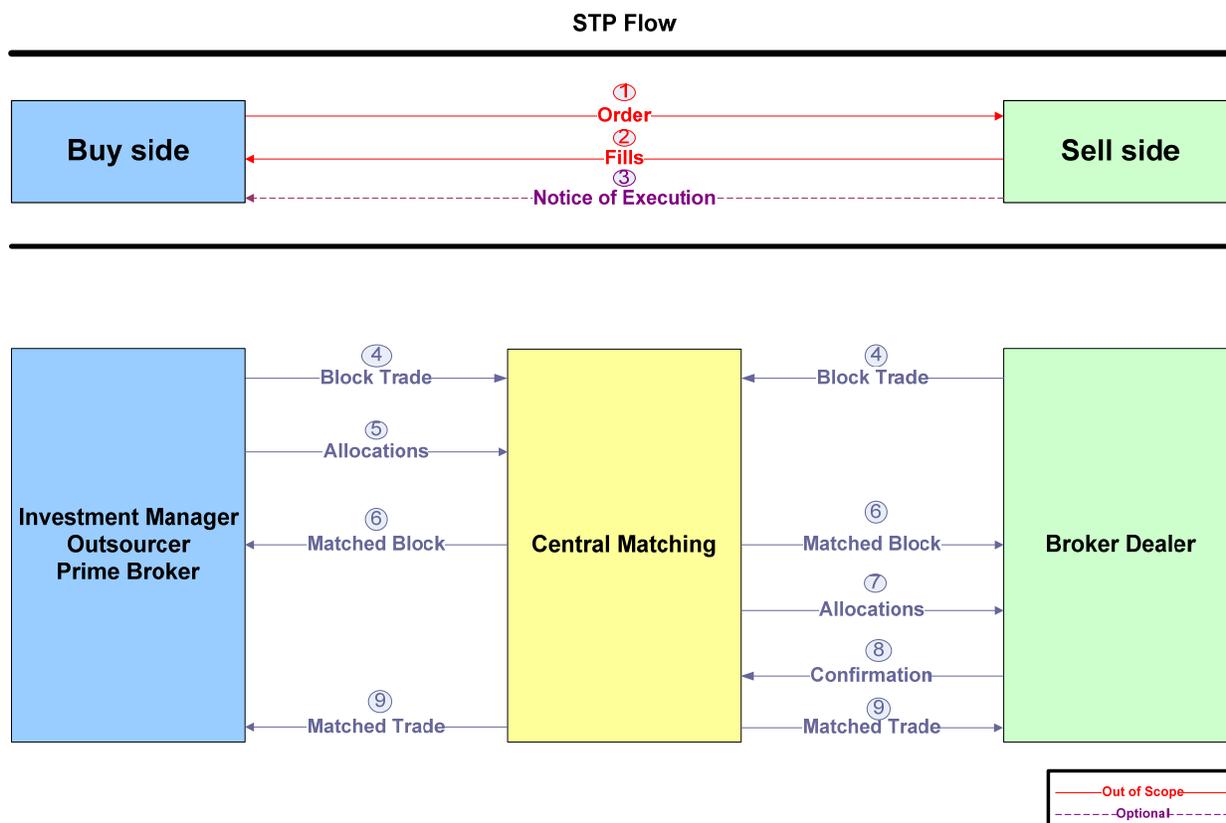
Outright Cancel can occur at any point during the below process but can only happen if with the Buyside and Sellside agree.

- 1.12.1 Buy side firm sends order to sell side
- 1.12.2 Sell side firm submits fills to buy side.
- 1.12.3 Once order has been completed final notice of execution is sent from sell side to buy side.
- 1.12.4 Buy side firm allocates order to underlying accounts and submits the details to the sell side.
- 1.12.5 Buy side firm send cancel instruction(s) to sell side.
- 1.12.6 Sell side firm acknowledges receipt of block with allocations.
- 1.12.7 Sell side firm confirms details of all allocation transactions.
- 1.12.8 Sell side firm confirms cancel
- 1.12.9 Buy side firm sends affirmation details to sell side.
- 1.12.10 Buy side firm send affirmation cancel to sell side.

**It is important to note the order of the cancel can impact the order to the transaction flow and the types of message sent to and from parties and when.*

1.13 Central Matching – STP Flow

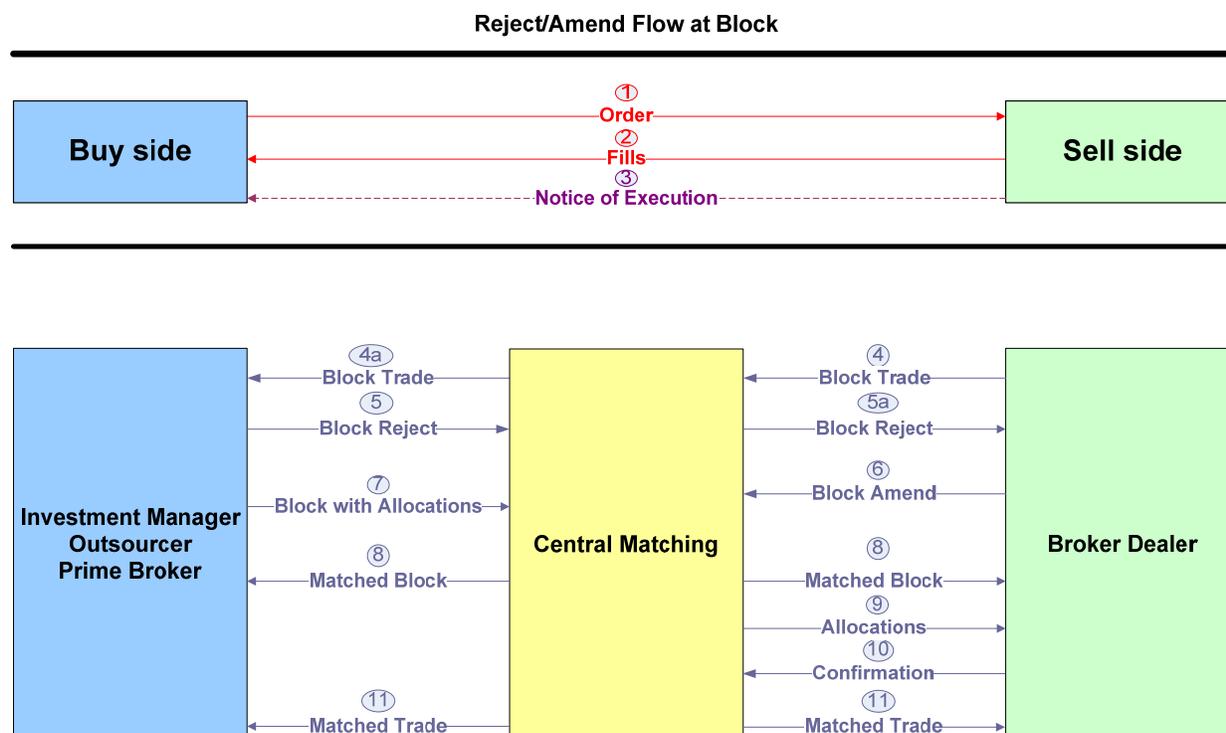
The below flow provides the overall interaction between the buy side and sell side firms in central matching in which all details are accurate and the transaction successfully flows through the matching process.



- 1.13.1 Buy side firm sends order to sell side
- 1.13.2 Sell side firm submits fills to buy side.
- 1.13.3 Once order has been completed final notice of execution is sent from sell side to buy side.
- 1.13.4 Buy side and sell side firms send block trade to central matching utility.
- 1.13.5 Buy side firm sends allocation level details to central matching utility. (This can be done at the same time as the block or not.)
- 1.13.6 Central matching utility matches blocks and sends matched block status to buy side and sell side firms.
- 1.13.7 Central matching utility sends allocations to sell side
- 1.13.8 Sell side firm sends confirmations to central matching utility.
- 1.13.9 Central matching utility matches allocations and sends matched trade details to both buy side and sell side firms.

1.14 Central Matching – Reject/Amend Flow at Block

The below flow provides the overall interaction between the buy side and sell side firms in central matching in which either party rejects or amends a transaction at the block level.



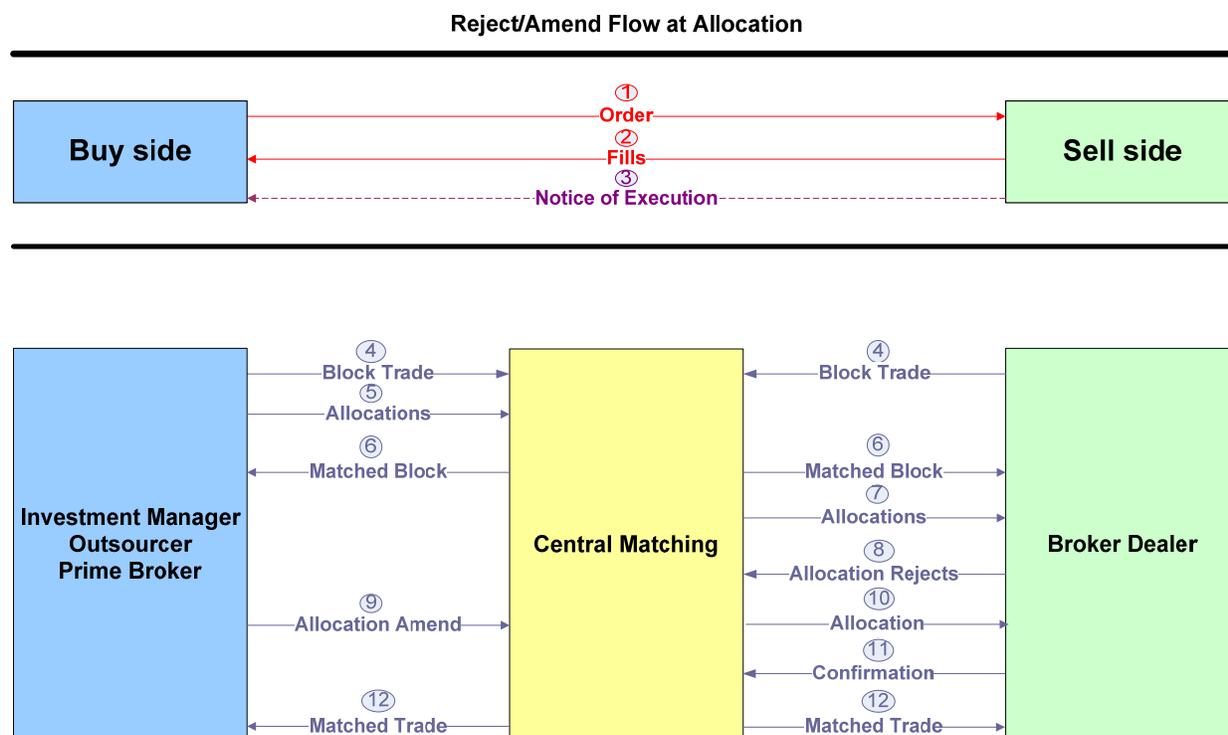
- Rejects can be initiated by either the Broker Dealer or the IM/Outsourcer/PB. Typical reasons for this flow are when incorrect counterparty or account are provided.

- 1.14.1 Buy side firm sends order to sell side
- 1.14.2 Sell side firm submits fills to buy side.
- 1.14.3 Once order has been completed final notice of execution is sent from sell side to buy side.
- 1.14.4 Sell side firm sends block trade to central matching utility. Central matching utility sends block trade to buy side firm.
- 1.14.5 Buy side firm rejects block trade sent from sell side to central matching utility. Central matching utility sends reject to sell side firm.
- 1.14.6 Sell side firm sends block amendment to central matching utility.
- 1.14.7 Buy side firm send block and allocation level details to central matching utility.
- 1.14.8 Central matching utility matches blocks and sends matched block status to buy side and sell side firms.
- 1.14.9 Central matching utility sends allocations to sell side.
- 1.14.10 Sell side firm sends confirmations to central matching utility.
- 1.14.11 Central matching utility matches allocations and sends matched trade details to both buy side and sell side firms.

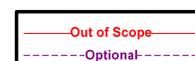
**It is important to highlight that rejects or amends can be sent from either the buy side or sell side firms.*

1.15 Central Matching – Reject/Amend Flow at Allocation

The below flow provides the overall interaction between the buy side and sell side firms in central matching in which either party rejects or amends a transaction at the allocation level.



- Rejects can be initiated by either the Broker Dealer or the IM/Outsourcer/PB. Typical reasons for this flow are when incorrect counterparty or account are provided.

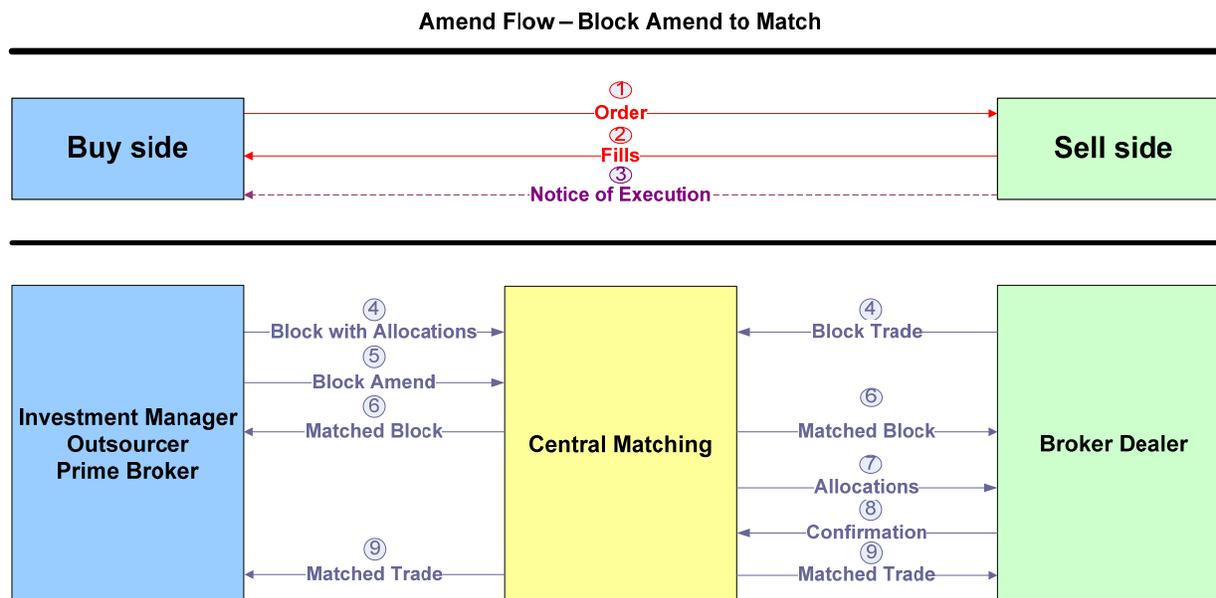


- 1.15.1 Buy side firm sends order to sell side
- 1.15.2 Sell side firm submits fills to buy side.
- 1.15.3 Once order has been completed final notice of execution is sent from sell side to buy side.
- 1.15.4 Buy side and sell side firms send block trade to central matching utility.
- 1.15.5 Buy side firm sends allocation level details to central matching utility. (This can be done at the same time as the block or not.)
- 1.15.6 Central matching utility matches blocks and sends matched block status to buy side and sell side firms.
- 1.15.7 Central matching utility sends allocations to sell side.
- 1.15.8 Sell side rejects allocations sent by buy side.
- 1.15.9 Buy side firm sends allocation amendment(s) to central matching utility.
- 1.15.10 Central matching utility sends allocations to sell side.
- 1.15.11 Sell side firm sends confirmations to central matching utility.
- 1.15.12 Central matching utility matches allocations and sends matched trade details to both buy side and sell side firms.

**It is important to highlight that rejects or amends can be sent from either the buy side or sell side firms.*

1.16 Central Matching –Block Amend to Match

The below flow provides the overall interaction between the buy side and sell side firms in central matching in which either party amends the block.



- This situation typically occurs when the IM/Outsourcer/PB realize the block level fields do not match so they initiate the Amend.
- For mismatched transactions this flow will be used in which an amend will be sent after receiving the status from the central matching utility.

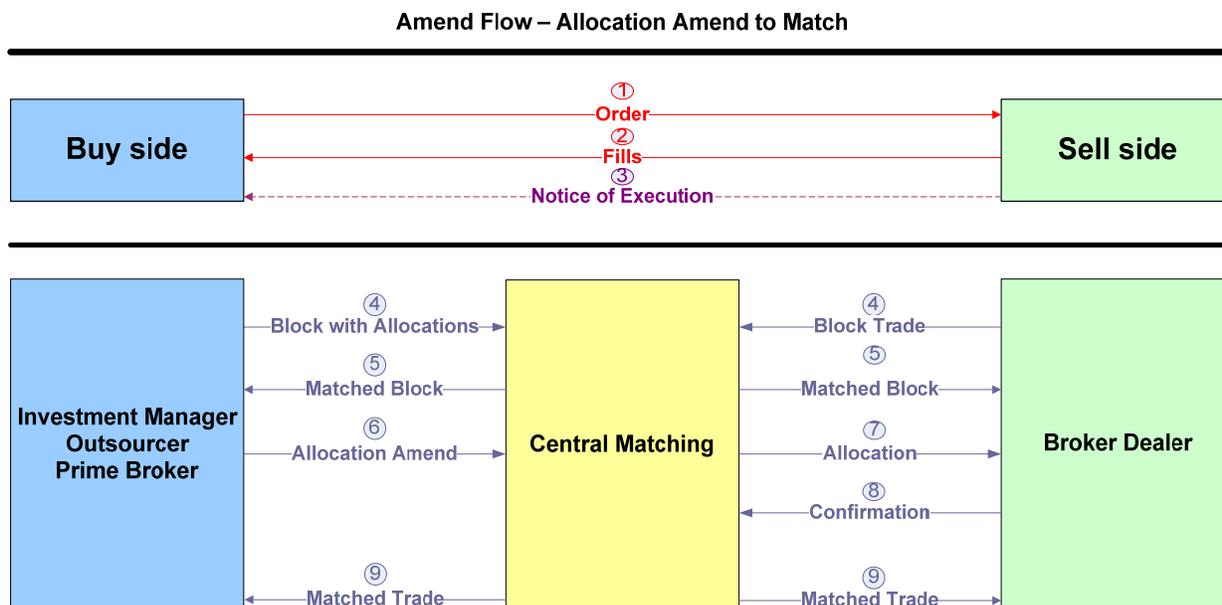


- 1.16.1 Buy side firm sends order to sell side
- 1.16.2 Sell side firm submits fills to buy side.
- 1.16.3 Once order has been completed final notice of execution is sent from sell side to buy side.
- 1.16.4 Buy side and sell side firms send block trade to central matching utility. Buy side firm includes allocation details as well.
- 1.16.5 Buy side firm sends block amendment to central matching utility.
- 1.16.6 Central matching utility matches blocks and sends matched block status to buy side and sell side firms.
- 1.16.7 Central matching utility sends allocations to sell side.
- 1.16.8 Sell side firm sends confirmations to central matching utility.
- 1.16.9 Central matching utility matches allocations and sends matched trade details to both buy side and sell side firms.

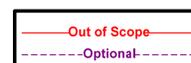
**It is important to highlight that block amends can be sent from either the buy side or sell side firms.*

1.17 Central Matching –Allocation Amend to Match

The below flow provides the overall interaction between the buy side and sell side firms in central matching in which the buy side amends the allocation(s) or the sell side amends the confirmation(s).



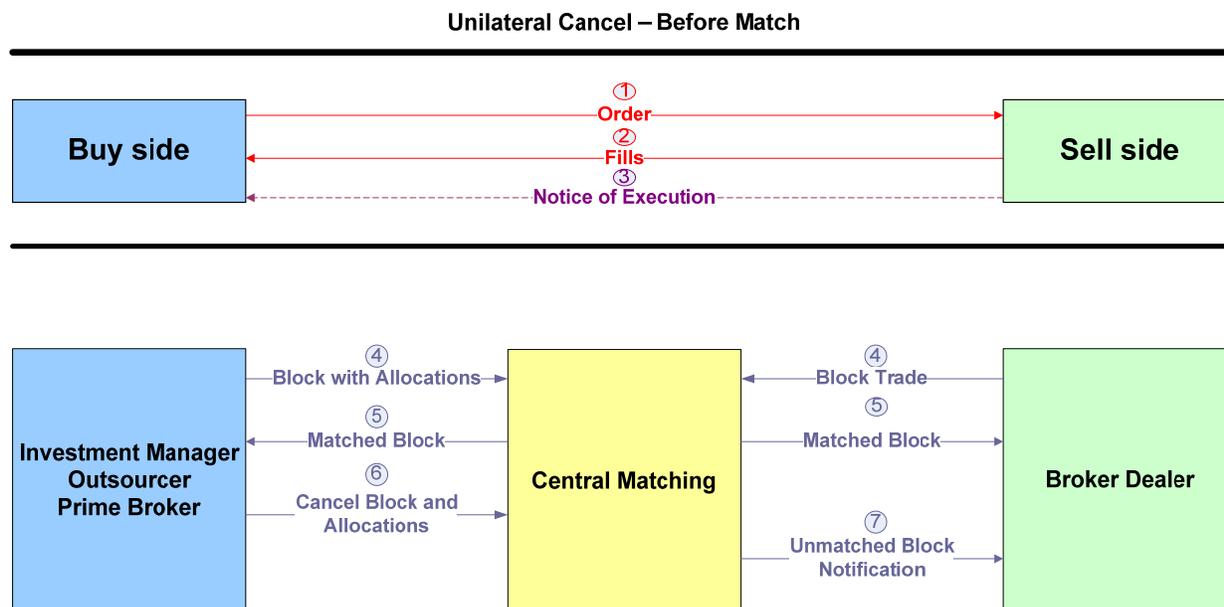
- This scenario applies when the IM/Outsourcer/PB realize that the financials (i.e. Fees/Taxes) are incorrect. If the overall financials change at the block level then the block would need to be re-sent and matched.



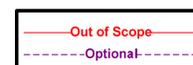
- 1.17.1 Buy side firm sends order to sell side
- 1.17.2 Sell side firm submits fills to buy side.
- 1.17.3 Once order has been completed final notice of execution is sent from sell side to buy side.
- 1.17.4 Buy side and sell side firms send block trade to central matching utility. Buy side firm includes allocation details as well.
- 1.17.5 Central matching utility matches blocks and sends matched block status to buy side and sell side firms.
- 1.17.6 Buy side firm sends allocation amendment(s) to central matching utility.
- 1.17.7 Central matching utility sends allocations to sell side.
- 1.17.8 Sell side firm sends confirmations to central matching utility.
- 1.17.9 Central matching utility matches allocations and sends matched trade details to both buy side and sell side firms.

1.18 Central Matching – Unilateral Cancel Before Match

The below flow provides the overall interaction between the buy side and sell side firms in central matching in which either party attempts to cancel the transaction before it is matched.



- This situation typically occurs when the IM/Outsourcer/PB realize they want to cancel the transaction.

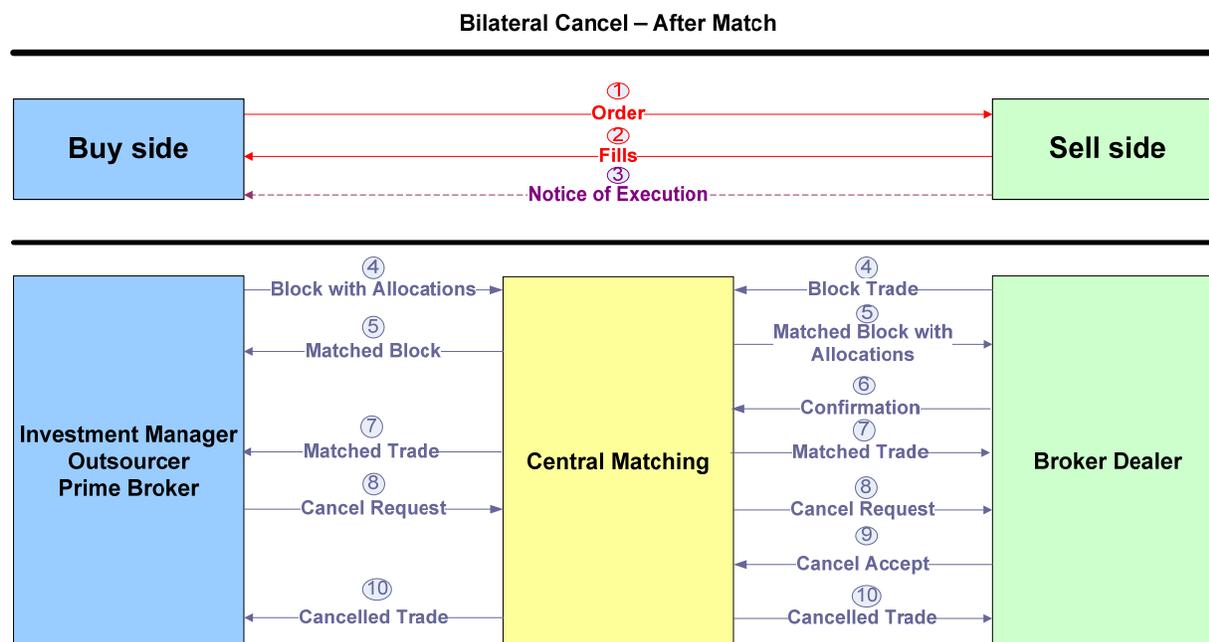


- 1.18.1 Buy side firm sends order to sell side
- 1.18.2 Sell side firm submits fills to buy side.
- 1.18.3 Once order has been completed final notice of execution is sent from sell side to buy side.
- 1.18.4 Buy side and sell side firms send block trade to central matching utility. Buy side firm includes allocation details as well.
- 1.18.5 Central matching utility matches block and sends matched block status to buy side and sell side firms.
- 1.18.6 Buy side firm sends cancel for block and allocations to central matching utility.
- 1.18.7 Central matching utility sends unmatched block notification to sell side.

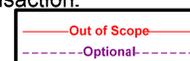
**It is important to highlight that unilateral cancels can be sent from either the buy side or sell side firms*

1.19 Central Matching – Bilateral Cancel After Match

The below flow provides the overall interaction between the buy side and sell side firms in central matching in which both parties agree to cancel the transaction.



- This scenario applies when either the IM/Outsourcer/PB or the Broker Dealer want to cancel the transaction.
- Either party can request a cancel and can either choose to accept or reject.



- 1.19.1 Buy side firm sends order to sell side
- 1.19.2 Sell side firm submits fills to buy side.
- 1.19.3 Once order has been completed final notice of execution is sent from sell side to buy side.
- 1.19.4 Buy side and sell side firms send block trade to central matching utility. Buy side firm includes allocation details as well.
- 1.19.5 Central matching utility matches blocks and sends matched block status to buy side and sell side firms. When sending to sell side allocations are included
- 1.19.6 Sell side firm sends confirmations to central matching utility.
- 1.19.7 Central matching utility matches allocations details and send matched trade details to both buy side and sell side firms.
- 1.19.8 Buy side firm submits cancel request to central matching utility which is sent to sell side firm.
- 1.19.9 Sell side firm accepts cancel request and sends to central matching utility.
- 1.19.10 Central matching utility sends cancelled trade status to buy side and sell side.

**It is important to highlight that bilateral cancels can be sent from either the buy side or sell side firms.*

2.0 Business Requirements

2.1 Enrichments

The below items highlight existing services within the matching process. The availability and use is dependent upon the matching service and what is agreed upon with the counterparties. This is not intended to be a complete list.

- 2.1.1 **Standing Settlement Instructions:** Information must be provided on the allocations and confirmations to be shared between the Broker Dealer and Investment Manager/Outsourcer/Prime Broker. The recommendation is to follow market practice and provide all relevant information such as Place of Settlement, Receive/Deliver Agent information, Counterparty information.
- 2.1.2 **Broker Cross Reference:** Recommendation is to follow existing Market Practice recommendations to use BIC or DTC ID for the Executing Broker and BIC/Local clearing codes (where applicable) for Clearing Information. The information provided can either be at the detailed level (i.e. Local specific) or more high level (i.e. Counterparty). The cross referencing would be agreed upon with the counterparties to the matching process.
- 2.1.3 **Security Identification Cross Reference:** Recommendation is to follow existing Market Practice recommendations to use ISIN as the preferred value. Local matching utilities would establish necessary cross reference tools to allow for multiple options to be used. For multi-listed assets additional data elements or classifications need to be considered as well.
- 2.1.4 **Tolerances:** Data should be captured and stored either in central matching utility or local matching products. This feature allows users to identify tolerance levels in which a transaction can match within (i.e. within \$1 would be a level that can be configured). This is driven by the client and configurable.

2.2 Closed Issues

- 2.2.1 **NOE – In Scope vs. Out of Scope – *Based on more detailed discussions the flow diagrams were updated and NOE was identified as an Optional flow.*** Notice of Execution (NOE): Upon initial review of the draft flows it was identified that the NOE was made out of scope for the purpose of the matching requirements. Several member firms identified potential reasons to include or exclude the NOE from scope. If referred to as the FINAL NOE this would be in scope as it triggers the initiation of the post-trade process. Further discussions around if there is a separate block confirmation that happens after the NOE then it would be out of scope.
- 2.2.2 **Allocation vs. Block Level Matching:** There were several points raised around what the preferred matching process would be. Block with allocation or allocation only or both. The topic is being captured under future discussions. As this was covered in flows the group agreed this can be closed.
- 2.2.3 **Retention Requirements:** Do we need to document time of how long information should be stored as well as where, does information need to be stored centrally to be accessed? This is to be defined firm by firm and cannot be captured in the overall best practice. The recommendation is this should at a minimum follow SEC requirements which are 7 years.
- 2.2.4 **Standard Service Levels around Time of Receipt:** Do we need to incorporate this as part of the overall language to look at performance standards that firms should be adhering to? Leads to the production of scorecards. Within the overall scope of the document we have highlighted the recommendation that matching should happen on Trade Date. We will consider in a future version identify recommendations by product.

3.0 Matching Attributes – DRAFT

3.1 Equity Match Fields

LIST COMPLETE REQUIRES FINAL REVIEW

Category (Equity)						
Field Name	B/A/Both	M/O	Type			
Investment Manager	Both	M	Exact			
Executing Broker	Both	M	Exact			
Security Identifier	Both	M	Exact			
Buy/Sell or Side Indicator	Both	M	Exact			
Trade Date	Both	M	Exact			
Quantity	Block	M	Exact			
Quantity Allocated	Both	M	Exact			
Account ID	Both	M	Exact			
Deal Price	Both	O	Exact or Tolerance			
Total Principal or Gross Trade Amount	Block	O	Exact or Tolerance			
Principal or Gross Trade Amount	Both	O	Exact or Tolerance			
Settlement Date	Both	O	Exact			
Place of Settlement	Both	O	Cross/Compatible			
Total Commissions	Block	O	Exact or Tolerance			
Commissions	Both	O	Exact or Tolerance			
Total Charges/Fees/Taxes	Block	O	Exact or Tolerance			
Charges/Fees/Taxes	Both	O	Exact or Tolerance			
Settlement Currency & Amount	Both	O	Exact or Tolerance			
Net Amount	Both	O	Exact or Tolerance			
Traded Currency	Both	O	Exact			
Applicable ISITC Classification Codes						
CS	ETF	MF	PS	RTS	WAR	

*This is intended to be a list of the key elements for matching. Additional fields may exist and can be added upon agreement between buy-side and sell-side firms.

**B/A/Both column represents field usage for matching in either a Block/Allocation or Allocation only match service.

***Although fields are identified as Optional for matching this would be a case by case basis between the buy-side and sell-side on what the key fields to be used.

****Traded Currency applies when you are settling against another currency

3.2 Fixed Income Match Fields

LIST COMPLETE REQUIRES FINAL REVIEW

Category (Fixed Income)					
Field Name	B/A/Both	M/O	Type		
Investment Manager	Both	M	Exact		
Executing Broker	Both	M	Exact		
Security Identifier	Both	M	Exact		
Buy/Sell or Side Indicator	Both	M	Exact		
Trade Date	Both	M	Exact		
Quantity	Block	M	Exact		
Quantity Allocated	Both	M	Exact		
Account ID	Both	M	Exact		
Deal Price	Both	O	Exact or Tolerance		
Total Principal or Gross Trade Amount	Block	O	Exact or Tolerance		
Principal or Gross Trade Amount	Both	O	Exact or Tolerance		
Settlement Date	Both	O	Exact		
Place of Settlement	Both	O	Cross/Compatible		
Total Accrued Interest	Block	O	Exact or Tolerance		
Accrued Interest	Both	O	Exact or Tolerance		
Total Charges/Fees/Taxes	Block	O	Exact or Tolerance		
Charges/Fees/Taxes	Allocation	O	Exact or Tolerance		
Settlement Currency & Amount	Both	O	Exact or Tolerance		
Net Amount	Both	O	Exact or Tolerance		
Traded Currency	Both	O	Exact		
Applicable ISITC Classification Codes					
CBO	CD	CP	BA	CORP	CPP
IET	MPP	MUNI	SL	STF	STRP
DISC	FAD	FRN	GOVT	TIPS	TN
TRPS	UBWW	UNBD	USTB	VRDN	

*This is intended to be a list of the key elements for matching. Additional fields may exist and can be added upon agreement between buy-side and sell-side firms.

**B/A/Both column represents field usage for matching in either a Block/Allocation or Allocation only match service.

***Although fields are identified as Optional for matching this would be a case by case basis between the buy-side and sell-side on what the key fields to be used.

****Traded Currency applies when you are settling against another currency

3.3 Factor based – MBS Match Field

LIST REQUIRES VALIDATION ON ALL DATA AS WELL AS RELEVANT ISITC CLASSIFICATION CODES

Category (Fixed Income)				
Field Name	B/A/Both	M/O	Type	
Investment Manager	Both	M	Exact	
Executing Broker	Both	M	Exact	
Security Identifier	Both	M	Exact	
Buy/Sell or Side Indicator	Both	M	Exact	
Trade Date	Both	M	Exact	
Quantity/Original Face	Block	M	Exact	
Quantity/Face Allocated	Both	M	Exact	
Account ID	Both	M	Exact	
Deal Price	Both	O	Exact or Tolerance	
Factor	Both	O	Exact or Tolerance	
Current Face	Both	O	Exact or Tolerance	
Settlement Date	Both	O	Exact	
Place of Settlement	Both	O	Cross/Compatible	
Total Accrued Interest	Block	O	Exact or Tolerance	
Accrued Interest	Both	O	Exact or Tolerance	
Settlement Currency & Amount	Both	O	Exact or Tolerance	
Net Amount	Both	O	Exact or Tolerance	
Traded Currency	Both	O	Exact	
Applicable ISITC Classification Codes				
FHA	FHL	FN	GN	TIPS
CDO	CLO	CMO		

*This is intended to be a list of the key elements for matching. Additional fields may exist and can be added upon agreement between buy-side and sell-side firms.

**B/A/Both column represents field usage for matching in either a Block/Allocation or Allocation only match service.

***Although fields are identified as Optional for matching this would be a case by case basis between the buy-side and sell-side on what the key fields to be used.

****Traded Currency applies when you are settling against another currency

OPEN: Do we need to include a field for Fees/Taxes/Charges?

3.4 Time Deposit Match Fields

LIST REQUIRES EXPERTS TO REVIEW AND COMPLETE.

Category (Equity)			
Field Name	B/A/Both	M/O	Type
Investment Manager			
Executing Broker			
Buy/Sell Indicator			
Trade Date			
Issuer			
Interest Rate			
Maturity Date			
Total Quantity			
Quantity Allocated			
Deal Price (optional)			
Account ID			
Settlement Date			
Type of Activity			
Type of Financial Instrument			
Allocated Trade Amount			
Total Interest			
Interest Allocated			
Settlement Amount			
Applicable ISITC Classification Codes			
TD			

*This is intended to be a list of the key elements for matching. Additional fields may exist and can be added upon agreement between buy-side and sell-side firms.

**B/A/Both column represents field usage for matching in either a Block/Allocation or Allocation only match service.

***Although fields are identified as Optional for matching this would be a case by case basis between the buy-side and sell-side on what the key fields to be used.

****Traded Currency applies when you are settling against another currency

3.5 Repo/Reverse Repo Match Fields

LIST REQUIRES EXPERTS TO REVIEW AND COMPLETE.

Category (Equity)			
Field Name	B/A/Both	M/O	Type
Investment Manager			
Executing Broker			
Security Identifier			
Buy/Sell Indicator			
Trade Date			
Quantity (B)			
Quantity Allocated			
Deal Price (optional)			
Account ID			
Deal Price (B)			
Total Trade Amount (B)			
Settlement Date (B)			
Trade Transaction Condition Indicator (B)			
Type of Financial Instrument (B)			
Trade Amount (A)			
Quantity (A)			
Settlement Amount (A)			
Applicable ISITC Classification Codes			
RP		RVRP	

*This is intended to be a list of the key elements for matching. Additional fields may exist and can be added upon agreement between buy-side and sell-side firms.

**B/A/Both column represents field usage for matching in either a Block/Allocation or Allocation only match service.

***Although fields are identified as Optional for matching this would be a case by case basis between the buy-side and sell-side on what the key fields to be used.

****Traded Currency applies when you are settling against another currency

3.6 Bond Forward Match field

LIST REQUIRES EXPERTS TO REVIEW AND COMPLETE.

Category (Equity)			
Field Name	B/A/Both	M/O	Type
Investment Manager			
Executing Broker			
Security Identifier			
Buy/Sell Indicator			
Trade Date			
Quantity (B)			
Quantity Allocated			
Deal Price (optional)			
Account ID			
Deal Price (B)			
Total Trade Amount (B)			
Settlement Date (B)			
Trade Transaction Condition Indicator (B)			
Type of Financial Instrument (B)			
Trade Amount (A)			
Quantity (A)			
Settlement Amount (A)			
Applicable ISITC Classification Codes			
BFW			

*This is intended to be a list of the key elements for matching. Additional fields may exist and can be added upon agreement between buy-side and sell-side firms.

**B/A/Both column represents field usage for matching in either a Block/Allocation or Allocation only match service.

***Although fields are identified as Optional for matching this would be a case by case basis between the buy-side and sell-side on what the key fields to be used.

****Traded Currency applies when you are settling against another currency

3.7 Exchange Traded Derivatives (ETD) Match Fields

LIST REQUIRES EXPERTS TO REVIEW AND COMPLETE.

Category (Equity)			
Field Name	B/A/Both	M/O	Type
Investment Manager	Both	M	
Executing Broker or Clearing Broker	Both	M	
Security Identifier	Both	M	
Buy/Sell Indicator	Both	M	
Trade Date	Both	M	
Total Quantity	Both	M	
Account ID			
Lot Size			
Underlying Asset Security Code			
Delivery Date			
Delivery Type			
Place of Trade			
Deal Price (B)*			
Total Charges or Taxes	Block		
Total Commissions	Both		
Quantity (A)	Allocation		
Deal Price (A)	Both		
Charges or Taxes (A)	Both		
Commissions (A)	Both		
Processing Indicator (new)			
Settlement Date			
Put or Call Indicator			
Option Style			
Strike Price			
Expiration Date			
Premium Amount			
Applicable ISITC Classification Codes			
FUT		OPT	

*This is intended to be a list of the key elements for matching. Additional fields may exist and can be added upon agreement between buy-side and sell-side firms.

**B/A/Both column represents field usage for matching in either a Block/Allocation or Allocation only match service.

*** Although fields are identified as Optional for matching this would be a case by case basis between the buy-side and sell-side on what the key fields to be used.

****Traded Currency applies when you are settling against another currency

3.8 FX Options Match Fields

LIST REQUIRES EXPERTS TO REVIEW AND COMPLETE.

Category (Equity)			
Field Name	B/A/Both	M/O	Type
Investment Manager	Both	M	
Executing Broker or Clearing Broker	Both	M	
Security Identifier	Both	M	
Buy/Sell Indicator	Both	M	
Trade Date	Both	M	
Total Quantity	Both	M	
Account ID			
Lot Size			
Underlying Asset Security Code			
Delivery Date			
Delivery Type			
Place of Trade			
Deal Price (B)*			
Total Charges or Taxes	Block		
Total Commissions	Both		
Quantity (A)	Allocation		
Deal Price (A)	Both		
Charges or Taxes (A)	Both		
Commissions (A)	Both		
Processing Indicator (new)			
Settlement Date			
Put or Call Indicator			
Option Style			
Strike Price			
Expiration Date			
Premium Amount			
Applicable ISITC Classification Codes			
FX Option			

*This is intended to be a list of the key elements for matching. Additional fields may exist and can be added upon agreement between buy-side and sell-side firms.

**B/A/Both column represents field usage for matching in either a Block/Allocation or Allocation only match service.

***Although fields are identified as Optional for matching this would be a case by case basis between the buy-side and sell-side on what the key fields to be used.

****Traded Currency applies when you are settling against another currency

3.9 FX Match Fields

LIST REQUIRES EXPERTS TO REVIEW AND COMPLETE.

Category (Equity)			
Field Name	B/A/Both	M/O	Type
Investment Manager			
Executing Broker or Clearing Broker			
Trade Date			
Account ID			
Buy Currency & Amount			
Sell Currency & Amount			
Exchange Rate			
Settlement Date			
FX Type – Spot vs. Forward			
CLS?			
NDF?			
Net Currency & Amount			
Applicable ISITC Classification Codes			
Spot		Forward	

*This is intended to be a list of the key elements for matching. Additional fields may exist and can be added upon agreement between buy-side and sell-side firms.

**B/A/Both column represents field usage for matching in either a Block/Allocation or Allocation only match service.

***Although fields are identified as Optional for matching this would be a case by case basis between the buy-side and sell-side on what the key fields to be used.

Appendix A: Securities Lending Flow

