Post-Trade Processing via FIX
Recommended Practices
DTC Qualified Vendor

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REVISION HISTORY

Date	Editor(s)	Description	Revision
Jan 2016	D. Tolman	- first draft	v 0.01
Feb 2016	D. Tolman	- updated workflows and data field requirements	v.0.02
Feb 2016	D. Tolman	- updated all workflows - add use of AllocationInstruction(J) to communicate pre-affirmed transactions from the buy-side when matching has been out-sourced to the qualified vendor.	v.0.03
March 2016	D. Tolman	- cleanup and definitions	V 0.04
April 2016	D. Tolman	- added propose workflow option where buy-side informs custodian of affirmed confirmation (open issue)	V 0.05
April 2016	D. Tolman	- added proposed tag for DTC-ID-control-number TradeConfirmationReferenceID	V 0.06

1 PREFACE

The purpose of the FIX Trading Community Post-Trade Processing via FIX Initiative is to define industry practices for common usage of the FIX Protocol for post-trade processing, for all asset classes, between buy-sides and sell-sides that can be used bi-laterally as well as through intermediary facilities.

This document is one of a series of Recommended Practices for Post-Trade Processing via FIX specifying guidelines for industry usage of the FIX standard to facilitate parallel implementation across buy-sides, sell-sides and intermediaries.

This document assumes an understanding of the FIX Protocol and post-trade processing in general. This document is written in the context of the Common Post-trade Framework.

> *Note: While the base protocol is FIX 4.4, additional tags or additional valid values from FIX 5.0 or later have been added as needed to meet industry post-trade processing requirements. These are identified in the message format tables ("[FIX 5.0 or later]") and may require specific exception configuration for FIX engines. The FIX Global Technical Committee has approved this as accepted practice.*

2 INTRODUCTION AND SCOPE

This document includes the FIX Recommended Practices for interfacing with DTC Qualified Vendors.

There are three alternative workflows:

- Pass-thru Listener
    - o A normal bi-lateral confirmation/affirmation workflow but via the qualified vendor, allowing the qualified vendor to detect the affirmed confirmation and inform the DTC without either the buy-side or the sell-side having to change their workflow.
- Notification by Buy-side
    - o In this workflow the buy-side notifies the qualified vendor of the affirmed transaction after the normal bi-lateral confirmation/affirmation workflow has been completed.
- Qualified Vendor with Matching
    - o This workflow is used if the buy-side has chosen to have the qualified vendor do the matching (i.e. outsourced confirmation matching).

3 REFERENCES

The following are the associated documents that have been completed at time of distribution. Please refer to the FIX Trading Community web site links below for the current complete set.

3.1 POST-TRADE VIA FIX RECOMMENDED PRACTICES

http://www.fixtradingcommunity.org/pg/structure/fix-guidelines/best-practiceguidelines-directory

3.1.1 Asset class specific

- PostTradeViaFIX_RecommendedPractices_Equities
- PostTradeViaFIX_RecommendedPractices_Equities_ExamplesAndNotes
- PostTradeViaFIX_RecommendedPractices_EquitySwaps
- PostTradeViaFIX_RecommendedPractices_FX
- PostTradeViaFIX_RecommendedPractices_EquityOptions
- PostTradeViaFIX_RecommendedPractices_Futures

3.1.2 Cross asset special cases

- PostTradeViaFIX_RecommendedPractices_SEF
- PostTradeViaFIX_RecommendedPractices_BrokerAllege_ConfirmationRequest

3.1.3 Code Lists

http://www.fixtradingcommunity.org/pg/structure/tech-specs/extension-pack-supplements/codelists

- Misc Fee Sub Types

4 GLOSSARY

- Depository Trust Company (DTC)
    - DTC is the world's largest central securities depository. It accepts deposits of equity and debt securities issues for custody, executes book-entry deliveries records book-entry pledges of those securities, and processes related income distributions. DTC is a member of the U.S. Federal Reserve System, a limited-purpose trust company under New York State banking law, a registered clearing agency with the Securities and Exchange Commission, and is owned by the Depository Trust and Clearing Corporation (DTCC), which is in turn owned primarily by most of the major banks, broker-dealers, and exchanges on Wall Street.
- Electronic Trade Confirmation (ETC) Qualified Vendor (QV)
    - A qualified ETC vendor intermediary is an organization that is not a registered clearing agency but that has been approved by the SEC to transmit confirmation and affirmation messages between the parties to a trade and then transmit the affirmed transaction information to the DTC.
- Depository Trust Company (DTC) Instructional Delivery (ID) system control number (DTC-CN):
    - A unique transaction identifier that is used by The Depository Trust Company's ("DTC") Institutional Delivery ("ID") system. This number is generated by the QV and passed to the DTC ID system. A standard for generation agreed upon among QVs guarantees uniqueness.
- Trade vs Transaction
    - Trade is used to refer to the purchase or sale of securities by the investment manager from a broker.
    - Transaction is used to refer to the exchange between clients and includes instrument details, client account identifier, quantity, parties, settlement instructions, etc.
- Confirmation and Affirmation
    - The sell-side clearing firm confirms a transaction by sending their version of the details to the buy-side.
    - The buy-side affirms that they agree with the confirmation from the sell-side clearing firm and that they are ready to settle.
        - *Note that there is another more strict use of the word affirmation during the settlement phase.*
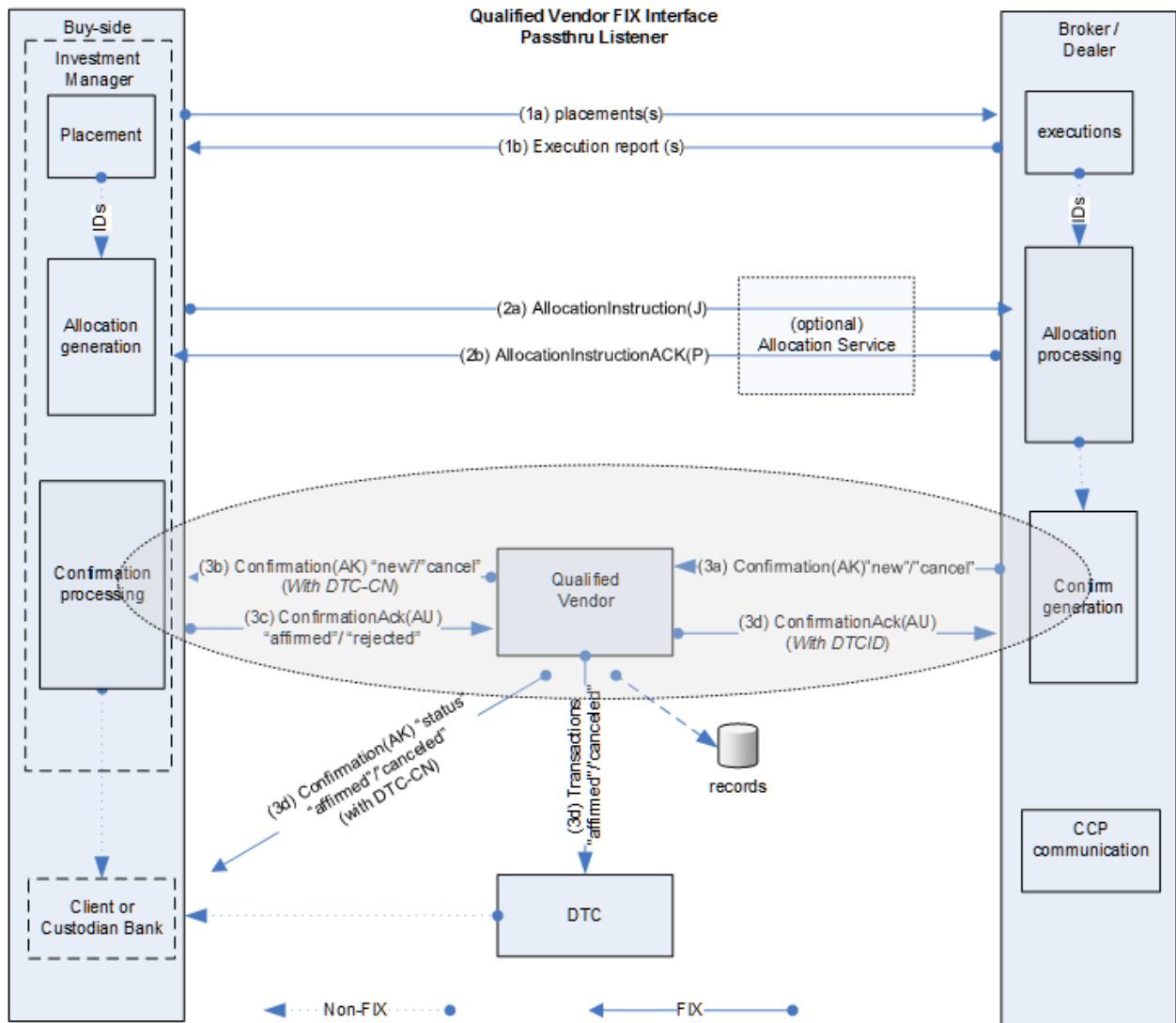
5   WORKFLOW STYLES

5.1   PASS-THRU LISTENER STYLE

This is the normal bilateral confirmation/affirmation workflow except via the qualified vendor.

    i. Confirmation(35=AK) and ConfirmationAck(35=AU) messages are sent between buy-side and sell-side via the qualified vendor according to the normal workflow

   ii. Qualified vendor listens in and communicates at appropriate points with the DTC

1. Receives a Confirmation(35=AK) message
2. Generates the DTC-CN
3. Sends the Confirmation(35=AK) message on to the buy-side
   a. Including the DTC-CN
4. Receives ConfirmationAck(35=AU) message back from buy-side
5. Validates that the referenced Confirmation(35=AK) message exists
6. Sends affirmed confirmation with DTC-CN to DTC
7. Sends ConfirmationAck(35=AU) (with the DTC-CN) back to the sell-side
8. Sends a Confirmation(35=AK) with ConfirmType(773) = 1 (Status) and AffirmStatus(940) = 3 (Affirmed) to the buy-side custodian (including DTC-CN)

Note: If the investment manager and the custodian agree the "affirmed" confirmation may come from the investment manager rather than the qualified vendor.

*Figure 1 - Qualified Vendor FIX Interface: Passthru Listener*

5.2 "NOTIFICATION BY BUY-SIDE" STYLE

This workflow allows normal bilateral confirmation/affirmation workflow to be completed and then for the buy-side to notify the qualified vendor of the affirmed transaction.

i. Buy-side and sell-side complete normal bilateral confirmation/affirmation workflow
ii. Buy-side sends a Confirmation(35=AK) message to QV with ConfirmType(773) = 1 (Status) and AffirmStatus(940) = 3 (Affirmed)
iii. QV sends
   o ConfirmationAck(35=AU) back to buy-side (with DTC-CN)
   o Confirmation(35=AK) message with ConfirmType(773) = 1 (Status), AffirmStatus(940) = 3 (Affirmed) to sell-side (with DTC-CN)
      ▪ Issue: how is sell-side FIX session identified
   o Sends a Confirmation(35=AK) with ConfirmType(773) = 1 (Status) and AffirmStatus(940) = 3 (Affirmed) to the buy-side custodian (including DTC-CN)
      Note: If the investment manager and the custodian agree the "affirmed" confirmation may come from the investment manager rather than the qualified vendor.

Figure 2 - Qualified Vendor FIX Interface: Notification by Buy-side
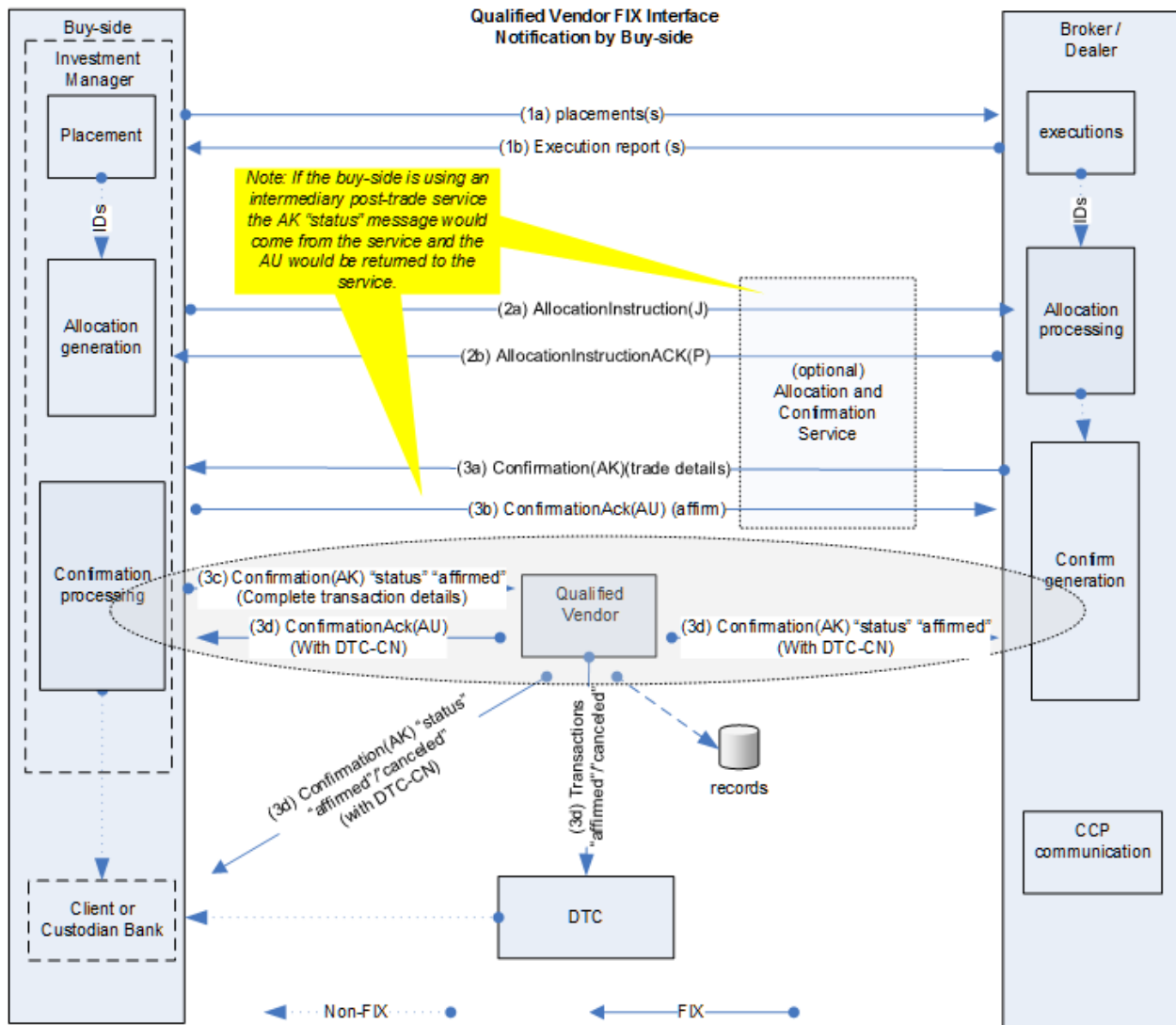
5.3 MATCHING SERVICE STYLE

This workflow is for the situation where the buy-side has decided to outsource matching to the qualified vendor. There are two variations; without and with the buy-side using an allocation service.

- Buy-side workflow without allocation service
  i. Buy-side
     1. sends copy of AllocationInstruction(35=J) message
 ii. Sell-side
     1. sends Confirmation(35=AK) message

iii. QV
1. matches: Confirmation(35=AK) and AllocationInstruction(35=J) allocations
   a. IndividualAllocID(467) can be used to match
2. Generates DTC-CN,
3. sends an affirmed confirmationmessage to DTC
4. sends Confirmation(35=AK) message with ConfirmType(773) = 1 (Status) and AffirmStatus(940) = 3 (Affirmed) to buy-side, with DTC-CN
5. sends a ConfirmationAck(35=AU) message with AffirmStatus(940) = 3 (Affirmed) to sell-side, with DTC-CN
6. Sends a Confirmation(35=AK) message with ConfirmType(773) = 1 (Status) and AffirmStatus(940) = 3 (Affirmed) to the buy-side custodian (including DTC-CN)
   Note: If the investment manager and the custodian agree the "affirmed" confirmation may come from the investment manager rather than the qualified vendor.

- Optional Allocation service
  i. If the buy-side is using an Allocation Service then the buy-side does not communicate directly with the QV. The Allocation service sends the AllocationInstruction(35=J) copy to the QV and the QV sends the Confirmation(35=AK) message with ConfirmType(773) = 1 (Status) and AffirmStatus(940) = 3 (Affirmed) back to the Allocation service which in turn sends it to the buy-side.

Figure 3 - Qualified Vendor FIX Interface: With Matching
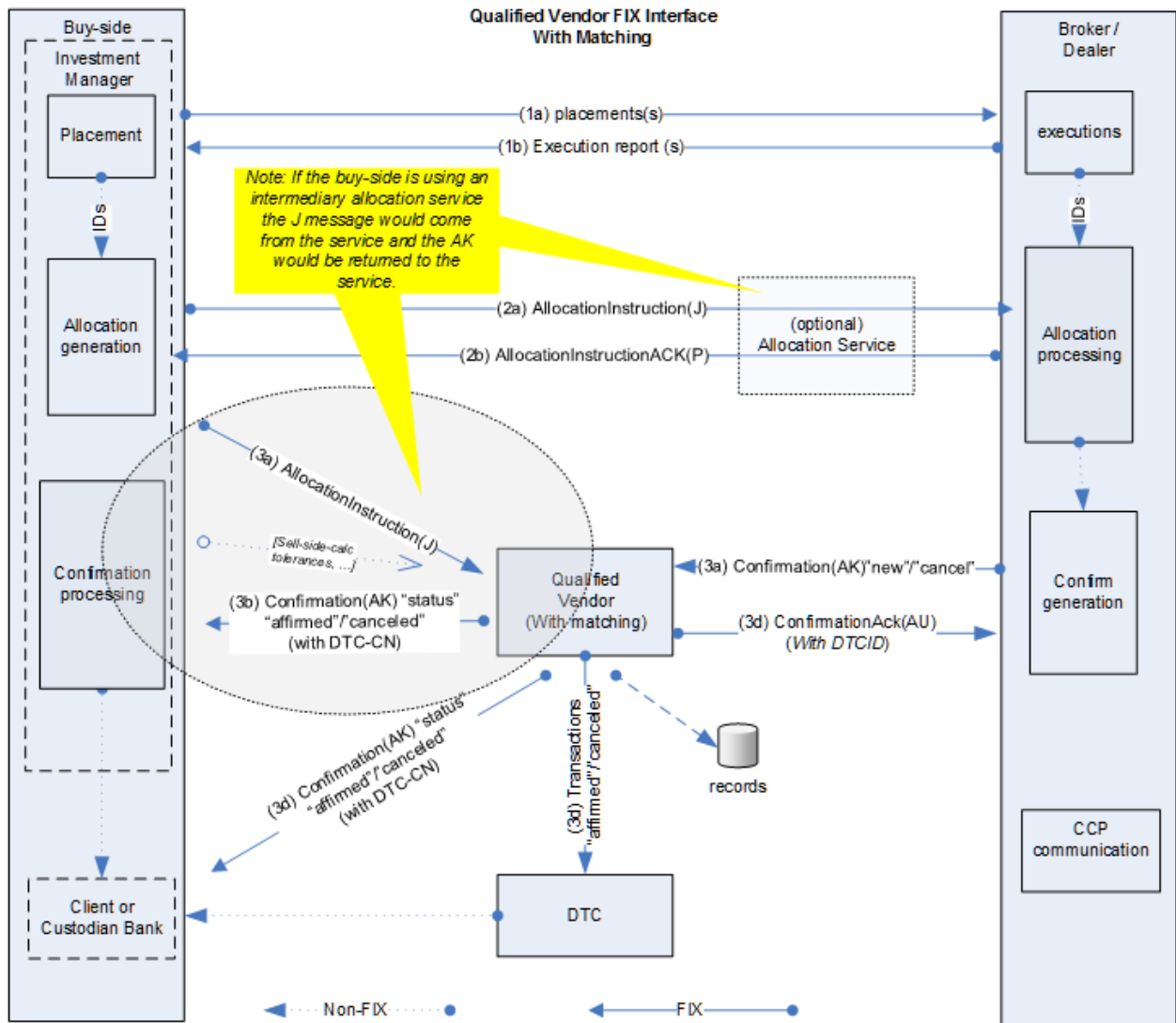
6 DATA

6.1 DTC PARTICIPANT IDENTIFIER

- Use Order Origination firm PtysSubGrp component
    - PartySubIDType(803) = 17 (CSD participant member code (e.g. DTC))
    - PartySubID(523) = <DTC participant number>
- Add to Confirmation(35=AK) message and AllocationInstruction(35=J) message
- Required for DTC trades.

Note: the QV assigns these (not the DTC) 9 character alpha field (e.g. for BB – <"B" and 8 digits>)

6.2 DTC CONTROL NUMBER (DTC-CN)

- TradeConfirmationReferenceID(tbd)
- Add to Confirmation(35=AK) message and ConfirmationAck(35=AU) message.

7 MESSAGE USAGE AND FORMAT MODIFICATIONS

7.1 "AFFIRMED" CONFIRMATION(35=AK) MESSAGE

The Confirmation(35=AK) message has been extended to facilitate communication of "affirmed" confirmations by adding the field AffirmStatus(940) to the message.

- o ConfirmType(773) = 1 (Status)
- o AffirmStatus(940) = 3 (Affirmed) [added]
- o ConfirmStatus(665) = 4 (Confirmed)
- o TradeConfirmationReferenceID(tbd) = <DTC-CN> [added]
- o (Remainder of the message is the same as the Confirmation(35=AK) message)

7.2 CONFIRMATION(35=AK) MESSAGE WITH DTC-CN

The Confirmation(35=AK) message has been extended to include the DTC-CN.

- o ConfirmType(773) = 2 (Confirmation)
- o ConfirmStatus(665) = 4 (Confirmed)
- o TradeConfirmationReferenceID(tbd) = <DTC-CN> [added]
- o (Remainder of the message is the same as the Confirmation(35=AK) message)

7.3 CONFIRMATIONACK(35=AU) MESSAGE WITH DTC-CN

The ConfirmationAck(35=AU) message has been extended to include the DTC-CN along with affirmations.

- o AffirmStatus(940) = 3 (Affirmed)
- o ConfirmStatus(665) = 4 (Confirmed)
- o TradeConfirmationReferenceID(tbd) = <DTC-CN> [added]
- o (Remainder of the message is the same as the ConfirmationAck(35=AU) message)

8 FIX DATA PASSED TO DTC AND THROUGH TO INTERESTED PARTIES

The following data fields will be included in the Confirmation(35=AK) message with ConfirmType(773) = 1 (Status) and AffirmStatus(940) = 3 (Affirmed) to the custodian:

8.1 INDIVIDUALALLOCID(467) (TRANSACTION-ID)
- o Unique in the context of the participant id