ISDA Operations Committee
Process Working Group

- Drive Process Efficiency
- Standardise Operational Practice
- Evolve ‘Best Practice’ Standards
- Influence Market Development / Technological Change

Recommended Practices for Portfolio Reconciliation

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1.0 Objective

The objective of these Recommended Practices for Portfolio Reconciliation (this "Statement") is to outline guidelines for reconciling Portfolios of privately negotiated derivatives transactions (sometimes referred to as "OTC" derivatives.) The recommendations set out in this Statement will be supported by definitions within the Financial Products Markup Language (FpML) to allow electronic message-based implementations based on a common industry standard for OTC derivatives. It is suggested that readers of this Statement refer to the work on business process and message content being carried out by the FpML Business Process Working Group.

Market participants seek an automated process for reconciling with counterparties details of some or all of the transactions outstanding between them. The need to reconcile Portfolios may be met either through bilateral arrangements or through the use of vendors providing centralised matching services.

It is intended that this Statement assists counterparties and commercial vendors in the development of services on a consistent basis and to common standards, whether such services be bilateral or centralised.

A core objective for portfolio reconciliation is that it be interoperable with, but not duplicative of, other processes such as automatching or affirmation.

The concept of Portfolio reconciliation, as discussed in this Statement, is the process of arriving at a point where certain pre-identified items match between the books and records of two parties with respect to a Portfolio of trades between them. This process is useful to participants whether they do or do not already employ an electronic trade matching or affirmation platform. Also, parties that currently confirm trades by telephone may use this process to automate T+1 Trade Verification, although it is stressed that the strategic industry focus continues to be upon agreeing fully-detailed trade confirmations.

As market participants adopt procedures such as those described in this Statement, they may also extend these principles to collateral management practices in connection with transactions which have already been matched in a manner consistent with the terms of this Statement.

This Statement is freely available to individual market participants and commercial vendors for use in designing their Portfolio matching capabilities. Parties should ensure that the principles and recommendations contained in this Statement are appropriate to their own commercial and operational circumstances.

Capitalised terms used but not defined herein have the meanings ascribed to them in the 2000 ISDA Definitions. Capitalised terms defined herein have the meanings ascribed to them herein only for purposes of understanding this Statement.

2.0 Glossary

Match ID

A “Match ID” is a unique identifier assigned by either party or a vendor, as agreed, to each matched trade for which there is “fully matched data”, as described below.

Portfolio

A “Portfolio” can be any grouping of OTC trades between two legal entities, as of a Portfolio Reconciliation Date, as agreed between them. For example, a Portfolio could comprise all OTC trades between two parties documented under a 2002 ISDA Master Agreement.

Portfolio Reconciliation Date

A “Portfolio Reconciliation Date” is the Business Day as of which parties mutually agree the Portfolio should be reconciled. Parties should agree on the Portfolio Reconciliation Date prior to requesting a reconciliation.

Where parties are located in different regions and time zones, the Portfolio Reconciliation Date should remain consistent.

Portfolio Reconciliation Region

A “Portfolio Reconciliation Region” is the location of the party requesting a reconciliation of a Portfolio.

Portfolio Reconciliation Time

The “Portfolio Reconciliation Time” is the close of business in the Portfolio Reconciliation Region on the Portfolio Reconciliation Date.

T+1 Trade

A “T+1 Trade” is a new trade between the parties whose Trade Date is the Business Day immediately preceding the relevant Portfolio Reconciliation Date that has not been fully confirmed by either electronic or manual means.

T+1 Trade Verification

“T+1 Trade Verification” is a reconciliation of T+1 Trades performed on a Portfolio Reconciliation Date.

3.0 Recommended Practices

Portfolio reconciliation should provide a means of ensuring that parties' books and records remain synchronised and that effects of trade events, such as novations, amendments and other activities, are accurately captured. Parties should bilaterally agree to a process for investigating discrepancies on mismatched trades in order to re-submit them for a full match. In order to mitigate the risk of discrepancies between parties with regard to a Portfolio, and as automated services develop to accommodate this capability, accepted best practice should be for market participants to ensure from time to time that their record of trade terms across each Portfolio is synchronised with that of each counterparty. The level of granularity of the reconciliation input process should correspond to the desired output of the reconciliation being performed; it should not seek to match more data fields than is necessary. That is, reconcile trade populations it should not be necessary to match all economic terms of individual trades.

Timeframes for undertaking Portfolio reconciliation will vary among counterparties and should primarily be determined by bilateral agreement. In many cases, such bilateral agreements are already in place and these recommendations are not intended to compromise any existing arrangements.

In other cases, factors such as volume, type of trading and relative volatility will impact the intervals at which Portfolio reconciliations may be appropriate, together with bilateral considerations of counterparty type, number of outstanding Confirmations, settlement breaks and investigations arising from collateral disputes. As guidance, it is recommended that Portfolio reconciliation be undertaken at least annually in the normal course of business. In practice, Portfolio reconciliation may take place more frequently as agreed between the parties from time to time.

Parties should take prompt action to investigate and reconcile any differences arising from the Portfolio reconciliation process. Contact should be made with counterparties no later than one Business Day following the availability of reports, in order to commence investigations, to resolve differences, and to re-submit trades for re-matching in the earliest practicable timeframe. Except in the case of an initial reconciliation of existing Portfolios, resolution of discrepancies should normally be possible within five Business Days of the date on which reconciliation has been completed.

Where parties undertake collateral reconciliation, it is expected that timeframes for resolution of discrepancies would be significantly tighter. It is recommended that discrepancies should ordinarily be resolved within one to two Business Days of the availability of exception reports. It is further recommended that, where collateral reconciliation is undertaken using an abbreviated data set, a full Portfolio reconciliation should subsequently be applied to any trades where discrepancies remain unresolved following this recommended resolution period.

4.0 Process Outline

4.1 Timing

Data should be delivered upon the request of either party (whether on an ad hoc basis or at regular intervals), preferably using system-to-system FpML communication. Preliminary reports as to the status of the reconciliation process should be available by the close of business that day. Full reporting should be available at the latest by the open of business (9:00 a.m. London time) on the Business Day following a request. Reports of the reconciliation of previously matched trades should be available to the requesting party on the same day of the request.

Messages should support both batch and incremental operation and they should document the proposed time for commencement of the matching process, be that immediate or at some mutually agreed time (e.g., business close + X hours.)

4.2 Delivery Mechanism and Medium

The strategic messaging representation should be FpML, which is the clear standard being utilised in the OTC market. Service providers should expect to develop system platforms based on FpML but also to accommodate other representations (eg other XML, fixed format flat files, Excel spreadsheets etc.) to encourage maximum adoption by a wide range of OTC participants, Implementers may choose to support multiple delivery mechanisms including email, web services, MQ series transfer, FTP, web-based uploads etc.

4.3 Reconciliation Requests

Parties may submit their Portfolio for reconciliation at any time by mutual request.

New Trades

If parties use the reconciliation process for T+1 Trade Verification, the party requesting a reconciliation should send its trade data as of the close of business on the Trade Date.

In relation to Portfolio reconciliation, trades should be submitted by the requesting party after the close of business on the Trade Reconciliation Date, or as agreed between the parties.

Reporting on the reconciliation process will be based on the status of the data as set forth in Section 5.0 below. New trades should be identified as “New” by both the requesting party and the reporting party.

Amended Trade

Trades whose terms have been changed or amended should be treated for reconciliation purposes as New trades. All data reference fields should be submitted.

A new version of an existing trade should cause both the requesting and reporting parties to label the trade as "Amended". Amended trades could include recognition of business events (such as corporate adjustments) as well as bilaterally agreed amendments (such as partial terminations, economic amendments, etc.).

If parties are able to reconcile an Amended trade based on their existing criteria, the existing Match ID for that trade may be retained. Mismatches should trigger an exception report with the original Match ID discarded and a new Match ID assigned following resolution of the discrepancies. To aid investigation, these trades should be categorised as "Broken Matches" as described in Section 5.3 below.

Trades comprising the Portfolio as of the Trade Reconciliation Date should be included in the reconciliation process. For the avoidance of doubt, unless parties otherwise agree between them, each reconciliation of a Portfolio should include:

- any trades previously submitted and reconciled with a Match ID assigned;
- any trades for which the Trade Date is the Portfolio Reconciliation Date; and
- any trades exercised or due to expire after the Portfolio Reconciliation Date.

In order to accommodate regional issues and currency requirements, each submitted trade record should identify the Portfolio Reconciliation Region. It is recommended that this field be required but that it need not match for purposes of determining that a reconciliation is complete. The label given to a particular Portfolio Reconciliation Region may differ among parties; however, it is recommended that the following labels for Portfolio Reconciliation Regions be used as a starting point: North America, Europe, Asia/Pacific, Middle East and Latin America.

5.0 Reporting

5.1 Return Format

Messages and reports should be returned to the requesting party in the same format as submitted.

Parties should be able to view reports and download them internally via a web portal and graphical user interface, or "GUI". Smaller participants should have the ability to view data represented to be in relation to them and agree to, or dispute, individual items through the GUI. The GUI should provide functionality to build bespoke data reports that can be downloaded if required.

5.2 Match ID

A unique Match ID should be returned to the participants in each trade for each trade match in the Portfolio. Match IDs should be retained by commercial service providers.

If parties use the reconciliation process for T+1 Trade Verification, any Match ID should be assigned on a provisional basis.

Unmatched trades will not receive a Match ID.

New trades should be identified so that their status as New is clear. Parties should identify subsequent amendments to a trade so that its Amended status can be recognized. If the trade is successfully matched post-amendment, the trade should retain the original Match ID; any mismatches should negate the previous Match ID until discrepancies have been resolved and a new Match ID has been assigned.

5.3 Returned Data

Each requesting party's data will be returned to it along with a report setting forth the matched status of the trades contained in the Portfolio or as an exception report. (See the table set forth in Section 6.0 for status categories.) In some cases, the data submitted by the requesting party should be returned to assist the discrepancy resolution process.

If a vendor service is used for Portfolio reconciliation, it should provide a web portal and GUI, with the ability to sort and filter data, for investigating and submitting queries on trade discrepancies. A download facility should be available.

Status reports, whether from the requesting party's counterparty or from a vendor, should include the following content, depending on the status of the data:

- **Fully matched trade data**: Fully matched trade data, assigned a Match ID, the counterparties' trade references and any legal entity identifier applied by a vendor.
- **Unmatched trade data**: All data that cannot be matched to a counterparty trade.
- **Partially matched trade data:** Trades that have been partially matched. Counterparty-specified algorithm should suggest nearest best matches, without ascribing a Match ID. Parties should accept or reject suggested best matches and "force" match as appropriate.

- **Alleged trade data**: All data sent by a counterparty. Both parties should see all data for trades alleged against them.
- **Broken matches**: One party has amended trade data that has subsequently caused a break in previously matched trades. (This concept would not be applicable to trades that have been subject to T+1 Trade Verification.)

The report returned to the requesting party should highlight or otherwise identify items where there are field discrepancies between the parties' records.

5.4 Structured Trades

As part of Portfolio reconciliation, parties should be able to manually or "force" match trades which comprise a structured trade potentially in bundles, through bilateral agreement. Parties may then request a permanent Match ID to be recorded. Resubmissions of these trades should be identified and automatically linked by a vendor system without counterparties, needing to capture and send Match ID references from their own systems.

A Match ID that has been assigned as a result of an agreement to manually match a trade should be readily distinguishable from other Match IDs allocated through the normal reconciliation process.

5.4 Data Retention

If a trade is manually matched with a Match ID assigned, the complete data set for the last version of that trade should be retained. This will enable identification and exception reporting of any field changes that have occurred since that trade structure was last submitted for reconciliation.

6.0 Returned Data – A Summary

Matched Status	Description	Definition	Returned data
Fully Matched	The trade has been fully matched with the Counterparty's trade	All data elements flagged as Match = Y	Match ID, Cprty Trade ID, Cprty BIC Code Vendor Participant ID, all requesting party's data.
Partial match	Certain trade data fields do not match	Weighting Score = "more than x" [to be agreed between parties]	All of both parties' data and both proposed trade IDs
Mismatched	The trade submitted cannot be matched and no similar trades exist	Weighting Score = "less than x" [to be agreed between parties]	All requesting party's data
Alleged	One party has submitted a trade against the other.		All counterparty's data
Broken Match	A trade with a previously assigned Match ID is amended unilaterally by one party	Relevant matching field no longer matches	All of both parties' data plus + Cpty Trade ID

7.0 Timestamps and Recordkeeping

For audit and version comparison purposes, all reconciliations whether bilateral or provided by a commercial service provider, should include a timestamp on each trade record, indicating (a) the date and time of reconciliation, (b) the Portfolio Reconciliation Date and Portfolio Reconciliation Region, and (c) the date, time and number of any previous version of that trade record.

Historical reports of previous reconciliations should be made available, which at a minimum should specify the pairs of party reference numbers which correspond to a Match ID.

For subsequent reconciliations, the vendor should make available timestamp information for each trade record with an existing Match ID.

8.0 Portfolio Reconciliation - Collateral Management

The 2005 ISDA Collateral Guidelines recommend that firms perform a detailed trade-by-trade position reconciliation (i) prior to making the first margin call ("pre-live reconciliation") and (ii) regularly thereafter. The most effective prevention against disputed margin calls is an ongoing Portfolio reconciliation process. Reconciliation allows the two parties to agree on the number and exposure of any existing trades. The pre-live reconciliation is a small but critical step which is often overlooked. To emphasise its importance, it is worth stating that if the Portfolio has not been reconciled and agreed, any collateral that flows back and forth between the parties is based on what may be an *estimate* of true exposure. From a credit risk management point of view, this is not generally considered a sound basis for collateralisation. Efficient and timely reconciliation is also critical to operational risk management and client service. In addition to the pre-live reconciliation mentioned above regular portfolio reconciliations between the two parties greatly reduce the frequency of collateral disputes and help to ensure that differences are addressed before they become more significant issues. Portfolio reconciliation should be a key part of the collateralisation process.

Participants using the reconciliation process for collateral management should ensure that all trades in the Portfolio are subject to an executed collateral agreement between themselves and their counterparty.

Parties should bilaterally agree on the Portfolio Reconciliation Date prior to a request for collateral reconciliation.

To accommodate regional organisation and deal-specific currency requirements, each trade record should contain information as to the Portfolio Reconciliation Region. This should be a mandatory but non-matching field for collateral reconciliation.

Consistent with this Statement, the 2005 ISDA Collateral Guidelines also encourage automated comparison and reconciliation of position records. Data fields for collateral reconciliation were developed by the ISDA Collateral Committee and published in 2003 at www.isda.org. These documents define a standard minimum set of data for the interchange of collateral trade information between parties for trade reconciliation purposes.

Parties choosing to use the reconciliation process in relation to collateral management should mutually agree to matching tolerance levels, particularly in relation to mark-to-market valuation fields, prior to returning reports in response to data submitted for reconciliation.

For more guidance on sound collateral management practices, please refer to the 2005 ISDA Collateral Guidelines at www.isda.org.

9.0 Conclusion

It is hoped that this Statement provides a useful introduction to the concept of Portfolio reconciliation as a business process, and that it gives an insight into the data requirements to achieve reconciliation. It is worth emphasising that the chief focus of the industry continues to be upon obtaining fully detailed confirmatory trade evidence as soon after the time of transacting the trade as possible. In no way is any Portfolio reconciliation exercise intended to duplicate trade confirmation processes.

As the Statement reflects, any solution, be it bilateral or provided centrally by a vendor, will need to operate using FpML, the acknowledged market standard language of the OTC industry. It is recognised that the frequency with which a party will seek to reconcile its portfolio will depend upon its own internal policies as well as the nature of the particular business need that it intends the reconciliation process to address.