

Moving Forward: An Implementation Plan

1.0 Introduction

In December 2003 the ISDA Operations Committee issued a strategy paper for OTC derivative operations entitled 'Going Forward: A Strategic Plan'¹. This sets out a strategy and vision for improving operational efficiency in processing trades. The purpose of this document is to highlight specific considerations for implementing the goals set out in the Strategic Plan and to provide a unified approach which supports investment by industry participants and service providers in developing new services.

1.1 Background

OTC derivatives have gained wide acceptance as tools for financial and risk management as evidenced by the 170 USD trillion in notional value outstanding by mid-year 2003². However, increasing volumes have raised concerns about the ability of dealers and end users to efficiently process and settle these transactions.

The current state of OTC derivatives processing continues to evolve. While automation has improved operational efficiency in certain areas, there is significant room for improvement in others. Although ISDA Benchmarking Surveys since 2000 have reported year-on-year improvement in automation, the Operations Committee recognises a need for accelerating the pace of change in the marketplace through support for a strategic direction for the industry of the future.

1.2 Strategy Vision

The Strategy Group of the ISDA Operations Committee, which comprises Operations heads from member banks, has worked to develop an operational processing model for OTC derivatives. The vision set out in the Strategic Plan has the support of leading industry firms. It advocates collaboration within the marketplace to develop inclusive, cost effective solutions to the challenges presented by continuing growth in the industry.

At its core, the paper recommends that the marketplace should aim to achieve substantial automation in the processing of OTC derivatives trades (specifically trade and post-trade processes) by 2006. This will be based upon adoption of FpML as a common standard for data representation and exchange and the development of standardised

¹ A copy of the Strategy Paper can be downloaded from the Operations section on the ISDA website (www.isda.org)

² Source: BIS

processes for clearing, settlement and portfolio reconciliation. By achieving a significant level of automation, the market will experience greater economies of scale, lower levels of credit and operational risk, and improved customer service.

1.3 Summary of Commitment

In sponsoring the ISDA strategy paper, the Strategy Group banks have publicly committed to supporting the goals and timelines set out in the Strategic Plan. To this end, these industry participants have dedicated staff to work on developing the implementation framework represented in this paper. The challenge set before the working group was to think “revolution not evolution”, and at the same time to address issues highlighted by dealers, end users, service providers and regulators alike.

1.4 Scope

In establishing this Implementation Plan, the Operations Committee acknowledges the progress made in the processing of OTC derivatives in the past few years by the industry, and in particular the contribution made by vendors in developing services which deliver automation and greater process efficiency.

Continuing growth in the marketplace, and the operational challenges which result from this, highlights the need for accelerated change. The goal should be to achieve standardisation and automation – and where possible simplification - over the full range of OTC derivative products and processes. Rather than seeking to reinvent existing capabilities or services within the marketplace, the Operations Committee has focussed on the need to identify gaps and provide direction on new solutions where needed. The key criteria should be compatibility across the marketplace, allowing inter-communication between market services and between industry participants using a common protocol and the means to deliver this. The recommendations in this paper are intended to provide clarity around the current, collective thinking of industry participants with respect to a future processing model for the industry.

The ability to develop automated, simplified solutions is in practice limited by product standardisation. Whilst the scope of this document addresses the broad range of OTC derivative products, specific recommendations apply principally to high-volume vanilla deals where a substantial degree of product standardisation has been achieved and for which automated processes can be developed. As newer OTC derivatives are traded, these should be migrated towards automation as the product matures and the market agrees standard terms. However, a proportion of OTC trades will typically be bespoke structured products. The limitation on variations in format required in order to develop standard messaging effectively places OTC structured products outside the scope of the main recommendations set out in this paper.

1.5 Market Consultation

The recommendations contained within this paper were derived from a broad set of constituents, including a broad cross-section of financial institutions, end users, brokers, ISDA as well as a number of service providers. The input for this paper was collected from a series of brainstorming sessions, market consultation sessions and meetings over the past few months and represents the collective views of the industry participants. The ISDA Operations Committee wishes to thank the institutions involved for dedicating resources to contribute to addressing these important implementation issues and looks forward to continuing to work together over the next few years.

2.0 Current State

2.1 Current State Process Overview

The processing of OTC derivatives has historically reflected the nature of this product as a bilateral, customised contract. The environment is highly manual with operations support staff communicating directly between counterparties to verify, confirm and administer these transactions through the life of each trade. Increasing volumes have encouraged greater automation of the main processes, but the focus has largely been internal investment by participants to create IT systems and internal infrastructure to achieve greater efficiency in handling trade volumes and control of risk.

The advent of electronic messaging, particularly FpML, as a common platform for communication, has provided an opportunity for developing market services to advance automation. The current state in processing OTC derivatives is improving, although it remains inconsistent across products, institutions and geographies.

At the end of 2003, the ISDA Operations Committee hosted a brainstorming session to develop ideas for operational improvements. This was attended by representatives of the 15 OTC derivatives dealers who committed support for the Strategic Plan. The purpose of this brainstorming session was to document current issues with OTC operational processes, identify opportunities for improvement, and to highlight implementation considerations for addressing those opportunities. Below are key processes that were addressed during the brainstorming sessions:

Process Overview Matrix

Product Area	Trade Processes	Post-Trade Processes
Interest Rate & Currencies	Verification, legal execution	Settlement/cash flow matching, netting, portfolio reconciliation
Equity & Commodities	Verification, legal execution	Settlement/cash flow matching, netting, portfolio reconciliation
Credit	Verification, legal execution	Settlement/cash flow matching, netting, portfolio reconciliation

In summary, key operational issues identified by industry participants for both trade and post-trade processes are:

2.1.1 Key Trade Process Issues

- Lack of standards and consistency in performing same day verification of trades and overlap of activities with the confirmation process creating inefficiencies.
- Lack of agreement in defining Confirmations, non-responsiveness, the need to enhance trade details with static data of uneven quality, divergent views on acceptability of electronic signatures and difficulty in delivering/receiving Confirmations which impacts the time it takes to confirm trades.
- The proliferation of non-standard clauses, unnecessary review of standard terms, the need for hard copy documents in certain jurisdictions and significantly varying legal practices from firm to firm which affect the ability to complete legal execution.

2.1.2 Key Post-Trade Process Issues

- Lack of standards and consistency in message formats to exchange cash flow details, inability/willingness to present all known cash flows to parties upfront and the inability to view a rolling forward view of payments contributes to inefficiencies while agreeing payment schedules.
- Lack of standards for when and how to net payments and inconsistency in stop period logic contributes to delayed resolution of payment breaks.
- Lack of industry consensus around what types of SSI's to provide to counterparties, the logic for how to select from multiple SSI's, and absence of processes for resolving issues with incorrect or outdated SSI's.
- Lack of agreement on the format and standards for representing static and incremental trade portfolio details.

2.2 High Level Process Flows

Due to the risks and delays inherent in the manual environment which currently supports OTC derivatives trading, some of the principal processes described below are controls which overlay the primary processing functions. The introduction of automation, at present limited in its product coverage, has achieved a simplified processing model. Ultimately, as discussed later in this paper, the market should develop comparable, consistent solutions for all products and processes.

2.2.1 Trade Processes

These comprise the mechanisms for verification, confirmation and legal execution of OTC deals and trade events as follows:

Verification The verification by the two counterparties to the trade of the principal economics of the deal. This is an overlay process carried out by an Operations function separated from Front Office traders to ensure both counterparties recognise the trade and correctly record the main details. Verification is currently a manual process performed over the telephone or by exchange of spreadsheets in circumstances where a full trade Confirmation has not been dispatched or received. Timeframes vary according to internal risk mitigation policies, usually in the range of Trade Date to Trade Date + 5 business days. Where deals are brokered, and a broker note confirming details has been received on Trade Date, independent verification is unlikely to be pursued between counterparties.

Confirmation The creation of a written or electronic record evidencing the full terms of a trade. The Confirmation expands on and confirms the oral legal contract entered into by Front Office personnel. The Confirmation dispatched by counterparty represents the trade as booked into that firm's system of record and is a legally binding document.

Historically, deal Confirmation has comprised a paper document dispatched by one or both counterparties by fax, email, post or courier to the other. By virtue of trade volume or deal complexity in a manual environment, Confirmations are not generally dispatched on Trade Date. Normal timeframes are T+1 to T+5 with complex deals taking significantly

longer. The longer a Confirmation is delayed, the greater the potential effects of the risk that a trade may be unrecognised or incorrectly recorded.

More recently, development of electronic messaging has introduced deal Confirmation by electronic record; the need to standardise data in controlled format limits the scope of electronic Confirmations to vanilla OTC transactions where a greater standardisation of the product has been achieved. Development of market services based on electronic messaging has significantly reduced the time taken to confirm trades.

Legal Execution

Legal execution of the Confirmation occurs when both parties to the trade agree the written or electronic record of the full trade terms. This is a distinctly different process to counterparties entering into a binding trade by oral (or other) contract.

Prior to legal execution, the manual process follows two distinct phases:

Checking – the manual tick-back of trade terms of an incoming written Confirmation against a counterparty’s own system records; and

Query Resolution – the negotiation of legal language or fallback provisions (or correction of economic errors) owing to the customised nature of OTC derivatives. This process causes severe delays in the legal execution of trades. Recent efforts within the OTC market to standardise language and methodology for high-volume ‘vanilla’ deals has reduced delays considerably.

In the manual environment, agreement of full trade terms typically occurs within T+30 calendar days, although negotiating non-standard language and complex structures can extend this period considerably.

At the point both counterparties agree a Confirmation, legal execution is achieved by:

One party sends the Confirmation and both parties sign this record (“**Signing**”);

Both parties exchange Confirmations which match in all material respects. Each party accepts the other party’s record of the trade (“**Matching**”)

Alternative methods are now available to electronically confirm deals which effect legal execution of a trade by:

Affirmation – a single electronic record of the deal is created (on Trade Date) and agreed by both parties.

Auto-matching – both parties each create an electronic record (usually T+0 or T+1) which is automatically matched against the other. Any mismatches between each party’s records will be resolved through the Query Resolution process.

Trade Events Trade events in the life-cycle of a trade (for example amendments, assignments/novations, cancellations) follow a similar process to trade confirmation and legal execution. Trade events typically fall within the processes developed to confirm and match deals and represent a formal amendment to the trade record evidenced by the original Confirmation.

2.2.2 Post-Trade Processes

These comprise the administration of OTC deals throughout the period to maturity:

Rate Fixing Rate and/or Spot Fixing takes place at regular intervals throughout the life of some OTC trades according to the terms of the deal. Most fixes for vanilla deals are taken from readily available and published rate sources. Between dealers, rate reset notices are rarely exchanged; however, the convention is still to supply end-users with a written notification of resets for customer service reasons.

Cashflow Reconciliation The current process for cashflow reconciliation between counterparties is almost entirely manual, focussing on cash flows to arise on the next upcoming Payment/Settlement Date. Typically, counterparties will contact each other by telephone to agree payment amounts, confirm dates and check receiving account details. Additional functionality is provided by spreadsheets and internet portals with some automation developed for Credit Derivative quarterly premium roll dates.

Settlement Payments due under OTC derivatives are settled individually by each counterparty by instruction to its paying agent to credit the counterparty's receiving bank. Escrow payments are occasionally used for settlement across different time zones. Payments across a number deals can be netted through bi-lateral agreement between counterparties to a single amount due on the same day in the same currency. The ability to net payments reduces credit and payment risk, although the extent to which counterparties are able to agree such arrangements depends upon their internal accounting systems.

Portfolio Reconciliation Currently, portfolio reconciliation exists only in limited form. This is usually carried out on an ad hoc basis by exchange of spreadsheets to define a specific population of trades for a limited purpose. Examples that fall into this category are bulk Novation of trades (e.g. upon transfer to a new legal entity after a merger or takeover) and sale of traded portfolios to a third party. The reconciliation process is manual.

Business Events For some OTC derivatives, for example options, equity and credit derivatives, certain business events may impact the nature of the trade throughout its life cycle. Examples are:

Exercise of options (giving rise to a cash settlement value or to the physical underlying derivative or instrument);

Corporate adjustments (mergers, takeovers, share issuance) in relation to equity derivatives;

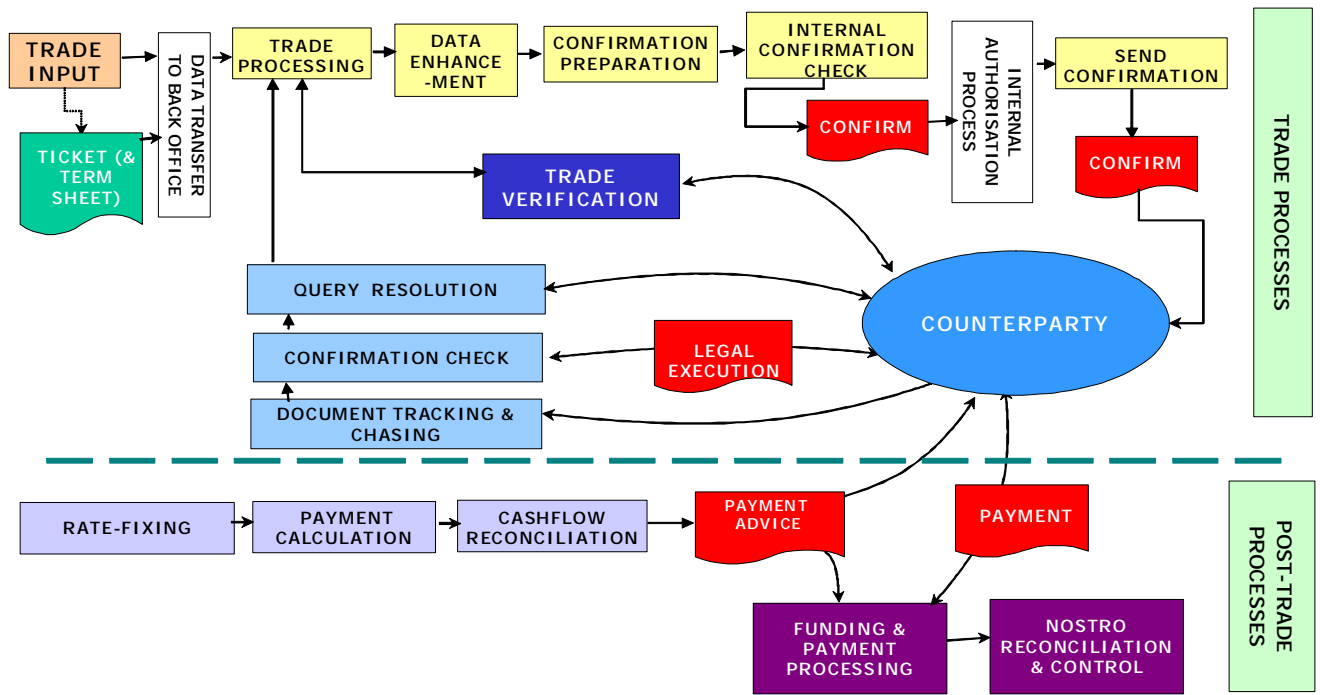
Triggers for exotic options (knock-in, knock-outs); and

Credit events in the case of credit derivatives.

The effect of any business event is handled by Front Office personnel and may give rise to a trade being rebooked, amended or terminated.

Depending on the nature of the business event, a written notification may be delivered by one party to the other without the need for an amended Confirmation. Where an amended Confirmation is required, business events invoke a repeat of the confirmation and legal execution processes.

LIFE OF A TRADE - THE MANUAL PROCESS



2.3 Current State Process Discussion

The processing model within the industry as it exists today is moving towards greater automation, with new vendor services coming to market in the past couple of years. These automated services have brought significant benefits, although different vendors have provided specific solutions for different products. This has meant that participants have needed to choose between new services which in themselves offer limited capability within each product group. In consequence, the market has not necessarily adopted a consistent solution and this lack of consistency has resulted in a less effective utilisation of the services available. Some key areas which affect development of market services are outlined below.

2.3.1 Trade Processes

Development of electronic messaging has enabled a growing degree of automation in the area of trade processing. Vendor services such as SWIFT, CMS, SwapsWire, DTCC and ICE provide the ability to generate and agree trade Confirmations. For example, SWIFT and DTCC use an auto-matching approach whereby each counterparty generates its own trade record from back office systems which is automatically matched by the vendor service with results and any discrepancies notified to both parties for resolution. SwapsWire uses an affirmation approach whereby a single trade record is generated and agreed by both parties, usually upfront in the process by Traders or Middle Office staff, before trade details reach back office systems.

Product Area	Vendor Services	Main Products (current)
Interest Rate Derivatives	SwapsWire	Interest Rate Swaps, FRAs, OIS
	SWIFT Accord	Interest Rate and Cross-Currency Swaps, FRAs
FX	SWIFT Accord	FX Options, FX Spot and Forwards
	CMS	
Credit Derivatives	DTCC	Credit Default Swaps
	SwapsWire	Credit Default Swaps
Commodities	ICEeC	Energy Swaps Options and IRGs

Automated vendor services have substantially reduced time taken from Trade Date of a transaction to effect legal execution with significant benefits:

- Ability to process increasing volumes of deals, volume-insensitivity.
- Full record of trade details (confirmation and legal execution) agreed, with reduction of risk through early detection of incorrect bookings.
- Automated environment requires data integrity; less opportunity for manual error when confirming deals and performing tick-back check prior to legal execution.
- Can be linked to internal automated systems to enable full straight through processing (STP).
- Collapsing existing trade processes to a single process event, i.e. trade verification, confirmation and legal execution are combined where the auto-matching/affirmation process is completed on Trade Date or T+1.

A number of issues can inhibit or prevent growth of this automated environment:

- Requirement for critical mass in terms of dealer participation in any vendor service.
- Requirement to provide cost-effective solutions to service a wider range of market-users.
- Strategic investment in IT infrastructure within member firms to enable effective use of vendor services.
- Ability by market firms to internally process and transmit trade data on Trade Date.
- Lack of standardisation in OTC derivatives from which vendor services are able to define defaults and product standards.
- Lack of process consistency across the market, for example in relation to trade and business events.

2.3.2 Post-Trade Processes

Automation of the post-trade environment is essentially limited to investment and development by market firms in their own internal processes:

- Automated capture from external published sources (e.g. Bloomberg, Telerate, Reuters) into back office systems of prices/rates for Rate and Spot Fixings.
- Automated calculation of payment amounts and notification of upcoming cashflows and dates.
- Dispatch to counterparties of written payment advice notes (where utilised).
- Nostro-reconciliation and identification of payment breaks.

In relation to market services, the central counterparty service through the London Clearing House enables counterparties with a high credit rating to achieve significant operational processing and capital benefits for interest rate swaps through:

- Give-up of trades to a bankruptcy-remote/high creditworthy counterparty, SwapClear, which qualifies for reduced risk weightings in relation to capital adequacy.
- Administration by SwapClear of primary post-trade processes throughout the life of a trade, i.e. rate fixing, cashflow matching and settlements.
- Netting of transactions.
- Collapse of post-trade processes to a single payment per day per currency per counterparty.
- Calculation by SwapClear of trade exposure and delivery/return of collateral.

Development of further central counterparty/clearing services within the OTC market could be inhibited by:

- Lack of defined message formats for extended use in post-trade processing across the main OTC product classes.
- Fragmentation of the current manual process.
- No availability of clearing facilities to suit a wide range of market participants.
- Lack of standards and requirements agreed by the market.
- Cost of service.
- Existing technology investments by key participants limiting appetite for funding of new services.

Early development of a cashflow matching service has been started by DTCC for quarterly premium roll-dates for Credit Default Swaps. This is currently being defined and piloted by a small group of OTC dealers within the market.

Other market initiatives to improve operational efficiency and reduce credit exposure exist at an early stage. Tri-Optima has achieved benefits with its swap tear-up service, where participants may submit swap trades for cancellation or partial cancellation against other participating counterparties through amalgamation and calculation of residual exposure.

The continued development of vendor services in the post-trade process model is a key aim in achieving volume-insensitivity and control over the manual environment which carries risks of errors, missed funding deadlines and incorrect payments. Historically, firms have over-laid several internal controls in order to correctly settle obligations on the due date. The resulting processes place limitations on the volumes and future growth that can be accommodated in OTC derivative products.

3.0 Future State

3.1 Future State Process Overview

The ISDA Operations Committee, advised by industry participants from the OTC derivatives dealers which form its Strategy Group, set forth a vision along with aggressive goals and timelines in its Strategic Plan published in December 2003. Subsequent discussions resulted in the following goals and timelines:

Goals

	<u>Vanilla</u>	<u>Complex</u>
1) Confirmations		
Verification – Principal Details	T+0	T+0
Dispatch – By one or both Ctpys	T+1	T+5
Checking & Resolution - of Queries	T+5	T+10

2) Settlement Efficiency & Cash Flow Matching

Submit - Schedule of Upcoming Pmts	S-10	S-10
Resolve - Discrepancies & Agree Match	S-5	S-5
Agree - Net Cash Flow	S-2	S-2

3) Intra Product Netting Capability

Undertake Intra Product Netting

- All OTC transactions
- Any Settlement Date
- 2 Legal Entities only

4) Portfolio Management

Product-Specific Timelines for Achieving Goals

Product	Process	Timeframe
Interest Rate Derivatives Credit Derivatives	Trade Verification Trade Confirmation Legal Execution	December 2004
Equity Derivatives FX Derivatives Commodity Derivatives	Trade Verification Trade Confirmation Legal Execution	June 2005
All OTC Product Classes	Cash Flow Matching	December 2005
All OTC Product Classes	Intra Product Payment Netting Portfolio Management	December 2006

In achieving the goals and timelines shown above, the ISDA Operations Committee identified market driven standards and automation as key implementation themes for industry participants. These themes were primary drivers in the development of recommendations for improving existing trade and post-trade processes by the initial group of brainstorming participants. Recognizing that OTC derivatives by their very nature represent somewhat customized transactions, the recommendations contained in this paper are intended to address operational issues primarily for less complex, highest volume products.

In some product areas, such as equity derivatives, there is still a fair amount of customization. Progress in improving the standardization is lagging with a large proportion of trade agreements still subject to considerable negotiation of language. As a result, these timelines may need to be altered to reflect the wider priorities of the industry as a whole and will be reviewed through formal Working Group sessions following publication of this Implementation Plan.

3.2 Implementation Recommendations

The high-level recommendations for improving operational efficiency outlined below are organized around key operational processes. It is envisioned that, upon broad agreement of the recommendations set out in this paper, an industry-led working group would be set up to explore further the detailed requirements around these recommendations. The detailed requirements would then be provided to a broad group of industry participants, brokers, end users and vendors.

As a goal, these detailed requirements will allow dealers, end users, service providers and other interested parties to make better investment decisions in enhancing or developing new applications, processes and capabilities.

3.3 Trade Process Recommendations

3.3.1 Trade Capture

Recommendation(s)

Achieve automated transfer of trade data for all participants from sales and/or trading to operations using straight-through processing techniques by T+0 to enable affirmation/auto-matching and settlement processes to commence. Improve completeness and integrity of trade data by making a participant's own affirmation/matching statistics readily available to encourage quality data on the front end of the process.

Background

Whilst trade capture is essentially an internal process, delays in accurate and complete capture of key trade details and data transfer to operational processing systems do impact a firm's ability to confirm and settle its trades on a timely basis. For this reason, trade capture has been identified as an area for focus within the market collaboratively and individually within firms.

Implementation Considerations

Financial institutions today achieve varying degrees of automation between trade capture and downstream systems. The development of automated processing systems should be supplemented with institutional policies that require traders to capture complete trade details at time of entry, with any exception resolved by T+0. Institutions will also need to develop controls to ensure the integrity of data entered during initial trade capture to support timely processing from downstream systems.

3.3.2 Verification/Confirmation/Legal Execution

Recommendation(s)

The ISDA Operations Committee recommends collapsing the verification, confirmation and legal execution processes. Legal execution of a trade will be recognized once all details of a trade have been agreed (via affirmation or auto-matching) and acknowledgement of agreement is available to all parties.

The sharing of trade data bilaterally or through a market service(s) using FpML for data description and messaging will facilitate exchange of trade details by T+0 (with allowances for global time zones), eliminating the need for an additional verification process. Current solutions might be built satisfactory on other existing standards, with no immediate need for change. For longer term evolutions FpML should be considered.

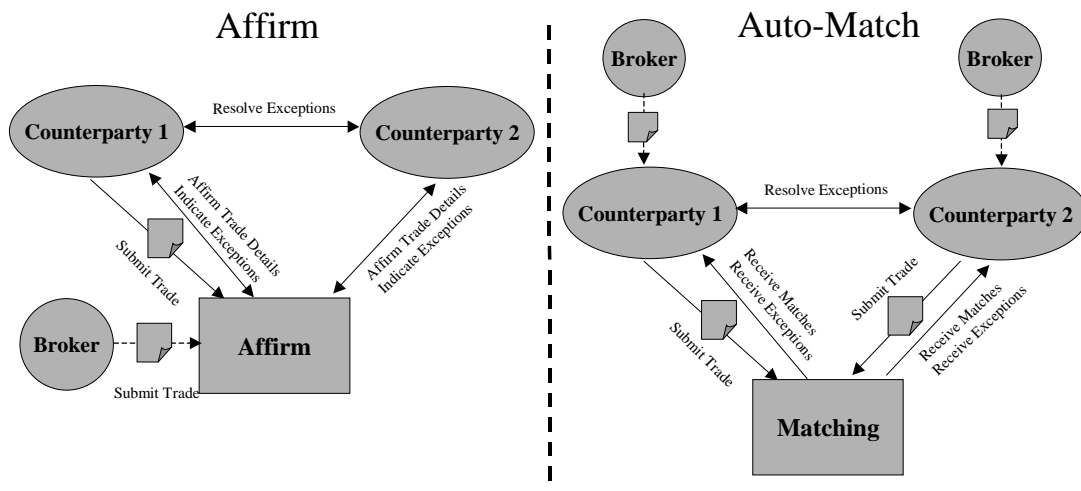
For vanilla transactions, results of the affirmation or auto-matching process should be available no later than T+1, with queries resolved by T+5. It is recommended that the industry seek greater standardization among existing service providers to provide automated affirmation/auto-matching which avoids duplicating investment by industry participants.

Background

Legal execution of OTC derivative trades can be facilitated by a variety of means today; affirmation, matching, signing, etc. In addition to differences in the processes that can support legal execution, the specific data that is agreed by counterparties and the processes by which the data is created, exchanged and agreement evidenced can differ by institution, product, service provider and/or geography. These varying processes tend to extend the timeframe until legal execution takes place, resulting in additional risks.

Implementation Considerations

There is not widespread agreement within the OTC derivatives industry with respect to whether affirmation or auto-matching are acceptable long-term approaches for agreeing the full record of trade details. As such, the ISDA Operations Committee recommends that both approaches be supported in adopting solutions. Below is a high level view of data flows for each process, utilizing a matching service.



The affirm or matching capability highlighted above could be provided in a number of ways. A third-party affirm or matching service(s) could be utilised similar to capabilities provided by existing service providers. Alternatively, in-house affirm/matching application(s) that meet requirements and standards as defined by the industry could be developed and utilized by market participants interested in affirming or matching bilaterally. While not prescribing a single model, the Operations Committee recommends avoiding duplicate investment by market participants where possible.

Automating the affirmation or matching processes requires the industry to agree the number and type of data fields to be compared for each product type; adopt standard formats and define affirm/matching business rules. Together with a supporting legal framework, this is the recommended approach to achieve legal execution of trades. To the extent that participants utilize different market services, some consideration will need to be given to handling affirmation/matching between services with different practices.

Moves to develop wide FpML messaging capability will require identification of means with which to exchange these messages (service-to-service, firm-to-firm or service-to-firm). Consequently, a standard protocol through which to transmit FpML that is secure, cost effective and readily available will need to be established (e.g. the web via https,

private leased lines, etc.) In addition, consideration for how messages will be created and parsed by users will also need to be addressed.

3.4 Post-Trade Process Recommendations

3.4.1 Matching Settlement & Netting of Payments

Recommendation(s)

The consensus of the ISDA Operations Committee members is for creation of a standard, automated means for matching trade cashflows. Counterparties would make available a rolling 30-day forward view of cash payments along with appropriate standard settlement instructions, updated each day for new trades and trade events (amendments, cancellations, novations), bi-laterally or through a service. Along with standardizing the cash flow matching process, industry participants will agree a set of business rules for combining cash flows as appropriate in facilitating the matching process. The industry feels that central settlement of payments, while deriving certain efficiencies, should remain an optional capability utilizing existing service providers for those participants who choose. Finally, the industry should agree on a standard set of business rules for netting payments on an intra-product basis.

Background

There is little in the way of standards or consistency in the representation of cash flows to counterparties for verification to support the payment process. As a result, agreeing payment schedules is difficult, time consuming and error prone. In addition, the occurrence of certain trade events can complicate the payment process even after agreeing original schedules. Finally, with insufficient attention paid to collecting and maintaining valid standard settlement instructions, errors can multiply.

In searching for solutions to address these issues, industry participants identified the need to establish more definitive standards and promote more consistency in handling netting of payments and the impact of trade events.

Implementation Considerations

The ISDA Operations Committee, in consultation with industry participants, has identified the need to establish standards and business rules for presenting and matching trade cash flows to facilitate the payment clearing process. The recommendation at this time is for individual counterparties to calculate their own rolling 30 day forward view of cash flows and match bi-laterally or thru a service based on a set of matching business rules. The intention should be to leverage existing capabilities and already established business rules and services where possible, while encouraging broad based product coverage.

As a first step, the industry should agree the timing and nature of cash flows to be compared prior to settlement for the automated matching to be effective. Cash flows would be recalculated and updated as necessary for trade events, so that an accurate rolling view is always presented. If desired, a clearing service could be utilized to settle trades on behalf of counterparties.

Potential models for cash flow matching are:

- Institutions calculate and present cash flows bilaterally, an automated cash flow matching routine is performed and exceptions exchanged among counterparties.
- Cash flows are provided to a cash flow matching service or central cash clearer by one or more counterparties, a cash flow matching routine is performed and the results provided to counterparties.

It is agreed that a capability for centrally storing and maintaining standard settlement instructions should exist, within or outside of any future payment clearing facilities. Counterparties would be responsible for initially providing accurate and complete instructions and then for updating instructions as necessary. Settlement instructions would be available to counterparties through a central service or provided bi-laterally as part of daily cash flow matching process.

As an initial goal, the industry should be also looking to establish a common set of standards and business rules for netting payments within agreed upon product groupings. Any existing, agreed upon netting rules should be evaluated as a starting point.

3.4.2 Portfolio Management

Recommendation(s)

In order to actively manage the growing portfolio of trades, reduce required reconciliations, track changes in mutual trade populations resulting from Trade and Business Events, identify potential unrecognized novations/assignments and facilitate collateral management processes, the ISDA Operations Committee recommends that the industry adopt a formal portfolio management process. The key components of the portfolio management capability would be a capability to perform daily reconciliation of portfolio trades if required, portfolio management capabilities (including trade tear-ups and/or mass cancellations) and/or optional central counterparty. Standards and business rules around the portfolio reconciliation, trade-tear-ups and/or mass cancellation of trades should be agreed upon by industry participants, leveraging existing capabilities and consensus available in existing market services.

Background

Manual daily reconciliation of trades with all counterparties today is a cumbersome and time-consuming process. As a result, a complete reconciliation of all trades and details with counterparties is not currently undertaken. The risk arises that missing or duplicate trades and novations/assignments may not be recognized on a timely basis. Portfolio management and the optional central counterparty capability will also help reduce the overall level of these risks.

Implementation Considerations

(a) As Needed Portfolio Reconciliation

Automating the portfolio reconciliation process is the only means to efficiently reconcile trades with counterparties, if desired. Therefore it is recommended that the industry adopt a standard process for presenting portfolio trade details in FpML format for reconciliation. Several existing service providers, including SWIFT, SwapsClear,

Swapswire and DTCC have indicated that they are planning on building this capability in the near future.

There are a variety of means of accomplishing automated portfolio reconciliation.

- 1) By using a matching service as highlighted above, a portfolio of trades could be produced by the matching service from those submitted and provided to counterparties for matching. These portfolio trades could be provided to counterparties in an automated form utilizing FpML so that matching against source system records can be performed. In the event that exceptions were noted and changes made, the changes would be submitted as part of the trade process and updated the following day by counterparties.
- 2) Counterparties could provide a portfolio of trades in FpML format to an affirm/matching service, which could match trades against affirmed/matched trade records and highlight exceptions back to counterparties.
- 3) Counterparties could bi-laterally match trade portfolio details utilizing a matching engine implemented by one or both counterparties by exchanging trade portfolios in FpML format utilizing FpML message standards.

(b) Active Portfolio Management

The industry will need to adopt a single, standard set of business rules and policies for actively managing the growing portfolio of trades, including tear-ups or mass cancelling of trades. The goal is to establish rules that can be applied to as many products as possible. Clearly, existing capabilities should be leveraged when establishing these requirements.

(c) Optional Central Counterparty

Key considerations for the optional central clearing capability include how to efficiently provide this service cost effectively for an extended range of OTC products (i.e., through an existing provider, central clearer, independent third party, etc.), the legal structure (liquidation, continuation), membership and capitalization, among others.

It is recommended that a working group look at existing models of for a central counterparty to develop a consensus of best practices, with a target set of capabilities and a gap analysis relative to existing providers. The working group should collate detailed requirements and work with existing or new providers in meeting the requirements identified by the market participants.

4.0 Conclusion & Next Steps

4.1 Conclusion

The recommendations in this paper identify certain core areas which will require action to accelerate delivery of automated processing for derivatives.

The industry should adopt a standard secure protocol for exchanging data utilizing FpML. This should include the means to deliver electronic messaging using a common platform which supports inter-communication between market participants and market services. Where current solutions work satisfactory with other existing standards, there is no immediate need for change. However, for longer term evolutions FpML should be considered.

Firms should be free to make business decisions when deciding which market service to subscribe to or when providing in-house capability (subject to agreed minimum standards). However all firms should be able to offer comparable levels of automated capability for processing OTC derivatives.

As described in this paper, moving to exception processing in OTC derivatives will require sustained and extensive development of market-based standards. Continuing focus in expanding the range of FpML messaging and standardisation of OTC derivative products to enable automated processing are key drivers.

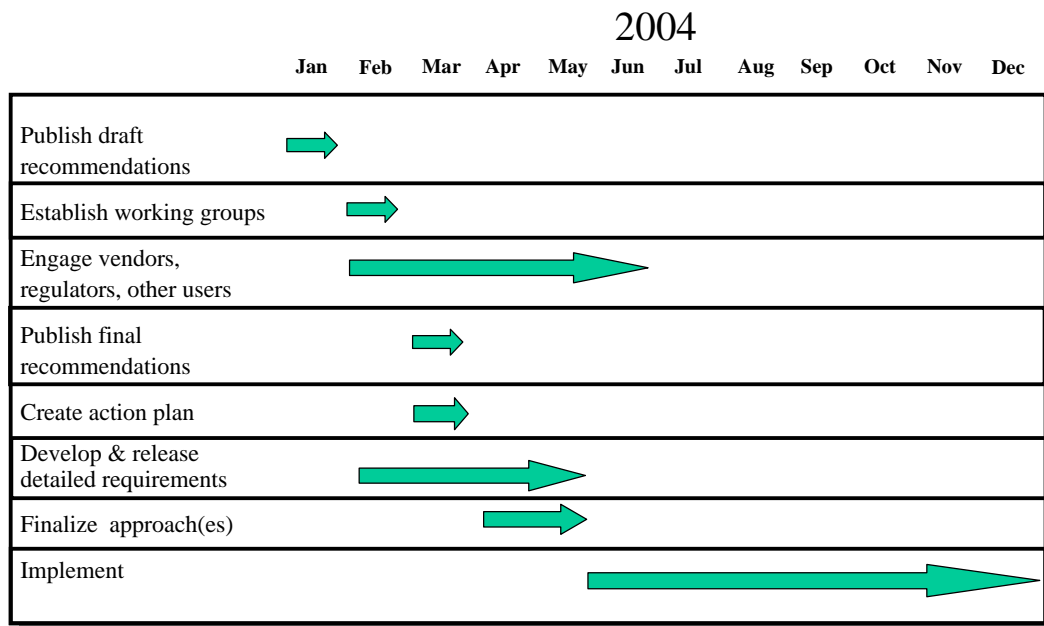
The catalyst to achieving the goals highlighted in the Strategy paper will be open communication and continued collaboration among dealers, end users and service providers to identify and prioritise process improvements. While many of the recommendations listed above are departures from existing processes, precedents for some of the changes already exist in this and other markets.

4.2 Next Steps

The ISDA Operations Committee recommends the creation of a single working group to drive forward the recommendations highlighted in this paper. The composition of the working groups will include large and small dealers, end users, and service providers and regulators on a discretionary basis. The mandate of the working groups will be to define detailed business requirements that will serve as a guide for institutions and service providers to direct more efficient investment in products, services and processes. In addition, the working groups will be responsible for driving standards, highlighting technical architecture considerations, and working with market vendors to develop service specifications.

The ISDA Strategy Group has laid out an aggressive schedule for achieving improvements in operational processing of OTC derivatives. Highlighted below is an action plan for achieving the first set of milestones for improving the ability of participants to verify, confirm and execute interest rate and credit derivatives trades:

Proposed Timeline for Auto-Affirm/Matching Capability (For Interest Rate and Credit Derivatives)



Annex

Last updated: May 10, 2004

The Implementation Plan has been co-ordinated through the ISDA Operations Committee as an operational blueprint for evolution of the OTC derivatives industry to the benefit of all market participants. This Annex identifies member firms specifically supporting the drive to develop standards and services in line with the Implementation Plan:

ABN Amro
Bank of America
BNP Paribas
Barclays Capital
Calyon
Citigroup
Commerzbank
Credit Suisse First Boston
Deutsche Bank
Dresdner Bank
Goldman Sachs
Greenwich Capital
HSBC
JP Morgan Chase
Lehman Brothers
Merrill Lynch
Mizuho Capital Markets
Royal Bank of Scotland
Societe Generale
Morgan Stanley
UBS

ISDA member firms wishing to evidence their support in developing this Implementation Plan should contact Karel Engelen (kengelen@isda.org).