ACI
THE FINANCIAL MARKETS ASSOCIATION

since 1955 balancing the financial markets
since 1955 balancing the financial markets

ACI Americas ACI Asia ACI Africa ACI Europe ACI Middle East

# The Model Code

## The International Code of Conduct and Practice for the Financial Markets

## New Chapter
## FX Best Practices Operations

March 2012

# FX Best Practices Operations

## Table of Contents

# 1. Confirmations

## *1.1 Confirmations*

### 1.11 Industry Best Practice for Confirmations

***Key Terms:***

**Confirmation:** is the information exchanged and agreed between the counterparties of a trade at the time of booking that details the financials of that transaction. The confirmation may in addition include the legal terms and settlement instructions. The confirmation process is fundamental in ensuring operational risk is minimized for both parties to the trade and that settlement may take place efficiently.

**Master Agreement:** a master agreement (or master contract) is a contract reached between parties, in which the parties agree to the terms that will govern future transactions or future agreements. A master agreement permits the parties to quickly negotiate future transactions or agreements, because they can rely on the terms of the master agreement, so that the same terms need not be negotiated for each subsequent trade.

**Central Counterparty (CCP):** Clearing refers to the management (risk management, transaction monitoring, netting) of a transaction after the matching of a buy and sale trade and prior to the legal fulfillment of the respective obligation. It exists in two forms, either as a CCP, in which case the CCP becomes the counterparty of the original buyer and seller, or as a facilitator, in which case the original buyer and seller remain legal counterparties to each other.

**Buy Side:** The Buy Side comprises investing institutions such as Mutual Funds, Hedge Funds, Asset Managers, Insurance Firms, Corporates and Governments that buy or invest in securities and financial instruments with a view to increasing their assets.

***Introduction:***

The development of markets, types of financial products, communication mechanisms, automation, and increased regulation create an environment where all market participants should have similar capabilities. Regulators along with the main participants have the opportunity to leverage general rules and best practices that may be applied throughout the life of a trade and the processing thereof.

Every trade of any financial product has specific stages during its lifecycle that need to be validated and confirmed and require attention to detail to ensure the trade is processed correctly. From the moment the trade is agreed, until the moment it has been confirmed and finally settled, the different stages in the lifecycle will be governed by the terms included in the confirmation.

Efficiency and accuracy have been considered in all the best practices and recommendations discussed in this document. They are two of the most important features in the operational process and help to avoid unexpected discrepancies and delays which may increase risks.

### Best Practice 1 – Responsibility

- Operations senior management are responsible for ensuring the correct processes are in place for confirming trades during their lifecycle. They should ensure the appropriate resources and procedures are in place to achieve this.
- These procedures should be closely monitored, available to all staff and shared with senior management.
- Staff managing the confirmation process should clearly understand their roles and responsibilities.
- The Operations department should have clear procedures that allow them to react to unexpected situations, as well having clear escalation procedures to minimize potential disruption or delays in the confirmation process.
- When a trade is to settle in a CCP or CLS, the parties may agree not to exchange confirmations. If so, this agreement should always be agreed in writing between the counterparties. However no counterparty should unilaterally eliminate confirmations for these trades.

### Best practice 2 – Segregation of duty

- The process of confirming trades should only be done by Back Office/Operations staff.
- Staff performing this function (Back Office/Operations) should be independent and separate from those that agreed and executed the trades (Front Office).
- Front Office should not have the ability to modify any confirmations.

### Best Practice 3 - Buy Side

- If a buy-side customer does not have the capability to send confirmations, or access to automated or electronic means, the buy-side customer should sign and return the sell-side confirmation. Signatures should be validated against the authorised signatory list.
- A critical step in reducing confirmation risk within the industry is to further engage the buy-side community and encourage new improved processes (particularly in terms of electronic confirmation methods).
- Encourage the buy-side to leverage their confirmation solutions in increasing standardization and automation and to reduce manual confirmations that may cause unnecessary delays. Automated confirmations can be facilitated through many means, such as vendor confirmation platforms as well as dealer portals.

## Best Practice 4 – All trades should be confirmed

- Both parties of a trade should send confirmations for every trade executed as unconfirmed trades can lead to operational and financial risk as well as to legal discrepancies.
- Any exception to this rule should be clearly documented between the counterparties and approved by the responsible Relationship Manager, Operations Management and Compliance Staff.
- In some situations, exchanging confirmations may appear superfluous, such as trades that are net settled, deals traded on electronic platforms or internal trades. Nevertheless, it is good practice to exchange confirmations even in those situations in order to reduce risk.

## Best Practice 5 – Sending

- Both counterparties should send confirmations, or positively affirm trades within two hours of the trade being booked.
- If the prior is not possible, the confirmation should be sent on trade date at the latest.
- All confirmation should be issued to "Non" Front Office personnel
- The confirmation of a trade should only be sent once, as multiple confirmations for the same trade may create confusion, delays and or potential errors for the counterparty.
- Copies of confirmations to counterparties should be marked as "Duplicate" or "Copy" and should have always the same content even if the same or another distribution channel is requested by the counterparty.

## Best Practice 6 - Receiving and Matching

- Matching should be performed as soon as possible by both counterparties upon receipt of the confirmation and by no means later than close of trading day. Doing so will minimise the potential risks associated with the matching process.
- Both counterparty processes should have the highest level of automation. The matching process should highlight any discrepancies between counterparties which should be investigated and corrected in the shortest time possible.
- Special attention should be paid to open own and open their confirmations as these may lead to operational and market losses.
- Confirmation matching should be a pre-settlement workflow activity.

## Best Practice 7 - Technical Means

- The confirmation of a trade should be sent received and processed in the most automated and standardized way possible.
- Counterparties should select the most secure and fastest mechanism to execute and confirm trades with the other counterparty.
- An electronic format is the most effective mean of sending information. The information should be structured using standard message types and sent through a secure communication method. This type of confirmation allows both counterparties to reduce operational risk through the automation of the validation of a trade's event lifecycle.

- Voice affirmation is a type of confirmation that should be avoided and only used where no other methods is available. Additional measures such as recorded lines should be adopted in the event of verbal confirmations. All verbal confirmations should be followed by an electronic or written confirmation.
  Voice affirmation by non-front office staff may be useful for trades done through a broker; in this situation formal confirmations should also be exchanged between counterparties and considered as overriding the voice affirmation.
- Physical confirmation should be used when no electronic mean is feasible and may be facilitated through fax, telex or mail. However this poses operational risk due to the time it may take and the manual activity required for processing. For example a mail confirmation may not be received by the counterparty until after settlement date.

### Best Practice 8 - Unconfirmed Trades

- Both parties should as a general rule and on a best efforts basis confirm trades.
- Trades that remain unconfirmed on trade date should be reported as soon as possible to Operations and Front Office Management.
- Participants should have escalation procedures in place which are known by all Operations staff. This should detail how to resolve unconfirmed trades or those with counterparty discrepancies and reflect trade and confirmation age. The procedures should clearly determine the escalation points for issues, the person responsible for escalating and the procedures for reporting items to Operations, Front Office and or Credit management. It should also include the actions to be taken in order to protect the institution in the case of unconfirmed trades.

### Best Practice 9 - Broker Trades

- Brokers should confirm all transactions to both counterparties immediately by an efficient, electronic and secure means of communication. As a best practice confirmations should be received within two hours of the trade being booked at the outset. It is important to note that broker confirmations are not bilateral confirmations between the principals of the trade and therefore do not carry the weight of a bilateral confirmation.
- Trades arranged via a broker should also be confirmed directly between the counterparties to the transaction using their usual system generated confirmations.
- The broker should always obtain acknowledgement from trader that all deals have been agreed and if not should ensure that any identified discrepancies are resolved as a matter of urgency. Lack of response from a trader should not be construed as an agreement to a trade(s).
- In the case of Tri-party trades the notification give-up between the executing broker and the prime broker will be sent within the same timeframes and parameters as broker confirmation trades mentioned above.

## Best Practice 10 - Legal Aspects

- Once a trade is agreed by the Front Office it is a binding agreement for the counterparties.
- From that moment until the transaction has settled both parties should use their best efforts to resolve any discrepancy according to market practices and within the legal framework of the product traded.
- Once the confirmation is accepted by both parties to a trade, it will determine the rights and liabilities of each party.
- For bilateral legal clarity both counterparties should sign a Master Agreement. This agreement should contain the broadest range of products, conventions, market practices and provisions in order to facilitate and document the activity between both parties.
- Whenever a Master Agreement exists between two parties, the confirmation should conform to the standards, provisions and content of the market or product. If there is no standard, the confirmation should make reference to the Master Agreement.
- The use of Master Agreement allows the trading parties to establish legal comfort and certainty of the trades done, minimizing legal risk of those transactions. It will govern all the trades that explicitly refer to the Master Agreement. Bilateral trading should be executed in a legal framework known to both sides.
- All terms and exceptional provisions will be according to the Master Agreement and ensures both counterparties acknowledge the trade and any and all exceptional situations that may occur during the life of the trade.
- Any new or changed standard form “template” documents used to document contractual commitments and all bespoke contracts should be reviewed and approved by Legal.

## Best Practice 11 – Market Conventions

- The content of a confirmation is the details, economic and non-economic, which identify both sides of a trade in a clear manner.
- The necessary type of data in a confirmation, depending on the product, are:
  - Economic, such as initial and final amounts, rates.
  - Dates including trade day, initial day, final day, settlement day and any relevant day during the life of the trade.
  - Identification of product, counterparty, currency, index.
  - Legal provisions that are not included on the Master Agreement that governs the trade or, the legal aspects when there is no Master Agreement signed between the parties. When there is a Master Agreement signed by parties it has to be referred to in the confirmation.
  - Market conventions that will be used during the whole life of the trade and which affects dates, calculation of the amounts, and events of the trade.
  - Instructions to be used for settlement actions during the life of a trade (even if these instructions are the standard settlement instructions (SSI), should be sent to the counterparty

- All of the aforementioned information should be expressed in the clearest manner in order for both parties to acknowledge their responsibilities. When a confirmation is governed by a Master Agreement the confirmation should conform to the formats specified for the market / instrument.

## Best Practice 12 - Review Amendments

- If a discrepancy creates any risk this should be closed out in the market without inference that either party is wrong pending the final resolution of the dispute. Any difference should be reconfirmed. A new confirmation should be provided by the counterparty whose original confirmation was incorrect.
- In the event that a trade is amended by one or both parties, then a new confirmation should be generated, and the confirmation cycle should restart and continue until the trade is completely matched by both parties.
- All amendments with change in financial trade details should be sent to counterparty via a cancellation and a new confirmation or a cancellation and an amend confirmation. Changes to settlement instructions should also be reconfirmed via an amend confirmation.
- Advice of cancelled deals should be issued within two hours of a trade being cancelled. Failure to issue a cancellation can result in confusion between parties and increases the risk of settlement issues.
- Amendments to transaction details should be conducted in a controlled manner that includes sales, trading and operations in the process. If operations staff is responsible for amending/cancelling a deal, they should obtain prior written authorisation from sales and trading before processing the amendments/cancellations.
- Particular care should be taken for amendments to FX Swaps transactions after the settlement of the near leg.
- Exception reporting on amendments and cancellations should be made available to sales, trading and operations management on a daily basis.

# 2. Settlement, SSI, Netting, Performance & Capacity Management in FX Processing

## *2.1 Settlement*

### 2.11 Industry Best Practice for Settlement with regards to being Prompt and Accurate

***Key Terms:***

***ACCOUNT WORKFLOW (AW):*** This is an institution's on boarding procedure for a newly opened client relationship.

***STRAIGHT THROUGH PROCESSING (STP):*** This enables trades to be processed by various front office and operations systems automatically, without the need for re-keying or other manual interventions. This may be subject to legal and regulatory restrictions.

***Introduction:***

Errors and discrepancies in payment and settlement instructions result in expensive overdraft and interest claims. Prompt, clear and timely instructions are required to eliminate costly mistakes. In order to achieve prompt and accurate settlement of trades it is important for an institution to incorporate the collection of basic static data within their on-boarding procedures. This is a key step in developing and maintaining an integrated STP process. The goal of STP is to reduce systemic risk and to improve the certainty and quality of settlement while optimizing efficient operations.

**Best Practice No. 13: New Client Relationship – Account Workflow (AW)**

- All necessary client static data such as SSI's, confirmation methods, global settlement limits together with client contacts for the Front Office and Operations should be collected within an institution's on boarding procedure (AW).
- The AW initiation turnaround time should not exceed 2 working days in order to be ready for trading.

**Best Practice no. 14: Straight Through Processing (STP)**

- STP is recommended to minimize settlement risk.
- Static data such as confirmation method and Standard Settlement Instructions needs to be set up in all relevant systems before trading to ensure high STP and low operational risk.

## 2.12 Industry Best Practice for Settlement with regards to Procedures and Controls around Cut off Times

***Key Terms:***

***Payment Cut Off:*** The payment cut off time is the last possible time provided by the institutions' correspondent banks to receive commercial payments for settlement of a particular currency on a given value date.

***Introduction:***

Recent crisis situations in the financial markets made institutions aware that payment cut off times are extremely important in order to guarantee a smooth liquidity exchange. Incorrectly managed cash flows within an institutions' cash management departments such as missed payment cut off times lead to additional funding costs.

**Best Practice No. 15: Know your Trade**

- Know all individual currency funding and payment cut off times and add them to all relevant systems.
- Know the status of your trade.
- A trade booked in the Front Office should be available real time within the cash management department for nostro account management.
- Prioritize trade settlement considering payment cut off times including currency sensitivity and size of amount.
- Ensure payment instructions are in place for all outstanding trades to avoid exception handling caused by missing payment instructions at payment cut off times.
- Each transaction should be processed always in advance of the payment cut off time.
- Ensure trades are matched with the counterparty on all financial details and settlement instructions before payment release.

**Best Practice No. 16: Know your Clients and your Stakeholders**

- There should be clear and structured escalation procedures for the management of incorrect funding balances between Front Office, Cash Management Department and Operations. This should also include any other impacted area such as required. This is particularly important during crisis situations.
- Implement and maintain comprehensive counterparty contact lists together with preferred communication medium in the event of missing information related to trades payments and settlement.

**Best Practice No. 17: Fast turn around time/Responsiveness to Changes**

- SSI and payment cut off changes should be immediately updated in the static date system. Ensure the information is updated real time in connected downstream settlement systems to adjust/change new and existing trades.
- Payment cut off changes caused by the institution's correspondent banks, by exceptional national bank holidays or by a crisis in a specific country should be communicated immediately.

## 2.13 Industry Best Practice for Settlement with regards to Communication with Nostro Banks

**Best Practice No. 18: Send Electronic Messages for Expected Receipts**

- A bank should send its nostro banks an electronic message that communicates its expected receipts of funds. This enables nostro banks to identify payments that are directed to an incorrect account early in the process, to correct payment errors on a timely basis and does ensure that the bank receives the exact funds.

**Best Practice No. 19: Use Real-time links to process Cancellation and Amendment of Payment Instructions**

- A bank should establish a real-time communication mechanism with its nostro bank to process the cancellation and amendment of payment instructions. Heads up phone calls to support smooth handling especially in emergencies are encouraged.

**Best Practice No. 20: Prepare for Crisis Situations**

- Banks should anticipate crises and prepare internally.
- Operations employees should understand:
  - The procedures for crisis situations affecting settlement
  - Alternative settlement procedures and how they are executed
  - Who to inform and how to inform nostro banks of changes or cancellations in payment instructions.
- Current nostro bank staff contact lists containing emergency contact numbers and contact information for each nostro bank should be maintained and distributed.
- Test crisis situations systematically to ensure that employees are familiar with alternative procedures and can manage them effectively.

## 2.14 Industry Best Practice for Settlement with regards to Controls if Beneficiary is a Third party

***Key Term:***

***Third party beneficiary:*** Recipient of the payment different to the counterparty of the relevant trade.

**Best Practice No. 21: Know your actual Beneficiary and your Third Party**

- Third party payments are not preferable due to the potential risk which they create, i.e. money laundering.
- SSI changes due to a third party payment request need to be confirmed by a written documentation that has been authenticated by the actual contractual beneficiary.
- Clear understanding of the underlying reasons is needed in order to determine its potential risk with regards to the Anti Money Laundering (AML) and Combating Financing of Terrorism (CFT) laws.
- Never release a third party payment without following your internal bank and compliance procedures.
- Market participants should have clear procedures in place regarding the screening of SSI's against official CFT-Lists and regarding Money Laundering related control reports.

**Best Practice No. 22: Know your Contractual Beneficiary's Subsidiaries**

- Collect and maintain all subsidiaries of your contractual beneficiary.
- Pre-confirm the collected list with the internal Compliance department in order to proceed with such type of Third Party payments in future without gathering compliance approval individually.

## 2.15 Industry Best Practice for Settlement with regards to CLS Usage, CLS Deal Input, CLS Rescinds

***Key Terms:***

***CLS:*** Continuous Linked Settlement is the global standard for FX settlement. All of the world's major banks participate in CLS.

CLS Settlement mitigates the risk associated with FX settlement across time zones. In addition, CLS has improved efficiencies in FX settlement and facilitated growth in the market. CLS changes the way the financial services industry operates by linking central banks and the world's leading financial institutions in a unique global real-time settlement system that has become the world's largest settlement service by value.

The CLS Group of companies is an industry-owned consortium that exists to deliver the CLS Settlement service to the market. The main holding company, CLS Group Holdings AG, is owned by CLS shareholders and its directors are representatives drawn from shareholder institutions. The Group was formed in 1997 and the settlement system has been operational since 2002. The CLS vision is to be the industry standard solution for settlement related services to the FX market and multi-currency, cash final settlement of traded financial products.

***Introduction:***

The CLS system is a process of instruction submission, authentication and matching, with related daily funding and settlement. On each settlement date, upon determining that the accounts of the submitting Settlement Members satisfy each of the risk management tests, CLS simultaneously settles each pair of matched instructions by making the corresponding debit and credit entries across the Settlement Members' accounts at CLS Bank.

Since the inception of live service in 2002, CLS has become the market-standard for FX settlement between major banks. Without CLS there is a (potentially devastating) risk that one or more parties pay away funds to another institution but do not receive any reciprocal funds due to them, this is known as settlement risk.

**Best Practice No. 23: CLS Usage should be expanded**

- Institutions active in FX trading should be CLS participants.

**Best Practice No. 24: Market Makers should be CLS Members or Third Parties**

- CLS participation is encouraged for major market making banks including retail FX-market makers but also other banks, large corporations, investment and hedge funds, as a means of mitigating settlement risk.

**Best Practice No. 25: CLS Deal Input and Matching**

- Non Prime Brokerage trades should be matched within two hours at the latest after a trade has been agreed with the counterparty.
- Prime Brokerage trades require a longer matching time due to the affirmation by the underlying client. However, matching needs to be affirmed by the end of the trade date at the latest.

**Best Practice No. 26: CLS Rescinds**

- Advise of a cancellation within two hours of the trade being cancelled.
- In the event of a crisis situation with a specific client of a particular CLS member, there should be tested, documented, procedures, within the member institution in order to facilitate a bulk rescind.
- The type of the crisis situation and the consequences of the bulk rescind, should be considered very carefully before performing any bulk rescinds. CLS settlement members may rescind instructions unilaterally provided that the rescind messages reach CLS Bank before the 00:00 CET deadline. If the deadline has passed only bilateral rescinds are accepted, until the 0630 CET bilateral rescind deadline.
- Amendments to an FX trade's financial and other details (e.g. trade date) should be sent to the counterparty via a cancel as well as a new confirmation.
- Amendments to an FX trade's settlement instruction "CLS to outside CLS" should be submitted via a cancellation and a new confirmation.
- If an instruction remains unmatched and/or unsettled through CLS Bank, and there is more than one FX trade with a single counterparty to settle in the same currencies, then both sides should bilaterally agree to settle the trades net outside of CLS Bank.

**(see also Industry Best Practice for Performance & Capacity Management in FX Processing)**

## *2.2 Standard Settlement Instructions (SSI's)*

### 2.21 Industry Best Practice for SSI's around its Usage, Changes, Controls and Archiving

***Key Terms:***

***STANDARD SETTLEMENT INSTRUCTIONS (SSI'S):*** The agreement between two financial institutions which defines the receiving agent bank details for the settlement of trades for a specific currency. These agreements allow a more efficient and controlled process in settling trades. Utilising SSI's may also lower the potential for fraud.

***Introduction:***

It has become crucial for an institution to have a proper SSI process in place in order to mitigate any potential settlement risk with regards to incorrectly formatted payments. This includes the exchange of SSI's, responsiveness to SSI changes from the institution's clients and the capability to adjust existing trades with a new set of SSI's.

**Best Practice No. 27: Every Institution should have a separate/independent SSI Team**

- In order to have a clear segregation between the duties within Operations each institution should have a separate SSI team to prevent/minimise the potential risk for a fraud.
- SSI's are to be stored and maintained in a dedicated static data system.
- SSI set up shall go through a 4-eye-principle to ensure its correctness, its validity and prevent from fraud.
- Third party SSI's are only to be set up following your internal bank and compliance procedures.

**Best Practice No. 28: SSI Usage**

- The institution should be in a position to set up SSI's of its clients per product and currency.
- SSI's shall be set up with a start date.

- End date to be applied upon receipt of instructions to change SSI’s accordingly and replaced with the “new” SSI with the appropriate start date. Where a change to SSI’s is to take place, previous SSI’s should be “deactivated” to mitigate risk around use of incorrect SSI’s.
- SSI’s which are stored and maintained in a dedicated static data tool shall be provided to all settlement systems in order to ensure STP.
- If an SSI is provided by Front Office, Sales or Trading, full authentication and authorisation of that SSI should be independently performed by Operations.

**Best Practice No. 29: Exchange of SSI’s**

- SSI changes and notifications by an institution shall be communicated to its clients ideally at least one month, but at the latest ten working days, before implementation regardless of the chosen channel or platform.
- SSI changes and notifications should be submitted by an institution to its clients via an authenticated Swift message, preferably MT670/671. E-mail, fax and letter is not an authenticated message type and requires a Sarbanes Oxley call back procedure to validate the sender of the message in order to minimize the potential risk of fraud.
- SSI’s included in a Swift trade confirmation should be a matching criteria in order to mitigate any settlement risk.

**Best Practice No. 30: Controls and Archiving Logic around SSI’s**

- The SSI static data tool requires an audit trail functionality.
- SSI notifications by an institution’s clients are to be stored based on the resident laws.
- Electronic SSI service providers should ensure that secure online user access is available, user access is controlled and regular recertification is performed.

**Best Practice No. 31: Changing SSI with regards to the Period of Notice and for Outstanding Trades**

- All outstanding deals should be settled in accordance with the SSI in force on the value date (unless otherwise explicitly agreed at the time at which any change to an existing SSI is agreed).
- SSI changes provided within spot window shall only be applied to outstanding transactions outside of the spot window. This is due to the fact that for certain currencies a payment message will have already been generated in order to pay with good value date. All trades within the spot window shall be changed based on a bilateral agreement between the parties.
- This applies when a counterparty becomes a CLS Settlement Member (SM) or CLS Third Party (TP) Member and moves trades from out of CLS to CLS as well as for changes from TP to SM or a TP changes the SM.

**Best Practice no. 32: Single changes to default SSI's**

- Any alterations to original payment instructions or SSI's are to be notified immediately and directly to the counterparty.
- Alterations are to be agreed by the relevant parties involved either via a written legally binding document or an authenticated confirmation message such as MT300 Swift.

## *2.3 Netting*

### 2.31 Industry Best Practice for Netting with regards to Procedures and Controls around Netting Agreement and Automated Netting

***Key Terms:***

***Netting agreement:*** Documentation to support settlement with counterparties on a net payment basis. Market institutions should aim to reduce the settlement and related credit risk on currency transactions by establishing legally viable bilateral currency payment and transaction netting agreements with counterparties.

***Automated (online) netting:*** Software to perform the automated calculation of netted payments.

***Introduction:***

Past events made a lot of institutions aware that in order to reduce the settlement and related credit risk on currency transactions, CLS settlement and/or netting agreements between counterparties, should be established. Clearly procedures for confirmations and for confirming bilateral net amounts reduce the settlement and related credit risk and such procedures should be included into the netting agreement.

The usage of an automated netting system enables proper calculations in each currency and reduces throughput time and errors in the process.

**Best Practice No. 33: Establish Netting Agreement**

- The Operational process should be supported by establishing a legally binding agreement if not mentioned in the Master Agreement between counterparties.
- Agree on confirmation procedure.
- Agree on procedure for confirming bilateral net amounts (use of voice logging is recommended).
- Agree on alternative procedures in case netting cannot be performed.
- Ad hoc netting can be performed using phone with voice logging.

**Best Practise No 34: Automated Netting**

- The usage of an automated (online) settlement netting system is encouraged.
- Counterparties should employ automated/online netting systems as part of their standard procedures.
- It is recommended to use the new Netting Position Advice message (MT370). The MT370 is used to advise the netting position of a currency resulting from foreign exchange, non deliverable forwards (NDF), options and other trades. It also specifies the settlement information for the currency.
- Cut-offs times for netting should be included in the systems.
- SSI's should be in place.

## *2.4 Performance & Capacity Management in FX Processing*

### 2.41 Industry Best Practice for Performance & Capacity Management in FX Processing

***Key Terms:***

***Performance:*** primarily concerned with throughput within a system and is taken to be the measure of how long specific activities take to complete or how many repeated iterations can take place in a given period of time (e.g. transactions per hour).

***Capacity:*** primarily concerned with answering the question 'how much' - the capacity of a system or business process is taken to be the measure of the quantity of work in total that can be processed and stored by the resources available over a particular period of time.

***Introduction:***

The events in the past highlighted that FX trading practices and the tools now employed by Institutions to assist this can exert considerable pressure on the end-to-end FX eco-system. As a consequence, the best practices listed below set out the minimum standards that firms participating in the FX market should aim to achieve.

**Best Practice No. 35: Sufficient technical and operational capability should be employed to ensure that an Institution's end-to-end FX processing can take place in both normal and peak market conditions without undue impact on its processing timeline.**

- Projected average/peak business volumes and the time periods in which these are likely to occur and must be processed in (both outbound and inbound) should be clearly defined. Similarly, the peak duration (the length of time where peak input capability must be sustained) should also be defined;
- Sufficient scalable end-to-end technical capacity and associated operational resources should be employed to achieve the above measures at all times (with appropriate contingency headroom built in to reflect an institution's business profile). This is likely to involve not only the firm's own systems (e.g. Trade Capture, Confirmation, Operations processing, Finance, Risk, CLS backing architecture) but other aspects of connected external infrastructure such as networks;
- For Institutions whose business profile may include high volume trading, consideration should be made with respect to the use of Aggregation tools for consolidating trade volumes.
- The End to End FX operational capabilities of an institution should be commensurate or exceed its Front Office Capabilities
- For firms operating from multiple locations or business lines, this capability should exist wherever trade generation may occur;
- The capability should accommodate failure or Disaster Recovery scenarios where an institution may need to "catch up" on trade data not processed whilst either recovering from system problems or when failing over to its standby facilities.
- End to End testing (on appropriately scaled architecture) should be employed to prove the above. Such testing should take place at least annually (both internally and through to CLS for those firms participating in the CLS Settlement Service).

**Best Practice No. 36: Clearly defined Capacity and Performance Management processes should be in place.**

- Utilising both historic analysis and projections of business generation, robust modelling processes should exist whereby future volumes (3-6, 12 and 24 month periods) are predicted as accurately as possible for both standard and peak business flows on a monthly, daily and intra-day (up to hourly) basis (thereby capturing routine variations in trade flow patterns);
- Appropriate change management and technical planning processes should be present to ensure that any changes arising from the above are deployed at least six months ahead of the anticipated requirement date;
- This process should be iterative and should take place, at a minimum, on an annual basis or as per internal business- and IT-plans.
- A comprehensive, documented performance and capacity framework should exist which describes the processes above and which should be reviewed and endorsed on an annual basis. This framework should be "owned" at senior level.

**Best Practice No. 37: Defined mechanisms in place to respond to extreme changes in demand**

It is possible that either in-house system failures or extreme swings of market volatility may cause volume/throughput surges and associated backlogs that may exceed those peak capabilities that an institution may have employed. Institutions should ensure that appropriate real-time monitoring mechanisms are in place to detect such volume build-up thereby providing as much "reaction time" as possible. In preparation, it is equally essential that an Institution's processes recognise the possibility of such eventualities and that appropriate measures are in place to safeguard both their systems and the wider eco-system should they occur. Such processes could include the ability to:

- Prioritise the submission of trades by value date and to manage internally any build-up of spot/future dated trades so that they can be subsequently submitted in a controlled fashion over an extended period.
- Via real time reporting and tracking to dynamically monitor volume trends to identify significant changes in volume profiles (either up or down) and, especially, to identify surges whose profile would exceed existing peak provision.

- To have in place appropriate crisis management and invocation processes so that defined (and expeditious) actions can be taken should volume trends indicate that planned peaks may be exceeded. For example; introduction of additional capacity and performance “on demand”, consolidation of trades into larger value and smaller volume trades.
- Limit the trade generation volume so that it does not threaten to exceed the technical capabilities of other systems within the Institution.

(see also V. Industry Best Practice for Settlement with regards to CLS Usage, CLS Deal Input, CLS Rescinds)

# 3. Reconciliations, Investigations, Discrepancies, Claims

## *3.1 Reconciliations*

### 3.11 Industry Best Practices with regards to Reconciliations

***Key Terms***

***Reconciliations:*** An accounting process used to compare the statements received from correspondent banks (nostro) to the account owning institutions general ledger. This ensures that all incoming and outgoing payments to and from the bank account match the institutions records.

***Introduction:***

It is essential that nostro reconciliations are performed on a daily basis. This daily check improves control and reduces operational risk and potential interest claims by identifying missing payments, unidentified funds and other discrepancies in the shortest possible time.

**Best Practice 38 - Importance of Account Reconciliations**

- Account reconciliations are necessary to detect missing, failed or erroneous entries at an early stage and to provide counterparties/clients with prompt notification of issues. Reconciliations reduce financial risk related to interest claims, incorrectly funded accounts and miss booked /unbooked trades.
- Reconciliations related to transactions and balances should be conducted for all cash and custody accounts.

**Best Practice 39 - Regular Reconciliations**

- Cash accounts should be reconciled as soon as an updated account statement is available, usually at the close of the previous day. For accounts with high value and volume of transaction intraday reconciliations should be considered. Custody accounts should be reconciled after each account movement or at least once per month.

**Best Practice 40 - Timely Investigation and Clarification**

- In the event of any discrepancies identified through the reconciliation process an investigation should be initiated with the Front Office, clients, correspondent banks or custodians as appropriate as soon as possible. The Operations department should have clear procedures that allow them to react to unexpected situations, as well having clear escalation procedures to minimize potential disruption or delays in the investigations process (see also chapter 2 Discrepancies / Investigations).

**Best Practice 41 - Segregation of Duties**

- Appropriate segregation of duties should exist between pre and post settlement operations units.
- Reconciliations should be carried out by staff members who are not involved in processing of transactions that would affect the balances of accounts held with correspondent banks.

## *3.2 Discrepancies / Investigations*

### 3.21 Industry Best Practices with regards to Managing Discrepancies and Investigations

***Key Terms:***

***Discrepancies:*** Discrepancies are mismatches which are normally detected during the daily reconciliation process and should be investigated and resolved in a timely manner.

***Introduction:***

Where discrepancies between two parties arise every effort should be made to obtain a quick resolution. Ongoing differences should be escalated promptly to the Front Office and Operations Management and disputes should be settled with clients in a professional manner.

**Best Practice 42 - Non-receipt of Payments**

- Individual organizations should determine how they monitor, report and notify internal parties of the non-receipt of payments.
- Reporting relating to non-receipts should be reviewed by Operations Management daily and appropriate follow-up action taken to ensure swift resolution. Management Information concerning failed trades including a trended ageing analysis should be presented to Senior Operations Management monthly.

- The resolution of issues should be expedited within a reasonable time frame that should not exceed 5 working days from the value date of the expected settlement.

**Best Practice 43 - Settlement Discrepancy**

- The following settlement/payment discrepancies can be considered:
    - Late payment
    - Payment to an incorrect correspondent or counterparty
    - Payment of incorrect amount
    - Duplicate payment
- In order to obtain a quick resolution the counterparty or correspondent should be informed at the earliest opportunity. This also applies for unknown receipts. It is recommended that updated contact lists are available.
- Investigation cases received before noon should be handled within the same day and those received after midday within 24 hours.

**Best Practice 44 – Communication**

- In order to ensure a quick resolution of a discrepancy first contact with the counterparty should be made by phone, preferably on a recorded line. In the event that time zone differences make phone impractical then authenticated fax, email or authenticated Swift message is the recommended and preferred method of communication. Where legally necessary a letter on company headed paper can be attached.

## *3.3 Claims*

### 3.31 Industry Best Practices with regards to Claims

***Key Terms***

***Use of funds:*** Interest earned by an institution as a result of the failure of counterparty's settlement.

***Back Valuation:*** Back dating of a transaction on a correspondent bank account to adjust the value date on a settlement that failed to occur on the originally agreed date in order to reduce a the associated loss.

***Compensation Claim:*** Claim for interest compensation from a counterparty as a consequence of delayed settlement. The claim should be paid in full or, if possible arrangements should be made to back value the transaction on the counterparty's account with their correspondent bank.

***Introduction:***

Claims occur due to settlement discrepancies and it is important to establish guidelines in order to obtain quick resolution.

**Best Practice 45 - Unjustified Enrichment**

- The basic principle behind claims for compensation is that no bank should be unjustly enriched or injured by the action/error of another bank. All parties involved should make every effort to achieve an equitable resolution to the problem, therefore claims should be made for only the costs incurred by the injured party and should not include add-ons for administration costs, except when agreed as general practice or local compensation guidelines have to be applied.

**Best Practice 46 - Minimum Threshold**

- Claims of less than US$ 500.-- are regarded as “de minimis” and are not expected to be submitted.

**Best Practice 47 - Time frame for Claims and Processing**

- For every late receipt a claim should be sent to the counterparty as soon as possible but within 30 days. The maximum time limit should be 60 days. Claims after 60 days of the actual settlement date are not expected to be submitted.
- Acknowledgement of receipt of a claim should be confirmed within 15 days of receipt via email or SWIFT.
- Acceptance or rejection of a claim should be advised within 15 days of receipt via email or SWIFT. The claimant will have a window of 15 days to refute any rejected claims. The 15 day cycle will continue until claim is mutually agreed or rejected.

**Best Practice 48 - Calculation Methodology for Claims**

- Compensation claims:
  - Claims are calculated on the full principal amount of the failed transaction with the interest rates imposed by the Agent Banks (€: EONIA rate, CHF: Reference interest rate Swiss National Bank, $: Fed. Funds rate), unless a higher negotiated interest rate is to be applied. On a global basis no additional charges should be added. However in accordance with local market practices this may happen.
- Back-valuation/Netting:
  - Back-valuation should be allowed in all applicable cases.
  - Note: Special rules are applied for € transactions. (See Appendix 1).
  - Netting of claims permissible upon bilateral agreement.

- Use of funds:
    - Use of funds should be paid by Party A that due to a payment error by Party B, had use of funds. Credit interest earned during the time of use should be reimbursed by Party A to Party B. Use of funds payments should be settled within 35 days. Note: Special rules are applied for €. (See Appendix 2).

**Best Practice 49 - Communication of Claims**

- Claims should be communicated in writing via e-mail or preferable via authenticated SWIFT. The information included in the claim should take into account the details of the transaction involved, number of days of the payment was delayed and the cost, together with calculation methodology being claimed.

**Appendix 1:**

Calculation formula for back value request is:
The average of each day's EONIA rate + 0.25 percent/360 + EUR 100 administration fees depending on local market practice and only if interest amount is higher than EUR 100.--.
If the EONIA rate + 0,25 is more than the ECB marginal lending facility rate, than the flat ECB rate is to be used.

**Appendix 2:**

Calculation formula for UOF request is:
The average of each day's EONIA rate - 0.25 percent.
If the EONIA rate – 0.25 is less than the ECB deposit facility rate, than the flat ECB rate is to be used.

PS: Additional source is the ISDA Best Practice for Interest Compensation Claims.

# 4. General Setup, Controls, Segregation of Duties, BCP

## *4.1 General Setup*

### 4.11 Industry Best Practice for General Setup

**Best Practice 50 - Core Competencies**

- Senior management of market participants should ensure all areas are adequately staffed. They should ensure that every staff member is competent and trained systematically and continuously for the role(s) they perform.
- A thorough understanding of the complete process flow of all products including initiation, capture, external validation, settlement, reconciliation and associated controls is essential for each individual and team involved.
- Training programs should be implemented accordingly.
- Business and IT Processes as well as Operation user manuals should be precisely documented and reviewed by management on at least an annual basis.

**Best Practice 51 - Operational Risk Awareness**

- Market participants should fully understand operational risks.
- Whenever possible action plans should be put in place that mitigate identified operational risks.
- A report describing operational risks, the most significant incidents and corrective action plans/follow-up should be made at least once a year and provided to senior management.
- It is good practice to collect and analyse incidents, near-misses so as to set up preventive action plans for the future.

**Best Practice 52 - Globally Consistent Processing Standards**

- Banks with several operation centres should define bank-wide standards and make sure these standards are adhered to.
- Autonomous branches should be closely supervised to ensure adherence to standards.

**Best Practice 53 - Participation in the Professional Community**

- Senior management should participate in the professional community and in industry forums in order to remain up to date with the latest developments (e.g. market practice, regulatory issues, standards, systems and technology).

**Best Practice 54 - Contact Lists**

- Contact lists of all counterparties should be kept and updated regularly
- Storage should be in a secure environment with access limited to those with an appropriate level of responsibility.

**Best Practice 55 - Escalation Procedures**

- Escalation procedures should be in place to ensure timely solution of critical issues.
- Issues should also be tracked and once closed, retained and referred to so corrective action can be monitored to conclusion.

**Best Practice 56 - Regular Business Partner Meetings**

- Regular internal business partner meetings should be held with participants from the whole process chain (Front to End including control areas) in order to share information, to ensure quality, to identify risks and to agree on measures to be taken.
- Core MIS should include dealer discipline MIS and any contributors to potential constraints such as system outages and volumes. Key Risk Indicators (KRI's) should be discussed as part of a set agenda. Front Office should chair and invite all relevant contributors to the meeting.

**Best Practice 57 - New Business**

- Before a new product or business strategy is launched, all relevant areas – namely Front Office, Credit Risk Management, Financial Accounting, Human Resources, Information Technology, Legal and Compliance, Operations, Product Control, Risk Measurement and Management, Tax and Treasury— should be involved so the new offering can be introduced in a controlled manner.

## *4.2 Controls*

### 4.21 Industry Best Practice with regards to controls

**Best Practice 58 - Counterparty Identification**

- No trading should be done without first identifying and setting up the counterparty. This includes Know Your Customer procedures, as required by the regulators, set up of Settlement Instructions and Confirmation Method.
- Amendments to key date fields (e.g. customer standing data) should be subject to 4 eyes control over input, and only changed on the basis of appropriately authorised documentation provided.
- Identification and setup should be completed in less than 2 working days.

**Best Practice 59 - Retaining Transaction Records**

- Operations are in charge of maintaining complete records of all transactions and any additional documentation as per internal guidelines and regulatory requirements.

**Best Practice 60 - Retaining Phone Conversations and Electronic Messages**

- Clear guidelines regarding recording and retention of phone conversations and electronic messages should be defined and implemented.
- These guidelines should be based on legal and regulatory requirements. Compliance with the guidelines should be reviewed as part of regular self-assessment processes.

**Best Practice 61 - Amendments to Transaction Details**

- Amendments and outright cancellations should be captured and reported to the Front Office Management on a daily basis.

**Best Practice 62 - Operational Performance Indicators**

- Operational efficiency, STP rates, quality and control effectiveness should be the main performance indicators used for target setting and performance reporting.
- Exceptions should be recorded and corrective actions tracked.
- Reviews of the indicators should take place with Senior Management at least monthly. Reviews within Operations should take place on a more frequent and regular basis.

**Best Practice 63 - System Access**

- Access to production systems should be rigorously controlled. Profiles for functions are encouraged. Profiles should be reviewed by an individual's manager semi-annually.
- Users should not have access to change system functionalities. All systems should have a clear business ownership assigned and all changes to a system must be approved by the business owner.
- Developers should have restricted and controlled access to production systems. A complete audit trail of all actions by users and developers should be saved by the system and be readily available for review.

## 4.3 Segregation of Duties

### 4.31 Industry Best Practices with regards to Segregation of Duties

**Best Practice 64 - Segregation of Duties and Reporting Lines**

- Operations management should ensure that clear segregation of duties exists within operations (see also Best Practice 27 and 41) and between operations and other business areas (see also Best Practice 2).
- The distinct duties should be reflected in separate reporting lines.

**Best Practice 65 - Independent Risk Controls**

- Market participants should have highly developed, adequately staffed and fully independent audit/control/risk management departments covering all areas of their institution.
- Rigorous and transparent self-assessments should be performed at least annually with exceptions recorded and corrective action tracked.
- Banks should offer employees the opportunity to raise issues and concerns anonymously.

## 4.4 Business Contingency Planning (BCP)

### 4.41 Industry Best Practices with regards to Business Contingency Planning

**Best Practice 66 - Existence of BCP**

- Each firm should define a BCP strategy and a detailed BCP plan as required by their regulator.
- Ensure Senior Management involvement.
- The BCP procedures should be updated and tested at least yearly.
- Participation in national or global Business Continuity tests organized by Central Banks or market infrastructure providers (e.g. CLS) is recommended.

**Best Practice 67 - Communication In Case Of Crisis**

- FX Market operations participants should be aware of the existing crisis communication platforms such as Fed 14 calls and Operations Managers Groups crisis calls. Connection to those platforms should be checked at least yearly.
- Internal communication procedures with clearly defined roles and responsibilities should be designed to ensure fast reactions to crisis situations.

# 5. Electronic Trading

## *5.1 Electronic Trading*

### 5.11 Industry Best Practices with regards to Electronic Trading

**Introduction:**

The use of electronic trading interfaces is encouraged as it can:

- reduce operational risks
- reduce human error
- improve the efficiency of the market
- increase transparency
- reduce fraud
- provide full audit trails for compliance

This section offers guidance on best practice and in so doing recognises the clear difference between acceptable and natural exploitation of market inefficiencies compared to unacceptable direct manipulation of those inefficiencies for profit. The FX market remains dominated by the over-the counter (OTC) business model. These different methods may lead to conflicting views on how to address disputes or market frictions. This guidance aims to provide a consistent approach to the treatment of the trade life cycle.

The FX market is going through a period of significant change including:

- rapidly growing number of new trading systems and venues
- increased use of "liquidity aggregators"[1]
- fast growth of trading automation.
- explosion of high frequency trading models[2]
- increased integration into other asset classes
- significant technology investments
- broadened client base to include retail business (higher ticket number lower nominal).

This has all made for a less distinct demarcation of the traditional boundaries of the trading entity and regulatory purview. The continued rapid growth of this way of transacting FX business and the entrance of new entities to the market have introduced liquidity providers, risk managers, intermediaries and end users to new

[1] Liquidity Aggregators in its simplest form present to the end user a combined or aggregated view of FX prices from several venues. Placing orders and executing trades is then managed by the aggregator according to customised algorithms

[2] High Frequency Trading models run automated short term strategies that result in rapid order entry and execution. The average size of deal tends to be small

types of risk and have modified existing risk issues and opened up parts of the market to potentially sophisticated exploitation of the differences in the capabilities of trading systems. Adherence to the following suggested best practice should help reduce some of these possible inequities. But the onus to design robust processes and clearly understand terms of engagement between counterparties, intermediaries and clients, remains with individual firms.

These proposals recognise that participants in the wholesale FX market are regularly trading on slightly different terms but agree to conform to a set of common principles in the way they and their clients transact business with each other.

Please be aware that individual electronic trading platforms/vendors have their own compliance rules, regulations and best practices and that these must be adhered to in addition to the guidelines set out below.

**Best Practice 68 - E-trading process according to market standards**

- Ensure that the complete e-trading process, from pricing to risk impact to settlement, conforms to recognised standards and market conventions.

**Best Practice 69 - Access to systems**

- Ensure access to systems internally and at the client interface is strictly controlled by non front office risk officers and that robust encrypted security processes are in place.
- All participants should only use their own user id and password and the sharing of Ids and passwords should be forbidden.
- Access to and the ability to initiate deals via electronic trading must be subject to documented controls and appropriate approval rights.

**Best Practice 70 - Terms of engagement**

- Ensure that the terms of engagement for each e-trading channel are fully documented, understood and signed off by all counterparties, clients, intermediaries and suppliers making use of these systems.
- Electronic trading operators should maintain up to date register of counterparty details.

**Best Practice 71 - Legal status of all potential counterparties**

- Market participants should be absolutely clear as to the legal status of all potential counterparties before allocating credit or trading status.

**Best Practice 72 - Prices**

- All prices and orders made on e-commerce platforms must be posted with a clear intent to be tradable
  - Market makers in particular must ensure that they are adequate and appropriate for their trading style.
  - Prices quoted should be firm unless clearly labelled as indicative. There needs to be a clear genuine intent to trade.
  - Credit manipulation is not acceptable market behaviour[3].
  - All participants must ensure that credit files are checked and updated as appropriate on a regular basis.
  - It's recommended that Electronic Communication Networks (ECN's) have mechanisms that control price flashing either through a Minimum Quote Life and/or Message to Trade ratio's. (Note: MIFID rules are not clear yet on this issue).

**Best Practice 73 - Trades should be dealt at "current" market rate**

- Trades should be dealt at a "current" market rate and not at an off-market rate away from a price appropriate to the executions venue and market participants involved. The practice on the part of market principles of inputting bids and offers away from the currents market price with the intent to profit from input errors is an abuse of the system and not acceptable behaviour.
- Trades which occur at off-market rates should, by agreement between the two counterparts and as soon as practically possible, either be cancelled or have their rate modified to be at an appropriate market rate.
- Algorithms require appropriate supervision performed by staff with commensurate levels of experience.

**Best Practice 74 - Risk officers are fully trained**

- Ensure that risk officers are fully trained in how to monitor and control multiple e-trading systems.

**Best Practice 75 - Liquidity providers should be cognisant of reputational risks**

- Liquidity providers should be cognisant of reputational risks when supplying liquidity for onward third party consumption e.g. how their liquidity and/or name is used when white labelling liquidity.

**Best Practice 76 - Contingency**

- Regularly test for loss of access to external electronic liquidity platforms, including the provision for loss of service to clients.

[3] Where a system relies on bi-lateral credit it is unacceptable for participants to influence prices in a market by temporarily withdrawing credit in the system for particular or all counterparties on that system

- Systems capacity to cope with extreme volume events resulting in greater number of trades being input into systems should be regularly reviewed and appropriate to business models/goals.
- All automated processes must have a manual contingency available that is documented in the Operating Procedures.

**Best Practice 77 – Archiving**

- All records should be archived and appropriate audit trails must be maintained as required by the regulators and internal policies.

**Best Practice 78 - Time stamps on e-trading**

- Time stamps on e-trading platforms need to be internally and globally synchronised to ensure appropriate tracking of trades.

**Best Practice 79 - Process for the swift resolution of disputes**

- There should be a clearly defined and documented process for the swift resolution of disputes arising from mishit[4] and broken trades[5].
- It is recommended that those disputes be resolved within 30 minutes to at least ascertain any outstanding position.

**Best Practice 80 - Process outlining procedures**

- There should be a clearly defined and documented process outlining procedures that follow in the event of a breach of the rules and operating procedures of the platform.

**Best Practice 81 - Institutions acting as Prime Brokers**

- Institutions acting as Prime Brokers, where applicable, must be responsible for the swift resolution of disputes, mishits, broken trades on behalf of their clients. It is not best practice to delegate this resolution downstream to their client or to rely on the execution venue to resolve disputes (unless the execution venue has explicitly specified that it undertakes that process and responsibility).
- Market participants providing access for others to liquidity venues, for example prime brokers, are responsible for the activities of their end users, for their adherence to the rules of individual execution venues and for adherence to market best practices.

[4] A “mishit” occurs when a trader makes a genuine error in the execution of an order. The amount, the side, the rate are all examples of types of error that can occur on an electronic platform

[5] A “broken trade” occurs when there is a system break where one or both parties to the deal are unclear as to whether the deal has been done

**Best Practice 82 - Ensure that there is human oversight**

- Ensure that there is human oversight of automated liquidity and trade management processes including management of order books and stops.
- Ensure that personnel overseeing operations have the necessary authority to resolve trade disputes, broken trades and mishits within the recognised timeframe.

**Best Practice 83 – Maintenance of Front and Middle Office contacts**

- E-commerce platforms and ECN's should maintain an up-to-date global (24 hour coverage) database of clients front and middle office contacts at Prime Brokerages, intermediaries and Institutions that have auto execution facilities to enable the swift resolution of mishits, broken trades and disputes.
- Multiple SSI's set up is a new recommendation in the market. This allows an institution to separate certain FX business from each other.

**Best Practice 84 – Counterparts providing access for others to liquidity venues**

- Market participants providing access for others to liquidity venues, for example prime brokers, are responsible for the activities of their end users, for their adherence to the rules of individual execution venues and for adherence to market best practice.