

Cleared Non-Deliverable Forwards (NDFs)

Version 3.5

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DISCLAIMER

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

Document History

| Version # | Change Date | Description of Change | Page |
|---------------|-------------------------------------|--|------|
| 0.1-0.11 | June, 2013- March, 2014 | Original version was expected to cover global requirements of both cleared and non-cleared NDFs falling under any regulatory jurisdiction that could be instructed as spot or FX deals. | All |
| 0.12 | April, 2014 | Scope reduced to only cleared NDFs. Converted back to an ISITC MP instead of a draft SMPG MP since we have reduced the scope to not include non-cleared, other forward products that require clearing outside of Dodd-Frank as well as MT300 FX confirmation process. | |
| 0.13 | May 14, 2014 | Updates to document based on ISITC Derivatives/Settlements call • Fixing/closing instructions from the Inv. Manager removed | |
| 0.14 | May 30 th , 2014 | Activity Diagram and Sample MT304/202 messages added | |
| 0.15 | July 08 th , 2014 | Scope section updated around commissions/fees and fixing trades Field recommendations and samples incorporated for fixing trade MT304 closing instruction. | |
| 0.16 | July 09 th , 2014 | Updates based on review of draft document with ISITC Settlements WG on conference call | |
| 0.17 | July 15 th , 2014 | Flow diagrams updated to incorporate footnotes on flows between actors for pre-SEF and post SEF environment | |
| 0.18 | September 8 th , 2014 | Updates to document post ISITC September conference discussion Scope section on partial vs. full offset of NDF open impacting recommendation of final offset at fixing date Update to flow diagram wording on submission of trade to SEF vs. execution Updates to final offsetting NDF recommendations across three scenarios (Full, partial and no offset). Removal of no offset as a scenario within MP. Open to update the field recommendations of the final NDF open vs. NDF close at fixing in section 3.2 on page 17. | |
| 0.19- 0.20 | October 22, 2014 | Updates to document post ISITC conference call 10/22/14 Scope section updated Final offset field recommendations consolidated into same field recommendations as the initial NDF open Samples section updated | |
| 1.0 | Nov. 11 th , 2014 | Formatting edits in preparation for ISITC Content Committee Review • Added market practice recommended as mandatory or conditional values to field format recommendations • Updated final offsetting at fixing date sample to include clearinghouse (89J) and Clearing Member (81J) fields | |

| | | as mandatory | |
|---------|---|--|--|
| | | Updated all instances of fixing/valuation date to refer to date only as fixing date Updated Scenario 1 samples with the partial offset to occur on separate day from initial NDF open. Also updated margin calculation table with footnote stating the calculations only reflect the final two days leading up to fixing for illustrative purposes. Value/Settle date of final offset sample updated to April 4th to be consistent with scenario. Removed reference to closing instructions from field recommendations fields 32B and 33B | |
| 2.0 | June, 2015 | SR2015 Field Additions: Execution venue - 22V Execution Timestamp – 98D Confirmation Timestamp – 98G Clearing Timestamp – 98H | |
| 3.0 | January, 2017 | SR2016 Field Changes: Existing field 22M and 22P length from 20x to 30x New field 22L Regulatory Jurisdiction SR2017 Field Changes: New 94A::ANDF codeword for NDFs Removal of 17N and 17F field recommendations as a result of new network validation rules around the new 94A::ANDF codeword New field 32E: Settlement Currency New field 30U: Valuation Date New field 14S: Settlement Rate Source New field 21A: Reference to Original Transaction New Identification of Financial Instrument | |
| 3.1-3.5 | January 25 th , 2017 – March 20 th , 2017 Reviewed with WG April, 2017 | Additional SR2016 changes made for additional of commission/fees currency/amount field 34B and commission/fees settlement date field 30F included within Seq. D – Accounting Information of format recommendations. Further limitations on mandatory net gain/loss and previous reference fields updated with proposed workaround defaults to pass SWIFT validation. This proposed over an alternative approach to use a narrative field for the 34B and 30F information. Samples updated to reflect CCP commission fields on the initial leg and movement of cash in the scenarios section. | |

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1.0 Background

ISITC has agreed to move forward with documenting a market practice with limited scope to help clarify the business process and messaging requirements for NDF Foreign Exchange instructions that require clearing. This reduced scope is in response to the slow movement of clarity on regulatory requirements globally as outlined below in the scope section in order to finalize a recommendation on the immediate need for cleared NDF Forward opening and closing/fixing instructions to the global custodian/fund accountant.

1.1 Scope

This document provides guidelines and contains the template for non-deliverable foreign exchange instructions via the SWIFT message format. The document will address message formats for the following methods:

- MT304 Instruction of Cleared Non-Deliverable Foreign Exchange instructed as opens to initiate a position, partially/fully offset prior to fixing date or close out/offset at or after fixing date prior to value date are in scope of this market practice
- MT300 NDF foreign exchange opening or closing/fixing matching confirmation has been removed from scope. It
 was determined the Execution Facility (SEF) or middleware provider will perform pre-acceptance checking
 (staging, pre-credit check with FCM and request for quotes from executing brokers) and matching in
 SEF/middleware provider with the CCP/FCM. Therefore, there is no need to exchange MT300s between the buyside and sell-side for either central or local matching.
- Non-deliverable forwards not requiring CCP clearing due to legal jurisdiction or parties involved are not in scope.
 Non-cleared NDF best practices will need to be clarified either through separate market practice or through a previous SWIFT Message Usage Guideline document produced.
- Other CCP cleared foreign exchange forwards beyond NDFs (Cash Settled Forwards) are currently not in scope
 of this document. As regulatory requirements around clearing of forward foreign exchanges beyond NDFs
 become clear, it will be determined if requirements will be incorporated into this market practice or the SMPG
 Third Party Foreign Exchange MP.
- Non-Deliverable Forward opens instructions were agreed to always be instructed via an MT304 Forward and
 messaging recommendations only cover a Forward (AFWD) message. Other markets which allow an NDF open
 or closing to be instructed via an MT304 Spot deal are out of scope of this document.
- Non-Deliverable Forward FX final offsetting order instructions (MT304s) are recommended to be instructed by the Inv. Manager to the custodian/fund accountant at fixing or the day after prior to value/settlement date whenever a partial offsetting or no offsetting has occurred prior to fixing and there is remaining position form the original NDF open that needs offset. Three scenarios are documented with related sample MT304 NDF instructions and MT202 cash margin movements in section 3.4 of this market practice:
 - Scenario 1 Position is partially offset through one or more offsetting NDF FX executions prior to fixing date. Final NDF MT304 instruction is recommended at or after fixing
 - **Scenario 2** Position is fully offset through one or more offsetting NDF FX executions prior to fixing date. No final NDF MT304 instruction is recommended at or after fixing
 - **Scenario 3** Position is never offset prior to fixing date. Final NDF MT304 instruction is recommended at or after fixing
- Any offsetting NDF instruction prior to fixing date will be instructed by the Inv. Manager as a completely separate NDF open which will remain open until fixing occurs. No linkage of the two NDF opens is required. Any offsetting NDF instruction on or after fixing date will be also be instructed as a completely separate NDF open and will be identified within the narrative tag 72 the valuation/fixing date is prior to the trade date of the NDF open.
- Data elements known to date to be required to be passed by the Inv. Manager to the global custodian acting as
 the delegated reporting party to report to the trade repository are noted within the field recommendations section
 of the market practice as optional in order to provide clarity on how to include in the messaging if applicable.
 Additional recommendations will be added as clarity on trade repository reporting data elements is confirmed. It
 is assumed trade repository elements such as the UTI and timestamps will only be provided on an NDF open or

- offset that was executed in the market and cleared through a CCP. Any offsetting NDF open instruction at or after fixing that was not a market execution/cleared will not have a UTI/timestamp.
- Examples and recommendations of format of FpML and ISO20022 messaging to be considered to incorporate into document as an alternative messaging solution in future.
- Examples and recommendations of the FpL FIX messaging between the Inv. Manager and SEF/Middleware
 provider are currently out of scope and may potentially be added or linked to a separate document once
 documented.
- Initial and daily variation margin payments applicable to the NDF are instructed separately through MT202/210 message with recommended cash purpose codewords (CCPM) as documented in the ISITC securities related payments market practice under the Derivatives Appendix. Expectation is IMs can and will net across cleared productsinto one net movement which will be broken down for fund accounting through a broker statement. Further, netting of VM and IM in one net movement is possible at the discretion of the Inv. Manager and agreed with their custodian/fund accountant on an SLA basis.
- Clearinghouse (CCP) and Designation Contract Market (DCM) commissions and fees will be instructed/settled
 outside of the NDF instruction and not in scope for this market practice. Discussions have noted the
 commissions/fees need to be instructed to the fund accountant for NAV purposes on a per trade basis even if the
 cash movement instruction is not sent until end of month as a net amount. It has been left as an SLA for the Inv.
 Manager if they decide to instruct this net amount as separate cash instructions at end of month or incorporate
 into the initial net margin movement instruction.
- Executing broker fees/commissions should not be specifically stated/included in the amount of in the NDF open instruction to the global custodian/fund accountant.

| | Scope of | Open | |
|---|-----------------|----------------|---|
| MT Type | Operation | Indicator | Usage Requirement? |
| | | | Out of Scope – Execution Facility |
| | | | and CCP will perform matching |
| MT200 Execution Confirmation | | 00000000 | and pre-acceptance. No buy and |
| MT300 - Execution Confirmation for Cleared NDFs | | Open and Close | sell side matching messaging expected. |
| Tor Cleared NDFS | - | Ciose | Out of Scope – Cleared Forward |
| | | | products beyond NDFs will be |
| MT304 Cleared Forward (Non- | | | captured separately once EMIR |
| NDF) Advice | | Open and | and other regulatory jurisdictions |
| , | Spot or Forward | Close | clarify regulation and timing. |
| | | | Out of Scope – Agreed within |
| | | | ISITC, Cleared NDFs will always |
| MT304 – Cleared NDF Advice | Spot | Open | be opened as a AFWD |
| MT304 -Non-cleared NDF | | | Out of scope – Agreed non- cleared NDFs are not covered in |
| Advice | Forward | Open | this market practice. |
| Advice | 1 Orward | Ореп | Out of scope – ISITC agreed if a |
| | | | closing/fixing instruction is |
| | | | required it should be instructed as |
| MT304 – cleared NDF Advice | Spot | Close | an AFWD and not Spot deal. |
| | | | In scope of ISITC market practice |
| | | | for NDF open and offsetting NDF |
| | | | open instruction to global |
| MT304 – Cleared NDF Advice | Forward | Open | custodian/fund accountant. |
| | | | Out of Scope of ISITC market |
| | | | practice. NDF offsetting trades prior to, at or after fixing date |
| | | | should be instructed as MT304 |
| MT304 – cleared NDF Advice | Forward | Close | Forward Opens. |

1.2 Actors and Roles

- Sender A sender sends the message containing the relevant FX execution information at opening and closing
- Recipient The recipient receives the message containing the data from the provider.

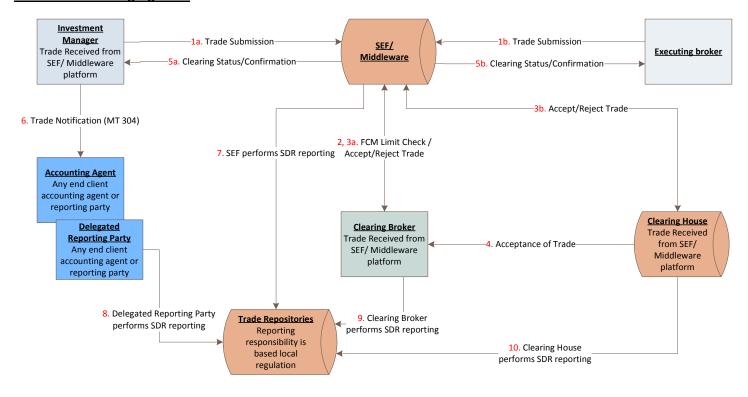
There are multiple actors involved in the process. Each actor may at any time play more than one of the roles outlined below.

| Sending Party – Account | Receiving Party – Account |
|-------------------------|---------------------------|
| Owner | Servicer |
| Investment Manager | Custodian Bank |
| Portfolio Manager | Fund Accountant |
| Middle Office Provider | Interested Party/Vendor |
| Hedge Fund | Prime Broker |

- Investment Manager/Outsourcer
- Executing Broker/Counterparty
- Custodian
- · Fund accountant if not acting as custodian
- Execution Facility for NDFs (SEF)
- Forwards Trade/Data Repository (SDR)
- Clearinghouse/CCP
- Clearing Member at the CCP for the IM (FCM/DCM/GCM)
- Clearing Member at the CCP for the executing broker (FCM/DCM/GCM)
- Collateral Manager, Collateral Optimizer leave out of flow diagram. Keep in actors/roles section
- Third Party Delegated Reporting Party for the IM or counterparty to report to the Trade Repository

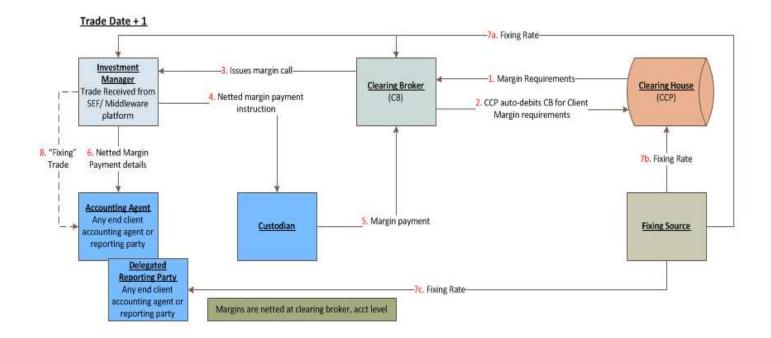
1.3 Activity Diagram

Trade Date Messaging Flow



- 1a, 1b Investment Manager and Executing Broker submits trade to SEF or to Middleware for Clearing.
- 2 SEF/Middleware submits trade to Clearing Broker to check against Clear Broker limits with the Investment Manager
- 3a, 3b Clearing Broker and Clearing House send notification to SEF/Middleware of trade acceptance
- 4 Clearing House notifies Clearing Broker of trade acceptance
- 5a, 5b SEF/Middleware notifies Investment Manager and Executing Broker of Cleared Trade
- 6 Investment Manager sends trade notification to Accounting Agent/Delegated Reporting Party
- 7/8/9/10 (optional) SEF, Delegated Reporting Party, Clearing Broker and Clearing House perform SDR reporting to Trade Repository

Trade Date + 1 Messaging Flow



- 1 CCP calculates IM and VM requirements and communicates requirements to the Clearing Broker.
- 2 CCP auto-debits the Clearing Broker account for margin
- 3 Clearing Broker issues margin calls (IM & VM) to the Investment Manager
- 4 Investment Manager instructs Custodian to meet margin calls
- 5 Custodian sends payment/collateral to Clearing Broker

Source

- 6 Investment Manager send notification to Accounting Agent/Delegated Reporting Party with margin movement details 7a, 7b, 7c Investment Manager, Account Agent /Delegated Reporting Party, CCP, & CB obtains Fixing Rate from Fixing
- 8 Investment Manager sends Fixing Trade to Accounting Agent/Delegated Reporting Party (based on SLA between sender and receiver)

2.0 Business Definition

2.1 Business Data Requirements

MT304 "Forward" Non-Deliverable FX MT304 Initial and Offsetting Opens

| Business Element | Comments |
|---|--|
| Sender's Reference | Unique transaction id from the sender. |
| Related Reference | Identification of the instruction to which the current message is related. |
| | On an NDF FX open cancellation; this will be the previously sent NDF open original reference ID being cancelled. |
| Type of Operation | NEWT - Used to send an advice / instruction for the first time or to send a corrected MT 304 when the erroneous one was cancelled using an MT 304 with function CANC. |
| | CANC - Used to cancel an MT304 previously sent or to cancel an MT304 which contains erroneous information. |
| Scope of Operation | ANDF - Indicates that the foreign exchange is a non- deliverable forward (NDF). The trade will be cash- settled in the agreed settlement currency. All initial and offsetting NDF trade instructions should be instructed using the ANDF codeword. |
| Open Indicator | This field specifies the instruction is for the opening or closing/fixing of a Forward Currency Contract or NDF. |
| | Y - The initial or offsetting NDF instruction prior to, at or after fixing date prior to settle/value date. |
| | Field only allowed, and required per SWIFT rule when Scope of Operation = ANDF. |
| Fund/Safekeeping Account | This field identifies the fund and/or name of the client in which the transaction was executed for. |
| Fund Manager | Identifies the BIC (ISO 9362 Bank Identifier Codes) and/or Name of the fund manager. |
| Executing Broker | Identifies the BIC (ISO 9362 Bank Identifier Codes) and/or Name of the executing broker. |
| Central Counterparty Clearing House (CCP) | This field identifies an agency or separate corporation of a futures exchange responsible for settling and clearing trades, collecting and maintaining margins, regulating delivery and reporting trade data. |
| | Recommended on all cleared NDF opens regardless if initial, offsets instructed prior to fixing or at/after fixing. |
| Clearing Broker | This field identifies the BIC (ISO 9362 Bank Identifier Codes) and/or Name party that are a member of the clearing house (CCP) and that acts as a liaison between the investor and the CCP. |
| | Recommended on all cleared NDF opens regardless if initial, offsets instructed prior to fixing or at/after fixing. |

| Settlement Currency | This field specifies the settlement currency of the non-deliverable trade. |
|--|--|
| Valuation Date | This field specifies the valuation date for a non- deliverable trade. |
| Settlement Rate Source | This field specifies the rate source for the settlement of the non-deliverable trade and includes an optional time and location for the settlement. |
| Opening Instruction Reference | This field contains the identification of the NDF opening instruction, to which the current valuation message is related, that is, the sender's reference in field 20 of the Opening instruction. |
| Trade Date | This field specifies the date the transaction was agreed between the fund manager and the executing broker. ISO8601 Date |
| Value Date | This field specifies the value date of the transaction. ISO8601 Date |
| Exchange Rate | This field specifies the agreed exchange rate of the transaction. It is the rate as the deal was struck. The rate can be reflected in either format. |
| Currency and Amount Bought | This field specifies the currency and amount bought. Currency must be a valid ISO 4217 currency code. |
| Delivering Agent | This field identifies the financial institution from which the payer will transfer the amount bought. Stated as BIC (ISO 9362 Bank Identifier Codes) and/or Name and allowing additional account number as well. Also allows for population of indicator for SSI usage |
| | /NETS/ to be used when a Forward NDF is instructed (94A:AFWD) since this field is mandatory within Sub-Sequence B1. Refer to field recommendations section for more information. |
| Currency and Amount Sold | This field specifies the currency and amount sold. Currency must be a valid ISO 4217 currency code. |
| Receiving Agent | This field identifies the financial institution and account where the payee will receive the amount sold. |
| | Stated as BIC (ISO 9362 Bank Identifier Codes), Local Market Cash Clearing Number or Name and allowing additional account number as well. Also allows for population of indicator for SSI usage. |
| | /NETS/ to be used when a Forward NDF is instructed (94A:AFWD since this field is mandatory within Sub-Sequence B2. Refer to field recommendations section for more information |
| Unique Transaction Identifier Namespace/Issuer Code | This field specifies a unique code that identifies the registered entity creating the unique transaction identifier. |
| | Applicable to the cleared NDF open executed/cleared in market only |
| Unique Transaction Identifier | This field specifies - in combination with the namespace - the unique transaction identifier to be created at the time a transaction is first executed, shared with all registered entities and counterparties |

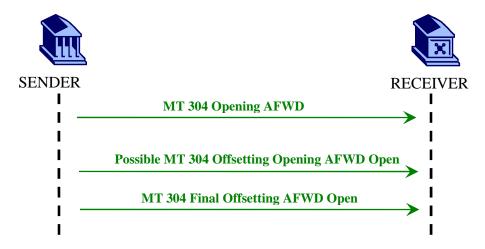
| | T |
|--|--|
| | involved in the transaction, and used to track that particular transaction over its life. |
| | Industry practices have to be followed for the creation of the Unique Transaction Identifier (UTI). The UTI is a combination of Namespace and Transaction Identifier. |
| | Unique Transaction Reference ID assigned by the clearinghouse (CCP) at the time of the clearing. |
| | Applicable to the cleared NDF open executed/cleared in market only |
| Previous Unique Transaction Identifier Namespace/Issuer Code | This field specifies the registered entity that created the previous unique transaction identifier at the time the transaction was executed. |
| | Applicable to the cleared NDF open executed/cleared in market only |
| Prior Unique Transaction Identifier | This field specifies - in combination with the namespace - the previous unique transaction identifier that was created at the time a transaction was executed. |
| | Industry practices have to be followed for the creation of the Prior Unique Transaction Identifier (PUTI). The PUTI is a combination of Namespace and Prior Transaction Identifier. |
| | Prior Transaction Reference ID assigned by the execution facility (SEF) at the time of execution. |
| | Applicable to the cleared NDF open executed/cleared in market only |
| Underlying Product Identifier | This field specifies the underlying product type. |
| | FXNDFO - Foreign Exchange Non Deliverable Forward |
| | Recommended for Cleared NDFs |
| Execution Venue | When a custodian/interested third party recipient is acting as the delegated reporting party to report the market executed NDF trade to the trade repository, trading venue of the execution is recommended to be provided. |
| Execution Timestamp | When a custodian/interested third party recipient is acting as the delegated reporting party to report the market executed NDF trade to the trade repository, the date and time of the execution of the transaction in Coordinated Universal Time (UTC) |
| Confirmation Timestamp | When a custodian/interested third party recipient is acting as the delegated reporting party to report the market executed NDF trade to the trade repository, the date and time of the confirmation of the transaction in Coordinated Universal Time (UTC) |
| Clearing Timestamp | When a custodian/interested third party recipient is acting as the delegated reporting party to report the market executed NDF trade to the trade repository, the date and time of the clearing of the transaction in |

| | Coordinated Universal Time (UTC) |
|--------------------------------------|--|
| Commissions/Fees Currency and Amount | This field specifies the amount of any non-settlement related commission or fees associated with the trade, for example resulting from central clearing. |
| Commissions/Fees Settlement Date | This field specifies the date on which commission and fees that are specified in field 34B must be settled. |

3.0 Appendix

3.1 Message Sequence Diagram

Messaging sequence diagram limited to scope of market practice. Refer to activity diagram for full business process flow diagram.



3.2 Message Field Requirements

MT304 Non-Deliverable FX Order Instruction Forward Initial and Offsetting Opens Prior/at/after Fixing

| Data Element | FIN | MP Presence |
|--|--|-------------|
| General Information Sequence | :15A: | М |
| Sender's Reference | :20:16x | М |
| | number assigned by the Sender to unambiguously identify the y identifying the deal to the fund manager. | |
| When a cancellation has to be s contain a new identification. | ent, field 20 of the cancellation/amendment message should | |
| Related Reference | :21:16x | С |
| When a cancellation has to be sent of the message being cancelled/am | t, field 21 must contain a reference (that is, the original field 20) ended. | |
| Type of Operation | :22A:4!c | М |
| an MT 304 which contains erroneous in | fuction. Used to cancel an MT 304 previously sent or to cancel formation. Struction. Used to inform the custodian that an instruction was | |
| | to send an instruction for the first time or to send a corrected MT elled using an MT 304 with function CANC. | |
| Scope of Operation | :94A:ANDF | М |
| ANDF - Indicates that the foreign 6 | exchange is a non-deliverable forward (NDF). The trade will be | |

| cash-settled in the agreed settlemen | nt currency. | |
|---|--|-------------|
| Open Indicator | :17O:Y | М |
| Y - The opening of an FCC or of an NDF The NDF fixing partial or final closing in | on is for the opening or closing/fixing of an FCC or NDF struction has been recommended by ISITC to always be stated as agreement senders close out an NDF position through an | |
| Net Settlement Indicator | :17N: | Not allowed |
| This field 17N is not allowed under netw | ork validation rule C2 if 94A::ANDF is present. | |
| | :83J:/ACCT/123 /NAME/Fund XYZ ne of the client in which the transaction was executed for. must be present using the /NAME/ party identification code | M |
| Fund Manager | :82J:/ABIC/BIC code /NAME/Manager Name | M |
| If J format is used, the Party Name When a recipient is acting as the de | r to Custodian, field 82a contains the Fund Manager. must be present using the /NAME/ party identification code legated reporting party to report to the trade repository if LEI is ed on the second line using the /LEIC/ party identification code. | |
| If J format is used, the Party Name When a recipient is acting as the de | :87J:/ABIC/BIC code /NAME/Broker Name r to Custodian, field 87a contains the Executing Broker. must be present using the /NAME/ party identification code legated reporting party to report to the trade repository if LEI is ed on the second line using the /LEIC/ party identification code. | M |
| and clearing trades, collecting and r data. Field is recommended on both initia prior to fixing date or a final offset at Recommendation is to populate the | :81J:/ABIC/BIC code /NAME/Clearinghouse Name Or :81J:/ABIC/UKWN /NAME/Clearinghouse Name parate corporation of a futures exchange responsible for settling maintaining margins, regulating delivery and reporting trade I NDF and all offsetting NDFs regardless if executed/cleared a or after fixing date not executed/cleared in the market. clearinghouse as a BIC using format option J. Discussed P BICs will not be listed within market practice as usage to be | M |

| Clearing Member | :89J:/ABIC/BIC code /NAME/Clearing Member Name Or :89J:/ABIC/BIC Code /LEIC/LEI /NAME/Clearing Member Name | М |
|--|---|---|
| liaison between the investor ar Field is recommended on both prior to fixing date or a final off Recommendation is to populat If J format is used, the Party N When a recipient is acting as t known and required can be po | initial NDF and all offsetting NDFs regardless if executed/cleared feet at or after fixing date not executed/cleared in the market. the clearing member as a BIC using the J format. It is ame must be present using the /NAME/ party identification code the delegated reporting party to report to the trade repository if LEI is appulated on the second line using the /LEIC/ party identification code. | |
| ettlement Currency | :32E:3!a | М |
| Recommendation is to include to for the account servicer regardle Deliverable vs. a scenario where | ent currency of the non-deliverable trade. this optional SWIFT tag on all initial NDFs for consistency of receipt ess if the currency pairing has only one currency that is Non- e both currencies are potential non-deliverable. 217 currency code (Error code(s): T52). | |
| aluation Date | :30U:8!n | М |
| · | on date for a non-deliverable trade. ressed as YYYYMMDD (Error code(s): T50). | |
| Date must be a valid date export The Valuation Date is recommended a valid to and at/after fixing date: LCH clearinghouse has concurrency pair and precedes or S/D-2) per currency pair deal. When an initial NDF open future that may allow non-series. | ressed as YYYYMMDD (Error code(s): T50). ed by ISITC on both the initial NDF open and all offsetting NDF opens on firmed as long as the fixing date is a valid business day for the sthe value / settlement date, there is no limitation or set date (S/D-1 on what fixing date can be bi-laterally agreed at the time of the NDF is instructed for clearing with LCH or any other clearinghouse in the standard fixing dates to be bi-laterally agreed instead of adhering to | |
| Date must be a valid date expension to and at/after fixing date: LCH clearinghouse has concurrency pair and precedes or S/D-2) per currency pair deal. When an initial NDF open future that may allow nonsthe market standard per NI Since the custodian will refollowing the market standinclude the Valuation Date identify if following standard The Valuation Date is also to fixing (market executed | ressed as YYYYMMDD (Error code(s): T50). ed by ISITC on both the initial NDF open and all offsetting NDF opens on firmed as long as the fixing date is a valid business day for the state the value / settlement date, there is no limitation or set date (S/D-1 on what fixing date can be bi-laterally agreed at the time of the NDF is instructed for clearing with LCH or any other clearinghouse in the standard fixing dates to be bi-laterally agreed instead of adhering to DF currency, the Valuation date is still recommended as mandatory. Need to consistently be able to identify if the initial NDF open is ard valuation/fixing dates per currency or not, it is recommended to e on all initial NDF opens regardless of clearinghouse to clearly dor non-standard (bi-laterally agreed) fixing date. required to confirm all offsetting NDF opens instructed occurred prior I trade) or at or after fixing date (no UTI or execution timestamp) | |
| The Valuation Date is recommended by the Valuation Date is recommended by the Valuation Date is recommended by the Valuation Date is also to fixing (market executed before value date. This field specifies the rate so | ressed as YYYYMMDD (Error code(s): T50). Ed by ISITC on both the initial NDF open and all offsetting NDF opens on firmed as long as the fixing date is a valid business day for the is the value / settlement date, there is no limitation or set date (S/D-1 on what fixing date can be bi-laterally agreed at the time of the NDF is instructed for clearing with LCH or any other clearinghouse in the standard fixing dates to be bi-laterally agreed instead of adhering to DF currency, the Valuation date is still recommended as mandatory. Noted to consistently be able to identify if the initial NDF open is ard valuation/fixing dates per currency or not, it is recommended to e on all initial NDF opens regardless of clearinghouse to clearly dor non-standard (bi-laterally agreed) fixing date. Trequired to confirm all offsetting NDF opens instructed occurred prior I trade) or at or after fixing date (no UTI or execution timestamp) aluation Date will be used to compare to the field 30T trade date of orior to or at/after fixing date. 14S:3!a2n[/4!n/4!c] Tource for the settlement of the non-deliverable trade and includes an | 0 |
| The Valuation Date is recommended from to and at/after fixing date: LCH clearinghouse has concurrency pair and precedes or S/D-2) per currency pair deal. When an initial NDF open future that may allow nonsthe market standard per NI Since the custodian will refollowing the market standard include the Valuation Date identify if following standard. The Valuation Date is also to fixing (market executed before value date. The Valuation NDF open parts of the second of the seco | ressed as YYYYMMDD (Error code(s): T50). Ed by ISITC on both the initial NDF open and all offsetting NDF opens on firmed as long as the fixing date is a valid business day for the is the value / settlement date, there is no limitation or set date (S/D-1 on what fixing date can be bi-laterally agreed at the time of the NDF is instructed for clearing with LCH or any other clearinghouse in the standard fixing dates to be bi-laterally agreed instead of adhering to DF currency, the Valuation date is still recommended as mandatory. Noted to consistently be able to identify if the initial NDF open is ard valuation/fixing dates per currency or not, it is recommended to e on all initial NDF opens regardless of clearinghouse to clearly dor non-standard (bi-laterally agreed) fixing date. Trequired to confirm all offsetting NDF opens instructed occurred prior I trade) or at or after fixing date (no UTI or execution timestamp) aluation Date will be used to compare to the field 30T trade date of orior to or at/after fixing date. 14S:3!a2n[/4!n/4!c] Tource for the settlement of the non-deliverable trade and includes an | 0 |

In subfield Time and Location, Location (4!c) consists of a two character ISO country code and a two character location code. The location code is made up as follows: If the location name is one word, then the location code is the first two letters of the location name. If the location name consists of at least two words, then the location code is the first letter of the first word followed by the first letter of the second word Reference to Opening Instruction :21A:16x Μ Mandatory for offsetting NDF open, not applicable on initial NDF open. This field contains the identification of the NDF opening instruction, to which the current valuation message is related, that is, the sender's reference in field 20 of the Opening instruction. This field must not start or end with a slash '/' and must not contain two consecutive slashes '//' (Error code(s): T26). End of Sequence A - General Information М **Forex Transaction Detail Sequence** :15B: М В :30T:8!n **Trade Date** M This field specifies the date the transaction was agreed between the fund manager and the executing broker. Value Date :30V:8!n Μ This field specifies the value date of the transaction. :36:12d **Exchange Rate** M This field specifies the agreed exchange rate of the transaction. It is the rate as the deal was struck. The rate can be reflected in either format. The exchange rate on the NDF open will contain the forward rate **Amount Bought Sequence B1** M Currency, Amount Bought :32B:3!a15d M The amounts are always confirmed from Trading Party's/Fund Manager's point of view (notification sending side). o If the Trading Party/Inv. Mgr. receives the Non Deliverable Notional Amount The amount bought on the NDF open will contain the Non-Deliverable Notional Amount If the Trading Party/Inv. Manager pays the Non Deliverable Notional Amount The amount bought on the NDF open will contain the deliverable amount **Delivery Agent** Net Settlement M :53J:/NETS/ This field identifies the financial institution from which the payer will transfer the amount bought This field should be populated with /NETS/ for Forward NDFs since this field is mandatory within the Sub Sequence B1 End of Subsequence B1 - Amount Bought М **Amount Sold Sequence B2** М

| | | T | | | |
|---|---|---|--|--|--|
| Currency, Amount Sold | :33B:3la15d | M | | | |
| • The amounts are always confirmed from Trading Party's/Fund Manager's point of view (notification sending side). | | | | | |
| If the Trading Party/Inv. Manager receives the Non Deliverable Notional Amount | | | | | |
| The amount sold on the NDF open will contain the deliverable amount | | | | | |
| If the Trading Party/Inv. Ma | nager pays the Non Deliverable Notional Amount | | | | |
| ■ The amount sold | on the NDF open will contain the Non-Deliverable Notional | | | | |
| Amount | · | | | | |
| Receiving Agent | Net Settlement | М | | | |
| | :57J:/NETS/ | | | | |
| This field identifies the financial in sold | stitution and account where the payee will receive the amount | | | | |
| This field should be populated with Sub Sequence B2 | /NETS/ for Forward NDFs since this field is mandatory within the | | | | |
| End of Subsequence B2 – Amount So | old | М | | | |
| End of Sequence B – Forex Transact | ion Details | М | | | |
| Optional Sequence C – General Information | :15C: | M | | | |
| | - Unique Transaction Reference Identifier | С | | | |
| Reporting Jurisdiction | :22L:35x | С | | | |
| | nce is present to provide the UTI or PUTI. | | | | |
| to be reported. A list of Jurisdiction Handbooks. | party for which the UTI was created or to which the trade needs codewords have been defined within the SWIFT User eporting jurisdiction must be identified in field 72 Sender to | | | | |
| Clearinghouse UTI Namespace/Issuer Code | :22M:30x | С | | | |
| of the institution that created the UT (LEI) Conditionally recommended as mar | is cleared by the Clearinghouse (CCP), the Issuer/Namespace I is recommended to be stated with their legal entity identifier indatory on initial NDF and all offsetting NDFs executed/cleared ded to be included in final offset instruction at or after fixing date et | | | | |
| Clearinghouse UTI Transaction Indicator | :22N:32x | С | | | |
| reference is assigned (gamma UTI) Conditionally recommended as mar | ndatory on initial NDF and all offsetting NDFs executed/cleared ded to be included in final offset instruction at or after fixing date | | | | |
| Optional Repetitive Subsequence C1 | a – Prior Unique Transaction Reference Identifier | С | | | |
| Execution Facility PUTI Namespace/Issuer Code | :22P:30x | С | | | |
| Execution Facility PUTI Prior Transaction Indicator | :22R:32x | С | | | |
| is assigned (alpha UTI). This is p | ecuted by the Execution Facility (SEF), a unique trade reference prior to the NDF being cleared by the CCP and assigned an recommended stated as the prior UTI identifier once the | | | | |

| clearinghouse UTI has become the | | | | |
|---|--|---|--|--|
| | e primary UTI | | | |
| Conditionally recommended as mandatory on initial NDF and all offsetting NDFs executed/cleared prior to fixing date. Not recommended to be included in final offset instruction at or after fixing date if not executed/cleared in the market | | | | |
| | | | | |
| - | ence C1a – Prior Unique Transaction Reference Identifier | С | | |
| - | ence C1 – Unique Transaction Reference Identifier | С | | |
| Underlying Product Identifier | :22U:6a | С | | |
| 1 | ne with the ISDA Product Taxonomy. | | | |
| FXNDFO Foreign Exchange Non Deliv | rerable Forward | | | |
| This field is to be used to highlight the | forward FX is a Non-Deliverable forward. | | | |
| Identification of Financial Instrument | [ISIN1!e12!c] [4*35x] | 0 | | |
| to notify the Receiver of this ISIN.An alternative identifier may be inc ISIN. | instrument that was traded. assigned an ISIN for regulatory purposes. This field can be used sluded in Description of Instrument, in addition to, or instead of an d in Description of Instrument, then they must be placed between | | | |
| Execution Venue | :22V:35x | M | | |
| the market executed NDF trade recommended to be provided. Execution Venue may contain a BIC, | party recipient is acting as the delegated reporting party to report to the trade repository, trading venue of the execution is | | | |
| 10383). | Legal Entity Identifier (LEI) or Market Identifier Code (MIC - ISO | | | |
| 10383). Execution Timestamp | :98D: 8!n6!n[,3n][/[N]2!n[2!n]] | M | | |
| When a custodian/interested third the market executed NDF trade to transaction in Coordinated University | :98D: 8!n6!n[,3n][/[N]2!n[2!n]] party recipient is acting as the delegated reporting party to report to the trade repository, the date and time of the execution of the sal Time (UTC) is recommended. | M | | |
| When a custodian/interested third the market executed NDF trade to transaction in Coordinated University Date must be a valid date expressed. | :98D: 8!n6!n[,3n][/[N]2!n[2!n]] party recipient is acting as the delegated reporting party to report to the trade repository, the date and time of the execution of the sal Time (UTC) is recommended. ed as YYYYMMDD (Error code(s): T50). | M | | |
| When a custodian/interested third the market executed NDF trade to transaction in Coordinated University Date must be a valid date expression Time must be a valid time expression. | :98D: 8!n6!n[,3n][/[N]2!n[2!n]] party recipient is acting as the delegated reporting party to report to the trade repository, the date and time of the execution of the sal Time (UTC) is recommended. ed as YYYYMMDD (Error code(s): T50). ed as HHMMSS (Error code(s): T38). | M | | |
| When a custodian/interested third the market executed NDF trade to transaction in Coordinated University Date must be a valid date expressing Time must be a valid time expression. UTC Indicator must be a valid time. | :98D: 8!n6!n[,3n][/[N]2!n[2!n]] party recipient is acting as the delegated reporting party to report of the trade repository, the date and time of the execution of the sal Time (UTC) is recommended. ed as YYYYMMDD (Error code(s): T50). ed as HHMMSS (Error code(s): T38). e expressed as HH[MM] (Error code(s): T39). | M | | |
| When a custodian/interested third the market executed NDF trade to transaction in Coordinated University Date must be a valid date expressing Time must be a valid time expression. UTC Indicator must be a valid time. | :98D: 8!n6!n[,3n][/[N]2!n[2!n]] party recipient is acting as the delegated reporting party to report to the trade repository, the date and time of the execution of the sal Time (UTC) is recommended. ed as YYYYMMDD (Error code(s): T50). ed as HHMMSS (Error code(s): T38). | M | | |
| When a custodian/interested third the market executed NDF trade to transaction in Coordinated University Date must be a valid date expressing Time must be a valid time expression. UTC Indicator must be a valid time. | :98D: 8!n6!n[,3n][/[N]2!n[2!n]] party recipient is acting as the delegated reporting party to report of the trade repository, the date and time of the execution of the sal Time (UTC) is recommended. ed as YYYYMMDD (Error code(s): T50). ed as HHMMSS (Error code(s): T38). e expressed as HH[MM] (Error code(s): T39). | M | | |
| When a custodian/interested third the market executed NDF trade to transaction in Coordinated Universed Date must be a valid date expressed Time must be a valid time expressed UTC Indicator must be a valid time Sign ([N]) must not be used when the Confirmation Timestamp When a custodian/interested third the market executed NDF trade to transaction in Coordinated University | :98D: 8!n6!n[,3n][/[N]2!n[2!n]] party recipient is acting as the delegated reporting party to report to the trade repository, the date and time of the execution of the sal Time (UTC) is recommended. ed as YYYYMMDD (Error code(s): T50). ed as HHMMSS (Error code(s): T38). e expressed as HH[MM] (Error code(s): T39). UTC Indicator is equal to all zeroes (Error code(s): T14). :98G: 8!n6!n[,3n][/[N]2!n[2!n]] party recipient is acting as the delegated reporting party to report the trade repository, the date and time of the confirmation of the sal Time (UTC) is recommended. | | | |
| When a custodian/interested third the market executed NDF trade to transaction in Coordinated Universed Date must be a valid date expressed Time must be a valid time expressed UTC Indicator must be a valid time Sign ([N]) must not be used when the Confirmation Timestamp When a custodian/interested third the market executed NDF trade to transaction in Coordinated University | :98D: 8!n6!n[,3n][/[N]2!n[2!n]] party recipient is acting as the delegated reporting party to report to the trade repository, the date and time of the execution of the sal Time (UTC) is recommended. ed as YYYYMMDD (Error code(s): T50). ed as HHMMSS (Error code(s): T38). e expressed as HH[MM] (Error code(s): T39). UTC Indicator is equal to all zeroes (Error code(s): T14). :98G: 8!n6!n[,3n][/[N]2!n[2!n]] party recipient is acting as the delegated reporting party to report the trade repository, the date and time of the confirmation of the | | | |
| When a custodian/interested third the market executed NDF trade to transaction in Coordinated Universed Date must be a valid date expressed Time must be a valid time expressed UTC Indicator must be a valid time Sign ([N]) must not be used when the Confirmation Timestamp When a custodian/interested third the market executed NDF trade to transaction in Coordinated Universed Date must be a valid date expressed. | :98D: 8!n6!n[,3n][/[N]2!n[2!n]] party recipient is acting as the delegated reporting party to report to the trade repository, the date and time of the execution of the sal Time (UTC) is recommended. ed as YYYYMMDD (Error code(s): T50). ed as HHMMSS (Error code(s): T38). e expressed as HH[MM] (Error code(s): T39). UTC Indicator is equal to all zeroes (Error code(s): T14). :98G: 8!n6!n[,3n][/[N]2!n[2!n]] party recipient is acting as the delegated reporting party to report the trade repository, the date and time of the confirmation of the sal Time (UTC) is recommended. | | | |
| When a custodian/interested third the market executed NDF trade to transaction in Coordinated University Date must be a valid date expressor Time must be a valid time expressor UTC Indicator must be a valid time Sign ([N]) must not be used when the Confirmation Timestamp When a custodian/interested third the market executed NDF trade to transaction in Coordinated University Date must be a valid date expressor Time must be a valid time expressor Time must be a valid time expressor the custodian transaction. | :98D: 8!n6!n[,3n][/[N]2!n[2!n]] party recipient is acting as the delegated reporting party to report to the trade repository, the date and time of the execution of the sal Time (UTC) is recommended. ed as YYYYMMDD (Error code(s): T50). ed as HHMMSS (Error code(s): T38). e expressed as HH[MM] (Error code(s): T39). UTC Indicator is equal to all zeroes (Error code(s): T14). :98G: 8!n6!n[,3n][/[N]2!n[2!n]] party recipient is acting as the delegated reporting party to report the trade repository, the date and time of the confirmation of the sal Time (UTC) is recommended. ed as YYYYMMDD (Error code(s): T50). | | | |
| When a custodian/interested third the market executed NDF trade to transaction in Coordinated Universional Date must be a valid date expressional UTC Indicator must be a valid time expressional ([N]) must not be used when the Confirmation Timestamp When a custodian/interested third the market executed NDF trade to transaction in Coordinated Universional Date must be a valid date expressional Timestame must be a valid time expressional UTC Indicator must be a valid time expressional UTC Indicator must be a valid time. | :98D: 8!n6!n[,3n][/[N]2!n[2!n]] party recipient is acting as the delegated reporting party to report of the trade repository, the date and time of the execution of the sal Time (UTC) is recommended. ed as YYYYMMDD (Error code(s): T50). ed as HHMMSS (Error code(s): T38). e expressed as HH[MM] (Error code(s): T39). UTC Indicator is equal to all zeroes (Error code(s): T14). :98G: 8!n6!n[,3n][/[N]2!n[2!n]] party recipient is acting as the delegated reporting party to report of the trade repository, the date and time of the confirmation of the sal Time (UTC) is recommended. ed as YYYYMMDD (Error code(s): T50). ed as HHMMSS (Error code(s): T38). | | | |

| Clearing Timestamp | :98H: 8!n6!n[,3n][/[N]2!n[2!n]] | M | | | | |
|--|---|------------------------------|--|--|--|--|
| the market executed NDF trade to | When a custodian/interested third party recipient is acting as the delegated reporting party to report the market executed NDF trade to the trade repository, the date and time of the clearing of the transaction in Coordinated Universal Time (UTC) is recommended. | | | | | |
| Date must be a valid date expressed | d as YYYYMMDD (Error code(s): T50). | | | | | |
| • Time must be a valid time expressed | d as HHMMSS (Error code(s): T38). | | | | | |
| • UTC Indicator must be a valid time of | expressed as HH[MM] (Error code(s): T39). | | | | | |
| Sign ([N]) must not be used when U | TC Indicator is equal to all zeroes (Error code(s): T14). | | | | | |
| Sender to Receiver Information | :72:6*35x | Not | | | | |
| • Information populated in this field m slash '/ '. | nust use an agreed upon code which must be put in between a | recommended to be present | | | | |
| | e SR2017 structured fields for populating Valuation Date, ate Source or Original Transaction Reference instead of the | | | | | |
| Code must not be UTI, PUTI, USI or | | | | | | |
| Code must not be FIX, SETC, SRCI | E or VALD (Error code(s): T70). | | | | | |
| the market executed NDF trade to the not have structured fields within the | When a custodian/interested third party recipient is acting as the delegated reporting party to report the market executed NDF trade to the trade repository, additional data elements that currently do not have structured fields within the MT304 have been identified as required for NDFs. As a short term work around until structured fields can be added to the MT304 as part of SR2015, the field 72 | | | | | |
| jurisdictions as to who is res Inv. Manager through their of the trade repository. As add standards on submitting SR MT304 as well as short tern | ts are still under discussion across various regulatory sponsible for reporting to the trade repository. For example, the delegated reporting party vs. SEF or CCP reporting directly to litional data elements are clarified, ISITC will work with SWIFT maintenance requests for structured fields to be added to the mover work around codeword recommendations in field 72. | | | | | |
| End of Sequence C – Optional Genera | | М | | | | |
| Optional Sequence D – Accounting Information | :15D: | С | | | | |
| are needed to be included as part of | relevant or recommended when the CCP commission or fees of the market facing NDF initial or partial or final offsets that are d CCP commission/fee that is needed to be tracked on a per ulative end of month. | | | | | |
| Reference to Previous Deals | :21P:16x | С | | | | |
| This field is mandatory when Seq. I to be populated, the ISITC recomm | D is present. As a workaround to allow the fields 34B and 30F nendation is to state "NONREF". | | | | | |
| Gain (Loss) Indicator | :17G:1!a | С | | | | |
| This field is mandatory when Seq. I to be populated, the ISITC recomm | D is present. As a workaround to allow the fields 34B and 30F nendation is to state 17G:Y | | | | | |
| Currency, Amount | :32G:3!a15d | С | | | | |
| | D is present. As a workaround to allow the fields 34B and 30F nendation is to state 32G: with the Deliverable Currency ISO | | | | | |
| For example: 32G:USD0, | | | | | | |

| Commission and Amour | ons and Fees – Currency nt | 0 | | | | |
|--|---|---|--|--|--|--|
| | • Field added as part of SR2016 at ISITC's request to specify the amount of any non-settlement related commission or fees associated with the trade, for example resulting from central clearing. | | | | | |
| 0 | Currency must be a valid IS | O 4217 currency code (Error code(s): T52). | | | | |
| 0 | · · · · · · · · · · · · · · · · · · · | and XPT are not allowed, as these are codes for commodities mmodities messages must be used (Error code(s): C08). | | | | |
| The integer part of Amount must contain at least one digit. A decimal comma is mandatory and is included in the maximum length. The number of digits following the comma must not exceed the maximum number allowed for the specified currency (Error code(s): C03,T40,T43). | | | | | | |
| Commission | 0 | | | | | |
| Field added as part of SR2016 at ISITC's request to state the date on which commission and fees that are specified in field 34B must be settled. | | | | | | |

3.3 Sample FIN Message Formats

- Three scenarios are documented with related sample MT304 NDF instructions and MT202 cash margin movements.
 - Scenario 1 Position is partially offset through one or more offsetting NDF FX executions prior to fixing date. Final NDF MT304 instruction is recommended at or after fixing date.
 - Scenario 2 Position is fully offset through one or more offsetting NDF FX executions prior to fixing date. No final NDF MT304 instruction is recommended at or after fixing date.
 - Scenario 3 Position is never offset prior to fixing date. Final NDF MT304 instruction is recommended at or after fixing date.

3.3.1 Scenario 1 – Position is only partially offset prior to fixing date

- Buy 10M USD vs. BRL
- Sell 1M USD vs. BRL as partial offset prior to fixing date
 - Positions will remain open at clearing house
 - Margins will be calculated for each of the positions. Margins will be netted and transmitted to the custodian by investment manager.
- Fixing Date prior to settlement/value date
 - Any residual exposure balance will be offset through an NDF open instruction to the custodian/fund accountant with the field 72 /VALD/ date denoting the trade date of the NDF open in field 30T is past the fixing date and therefore not a market executed NDF open, but a final offsetting NDF open to clear off the position on accounting.

| Initial Open | USD | BRL | | PAI Rate |
|--|------------------------------|-------------------|-------|--------------------|
| Buy USD on T Sell BRL on T | \$10,000,000.00 | (\$22,487,000.00) | 0.15% | Federal Funds Rate |
| Trade Price | 2.248700 | USD/BRL | | |
| Trade Date | Jan. 06, 2014 | | | |
| Value/Settle Date | April 4 ^{th,} 2014 | | | |
| Final Fixing | 2.2068 | USD/BRL | | |
| CCP Commission Currency and Amount | 100 | | | |
| CCP Commission Value Date | April 3 rd , 2014 | | | |

| Partial Offset | <u>USD</u> | <u>BRL</u> | | PAI Rate |
|--|------------------------------|--------------|-------|--------------------|
| Sell USD on T Buy BRL on T | (\$1,000,000.00) | 2,340,000.00 | 0.15% | Federal Funds Rate |
| Trade Price | 2.340000 | USD/BRL | | |
| Trade Date | March 3 rd , 2014 | | | |
| Value/Settle Date | April 4 th , 2014 | | | |
| Final Fixing | 2.2068 | USD/BRL | | |
| CCP Commission Currency and Amount | 100 | | | |
| CCP Commission Value Date | April 4 th , 2014 | | | |

| Buy USD on T | | | Clearing | |
|---------------|--|--------------|-----------------|------------|
| Sell BRL on T | | Final Fixing | Settlement Date | Value Date |

| | Mon, March 31st | Tue, April 1st | Wed, April 2nd | Thur, April 3rd | Fri, April 4th |
|---|-----------------|-----------------------|----------------------|--------------------|-----------------|
| Trade Price | 2.248700 | | | | |
| Daily Settlement Price | 2.201600 | 2.187000 | 2.206800 | 2.206800 | |
| Discount Factor | 0.999984276 | 0.999988207 | 0.999992138 | 1.000000 | |
| Mark to Market (undiscounted) | (\$213,935.32) | (\$282,121.63) | (\$189,867.68) | \$ - | \$ - |
| Total Mark to Market (NPV) | (\$213,931.96) | (\$282,118.30) | (\$189,866.19) | \$ - | \$ - |
| Variation Margin | (\$213,931.96) | (\$68,186.34) | \$92,252.11 | \$189,866.19 | \$ - |
| Price Alignment Interest | \$0.00 | \$0.89 | \$1.18 | \$0.79 | |
| Final Settlement | | | | (\$189,867.68) | |
| Total Per Trade Register | (\$213,931.96) | (\$68,185.45) | \$92,253.29 | (\$0.70) | _ |
| Cash Movement at the Settlement Bank | | <u>(\$213,931.96)</u> | <u>(\$68,185.45)</u> | <u>\$92,253.29</u> | <u>(\$0.70)</u> |

| Sell USD on T Buy BRL on T | | | Final Fixing | Clearing Settlement Date | Value Date |
|---|-----------------|----------------|-------------------|-----------------------------|----------------|
| Day Ditt oil 1 | Mon, March 31st | Tue, April 1st | Wed, April 2nd | Thur, April 3rd | Fri, April 4th |
| Trade Price | 2.340000 | | | | |
| Daily Settlement Price | 2.201600 | 2.187000 | 2.206800 | 2.206800 | |
| Discount Factor | 0.999984276 | 0.999988207 | 0.999992138 | 1.000000 | |
| Mark to Market (undiscounted) | \$62,863.37 | \$69,958.85 | \$60,358.89 | \$ - | \$ - |
| Total Mark to Market (NPV) | \$62,862.38 | \$69,958.02 | \$60,358.42 | \$ - | \$ - |
| Variation Margin | \$62,862.38 | \$7,095.64 | (\$9,599.61) | (\$60,358.42) | |
| Price Alignment Interest | \$0.00 | (\$0.26) | (\$0.29) | (\$0.25) | |
| Final Settlement | | | | \$60,358.89 | |
| Total Per Trade Register | \$62,862.38 | \$7,095.38 | (\$9,599.90) | \$0.22 | |
| Cash Movement at the Settlement Bank | | \$62,862.38 | \$7,095.38 | (\$9,599.90) | <u>\$0.22</u> |

| Netted Cash Settlement | | | | |
|------------------------|------------------|----------------------------|--------------------|-----------------|
| Amount | <u>(\$151,06</u> | <u>9.57)</u> (\$61,090.08) | <u>\$82,653.39</u> | <u>(\$0.48)</u> |

^{*}For illustration purposes, only the final two days prior to fixing and two days after fixing are illustrated below. It is assumed the daily margin movements would be calculated and instructed to the custodian daily from trade date of the initial and offsetting NDF instruction.

Buv 10M USD vs. BRL

| MT304 NDF Forward Initial Open instruction from Inv. Manager to GC/FA |
|---|
| :15A: |
| :20:0000001 |
| :22A:NEWT |
| :94A:ANDF |
| :17O:Y |
| :83J:/ACCT/12345 |
| /NAME/ABC FUND |
| :82J:/ABIC/FUMAUS33 |
| /NAME/FUND MANAGER |

General Information Block
Message Reference
Type of Operation
Scope of Operation
Open Indicator
Fund

Fund Manager BIC and Name

| :87J:/ABIC/EXBKUS33 | Executing Broker BIC and Name |
|----------------------------------|--|
| /NAME/EXECUTING BRKR | |
| :81J:/ABIC/CMEBIC33 /NAME/CME | Central Counterparty/Clearinghouse BIC and Name |
| :89J:/ABIC/CLBKUS33 | Clearing Member BIC and Name |
| /NAME/CLR BRKR NAME | Clearing Weinber Bic and Name |
| :32E:USD | Settlement Currency |
| :30U:20140402 | Valuation/Fixing Date |
| :15B: | Forex Transaction Details |
| :30T:20140106 | Trade Date |
| :30V:20140404 | Value/Settle Date |
| :36:2,2487 | Exchange Rate |
| :32B:USD10000000, | Currency, Amount Bought |
| :53J:/NETS/ | Delivery Agent |
| :33B:BRL22487000, | Currency, Amount Sold |
| :57J:/NETS/ | Receiving Agent |
| :15C: | Forex Transaction Details |
| :22L:35x | Reporting Jurisdiction |
| :22M:20x | Clearinghouse Issuer/Namespace LEI |
| :22N:32x | Clearinghouse UTI Transaction Indicator |
| :22P:20x | Execution Facility Previous (PUTI) Issuer/Namespace LEI |
| :22R:32x | Execution Facility Previous (PUTI) Transaction Indicator |
| :22U:FXNDFO | Underlying Product Identifier |
| :15D: | Accounting Information |
| :21P:NONREF | Reference to Previous Deal |
| :17G:Y | Net Gain/Loss Indicator |
| :32G:USD0, | Net Gain/Loss Currency and Amount |
| :34B:USD100, | CCP Commission/Fee Currency and Amount |
| :30F:20140404 | CCP Commission/Fee Settlement Date |

Sell 1M USD vs. BRL as partial offset prior to fixing date
 MT304 NDF Forward Partial

| Offsetting Open instruction from Inv. Manager to GC/FA | |
|--|---|
| :15A: | General Information Block |
| :20:0000002 | Message Reference |
| :22A:NEWT | Type of Operation |
| :94A:ANDF | Scope of Operation |
| :17O:Y | Open Indicator |
| :83J:/ACCT/12345 /NAME/ABC FUND | Fund |
| :82J:/ABIC/FUMAUS33 /NAME/FUND MANAGER | Fund Manager BIC and Name |
| :87J:/ABIC/EXBKUS33 /NAME/EXECUTING BRKR | Executing Broker BIC and Name |
| :81J:/ABIC/CMEBIC33 /NAME/CME | Central Counterparty/Clearinghouse BIC and Name |
| :89J:/ABIC/CLBKUS33 | Clearing Member BIC and Name |

| /NAME/CLR BRKR NAME | |
|---------------------|--|
| :32E:USD | Settlement Currency |
| :30U:20140402 | Valuation/Fixing Date |
| :21A:0000001 | Original Opening Transaction Reference ID |
| :15B: | Forex Transaction Details |
| :30T:20140303 | Trade Date |
| :30V:20140404 | Value/Settle Date |
| :36:2,34 | Exchange Rate |
| :32B:BRL2340000, | Currency, Amount Bought |
| :53J:/NETS/ | Delivery Agent |
| :33B:USD1000000, | Currency, Amount Sold |
| :57J:/NETS/ | Receiving Agent |
| :15C: | Forex Transaction Details |
| :22L:35x | Reporting Jurisdiction |
| :22M:20x | Clearinghouse Issuer/Namespace LEI |
| :22N:32x | Clearinghouse UTI Transaction Indicator |
| :22P:20x | Execution Facility Previous (PUTI) Issuer/Namespace LEI |
| :22R:32x | Execution Facility Previous (PUTI) Transaction Indicator |
| :22U:FXNDFO | Underlying Product Identifier |
| :15D: | Accounting Information |
| :21P:NONREF | Reference to Previous Deal |
| :17G:Y | Net Gain/Loss Indicator |
| :32G:USD0, | Net Gain/Loss Currency and Amount |
| :34B:USD100, | CCP Commission/Fee Currency and Amount |
| :30F:20140404 | CCP Commission/Fee Settlement Date |
| | |

• Netted margin movements transmitted to the custodian by investment manager.

| MT202 Net margin movement | |
|---------------------------|--|
| 20: 0000003 | Transaction Reference/Message Identification |
| 21 : CCPM | Cash Purpose Codeword |
| 32A: 140401USD151069,57 | Value Date, Currency Code and Amount |
| 53B: /ACOWN123 | Account Owner's Account |
| 57D: //FW021000ABA | Creditor's Agent – Account with Institution |
| 58A: /456789 | Creditor's Beneficiary Account and Name |
| FIBADEFFXXX | |

Netted margin movements transmitted to the custodian by investment manager.

| MT202 Net margin | , , , , , , , , , , , , , , , , , , , |
|------------------------|--|
| movement | |
| 20: 0000004 | Transaction Reference/Message Identification |
| 21 : CCPM | Cash Purpose Codeword |
| 32A: 140402USD61090,08 | Value Date, Currency Code and Amount |
| 53B: /ACOWN123 | Account Owner's Account |
| 57D: //FW021000ABA | Creditor's Agent – Account with Institution |

| 58A: /456789 | Creditor's Beneficiary Account and Name | | | |
|--------------|---|--|--|--|
| FIBADEFFXXX | | | | |

Final offsetting NDF instruction at fixing date

| MT304 NDF Forward Final Offsetting Open instruction from | |
|--|--|
| Inv. Manager to GC/FA | |
| :15A: | General Information Block |
| :20:0000005 | Message Reference |
| :22A:NEWT | Type of Operation |
| :94A:ANDF | Scope of Operation |
| :17O:Y | Open Indicator |
| :83J:/ACCT/12345 /NAME/ABC FUND | Fund |
| :82J:/ABIC/FUMAUS33 /NAME/FUND MANAGER | Fund Manager BIC and Name |
| :87J:/ABIC/EXBKUS33 /NAME/EXECUTING BRKR | Executing Broker BIC and Name |
| :81J:/ABIC/CMEBIC33 /NAME/CME | Central Counterparty/Clearinghouse BIC and Name |
| :89J:/ABIC/CLBKUS33 /NAME/CLR BRKR NAME | Clearing Member BIC and Name |
| :32E:USD | Settlement Currency |
| :30U:20140402 | Valuation/Fixing Date |
| :21A:0000001 | Original Opening Transaction Reference ID |
| :15B: | Forex Transaction Details |
| :30T:20140402 | Trade Date |
| :30V:20140404 | Value/Settle Date |
| :36:2,206800 | Exchange Rate |
| :32B:BRL21420000, | Currency, Amount Bought |
| :53J:/NETS/ | Delivery Agent |
| :33B:USD9000000, | Currency, Amount Sold |
| :57J:/NETS/ | Receiving Agent |
| :15C: | Forex Transaction Details |
| :22L:35x | Reporting Jurisdiction |
| :22M:20x | Clearinghouse Issuer/Namespace LEI |
| :22N:32x | Clearinghouse UTI Transaction Indicator |
| :22P:20x | Execution Facility Previous (PUTI) Issuer/Namespace LEI |
| :22R:32x | Execution Facility Previous (PUTI) Transaction Indicator |
| :22U:FXNDFO | Underlying Product Identifier |

• <u>Clearing Settlement Date—Netted margin movements transmitted to the custodian by investment manager.</u>

| MT202 Net margin movement | |
|---------------------------|--|
| 20: 0000006 | Transaction Reference/Message Identification |
| 21 : CCPM | Cash Purpose Codeword |
| 32A: 140403USD82653,39 | Value Date, Currency Code and Amount |

| 53B: /ACOWN123 | Account Owner's Account |
|--------------------|---|
| 57D: //FW021000ABA | Creditor's Agent – Account with Institution |
| 58A: /456789 | Creditor's Beneficiary Account and Name |
| FIBADEFFXXX | |

 Value/Settlement Date – Netted margin movements transmitted to the custodian by investment manager likely including the CCP Commission/Fee amounts.

| MT202 Net margin movement | |
|---------------------------|--|
| 20: 0000007 | Transaction Reference/Message Identification |
| 21 : CCPM | Cash Purpose Codeword |
| 32A: 140404USD,48 | Value Date, Currency Code and Amount |
| 53B: /ACOWN123 | Account Owner's Account |
| 57D: //FW021000ABA | Creditor's Agent – Account with Institution |
| 58A: /456789 | Creditor's Beneficiary Account and Name |
| FIBADEFFXXX | |

3.3.2 Scenario 2 – Position is fully offset prior to fixing date

- Day 1 Buy 10M USD vs. BRL
- Day 2 Sell 10M USD vs. BRL fully offset prior to fixing date
 - Positions will remain open at clearing house
 - Margins will be calculated for each of the positions. Margins will be netted and transmitted to the custodian by investment manager.
- Fixing Date on Day 4 (T+3)
 - No residual exposure remains at fixing/offsetting, therefore no additional closing/fixing NDF trade instruction is required

3.3.3 Scenario 3 – Position is never offset prior to fixing date

- Day 1 Sell 10M USD vs. BRL as partial offset prior to fixing date
 - Positions will remain open at clearing house
 - Margins will be calculated for each of the positions. Margins will be netted and transmitted to the custodian by investment manager.
- Fixing Date on Day 3
 - Any residual exposure balance will be offset through an NDF open instruction to the custodian/fund accountant with the field 72 /VALD/ date denoting the trade date of the NDF open in field 30T is past the fixing date and therefore not a market executed NDF open, but a final offsetting NDF open to clear off the position on accounting.

| | USD | <u>BRL</u> | PAI Rate | | |
|----------------|-----------------|-----------------|----------|--------------------|--|
| Sell BRL on T | \$10,000,000.00 | (22,487,000.00) | 0.15% | Federal Funds Rate | |
| Trade Price | 2.248700 | USD/BRL | | | |
| Value Date | 4/14/2014 | | | | |
| Final Fixing | 1.765000 | USD/BRL | | | |
| CCP Commission | | | | | |
| Currency and | | | | | |
| Amount | 100 | | | | |
| CCP Commission | | | | | |
| Value Date | April 3rd, 2014 | | | | |

| | | | | Final Fixing | Clearing Settlement Date | Value Date |
|--------------------------------------|-----------------|-----------------|-----------------|----------------------|-----------------------------|-----------------|
| | Mon, April 7th | Tues, April 8th | Wed, April 9th | Thurs, April 10th | Fri, April 11th | Mon, April 14th |
| Trade Price | 2.248700 | | | | | |
| Daily Settlement Price | 2.218900 | 2.201600 | 2.187000 | 2.206800 | 2.206800 | |
| Discount Factor | 0.999972482 | 0.999984276 | 0.999988207 | 0.999992138 | 1.000000 | |
| Mark to Market (undiscounted) | \$ (134,300.78) | \$ (213,935.32) | \$ (282,121.63) | \$ (189,867.68) | \$ - | |
| Total Mark to Market (NPV) | \$ (134,297.08) | \$ (213,931.96) | \$ (282,118.30) | \$ (189,866.19) | \$ - | |
| Variation Margin | \$ (134,297.08) | \$ (79,634.87) | \$ (68,186.34) | \$ 92,252.11 | \$ 189,866.19 | |
| Price Alignment Interest | \$0.00 | \$0.56 | \$0.89 | \$1.18 | \$0.79 | |
| Final Settlement | | | | | (\$189,867.68) | |
| Total Per Trade Register | (\$134,297.08) | (\$79,634.31) | (\$68,185.45) | \$92,253.29 | (\$0.70) | |
| Cash Movement at the Settlement Bank | | (\$134,297.08) | (\$79,634.31) | (\$68,185.45) | \$92,253.2 <u>9</u> | <u>(\$0.70)</u> |

| Cumulative PAI | \$3.42 |
|--|----------------|
| Net Cashflows w/ Discounting | (\$189,864.26) |
| Final Settlement - (Cumulative VM EOD Price - Trade Price) | (\$189,867.68) |
| Difference | \$3.42 |

^{*}The market standard Fixing date is S/D-2 for BRL. The Clearing Settlement Date is the day after the final fixing when the NDF exposure position has moved to zero and the day before the NDF contract's value/maturity/settlement date. For other markets where the market standard fixing date is S/D-1 such as RUB, the clearing settlement date and the value/maturity/settlement date of the NDF contract would be the same day after fixing date.