BUSINESS JUSTIFICATION

FOR THE DEVELOPMENT OF NEW ISO 20022 FINANCIAL REPOSITORY ITEMS

This business justification is a modified version of what was submitted for the post-trade space by Omgeo in October 2006. SWIFT Scrl is now a joint submitter and agrees to take on the responsibility for the development of the models and resultant schemas. The scope has also been broadened with the addition of listed derivatives, Repo's and lending/borrowing contracts.

A. Name of the request:

Securities Post-trade messages

B. Submitting organization(s):

Omgeo LLC

22 Thomson Place 55-T5

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and

S.W.I.F.T. Scrl

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C. Scope of the new development:

The following is an outline of the revised scope of the business justification. Of note is the addition of listed derivatives, repo's and lending/ borrowing contracts.

Financial instruments	Equity
	Fixed income
	Listed derivatives
	Repo and Lending/ borrowing
	contracts
Business agreement types	<u>Buy / Sell</u>
	<u>Repo</u>
	<u>Lending/borrowing</u>
ISO 20022 business area	Securities Trade (setr)

Business processes	Trade notification and allocation Trade Matching Trade Confirmation Trade Affirmation
Out of scope	Trade execution reporting Collateral management Matching of foreign exchange (FX) Clearing processes

Today, there are multiple standards and syntaxes to support these business processes. There are varying expectations regarding end benefits from the community of users supporting this development:

- The ability to migrate from proprietary communication to ISO 20022 directly, without having to adopt ISO 15022.
- Overall increased syntax interoperability (i.e. FIX, ISO 15022, ISO 20022) <u>in</u>
 <u>keeping with the Investment Roadmap that was jointly developed by ISITC,</u>
 <u>SWIFT, FpML and FIX Protocol Ltd. (FPL).</u>
- The ability to utilise a single ISO standard across multiple business processes (i.e. pre-trade/trade, post-trade matching, settlement, reconciliation, etc.).

Integrating ISO 20022 messaging to manage the trade process from Notice of Execution (NOE¹) to pre-settlement will facilitate the matching of trade sides between counterparties, eliminate manual intervention and reduce risk.

The scope of processing to be covered by the Post-Trade messages includes the following:

- Notice of Execution
- Allocation
- Matching Status
- Confirmation
- Affirmation

D. Purpose of the new development:

The goal of this submission is to initiate the transition of Post–Trade messaging from the existing ISO 15022 standard, to new ISO 20022 messages. Those who have not already

¹ NOE – which should not be confused with order acceptance and reporting of executions which are an integral part of the execution process within the securities pre-trade and trade business processes. The already submitted ISO 20022 pre-trade and trade models will be expanded to complete the current FIX trade processing as a separate submission.

implemented an existing standard would prefer to move directly to and leverage the benefits of ISO 20022.

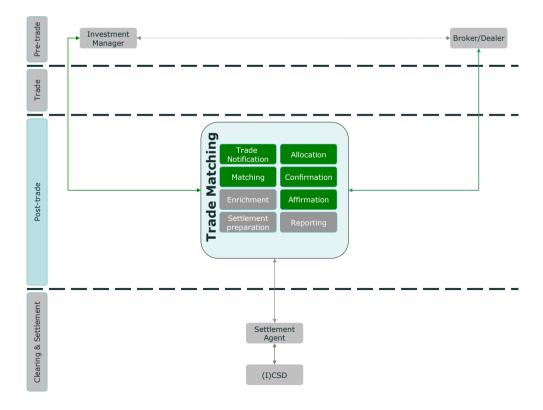
This revised business justification also reflects the increased interest <u>and commitment</u> from other parties (noted below), so in addition to transitioning from ISO 15022 to ISO 20022, the development will also incorporate the requirements of existing <u>local</u> formats (i.e. JASDEC, Euroclear) <u>as well</u> as <u>necessary and will look to</u> leverage the work performed <u>by FPL and SWIFT</u> in the pre-trade/trade space.

In the current environment, Post-Trade communication, <u>as scoped</u>, is <u>mainly</u> supported by the following ISO 15022 messages <u>as well as a number of proprietary message formats</u>:

- o MT509 Trade Status message
- o MT513 Client Advice of Execution
- o MT514 Trade Allocation Instruction
- o MT515 Client Confirmation of Purchase or Sale
- o MT517 Trade Confirmation Affirmation

New ISO 20022 messages are expected to be reverse-engineered from current industry practices, and ISO 15022 standards, and the FIX standard. however Additional messages, functionality and information will be added to support defined functionality as determined by industry participants.

The following diagram is an illustration of the primary communication flows which this business justification is addressing (the green is what is in scope).



E. Community of users:

Parties/actors that will use/benefit from the new messages:

- Financial institutions, which place trade orders with other banks (e.g. possible within the B4B model of UBS AG)
- Institutional investors, which have their orders processed by their custodian bank
- Financial intermediaries (FIM) and Family Offices, which have their orders processed by their custodian bank
- Custodian banks, as typical for Switzerland or continental Europe, which process trade orders for their clients
- Stock exchanges, which take on orders from their participants
- IM (Investment Manager) partners with the Broker / Dealer to communicate details, execute modifications and settle financial instrument transactions.
- B/D (Broker Dealer) partners with the Investment Manager and Bank (where applicable) to communicate details, execute modifications and settle financial instrument transactions.
- VMU (Virtual Matching Utility) mediates communication between the Broker / Dealer and Investment Manager to exchange trade details, match settlement criteria and confirm completion of financial instrument transactions.
- Custodian and/or Trust Bank partners with the Investment Manager and Broker / Dealer to confirm and settle financial instrument transactions.
- Bank (Retail / Wholesale) partners with the Broker / Dealer to communicate details, execute modifications and settle financial instrument transactions

Specifically, the following parties are committed to being involved in the development of the ISO 20022 messages and in promoting their use:

- SWIFT
- JASDEC
- -Euroclear

SWIFT and Omgeo are committed to working with interested parties, such as JASDEC, Euroclear and FPL, amongst others, who have a specific interest in the development and implementation of these messages in ISO 20022. SWIFT and Omgeo will also look to involve FIX Protocol Ltd. in the development process, specifically where there is overlap between the work performed in pre and post-trade (i.e. NOE - Notice Of Execution and allocations) messages and other processes where FPL can bring their experience to bear.

FPL commits to provide resources to reverse engineer the corresponding FIX messages that fall within the scope of this effort.

In addition, as stated in the 'Securities pre-trade and trade' business justification, FPL also commits to completing the reverse engineering of the trade execution reporting that was not completed as part of the initial submission of candidate ISO 20022 pre-trade and trade models as a separate submission.

F. Timing and development:

SWIFT intends to develop the ISO 20022 models together with the parties mentioned in section E and submit to ISO in Q3 2009.

G. Commitments of the submitting organization:

- SWIFT, together with Omgeo, is committed to
 - Undertake the development of the candidate UNIFI business models and
 message models that it will submit to the RA (Registration Authority) for
 compliance review and evaluation. The submission will include Business
 Process Diagram (activity diagram), Message Flow Diagram (sequence
 diagram) and Message Definition Diagram (class diagram), as well as other
 descriptive material that will be used by the RA to generate the Message
 Definition Report;
 - Address any queries related to the description of the models and messages as published by the RA on the UNIFI website.
- SWIFT intends to organize pilot testing of the resultant message schemas.
- SWIFT is also committed to initiate and/or participate in future message maintenance.
- SWIFT and Omgeo acknowledge and accept the following:

"Organizations that contribute information to be incorporated into the ISO 20022 Repository shall keep any Intellectual Property Rights (IPR) they have on this information. A contributing organization warrants that it has sufficient rights on the contributed information to have it published in the ISO 20022 Repository through the ISO 20022 Registration Authority in accordance with the rules set in ISO 20022. To ascertain a widespread, public and uniform use of the ISO 20022 Repository information, the contributing organization grants third parties a non-exclusive, royalty-free license to use the published information".

H. Contact persons:

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I. Comments from RMG members and disposition of comments by Omgeo and **SWIFT**

Wherever the original version of the business justification has been amended to address comments, these amendments are highlighted in blue italic underlined characters. Further clarifications have been added in red italic underlined characters.

Comments from FPL and disposition of comments:

FIX Protocol Ltd. (FPL) which represents the interests of the FIX Community would like to thank the ISO 20022 RMG for the opportunity to provide a response for the Securities Post-trade business justification. FPL thanks Omgeo and SWIFT for their leadership in submitting this important business justification.

The N1705 Securities Post-trade messages Business Justification does not specifically reference the work completed by FIX, SWIFT, FpML, and ISITC in terms of creating an industry standard roadmap for message syntax adoption by asset class and business process, commonly referred to as the Investment Roadmap. While the Investment Roadmap is not officially included within the ISO 20022 process, it is the basis upon which investments in technologies are being made and has an impact on adoption of ISO 20022. The Investment Roadmap also represents an agreement among major industry participants on the appropriate use of standard protocol syntax across the securities life cvcle.

The FPL dusiness processes do not end at the "notice of execution" as indicated in the dusiness
justification. FPL's business processes extends into the following areas:
securities trade reporting, allocations and confirmations/affirmation for fixed income, equities and
market traded FX
☐ listed derivatives clearing, including position management, collateral and margin management
□ collateral management for repos and securities lending/borrowing.

FPL requests that the business justification be updated to recognize the existence of FIX business processes and messages across the securities post-trade space. FPL requests that post-trade FIX business processes and messages be reverse engineered as part of the securities post-trade initiative.

The FIX Protocol and associated business processes are adopted within the post trade space. FIX is viewed as a strategic direction for a large number of automation efforts that are automating processes from front office to back office. It will be very detrimental to industry participants if there is a change in message syntax forced upon the industry at the post trade part of the trading life cycle. FPL requests that the business justification explicitly state that multiple syntaxes will exist on an ongoing basis in the post-trade space

Overlap with the work being completed by the FIA / FOA Working Group for Listed **Derivatives Post trade processing**

A concurrent initiative in post trade and clearing for listed derivative is underway that encompasses both Americas and EMEA regions. This effort, ongoing since 2002, is led jointly by the Futures Industry Association (FIA) and the Futures and Options Association (FOA). The effort is commonly referred to as the FIA Post Trade Working Group for listed derivatives clearing. FPL requests that this initiative and the work being performed therein be included as part of the overall scope and explicitly referenced as

part of the business justification. FPL was somewhat surprised that the amended business justification specifically extended the asset classes to include listed derivatives, repos, and lending/borrowing contracts, while excluding the work being completed by the FIA Post Trade Working Group.

Potential issue in terms of ISO 20022 RMG Process and Rules

Within the ISO 20022 management process the submitter of a business justification maintains an important role throughout the life time of the submission. The submitter of a business justification is to be consulted to review any maintenance request affecting messages covered by the business justification. It is likely that maintenance requests will emanate from the FIX Community, hence providing a strong argument for adding FPL as a co-submitter.

Further to the point, prior to the amendment to the business justification to include listed derivatives, FPL planned on submitting a business justification specifically for listed derivatives. FPL had already contributed to the process by working with Omgeo to review their work in the post trade space for compatibility with existing FIX post trade processes for the other asset classes covered by the FIX Protocol. Certainly as a policy, the current approach where the first submitter largely controls the business processes covered by the justification may not always lead to the best outcome from an overall industry perspective.

Business processes are similar across client and street side participants

Straight through processing initiatives within the securities industry have shown that common business models used for post trade processing exist across participants, be they clearing house, matching utilities, sell side brokerage, and buy side firms. An integrated approach will simplify end to end automation.

FIX has documented robust two and three party models for trade reporting and matching, and trade allocations that can be of benefit to ISO 20022 community. We believe that segregating post trade processing by participant type is not necessary and is counterproductive based upon the potential to create barriers or silos.

Conclusion

We thank the submitters Omgeo and SWIFT for their leadership in submitting the business justification. We request that FPL be included as a submitter, that the FIX business processes and messages be reverse engineered into the ISO 20022 model as part of this initiative, and that the business justification be further modified to explicitly mention that multiple message syntaxes will exist and be supported for post-trade.

Response from SWIFT and Omgeo Firstly, we would like to thank FPL for their comments. FPL raises a number of points, which we will address each separately.

Scope – Post-trade covers many different processes and we acknowledge that FPL has messages which cover some of them. This particular business justification (which was previously approved by the RMG with the current scope in terms of business processes, ie, covering trade-matching) only covers the matching of trades for a specific number of instruments. Some of the processes which FPL mentions, including trade reporting, listed derivatives clearing, etc. are not part of the scope of this business justification. SWIFT and Omgeo do not wish to extend the scope of this particular business justification to cover these additional processes and intend instead to submit an additional business justification as explained below. We have indicated in the business justification that it is our full intention to include FPL in the development process and expect FPL to ensure that the developed models will include requirements where FPL messages cover the trade matching process. The text of the business justification has been amended to clarify and mention the business processes that are out of scope. SWIFT intends to submit an additional business justification in the area of clearing and will invite FPL to participate in this project.

<u>Investment roadmap</u> – SWIFT and Omgeo acknowledge that the "post-trade" space can have either FIX or ISO 20022 XML syntax in line with the investment roadmap. This is not contradicted within this business justification. Our intention is to develop the ISO 20022 business and message models and the ISO 20022 XML schemas. Once the business and message models are developed and approved, nothing prevents FPL from introducing a business justification requesting approval to use the models to derive messages in the FIX syntax.

<u>FIA/FOA</u> – as mentioned above in the scope, the intention of this business justification is not to cover any part of the clearing or collateral management process. The text of the business justification has been amended to clarify and mention the business processes that are out of scope.

<u>Co-submission</u> – we believe that the inclusion of FPL in the development process, through our working group, will ensure that the resultant model for post-trade matching is aligned with the model submitted by SWIFT and FPL in the pre-trade/trade space and will cover any specific requirements of FPL's processes in post-trade, which are relevant to this business justification.

Please also note that in the new maintenance process currently defined by the RMG, it is the SEG that will approve change requests received from any community of users prior to assignment to the submitting organisation in charge for implementation of those changes. This would allow FPL to evolve the models as necessary to cover any future requirements of the FIX community.

In conclusion, Omgeo and SWIFT as co-submitters will retain the scope as described in the current business justification. In view of the limited overlap with processes covered by the FIX protocol today, FPL will be included in the development, but not added as a co-submitter.

Comments from Switzerland and disposition of comments:

The Swiss community welcomes the development of these new standards. We suggest to expand the business model with an End to End process, Standing Settlement Instruction and to broaden the community of users.

Comments in details of the Swiss community:

C. Scope of the new development:

Which financial instruments are classified as "listed derivatives"?

→ A precise definition would be useful.

Response from SWIFT and Omgeo

Listed derivatives, for the purpose of this business justification, include futures and options contracts traded on an exchange.

The request to add this was based on the matching of futures and options on equities. If there is a need to use an ISO standard to match other types of listed derivative then it is assumed that these messages would cover that need.

D. Purpose of the new development

Regarding ISO 20022 standards, the new development should establish a detailed differentiation of the boundaries between post trade and both, pre trade (Trade Order, Cancellation Request, Replacement Request, Order Status Advice) as well as settlement (Settlement Instruction, Settlement Status Advice and Settlement Confirmation). It is important that standards are provided E2E. One has to take into consideration the different kinds of trades (single order, bulk order, block order, others), which affect the post-trade process.

The assumed focus of post-trades regarding trade matching is too narrow. Post-trade includes further process models, which need to be supported by the ISO 20022 standards, as well:

The traditional "Swiss Process Model" does not stringently require a trade-matching within the triangle of "Investment Manager / Broker Dealer / Custodian". Normally, an investor buys/sells securities directly with the help of his custodian bank. The latter takes on the order (MT502) and bills its customer (MT515) according to best execution principles. The accounts (cash & custody) required for the trade are normally provided within the order itself, or may be retrieved from standing instructions. A follow-up settlement is redundant as the trade will be settled in-house by the custodian bank: The trade will be booked directly into the investor's accounts.

The investor's trade is processed using the following messages: order input (MT502: new, cancellation), status (MT509: instruction processing; cancellation processing) and confirmation (MT515). The FIX-standard is used predominantly, with exception of "confirmation" (MT515). Order replacements (MT502), order matching, allocation (MT514) and affirmation (MT517) together with the respective order statuses (MT509: matching, affirmation, replacement) are not provided for the client side of the custodian bank, as they are not necessary. Our requirement is that the "Swiss Process Model" will still be supported with the new standards to come (ISO 20022).

Specialties on the client side: All types of Swiss fees should be displayable within a confirmation message.

Regarding the "Swiss Process Model" on our street-side (broker to broker), Swiss market participants (e.g. UBS) use "order" (MT502), "order status" (MT509: new, cancellation) and "execution notification" (MT513). FIX is used predominantly for that purpose. As "order replacements" (MT502), "order matching", "allocation confirmations" (MT515) and affirmation processes (MT517) together with the respective order statuses (MT509: matching, affirmation, replacement) are not required, they are not used. Also within in this realm, our requirement is that the "Swiss Process Model" will still be supported with the new standards to come (ISO 20022).

Specialties on the street side: The Swiss stock exchange receives its orders via FIX. In order to enable the Swiss exchange to release the following settlement instruction, these orders contain settlement details that are not defined in the standing instructions. Swiss banks acting as brokers use standing instructions, which have been agreed with their counterparties.

We would welcome to see the diagram on page 3 being enlarged, so that other post-trade process models and interfaces from these models to both, pre-trade and settlement processes are better visible.

Response from SWIFT and Omgeo

We are committed to ensuring that the ISO 20022 business model and messages for post-trade matching fit with the efforts currently ongoing in other areas of the end to end transaction chain. In line with ISO 20022 principles, we will ensure this by reusing message and business components that have been created for the candidate pre-trade and trade model and settlement and reconciliation messages where relevant. We acknowledge that there are other business processes in the post trade area, however SWIFT and Omgeo do not wish to extend the scope of this business justification to cover these additional processes at this time. SWIFT is investigating the submission of an additional business justification in the area of clearing. Future submissions and developments will leverage our development in post-trade matching according to the ISO 20022 principles mentioned above.

E. Community of Users:

Parties / actors are narrowed down too much. Only the triangle of "investment manager / broker dealer / Custodian" with the VMU at their center is addressed.

The following parties / actors are missing:

- Financial institutions, which place trade orders with other banks (e.g. possible within the B4B model of UBS AG)
- Institutional investors, which have their orders processed by their custodian bank
- Financial intermediaries (FIM) and Family Offices, which have their orders processed by their custodian bank
- Custodian banks, as typical for Switzerland or continental Europe, which process trade orders for their clients
- Stock exchanges, which take on orders from their participants

As most of these actors do already support ISO 15022 messages today, we estimate that SWIFT brings in the requirements of the aforementioned realms into the process modeling of reverseengineering of the current industry practices and ISO 15022 standards. Market-specific aspects should be considered, or could be brought in by various interested markets during the standard evaluation, respectively.

Response from SWIFT and Omgeo

We agree with the comment and have updated the business justification accordingly.

Comments from the US and disposition of comments:

The post trade business justification submitted by SWIFT and Omgeo does not fully recognize the presence of FIX in the post trade space in terms of both business process and message syntax, especially in the listed derivatives asset class. The US recommends that either FIX Protocol Ltd. be added to the business justification or that submitters and FPL agree that a separate business justification is warranted to address the inclusion FIX post trade business process.

Response from SWIFT and Omgeo

The "post-trade space" is a broad term which covers many processes including clearing, netting and trade matching. This business justification is only dealing with the latter. Listed derivatives are only being covered to the extent that matching is taking place on those instruments. It is our intention to involve FPL in the development of the business model for post-trade matching to ensure alignment with the pre-trade and trade models submitted by FPL and SWIFT. One should bear in mind that this business justification is a slightly modified version of a previously approved business justification where the scope was trade matching only and not the entire post trade space. The text of the business justification has been amended to clarify and mention the business processes that are out of scope.

Comments from Euroclear and disposition of comments:

Euroclear welcomes and supports this Business Justification and is pleased to confirm their involvement in defining and promoting the use of the resulting ISO20022 messages.

In respect of the BJ content itself, we would like to make the following comments:

Under Section 'C. Scope of the new development:' in the scope table, we would assert that there should be a clearer distinction between Financial Instruments; and Repo and Lending/borrowing contracts which are types of business agreement.

In this respect, we would suggest that this document shows Financial Instruments as being: Equity, Fixed income & Listed derivatives; and that a new line be used to reflect the in-scope business agreement types (please see table below).

Further to this clarification, we also request that Buy/Sell (& Sell/Buy) deals are included in the scope, given the close similarity of processing to the Repo and loan/borrow models.

Financial instruments	Equity
	Fixed income
	Listed derivatives
Business agreement types	Buy / Sell

	Repo Lending/ borrowing
ISO 20022 business area	Securities Trade (setr)
Business processes	Trade notification and allocation
	Trade Matching
	Trade Confirmation
	Trade Affirmation

Under Section 'E. Community of users:' for markets where such arrangements are permitted, a new bullet should be added to the list as follows:

• Bank (Retail / Wholesale) - partners with the Broker / Dealer to communicate details, execute modifications and settle financial instrument transactions

With a related alteration to the current 2nd bullet:

• B/D (Broker – Dealer) – partners with the Investment Manager <u>and Bank (where applicable)</u> to communicate details, execute modifications and settle financial instrument transactions

Response from SWIFT and Omgeo

We accept the proposed addition of clarity and have updated the BJ accordingly.