



ISO 20022 Investment Funds Maintenance and

implementation in the SWIFTNet Funds Solution

Proposal for Funds Order Maintenance 2017

This document is a proposal for the first ISO 20022 maintenance, since the maintenance freeze of the ISO 20022 investment funds order message set in 2007, and its implementation in the SWIFTNet Funds solution.

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1 Background and Introduction

ISO 20022 messages for investment funds have been available for use since 2004. ISO 15022 messages (MT 502, 509 and 515) are also used for the investment funds order process. The investment funds community agreed that only one standard should be used for investment funds transactions and that ISO 20022 is the agreed message standard. A migration programme was put into place by SWIFT in order to support and facilitate the migration of ISO 15022 for funds to the ISO 20022 messages in the SWIFTNet Funds solution. As part of the migration programme, it was agreed that there should be no maintenance on the ISO 20022 funds order messages set until November 2015 and that no new investment funds functionality should be added to the ISO 15022 MT 502, 509 and 515 messages. There has been no maintenance on the ISO 20022 investment funds order messages since 2007.

At the end of 2014, the SWIFT Funds Migration Advisory Group (FMAG), the representatives of the SWIFT users of the funds messages, re-confirmed that ISO 20022 (MX) messages is the way forward for the funds industry. It was also agreed that the maintenance freeze on the ISO 20022 order messages is over.

The SWIFT migration of ISO 15022 to ISO 20022 has a good momentum, in September 2015, the MX migration rate was measured at 67.56% and the MX readiness rate is now 85.39%.

Recently the investment funds working group of the Securities Market Practice Group (SMPG IFWG) met in Singapore, 7 - 9 October 2015 and a discussion took place on how to proceed with the pending changes that should be applied to the ISO 20022 order messages. Whilst maintenance is not the main remit of the SMPG IFWG, and does not have the mandate to make decisions on ISO maintenance, within the SMPG IFWG there is a body of experience, both SWIFT/ISO 20022 and non-SWIFT, that enables the SMPG IFWG to propose recommendations for a maintenance on the order messages.

This document sets out a number of recommendations for a maintenance on the order message set for the ISO 20022 2016-2017 maintenance cycle (the new release would be available for live use in the SWIFTNet Funds solution in November 2017) and requests that the ISO 20022 Securities Standards Evaluation Group (SEG) and the SWIFT FMAG give the green light on the proposal for maintenance. Once agreed, the maintenance should follow the usual ISO 20022 maintenance process.

1.1 SMPG Investment Funds

The investment funds national market practice groups (NMPG) in the SMPG organisation (SMPG IFWG) represent Luxembourg, Great Britain, Italy, Germany, Switzerland, Denmark, Norway, Sweden, Brazil, France and Spain. Clearstream and Euroclear also participate.

1.2 Solicitation of Feedback

This proposal for a maintenance on the funds order message set is circulated to the SMPG IFWG convenors, the ISO 20022 Securities Standards Evaluation Group (SEG) and the Funds Migration Advisory Group.

1.3 Decision for Order Maintenance

This proposal for a maintenance on the funds orders is submitted jointly by the SMPG IFWG and SWIFT Standards.

It is submitted to the ISO 20022 Securities Standards Evaluation Group (SEG) to indicate that there is a proposal to action the deferred approved change requests for order messages and to request agreement.

It is submitted to the Funds Migration Advisory Group, the representatives of the SWIFT users of the funds messages, to get the 'green light' for the implementation of the new versions of the order messages in the SWIFTNet Funds solution in November 2017.

The go/no go decision is required by the end of 2015 in order to be aligned with the ISO 20022 2016-2017 maintenance cycle (the new release would be available for live in the SWIFTNet Funds solution use November 2017). If no decision is made, then maintenance on the orders maintenance is deferred to a later maintenance cycle.

Following the 'green' light', the investment funds community, via ISO 20022 and SWIFT, will be informed of the decision immediately so as to allow the maximum time for planning and to formulate and submit change requests.

2 General Conclusions

The SMPG Investment Funds Working group agreed that a maintenance on the order messages is to be considered for the 2016-2017 cycle. The new versions of the message would be available for live use in the SWIFTNet Funds solution in November 2017.

Due to the large number of change requests, the SMPG IFWG recommends the maintenance is restricted to the order (setr) messages only, unless there are legislative changes that require changes to other messages in the SWIFTNet Funds solution. At this time, it is thought that there may be legislative changes to the investment funds account management (acmt) messages, for example, the 'Common Reporting Standard'.

2.1 Scope of the Order Maintenance

The aim of the section is to give an overview of the types of changes that might be required in this order maintenance project, so that there is an understanding of the potential impact.

The following types of items will be considered for the order maintenance:

- All valid business changes currently posted on the ISO 20022 website. This includes the
 approved Swiss change request to add hedge/alternative funds functionality into the ISO 20022
 order messages. A number of submitters may re-validate their change requests.
- 2. Any valid change requests submitted to ISO 20022 before 31 May 2016, for example, it is understood that five new change requests are to be submitted by the Luxembourg community and a number of change requests are to be submitted by the Italian community.
- 3. ISO compliance changes ('technical'). Because the funds messages have not been maintained for eight years and the ISO 20022 methodology has evolved, there are a number of components in the messages that are no longer compliant with the current version of ISO 20022 and would need to be fixed when new versions of the messages are submitted for ISO approval. These are:
 - i. Application Header replacement by Business Application Header
 - ii. Change from SWIFT URN to ISO URN in the schema namespace (SWIFT item)

- iii. Change from generation in ISO 20022 1.0 ('2004') to ISO 20022 1.5 ('2013') (SWIFT Item)
- iv. Replacement of obsolete elements or components
 - 1. XOR replacement by a choice component
 - 2. BICOrBEI replacement and elimination of obsolete components
 - 3. Extension replacement by Supplementary Data

These items and their impact are described in more detail below.

3 Main Changes

3.1 Introduction

The known changes have been collated in the spreadsheet 'ISO_CRs Funds List Version 2015-10-14.xlsx' and is provided with this document. About thirty-four business requirements are listed in the spreadsheet, although changes anticipated from the Italian community are not included. Some changes impact a single component, for example, there are nine changes that impact Charge/Commission and this could be counted as one change.

The aim of this section is not to list all the possible changes or describe implementation, but rather to provide an overview so that there can be a preliminary assessment of the impact of the maintenance.

For some of the changes, some explanation is also provided below.

3.2 Hedge / Alternative Funds requirements

In 2014, the Swiss market submitted a change request to ISO 20022, sponsored by the SMPG IFWG, to include hedge/alternative funds functionality in the existing 'mutual' funds messages.

At a later stage, a market practice for the use of the existing 'mutual funds' messages for hedge / alternative funds has been developed, tested and agreed. This market practice was created by the Global Alternative Investment Automation (GAIA) group. It has the endorsement of about 10 major funds institutions (transfer agents and custodians).

The SMPG IF WG agree that this market practice work will be leveraged and form the basis of an initial set of requirements for the implementation of the Swiss change request. In some cases, the change will be the refinement of the definition of an element already existing in the messages, in other cases, it may mean the addition of a code word or optional element.

(The SWIFT messages for hedge funds (also known as the 'Sharp' messages) will remain in the SWIFT Net Funds solution until there is no demand. The messages will not be submitted for ISO 20022 approval.)

(SMPG IFWG agreed that without the inclusion of hedge/alternative funds functionality in the ISO 20022 order messages for the 2016-2017 cycle, there would not be a strong enough business case for the maintenance.)

3.3 Replacement of Application Header by Business Application Header

This is an item that could be deferred to a later maintenance.

There are two aspects to the replacement of the SWIFT Application Header (AH) by the ISO 20022 Business Application Header (BAH):

- Implementation of the BAH in the SWIFTNet Funds solution (this is a SWIFT only item)
- Elimination of elements in the messages that are duplicates of the elements in the BAH

Although the 2017 maintenance is only on the orders maintenance, it is agreed that the implementation of the BAH in SWIFT Funds solution is for all the messages in the solution (except the SWIFT hedge funds messages). This means all users of the solution may have to perform some level of testing on all the funds messages they use, not only the orders.

The elimination of elements in messages that are duplicates of elements in BAH will NOT be done in the Orders Maintenance 2017 project, but at a later date. Market practice will be created by the SMPG IFWG to cover the elements in messages that are duplicates of elements in BAH.

3.4 Change from SWIFT URN to ISO URN in schema namespace

ISO messages have the ISO URN in the namespace in the schema. For historical reasons, the messages in the SWIFTNet Funds solution (in the main) have the SWIFT URN and because of the ISO 20022 maintenance freeze, SWIFT decided not to introduce this technical change whilst the ISO 20022 maintenance freeze precludes any changes to the business content of the messages.

- The message schemas in scope of the 2017 maintenance, for the SWIFTNet Funds solution, will be generated with the ISO URN.
- The messages not in scope of 2017 will remain in the SWIFTNet Funds solution unchanged..
- The SWIFTNet Funds Solution Service description will list those messages that have the ISO URN
 and those that have the SWIFT URN (as it does today, because today although most funds MXs
 have a SWIFT namespace, a few have the ISO namespace, for example, the FPP messages).

3.5 Change from ISO 20022 1.0 ('2004') to ISO 20022 1.5 ('2013')

This is a SWIFT only item.

For historical reasons, currently all message schemas in the Funds solution are generated in ISO 20022 1.0 ('2004'), whereas the ISO versions are generated in ISO 20022 1.5 ('2013')¹.

- The message schemas in scope of the 2017 maintenance, for the SWIFTNet Funds solution, will be generated in ISO 20022 1.5 ('2013').
- The messages not in scope of 2017 will remain in the SWIFTNet Funds solution unchanged .

¹ ISO 20022 WG5 is reviewing the standard. This work is not expected to result in any impact on the generation of the XML messages.

• The SWIFTNet Funds Solution Service description will list those messages that are ISO 200221.0 ('2004') and those that have are ISO 20022 1.5 ('2013').

3.6 Replacement of Obsolete Elements or Components

Because the funds messages have not been maintained for 8 years and the ISO 20022 methodology has evolved, there are a number of components in the messages that are no longer compliant with the current version of ISO 20022 and would need to be fixed when new versions of the messages are submitted for ISO approval.

These sections give an overview of elements or components that must be replaced.

3.6.1 Replacement of XOR by Choice Component

The XOR construct is not compliant with ISO 20022. Over the previous 4 years of maintenance on investment funds account management, fund cash forecast, price reports and transfer messages, XORs have been eliminated, thus just leaving the order (setr) messages with XORs.

Impacted elements using subscription order as the example message

#	Element	Comment
1	Cancellation Right	
2	Beneficiary Details / Other Identification / Identification Type	
3	Units Number Gross Amount Net Amount	Big impact since one of these elements must be present in the order
4	Financial Instrument Details / Identification / Other Proprietary Id / Domestic Proprietary	Orders that have an ISIN are not impacted by this
5	Charge Details	There are major business changes for
6	Commission Details	charge and commission, replacement of the XOR is but one change
7	Tax Details	
8	Related Party Details / Role	

The confirmations have one fewer XOR components to eliminate.

3.6.2 Replacement of Replacement of BICOrBEI with AnyBIC

The message element BICOrBEI is obsolete and party elements that may be a non-bank or a bank must have the element 'AnyBIC'

Impacted elements using subscription order as the example message

#	Element	Comment
1	Pool Reference, Previous Reference	All party fields are optional, thus if no use
2	Investment Account – Owner & Account Servicer	of party fields, then impact is minimal.
3	Foreign Exchange Details / Quoting Institution	
4	Charge, Commission & Tax Details – Recipient Identification	

#	Element	Comment
5	Cash Settlement – Debtor and Creditor	
6	Settlement & Custody – REAG, RECU, REI1, DEAG, DECU, DEI1	
7	Related Party	
8	Copy Details – Original Receiver	

3.6.2.1 Replacement of Extension with Supplementary Data

Funds messages currently have an Extension sequence (Extension1). Funds users use the Extension sequence as a text field to carry data that cannot be placed in a structured field. The replacement, 'Supplementary Data', technically, allows this kind of usage.

- Messages in scope of the 2016-2017 maintenance will have the Extension sequence replaced by a Supplementary Data sequence.
- The messages not in scope of 2016-2017 will remain unchanged.
- In theory, once the order maintenance has been done, this eliminates the needs for using this 'text' field since all requirements are now in structured fields (at least until new gaps arise).
- For those institutions that use both the order (setr) messages and, for example, the transfer (sese) messages, and the need to use this 'text' field arises, then there is a difference in how this is done:

Current	Future
<xtnsn></xtnsn>	<splmtrydata></splmtrydata>
<plcandnm>MitplExctnDtls/OrdrRcvDtTm</plcandnm>	<plcandnm>MitplExctnDtls/OrdrRcvDtTm</plcandnm>
<txt>2014-02-12</txt>	<envlp></envlp>
	<auto-generated_for_wildcard xmlns="">2014-02-12generated_for_wildcard></auto-generated_for_wildcard>

This is an item that requires further discussion.

3.6.3 Replacement of 'Account Identification 1'

The message component 'Account Identification 1' for safekeeping account is obsolete.

Impacted elements using subscription order as the example message

#	Element	Comment
1	Investment Account Details – Account Identification	Mandatory so impact on all users.
2	Sub Account Details - Identification	
3	Settlement And Custody – REAG, RECU, REI1, DEAG, DECU and DEI1 account	
4	Cash Settlement – Cash Account	Format should be cash account
5	Related Party - Account	

4 Appendix - Order Message Set

#	Name	Identifier	Year first released
1	RedemptionBulkOrderV03	setr.001.001.03	2007
2	RedemptionBulkOrderCancellationRequestV03	setr.002.001.03	2007
3	RedemptionBulkOrderConfirmationV03	setr.003.001.03	2007
4	RedemptionOrderV03	setr.004.001.03	2007
5	RedemptionOrderCancellationRequestV03	setr.005.001.03	2007
6	RedemptionOrderConfirmationV03	setr.006.001.03	2007
7	SubscriptionBulkOrderV03	setr.007.001.03	2007
8	SubscriptionBulkOrderCancellationRequestV03	setr.008.001.03	2007
9	SubscriptionBulkOrderConfirmationV03	setr.009.001.03	2007
10	SubscriptionOrderV03	setr.010.001.03	2007
11	SubscriptionOrderCancellationRequestV03	setr.011.001.03	2007
12	SubscriptionOrderConfirmationV03	setr.012.001.03	2007
13	SwitchOrderV03	setr.013.001.03	2007
14	SwitchOrderCancellationV03	setr.014.001.03	2007
15	SwitchOrderConfirmationV03	setr.015.001.03	2007
16	OrderInstructionStatusReportV03	setr.016.001.03	2007
17	OrderCancellationStatusReportV03	setr.017.001.03	2007
18	RequestForOrderStatusReportV03	setr.018.001.03	2007
19	SubscriptionOrderConfirmationCancellationInstructionV01	setr.047.001.01	2007
20	SubscriptionOrderConfirmationAmendmentV01	setr.048.001.01	2007
21	SubscriptionBulkOrderConfirmationCancellationInstructionV01	setr.049.001.01	2007
22	SubscriptionBulkOrderConfirmationAmendmentV01	setr.050.001.01	2007
23	RedemptionOrderConfirmationCancellationInstructionV01	setr.051.001.01	2007
24	RedemptionOrderConfirmationAmendmentV01	setr.052.001.01	2007
25	RedemptionBulkOrderConfirmationCancellationInstructionV01	setr.053.001.01	2007
26	RedemptionBulkOrderConfirmationAmendmentV01	setr.054.001.01	2007
27	SwitchOrderConfirmationCancellationInstructionV01	setr.055.001.01	2007
28	SwitchOrderConfirmationAmendmentV01	setr.056.001.01	2007
29	OrderConfirmationStatusReportV01	setr.057.001.01	2007
30	RequestForOrderConfirmationStatusReportV01	setr.058.001.01	2007