

# **SWIFT Certified Application**

# Securities Settlement

Label Criteria 2017

This document explains the criteria required to obtain the SWIFT Certified Application - Securities Settlement 2017 label for your business application.

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### **Preface**

#### Purpose of the document

This document explains the criteria required to obtain the SWIFT Certified Application - Securities Settlement 2017 label for your business application.

#### **Audience**

This document is for the following audience:

- · Application product managers
- Developers
- SWIFT customers seeking to understand the SWIFT Certified Application Programme or being involved in the selection of third-party applications

#### Related documentation

SWIFT Certified Application Programme Overview

The document provides an overview of the SWIFT Certified Application Programme. It describes the benefits of the programme for SWIFT registered providers that have a software application they want to certify for compatibility with SWIFT standards, messaging services, and connectivity. This document also describes the application and validation processes that SWIFT uses to check such SWIFT compatibility. SWIFT's certification of an application is not an endorsement, warranty, or guarantee of any application, nor does it guarantee or assure any particular service level or outcome with regard to any certified application.

SWIFT Certified Application Technical Validation Guides

The documents explain in a detailed manner how SWIFT validates the application so that this application becomes SWIFT Certified.

- www.smpg.info for the latest information about market practices
- User Handbook

# 1 SWIFT Securities Settlement Messages

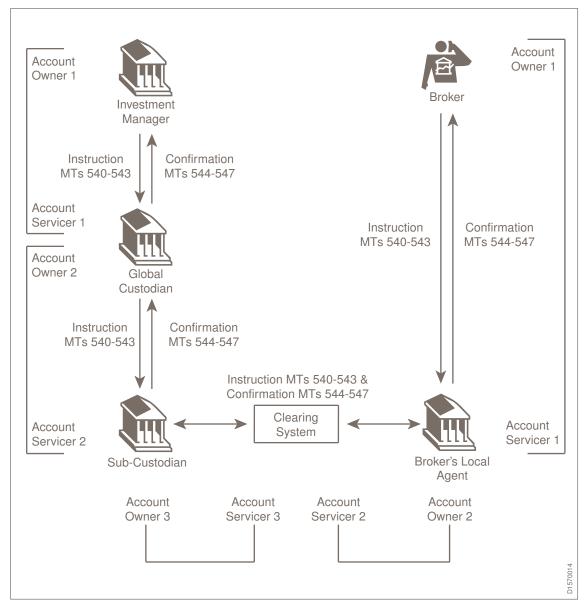
In terms of business processes, Securities Settlement directly follows the Trade Initiation and Confirmation stage. Once the details of a trade have been matched and confirmed and the resulting obligation confirmed by settlement parties (clearing), the delivering and receiving parties must settle the trade.

Each settlement party involved in the chain issues settlement instructions, until both the related receiving instruction from one party and the delivery instruction from the counterparty reach the final place in the settlement system.

Once settlement of the securities has been completed, the account servicer sends the appropriate confirmation message to the account owner. The confirmation message must match the original instruction message. For example, if the instruction is a "Receive Against Payment" instruction, then the confirmation message is a "Receive Against Payment Confirmation" message.

Sometimes, there is no settlement instruction (from the client) as this is directly processed from the trade to the market infrastructure. In addition to a real OTC process described here, on SWIFT there is also Exchange-related settlement.

#### Securities settlement transaction



In addition to the mandatory confirmation of the settlement instruction, the account servicer may also send a Statement of Holdings to the account owner. The purpose is to provide additional information, detailing the quantity and identification of the securities held for the account at a specific point in time.

The account servicer may also send a Statement of Transactions to the account owner, detailing the movement of securities into and out of the safekeeping account. This includes securities movements that result from corporate actions, borrowing and lending, and collateral management activity.

# 2 SWIFT Certified Application - Securities Settlement Label

The SWIFT Certified Application - Securities Settlement labels targets third-party business applications that support Securities Settlement message creation and understanding as well as events processing, such as securities portfolio holdings management.

This label is granted to business applications that adhere to a specific set of criteria linked to the support of SWIFT MT messages, SWIFT connectivity, and SWIFT functionality.

# 3 SWIFT Certified Application - Securities Settlement Criteria 2017

## 3.1 Certification Requirements

#### **New label**

Vendors applying for the SWIFT Certified Application - Securities Settlement label for the first time must comply with all criteria as defined in this document.

#### Label renewal

Vendors that have been granted the SWIFT Certified Application - Securities Settlement label in 2016 are required to prove compliance to the Standards Release (SR) 2017.

If the vendor has upgraded its application, then SWIFT will request details of the new functionalities that the vendor must demonstrate (for example, new functional validation required).

### 3.2 Installed Customer Base

#### Live customer reference

A minimum of five live customers must use the application.

By customer, SWIFT means a distinct financial institution that uses the product to send and receive messages over SWIFTNet.

Five live sites from the same customer are not enough to qualify for a label.

SWIFT reserves the right to contact the relevant customer to validate the functionality of the application submitted for a SWIFT Certified Application label. A questionnaire is used as the basis for the customer validation. The questionnaire can be in the form of a telephone interview, an email, or a discussion at the customer site. The information provided by the customer is treated as confidential and is not disclosed, unless explicitly agreed with the customer.

# 3.3 Messaging

#### **FIN protocol**

The application must support the FIN protocol.

## 3.4 Direct Connectivity

#### Requirements

For direct connectivity, the vendor application must integrate with Alliance Access. A business application that does not connect directly to Alliance cannot be considered for a SWIFT Certified Application label.

The direct connection from the business application to Alliance Access can be achieved using one or more of the Alliance Access adapters:

- MQ Host Adapter (MQHA)
- Automated File Transfer (AFT)
- SOAP Host Adapter

The vendor must develop and test SWIFT application integration using Alliance Access 7.0 or 7.2. Proper support of either Alliance Access Release 7.0 or 7.2 is mandatory for the 2017 label.

The SWIFT Certified Application - Securities Settlement label requires support for either Automated File Transfer (AFT) or an interactive link with MQ Host Adapter (MQHA) or SOAP.

#### **Mandatory adapters**

Messaging service	Standards	Interface	Mandatory adapter
FIN	MT	Alliance Access 7.0 or 7.2	AFT or MQHA or SOAP

#### Note

If the application supports several of the previously mentioned adapters, then the vendor may provide the appropriate evidence for some or all of them during the technical validation. SWIFT only publishes information for which evidence has been provided.

#### **SWIFTNet Release 7.2**

A mandatory upgrade to the underlying technology behind SWIFT's interface products is planned for 2017. The aim of the release is to continue to provide a highly secure and efficient SWIFT service for our customers in the years ahead.

#### Note

Release 7.2 support will become a mandatory requirement in 2018. SWIFT recommends that you test, plan, and prepare for this change accordingly during the course of 2017. Customers will expect statements about your readiness soon after general availability.

More details on the SWIFTNet Release 7.2 can be found on www.swift.com:

- Release 7.2
- User Handbook

#### **Local Authentication (LAU)**

Local Authentication provides integrity and authentication of files exchanged between Alliance Access and any application that connects through the application interface. Local Authentication requires that the sending entity and Alliance Access use the same key to compute a Local Authentication file signature. With the increased number of cyber-attacks on the financial industry, customers will expect message signing with LAU from their application providers.

#### Note

Although Local Authentication support is not mandatory to receive the 2017 SWIFT Certified Application label, SWIFT strongly encourages SWIFT Certified providers to plan for LAU support.

### 3.5 Standards

#### ISO 15022-compliant message standards

Only ISO 15022-compliant message standards are taken into consideration for the SWIFT Certified Application - Securities Settlement label in 2017. The application must be able to support all fields and all mandatory and optional code words.

#### ISO 20022-compliant messages

Although ISO 20022 implementation is not mandatory to receive the 2017 SWIFT Certified Application - Securities Settlement label, SWIFT strongly encourages Certified Application providers to plan for ISO 20022 adoption.

Applications that support ISO 20022 must comply with the following:

- ISO 20022 Harmonisation Charter
- ISO 20022 Version and Release Management Best Practices
- Recommendations for Implementation of ISO 20022 Messages Best Practices

Amongst other requirements, this implies that applications must:

- support the latest or previous version of ISO 20022 messages as available
- align its maintenance cycle with the MX release cycle
- rely on the message specifications as published on MyStandards

#### Recommended ISO 20022 messages list

For a list of recommended ISO 20022 messages for Securities Settlement mapped to the ISO 15022 Message Types please refer to <u>Appendix A</u>.

### **3.5.1 ISO 15022 Message Types**

#### **Account Servicers**

The following message types, for both incoming and outgoing flows, must be supported by vendors whose users are involved as account servicer to an account owner. These users include settlement agents, custodians, central securities depository, and other account servicers.

The following table links the different message types and the related transaction flows:

Transaction flow	Message type
Settlement Instruction and Status Feedback	MT 540, MT 541: Instructions to receive financial instruments from a specified party either Free or Against Payment
	MT 542, MT 543: Instructions to deliver financial instruments to a specified party either Free or Against Payment
	MT 548: Reports on the status of a specific settlement instruction

Transaction flow	Message type
Settlement Confirmation and Position Reporting	MT 544, MT 545: Confirm the receipt of financial instruments from a specified party either Free or Against Payment
	MT 546, MT 547: Confirm the delivery of financial instruments to a specified party either Free or Against Payment
	MT 535 including Delta: Report on the quantity and identification of securities and other holdings held by the account owner
	MT 536: Report on the account activity for all or selected securities, for a specified period of time for a specified account
Additional Processing	MT 578: Settlement Allegement MT 586: Statement of Settlement Allegements

#### Summary of mandatory messages for account servicers

MT Description	IN	OUT
MT 540 - 541 - 542 - 543	Mandatory	Mandatory
MT 544 - 545 - 546 - 547	Mandatory	Mandatory
MT 535	Mandatory	Mandatory
MT 548	Mandatory	Mandatory
MT 536	Mandatory	Mandatory
MT 578 - 586	Mandatory	Mandatory

#### **Account owners**

The following table lists the message types that must be supported by vendors whose players are involved as account owner only. These players are typically investment managers and Broker/ Dealers.

Transaction flow	IN	OUT
MT 540 - 541 - 542 - 543	Optional	Mandatory
MT 544 - 545 - 546 - 547	Mandatory	Optional
MT 535	Mandatory	Optional
MT 548	Mandatory	Mandatory
MT 536	Optional	Optional

Transaction flow	IN	OUT
MT 578 - 586	Mandatory	Mandatory

# 3.6 Message Validation (Syntax and Semantic)

#### Overview

FIN central services validate every FIN message against syntax and semantic rules. The central system rejects messages that do not pass validation. This rejection incurs substantial costs for SWIFT users. To avoid this, applications must provide the same level of validation of the generated messages as the FIN central service does.

#### Standards release

The application must support all changes to existing message types and the introduction of new message types before the live release date on the SWIFT network. If new messages are introduced or significant modification has been made to existing messages, then SWIFT expects the application provider to provide adequate testing time to its customers before these messages go live. Support of the Standards Release Guide 2017 is mandatory for the SWIFT Certified Application - Securities Settlement 2017 Criteria.

#### **Network Validated Rules (Message Format Validation Rules)**

Network Validated Rules are defined in the *Message Format Validation Rules* (MFVR) in the <u>User Handbook</u>. The MFVR is updated on a regular basis, following the SWIFT Standards Release cycle.

#### MT Usage Rules

Usage Rules are not validated on the network, and do not generate error codes. It is mandatory to adhere to these rules when using MT fields, as mentioned *Category 5 - Securities Markets - Message Reference Guides* on the User Handbook.

#### Straight-through processing (STP) guidelines

STP guidelines are not validated on the network and are not mandatory when using MT messages. An application that generates messages is required to comply, whenever possible, with the guiding principles for STP in a SWIFT environment. This includes very generic principles, such as avoiding the use of full name and address for a financial institution.

### 3.7 Market Practices

The industry has created Market Practice Groups. The objective of these groups is to work on globally harmonised market practices, which together with the ISO 15022 standard, enhance STP at an industry level.

Technically speaking, market practices can be seen as an instance of a FIN MT message where some optional fields, keyword, or qualifier become mandatory for a specific country.

Support of these industry market practices is mandatory to receive the Securities Settlement label. In this case, supporting does not mean implementation of all variations of each country. This

means that the software must be able to support the concept and has already a minimum of country specifics implemented together with the general guidelines.

#### **Related information**

www.spmg.info

# 3.8 Technical Message Reconciliation

SWIFT validates messages at different levels and provides notification about validation and transmission results. The application must capture these technical notifications and acknowledgements as well as ensure technical reconciliation, error handling, repair, and retransmission.

### 3.9 User Interface

Whenever relevant, SWIFT expects the application and middleware to offer a Graphical User Interface (GUI).

#### Message viewer

The vendor application must be able to browse incoming and outgoing SWIFT messages in a formatted way. In particular, FIN messages must be visualised with a user-friendly GUI or a web browser that offers business meaningful fields (or a reference to the meaning of a FIN tag field code).

#### Message entry

The Graphical User Interface (GUI) or a web-based browser, if present, must make it possible for a user to input manually any relevant SWIFT message.

The message entry tool must cater for some data input validation at message field level. Any invalid entry must be flagged, and the user must be prompted to correct the input.

#### Message repair

The Graphical User Interface (GUI) or the web-based browser, if present, must make it possible for a user to manually modify any relevant SWIFT message.

# 4 Reference Data Integration

The application must support the directories that are documented in this section.

Optional directories are clearly identified as such.

### 4.1 BIC Directory

#### Overview

The application must provide access to the BIC Directory (or the eventual replacements of the BIC Directory: BIC Plus or BIC Directory 2018) both for message validation and as a look-up function in the message creation and message repair stations.

It is the responsibility of directory subscribers at all times to make sure that they use the latest version of the BIC Directory. As such, SWIFT expects the application to support the BIC Directory monthly update in an efficient manner without disrupting customer operations.

#### Retrieval functionality during message composition

The BICs contained in the BIC Directory, BIC Plus, and BIC Directory 2018 can be used in various fields of the SWIFT messages. The absence of BICs in these fields is one of the major obstacles to straight-through processing (STP) and causes manual intervention on the recipient side. SWIFT expects vendors to provide an integrated interface within their application to make it possible for users to retrieve and input correctly formatted BICs into the proper fields.

#### Search functionality

The user must be able to enter a number of search criteria, such as bank name or address, to perform a search, and to get a list of results. From this result window, the user must be able to select the required BICs and copy these into the different bank identifier fields of the message (that is, the transaction).

If the search criteria return no results, then the user must be alerted that no BIC is available. If the user manually enters an invalid BIC, then the application must send an alert notifying the user that this BIC is not valid.

#### Available format and delivery

Flat file in XML or TXT format.

#### **Delivery**

The BIC Directory, BIC Plus, and BIC Directory 2018 are downloadable in a manual or automated manner from the <u>SWIFTRef Access Point</u> in full and delta versions. Upon request, they can also be delivered through FileAct.

The BIC Directory, BIC Plus, and BIC Directory 2018 must either be copied into the application repository system or stored in the back office for access by the vendor application through a defined interface.

# 4.2 Bank Directory Plus (Optional)

#### Content

Bank Directory Plus contains the following information:

- All BIC11s from the ISO registry (more than 200 countries), from connected and non-connected financial institutions and corporates active on FIN, FileAct, and/or InterAct.
- All LEI (Legal Entity Identifier) from the endorsed LOUs (Local Operating Units).
- · Name and address details for each BIC
- FIN service codes
- National clearing codes (160+ countries), including CHIPS, TARGET, and EBA data. For a limited number of countries (10+), national codes are also provided with name and address in local language (for example, China, Japan, Russia).
- Bank hierarchy information
- · Country, currency, and holiday information
- Timezone information

#### **Available formats**

Flat file in XML or TXT format

#### **Delivery**

The Bank Directory Plus is downloadable in a manual or automated manner from the <u>SWIFTRef</u> <u>Access Point</u> in full and delta versions. Upon request it can also be delivered through FileAct.

# 4.3 IBAN Plus (Optional)

#### Content

The IBAN Plus directory contains the following information:

- IBAN country formats
  - IBAN country prefix
  - IBAN length
  - Bank code length, composition, and position within the IBAN
- Institution name and country
- · Institution bank and branch codes in the formats as embedded in IBANs
- Institution BICs as issued together with the IBANs to the account holders
- Data for the SEPA countries and the non-SEPA countries that adopted the IBAN
- Updates to the file when new IBAN country formats are registered with SWIFT in its capacity as the ISO IBAN registry

The directory is ideal for accurate derivation of BIC from IBAN, covering 68 IBAN countries (including all SEPA countries).

#### **Available formats**

Flat file in XML or TXT format

#### **Delivery**

The IBAN Plus is downloadable in a manual or automated manner from the <u>SWIFTRef Access</u> Point in full and delta versions. Upon request it can also be delivered through FileAct.

### 4.4 SWIFTRef Business Applications

#### Introduction

SWIFTRef offers a portfolio of reference data products and services. Data is maintained in a flexible relational database and accessible in a choice of formats and delivery channels matched to business needs.

#### **Purpose**

Application vendors are able to access BICs, National bank/Sort codes, IBAN data, payment routing data (including SEPA and other payment systems), Standard Settlement Instructions (SSIs), LEIs, MICs (Market Identification Codes), BRNs (Business Registration Numbers), GIINs (Global Intermediary Identification Numbers), and more. Through SWIFTRef, vendors can ensure that their applications support the most accurate and up-to-date reference and entity data for smooth payments initiation and processing.

#### Related information

Additional information about SWIFTRef for application vendors is available on <a href="mailto:swift.com/swiftref-business-applications">swiftref-swift.com/swiftref-business-applications</a>.

# 5 Marketing and Sales

#### Requirements

In order to maximise the business value of the SWIFT Certified Application - Securities Settlement label, collaboration between SWIFT and the vendor is expected. More specifically, the vendor must provide SWIFT, under a non-disclosure agreement, with the following information:

- A list of customers actively using the application in a SWIFT context
   The list must contain the institution name, location, and an overview of the integration scope (domain, features, and sites) for the current and previous year.
- · A list of all customers active in the financial sector
- A product roadmap for 2017 and 2018 containing the plans for further developments, SWIFT support, and new releases
- A complete set of documentation, including feature overview, SWIFT adapters, workflow engine capability, and user manuals

In addition, the vendor must dedicate a page of their web site to describe the SWIFT Certified Application used in a SWIFT context.

# A ISO 20022 Messages Optional for Securities Settlement

#### MT and MX Types

МТ	MX	Message Definition
MT 535	semt.002.XXX.XX	SecuritiesBalanceCustodyReport
	semt.003.XXX.XX	SecuritiesBalanceAccountingReport
	semt.020.XXX.XX	SecuritiesMessageCancellationAdvice
MT 536	semt.017.XXX.XX	SecuritiesTransactionPostingReport
	semt.020.XXX.XX	SecuritiesMessageCancellationAdvice
MT 540	sese.020.XXX.XX	SecuritiesTransactionCancellationRequest
	sese.023.XXX.XX	SecuritiesSettlementTransactionInstruction
	sese.033.XXX.XX	SecuritiesFinancingInstruction
	sese.036.XXX.XX	SecuritiesFinancingModificationInstruction
MT 541	sese.020.XXX.XX	SecuritiesTransactionCancellationRequest
	sese.023.XXX.XX	SecuritiesSettlementTransactionInstruction
	sese.033.XXX.XX	SecuritiesFinancingInstruction
	sese.036.XXX.XX	SecuritiesFinancingModificationInstruction
MT 542	sese.020.XXX.XX	SecuritiesTransactionCancellationRequest
	sese.023.XXX.XX	SecuritiesSettlementTransactionInstruction
	sese.033.XXX.XX	SecuritiesFinancingInstruction
	sese.036.XXX.XX	SecuritiesFinancingModificationInstruction
MT 543	sese.020.XXX.XX	SecuritiesTransactionCancellationRequest
	sese.023.XXX.XX	SecuritiesSettlementTransactionInstruction
	sese.033.XXX.XX	SecuritiesFinancingInstruction
	sese.036.XXX.XX	SecuritiesFinancingModificationInstruction

МТ	MX	Message Definition
MT 544	semt.020.XXX.XX	SecuritiesMessageCancellationAdvice
	sese.025.XXX.XX	SecuritiesSettlementTransactionConfirmation
	sese.026.XXX.XX	SecuritiesSettlementTransactionReversalAdvice
	sese.035.XXX.XX	SecuritiesFinancingConfirmation
MT 545	semt.020.XXX.XX	SecuritiesMessageCancellationAdvice
	sese.025.XXX.XX	SecuritiesSettlementTransactionConfirmation
	sese.026.XXX.XX	SecuritiesSettlementTransactionReversalAdvice
	sese.035.XXX.XX	SecuritiesFinancingConfirmation
MT 546	semt.020.XXX.XX	SecuritiesMessageCancellationAdvice
	sese.025.XXX.XX	SecuritiesSettlementTransactionConfirmation
	sese.026.XXX.XX	SecuritiesSettlementTransactionReversalAdvice
	sese.035.XXX.XX	SecuritiesFinancingConfirmation
MT 547	semt.020.XXX.XX	SecuritiesMessageCancellationAdvice
	sese.025.XXX.XX	SecuritiesSettlementTransactionConfirmation
	sese.026.XXX.XX	SecuritiesSettlementTransactionReversalAdvice
	sese.035.XXX.XX	SecuritiesFinancingConfirmation
MT 548	semt.014.XXX.XX	IntraPositionMovementStatusAdvice
	sese.022.XXX.XX	SecuritiesStatusOrStatementQueryStatusAdvice
	sese.024.XXX.XX	SecuritiesSettlementTransactionStatusAdvice
	sese.027.XXX.XX	SecuritiesTransactionCancellationRequestStatusAdvice
	sese.031.XXX.XX	SecuritiesSettlementConditionsModificationStatusAdvice
	sese.032.XXX.XX	SecuritiesSettlementTransactionGenerationNotification
	sese.034.XXX.XX	SecuritiesFinancingStatusAdvice
MT 578	sese.028.XXX.XX	TransactionAllegementNotification002
	sese.029.XXX.XX	AllegementRemovalAdvice002
MT 586	semt.019.XXX.XX	TransactionAllegementReport002

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