

# **SWIFT Certified Application**

## Reconciliation

Label Criteria 2018

This document explains the criteria required to obtain the SWIFT Certified Application - Reconciliation 2018 label for a business application.

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## **Table of Contents**

Pre	reface		
1	SWI	IFT Certified Application - Reconciliation Label	4
2	SWI	IFT Certified Application - Reconciliation Criteria 2018	5
	2.1	Certification Requirements	5
	2.2	Installed Customer Base	5
	2.3	Messaging	5
	2.4	Direct Connectivity	6
	2.5	Standards	6
	2.6	Message Validation	8
	2.7	Technical Message Reconciliation	9
	2.8	Data Reconciliation Automation Processing and Workflows	9
	2.9	Reference Data Integration (Optional)	10
3	Mar	keting and Sales	14
Α	Арр	pendix A	15
	A.1	ISO 15022 - ISO 20022 Mapping Table for Reconciliation	15
Leg	al Not	iices	18

## **Preface**

#### Purpose of the document

This document explains the criteria required to obtain the SWIFT Certified Application - Reconciliation label for a business application.

#### **Audience**

This document is for the following audience in vendor companies:

- Application Product Managers
- Development Managers
- Developers
- SWIFT customers seeking to understand the SWIFT Certified Application Programme or involved in selecting 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.

# 1 SWIFT Certified Application - Reconciliation Label

#### **Background**

Financial services firms are turning their attention towards reconciliation systems as data grows in complexity and volume.

#### Solution

The SWIFT Certified Application - Reconciliation label helps third-party application vendors to streamline middle-office and back-office operations used to match and reconcile large volumes of securities transaction data (which includes equities, fixed income, derivatives, and funds) and payments.

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

# 2 SWIFT Certified Application - Reconciliation Criteria 2018

## 2.1 Certification Requirements

#### **New label**

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

#### **Existing label**

#### Mandatory

Vendors that have been granted the SWIFT Certified Application - Reconciliation label in 2017 are required to prove compliance with the Standards Release (SR) 2018 and connectivity through Alliance Access 7.2.

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).

### 2.2 Installed Customer Base

#### Live customer reference

A minimum of two live customers must use the application.

At least one of the two live customers must be a user of the intra-day business functionality.

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

Two 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.

#### Related information

**Direct Connectivity** on page 6

## 2.3 Messaging

#### **FIN** protocol

The application must support the FIN protocol.

## 2.4 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 7.2. Proper support of Alliance Access Release 7.2 is mandatory for the 2018 label.

#### **Mandatory adapters**

The SWIFT Certified Application - Reconciliation label requires support for either Automated File Transfer (AFT) or an interactive link with MQ Host Adapter (MQHA) or SOAP for Alliance Access 7.2. The adapters must support the following messaging service and Standards:

Messaging service	Standards
FIN	MT

#### 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.

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

Local Authentication provides integrity and authentication of messages and 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 message/file signature. With the increased number of cyber-attacks on the financial industry, customers will expect message signing with LAU from their application providers.

For more information about LAU, see the Alliance Access Developer Guide.

Note

Although Local Authentication support is not mandatory to receive the 2018 SWIFT Certified Application label, SWIFT strongly encourages SWIFT Certified providers to plan for LAU support.

### 2.5 Standards

#### ISO 15022-compliant message standards

Only ISO 15022-compliant message standards are taken into consideration for the SWIFT Certified Application - Reconciliation label in 2018. 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 2018 SWIFT Certified Application - Reconciliation 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

For more information, see <u>ISO 15022 - ISO 20022 Mapping Table for Reconciliation</u> on page 15.

#### **SWIFT** outgoing message types

The support of the following outgoing message is optional:

Message Type	Message Type name
MT 549	Request for Statement/Status Advice

#### **SWIFT** incoming message types

The support of the following incoming messages is mandatory:

Message Type	Message Type name
MT 535	Statement of Holdings  Note: Support for the "Delta" statement is required, that is, the ability to accept a Statement
	of Holdings that shows just the changes since the previous Statement
MT 536	Statement of Transactions
MT 537	Statement of Pending Transactions
MT 538	Statement of Intra-Position Advices
MT 540	Receive Free
MT 541	Receive Against Payment
MT 542	Deliver Free
MT 543	Deliver Against Payment

Message Type	Message Type name
MT 544	Receive Free Confirmation
MT 545	Receive Against Payment Confirmation
MT 546	Deliver Free Confirmation
MT 547	Deliver Against Payment Confirmation
MT 548	Settlement Status and Processing Advice
MT 578	Settlement Allegement
MT 586	Statement of Settlement Allegements
MT 940	Customer Statement Message
	Note:The MT940 allows free text to be included for each movement. The capture and display of this free text needs to be demonstrated.
MT 950	Statement Message

## 2.6 Message Validation

#### Introduction

FIN central services validate every FIN message against syntax and semantic rules. Messages that do not pass validation are rejected by the central system, incurring substantial cost 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

All changes to existing message types and the introduction of new message types must be supported by the application before the live release date on the SWIFT network. If new messages are introduced or a 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.

The 2018 SWIFT Certified Application - Reconciliation label requires the support of the Standards Release Guide (SRG) 2018.

#### Network validation rules (message format validation rules)

Network validation rules are defined in the <u>Message Format Validation Rules</u>. The *Message Format Validation Rules* are updated 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 follow these rules when using MT fields, as mentioned in the <u>Standards MT Message Reference</u> Guides.

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

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

## 2.7 Technical Message Reconciliation

SWIFT validates messages at different levels and provides notification relating to the validation and transmission results of the messages sent. The application must capture these notifications and ensure technical reconciliation, error handling, repair, and retransmission.

# 2.8 Data Reconciliation Automation Processing and Workflows

#### Overview

The reconciliation application must be able to automate holdings and transactions reconciliation processing using the correct SWIFT messages.

#### Requirements

The following requirements apply to the application:

- perform end-of-day reconciliation based on SWIFT statement messages
- perform intra-day reconciliation based on SWIFT transactions and interim statement messages

The purpose of this requirement is to show that added business functionality exists to calculate an intra-day balance based on transactions or interim statements, in addition to normal end-of-day statement processing.

 have some control on how to differentiate between the intra-day balance and the end-of-day balance

This could be achieved, for example, either by just opening a parallel account, or by merging intra-day and end-of-day movements in the same account. Any calculated balance is only an indication and not a true cash management feature.

- be flexible by taking advantage of SWIFT intra-day message types to enable balance calculations during the day
- demonstrate matching, either intra-account, between Debit/Credit movements, or against a real-time ledger extract, or equivalent

#### Value-added processing

A reconciliation application provides an essential function in itself, but the value of this function increases when it is integrated into the life-cycle of a transaction.

Reconciliation applications must be integrated in the processing cycle from the viewpoint of end-toend processing. Therefore, SWIFT requires the application to support value-added processing, such as:

Event triggers in another application that are the direct result of the reconciliation process.

These events can be categorised as follows:

- an exception that require action to resolve
- a confirmation that authorises the next process to begin.

Examples: late settlement or incorrect amount requiring correction, control of risk exposure, support of cash management process, central authority reporting, authorisation for release of funds or trade transaction

#### Transaction to statement matching

This implies a more comprehensive facility than just matching a statement to an internal position. A reconciliation application is expected to relate a balance to the underlying transaction that led to the movement: a settlement confirmation to a securities movement statement confirmation to a cash statement movement. In other words, requirements for this option are met if the application provides the ability for an operator to link a movement in a statement to information concerning the original transaction that caused the movement to occur.

#### **Exception processing**

#### Mandatory

Reconciliation applications must be able to process exceptions resulting from the matching process and are expected to fully support the following SWIFT recommended investigation messages:

- MT n95 (Queries), which request information relating to a previous message or amendment to a previous message
- MT n96 (Answers), which are used to respond to an MT n95

A reconciliation application must be able to automatically prepare an MT n95 for sending. An operator intervention is necessary only for verification and approval. An application that can send MT n95s but is not able to accept and process the MT n96 does not support STP and therefore its investigation functionality does not qualify for the SWIFT Certified Application - Reconciliation label.

Note

The SWIFT Exceptions and Investigations solution aims to streamline the management of payment-related enquiries. A specific SWIFT Certified Application - Exceptions and Investigations label is endorsing this solution.

#### Optional

MT 549: Request for Statement

## 2.9 Reference Data Integration (Optional)

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

Optional directories are clearly identified as such.

## 2.9.1 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, or Bank Directory Plus) 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 a part of the BIC, 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 Portal</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.

### 2.9.2 Bank Directory Plus

#### Content

Bank Directory Plus contains the following information:

- All BIC11s from the BIC Directory (more than 200 countries), from connected and nonconnected financial institutions and corporates active on FIN, FileAct, and/or InterAct.
- LEIs (Legal Entity Identifier) from the endorsed LOUs (Local Operating Units).

Only LEIs that have a corresponding BIC are included.

- Name and address details for most BICs
- 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>Portal</u> in full and delta versions. Upon request it can also be delivered through FileAct on a daily or monthly basis.

#### 2.9.3 IBAN Plus

#### 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
- Institution bank and branch codes for which no IBANs have been issued and hence that should not be found in IBANs.

The directory is ideal for accurate derivation of BIC from IBAN, covering 72 IBAN countries (including all SEPA countries). It is also ideal for validating IBANs. The capability to validate IBANs is important as many corporations generate IBANs for their vendors, suppliers, and clients, which in many cases are not the correct IBANs issued by the banks.

#### **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> <u>Point</u> in full and delta versions on a daily and monthly basis. Upon request it can also be delivered through FileAct.

### 2.9.4 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:swiftref.swift.com/swiftref-business-applications">swiftref.swift.com/swiftref.swift.com/swiftref-business-applications</a>.

## 3 Marketing and Sales

#### Requirements

In order to maximise the business value of the SWIFT Certified Application - Reconciliation 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 2018 and 2019 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 Appendix A

# A.1 ISO 15022 - ISO 20022 Mapping Table for Reconciliation

MT messages	MX messages
Incoming	Incoming
MT535	semt.002.XXX.XX
	semt.003.XXX.XX
	semt.020.XXX.XX
MT 536	semt.017.XXX.XX
	semt.020.XXX.XX
MT 537	semt.018.XXX.XX
	semt.020.XXX.XX
MT 538	semt.016.XXX.XX
	semt.020.XXX.XX
MT 540	sese.020.XXX.XX
	sese.023.XXX.XX
	sese.032.XXX.XX
	sese.033.XXX.XX
	sese.036.XXX.XX
MT 541	sese.020.XXX.XX
	sese.023.XXX.XX
	sese.032.XXX.XX
	sese.033.XXX.XX
	sese.036.XXX.XX
MT 542	sese.020.XXX.XX
	sese.023.XXX.XX
	sese.032.XXX.XX
	sese.033.XXX.XX
	sese.036.XXX.XX

MT messages	MX messages
MT 543	sese.020.XXX.XX
	sese.023.XXX.XX
	sese.032.XXX.XX
	sese.033.XXX.XX
	sese.036.XXX.XX
MT 544	semt.020.XXX.XX
	sese.025.XXX.XX
	sese.026.XXX.XX
	sese.035.XXX.XX
MT 545	semt.020.XXX.XX
	sese.025.XXX.XX
	sese.026.XXX.XX
	sese.035.XXX.XX
MT 546	semt.020.XXX.XX
	sese.025.XXX.XX
	sese.026.XXX.XX
	sese.035.XXX.XX
MT 547	semt.020.XXX.XX
	sese.025.XXX.XX
	sese.026.XXX.XX
	sese.035.XXX.XX
MT 548	sese.022.XXX.XX
	sese.024.XXX.XX
	sese.027.XXX.XX
	sese.031.XXX.XX
	sese.032.XXX.XX
	sese.034.XXX.XX
MT 578	semt.020.XXX.XX
	sese.028.XXX.XX
	sese.029.XXX.XX

MT messages	MX messages
MT 586	sese.037.XXX.XX
	semt.019.XXX.XX
	semt.020.XXX.XX
MT 596	NA
MT 940	camt.053.XXX.XX
MT 950	camt.053.XXX.XX

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