



Service

Partners

# SWIFTReady Exceptions and Investigations

## Label Criteria 2012

This document explains the criteria needed to obtain the SWIFTReady Exceptions and Investigations 2012 label for your business application.

27 January 2012

# Table of Contents

<b>Table of Contents .....</b>	<b>2</b>
<b>Preface.....</b>	<b>3</b>
<b>1 SWIFT for Exceptions and Investigations: .....</b>	<b>4</b>
<b>2 The SWIFTReady Exceptions and Investigations Label .....</b>	<b>5</b>
<b>3 SWIFTReady Solution Criteria 2012 .....</b>	<b>6</b>
3.1 Changes compared to 2011 .....	6
3.2 Installed Customer Base .....	6
3.3 Connectivity.....	7
3.3.1 Option 1: Direct Connectivity .....	7
3.3.2 Option 2: Indirect Connectivity.....	7
3.4 Messaging.....	8
3.5 Standards .....	8
3.5.1 Library of XML Message Templates.....	8
3.5.2 Correct Payload Structure .....	8
3.5.3 MT/MX Co-Existence.....	9
3.5.4 Bank-to-Bank and Corporate-to-Bank Message Flows .....	9
3.6 Message Reconciliation .....	9
3.7 Message Validation .....	9
3.8 Business Workflows .....	10
3.8.1 Automating the Case Assignment Messages.....	10
3.8.2 Support of the Unique Case Identifier .....	10
3.8.3 Re-Use of the Unique Case Identifier (Case ID) .....	10
3.8.4 Implementation of the Re-Open Flag .....	10
3.8.5 Relating the Underlying Payment Instruction Identification to Unique Case Identifier.....	11
3.8.6 Support of the No By-Pass Rule.....	11
3.8.7 Messaging Grouping by Case .....	11
3.9 User Interface.....	12
3.10 User Profile Management .....	12
3.11 Marketing and Sales .....	12
<b>Legal Notices .....</b>	<b>13</b>

# Preface

## Purpose of this document

This document explains the criteria needed to obtain the SWIFTReady Exceptions and Investigations 2012 label for your business application.

## Intended audience

This document is for the following audience:

- Application Product Managers
- Developers

## Related documentation

The following references can be found at [http://www.swift.com/partners/certify\\_your\\_application](http://www.swift.com/partners/certify_your_application)

- *SWIFTReady Application Programme Overview*  
The document provides an overview of the SWIFTReady programme and its benefits to application vendors. Explains the SWIFTReady validation process, including technical, functional and customer validations.
- *SWIFTReady Technical Validation Guide*  
The document explains in a detailed manner how the validation will be applied to an application to become SWIFTReady compliant.

The following information is available on [www.swift.com](http://www.swift.com) for Exceptions and Investigations 1.2 (to be checked if up-to-date – several instances in doc):

- *Service Description*
- *Integration Guide*
- *Standards MX Message Reference Guides*
- *Standards MX Schemas Standards MX Samples*
- *Samples with InterAct Headers*
- *Samples with Alliance Access Headers*

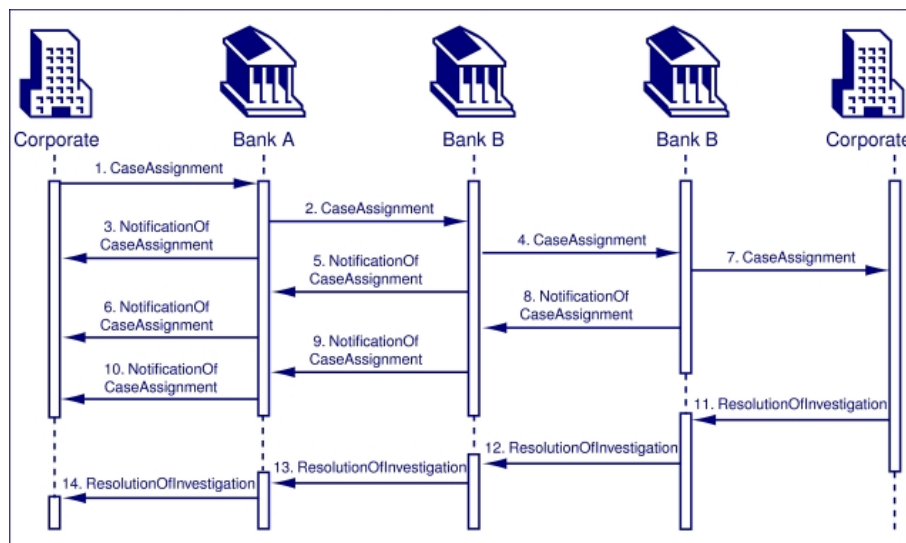
# 1 SWIFT for Exceptions and Investigations

SWIFT for Exceptions and Investigations aims at supporting banks and their customers in their effort to streamline their payment-related enquiries management processes. This is achieved by automating enquiries which have the potential to be automated, hereby increasing also the efficiency in handling enquiries that still require some manual intervention.

The Exceptions and Investigations 1.2 release is currently available. This release relates to the bank-to-bank environment as well as the corporate to bank environment.

Exceptions and Investigations combines the use of:

- 4 case assignment and 12 case management XML messages to be used in a bank-to-bank and corporate-to-bank environment. The business content of the MXs used in the Exceptions and Investigations Bank-to-Bank space is the same as in the Exceptions and Investigations Corporate-to-Bank space. However, there is a slight difference in the header of the messages, hence the reference to two releases and two sets of documentation.
- InterAct in store-and-forward mode. See the relevant *Service Description* and the *Integration Guide* for a complete description of features and functions.
- A Rulebook setting out the rules and describing best practice guidelines applicable to all Exceptions and Investigations users. This includes specific workflows supporting each exception or investigation process, that is, Request for Cancellation, Request for Modification, Unable to Apply and Claim Non Receipt. The following workflow diagram describes the generic flow of messages for an enquiry from creation to closing.



## 2 The SWIFTReady Exceptions and Investigations Label

To integrate SWIFT for Exceptions and Investigations into existing applications or databases and to fully automate the information flows, service users must enhance their existing application infrastructure or obtain new applications. They can develop applications in-house or outsource this to a third-party software vendor. The integrated solution links a SWIFT interface to back-office applications or to a Financial Enterprise Application Integration (EAI) solution.

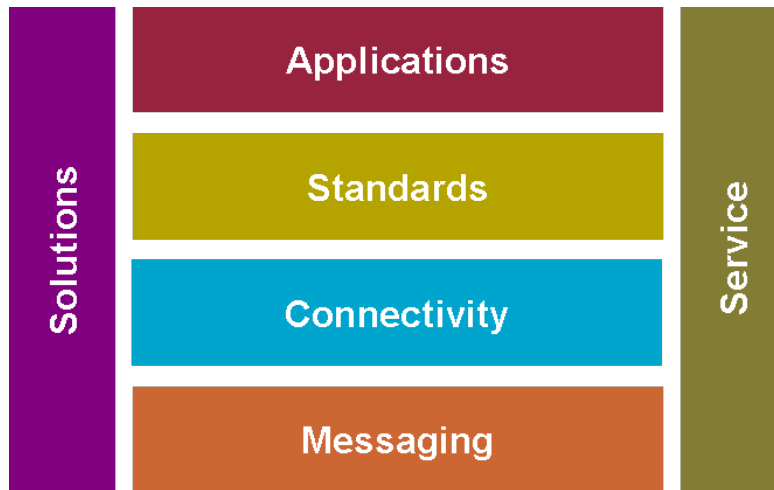
The purpose of this label is to ensure that third-party applications are interoperable with each other, supporting the Exceptions and Investigations standards and rules as described in the SWIFT User Handbook Online. Therefore, the SWIFTReady Exceptions and Investigations label criteria focus on the ability of an application support for:

- Messaging: the InterAct messaging flows defining the request-response communication between sender/receiver and the store-and-forward service.
- Standards and Rulebook: all Exceptions and Investigations MT/MX standards and usage rules as outlined in the *Standards MX Message Reference Guides*.
- Business workflows: a workflow defines the series of messages to be exchanged and the sequence they must be sent in.

The SWIFTReady label criteria require automation based on local application intelligence to support the communication workflows (for example: the application must automatically generate and return a NotificationOfCaseAssignment when forwarding a case to the next party in the payment chain).

Integration is bank-specific and must be included in the bank requirements.

## 3 SWIFTReady Solution Criteria 2012



### 3.1 Changes compared to 2011

New label

Vendors applying for the SWIFTReady Exceptions and Investigations label for the first time must comply to all criteria as defined in this document.

Existing label (renewal from previous year)

Vendors that have been granted the SWIFTReady Exceptions and Investigations label in 2011 are required to prove compliance to Standards Release (SR) 2012.

In case the vendor has upgraded its application, details of the new functionalities will be requested by SWIFT and demonstrated by the vendor (for example, New Functional validation required).

### 3.2 Installed Customer Base

To be eligible for the 2012 label, the Exceptions and Investigations functionality of your solution must be implemented and used by at least 1 live customer using SWIFT for Exceptions and Investigations. By "customer" we mean a separate financial institution using the service to generate/receive messages carried over SWIFTNet.

SWIFT reserves the right to contact the relevant customer to validate the functionality of the application submitted for SWIFTReady certification. A questionnaire will be used as the basis for the customer validation which can be in the form of a telephone interview, an e-mail or a discussion at the customer site. The information provided by the customer will be treated as confidential and will not be disclosed, unless explicitly expressed by the customer.

**Note** If the partner has successfully passed all certification steps to obtain the 2012 label for its application, but fails to have a customer, by which the application is used as described above, its application will receive a conformance statement. This statement will automatically be transferred into the SWIFT Ready label once the partner has a customer that uses the Exceptions and Investigations solution to send and receive live traffic. For more details, see the *SWIFT Partner Programme Terms and Conditions*.

## 3.3 Connectivity

The application must be able to connect to Alliance Access either directly, via one of the adapters mentioned below, or indirectly, via one of the SWIFTReady Financial Enterprise Application Integration (EAI) applications.

An application which does not support a link to an Alliance interface, even though it may support a link to a third-party SWIFT interface, will not be considered for a SWIFTReady label.

### 3.3.1 Option 1: Direct Connectivity

The partner must develop and test SWIFT application integration using **Alliance Access 7.0**.

**Alliance Access** provides a resilient store-and-forward local messaging hub and manages the SWIFT protocol (security, network, and store-and-forward queues management).

When connecting directly to Alliance Access, the business application must:

- add the specific Alliance Access messaging interface header to the request payload (the request payload consists of application header + Exceptions and Investigations business message);
- support the XML v2 data format.

In summary:

Messaging service	Interface	Mandatory Access adapter
InterAct store-and-forward	Access	AFT or MQHA or SOAP

(1) MQSA can no longer be ordered. It is supported in maintenance mode only.

### 3.3.2 Option 2: Indirect Connectivity

Alternatively, you can prove your application compliance with the connectivity criteria by providing SWIFT with evidence of an indirect connectivity solution consisting of your business application and a middleware (EAI) solution. For indirect connectivity, a selection must be made from the list of **2011 SWIFTReady Financial EAI** suites, which are listed on [swift.com http://www.swift.com/partners/locator](http://www.swift.com/partners/locator). Please note that there will not be a 2012 SWIFTReady Financial EAI label.

Financial EAI provides generic adapters that capture business data for various file systems, documents and business application databases, and map them to the requested MT or MX formats, prior to routing and dispatching them to the appropriate Alliance interface. It deals with the messaging and network complexities and eases the integration with SWIFT. The EAI adapters must be customised and configured to map to the partner application, which must also provide the appropriate message reconciliation mechanisms.

When the Partner selects the indirect connectivity option for label qualification, the combined solution (partner application and SWIFTReady Financial EAI) must be tested end-to-end over the SWIFT Integration Test Bed (ITB).

In the latter case, Partner Management reserves the right to contact the relevant financial institution for further information.

## 3.4 Messaging

The application (optionally through a Financial EAI application) must support InterAct and its mandatory associated features as listed in the *Service Description* and *Integration Guide* for Exceptions and Investigations 1.2.

## 3.5 Standards

The application must support all case assignment messages and all case management messages following the rules as described in the *SWIFT Standards MX Message Reference Guides 1.2* as well as the related FIN messages.

### List of messages required for SWIFTReady Exceptions and Investigations

Request Type	Request Name	Incoming/Outgoing
camt.007.002.02	RequestToModifyPaymentV02	Ü
camt.008.002.02	RequestToCancelPaymentV02	Ü
camt.026.001.02	UnableToApplyV02	Ü
camt.027.001.02	ClaimNonReceiptV02	Ü
camt.028.001.02	AdditionalPaymentInformationV02	Ü
camt.029.001.02	ResolutionOfInvestigationV02	Ü
camt.030.001.02	NotificationOfCaseAssignmentV02	Ü
camt.031.001.02	RejectCaseAssignmentV02	Ü
camt.032.001.01	CancelCaseAssignmentV01	Ü
camt.033.001.02	RequestForDuplicateV02	Ü
camt.034.001.02	DuplicateV02	Ü
camt.035.001.01	ProprietaryFormatInvestigationV01	Ü
camt.036.001.01	DebitAuthorisationResponseV01	Ü
camt.037.001.02	DebitAuthorisationRequestV02	Ü
camt.038.001.01	CaseStatusReportRequestV01	Ü
camt.039.001.02	CaseStatusReportRequestV01	Ü
	and	Ü
MT192/MT292	Request for cancellation	Ü
MT195/MT295	Queries	Ü
MT196/MT296	Answers	Ü
MT199/MT299	Free Format Message	Ü

All changes to the messages must be supported by the application before the live release date on the SWIFT network. When new messages are introduced or those existing are significantly modified, we expect the application providers to provide adequate testing time to their customers prior to these messages going live.

### 3.5.1 Library of XML Message Templates

To minimise the need for manual entry, the application must provide a library of all standard Exceptions and Investigations XML messages which an automated process or operator can select from.

### 3.5.2 Correct Payload Structure

The application must be able to generate the correct payload structure of the 16 XML schemas.

### 3.5.3 MT/MX Co-Existence

Since the XML-based messages (MXs) for Exceptions and Investigations today co-exist with the formatted FIN enquiry messages, the application must be capable to send/receive the Exceptions and Investigations MXs as well as the FIN messages listed in section 3.5 Standards.

The application must also be able to automatically generate or forward an investigations message to the next party in the payments chain in the appropriate syntax (MX or MT), that is, depending on the Exceptions and Investigations readiness status of this next party. The readiness status of Exceptions and Investigations customers can be found in the *SWIFTNet Services Directory*. The *SWIFTNet Services Directory* on [www.swift.com](http://www.swift.com) lists all test and live users that participate in Exceptions and Investigations. The application must enable a user to upload and manually update the available information from the Directory.

The application is required to incorporate the Unique Case ID in the generated MT or MX message.

### 3.5.4 Bank-to-Bank and Corporate-to-Bank Message Flows

The Exceptions and Investigations solution is set up in two distinct SWIFTNet services to support the corporate-to-bank or the bank-to-bank message flows.

The application must support both environments.

Based on the information downloaded from the *SWIFTNet Services Directory* on [www.swift.com](http://www.swift.com), the application must be able to decide in which Exceptions and Investigations service the message has to be sent, that is, the Exceptions and Investigations corporate-to-bank service or the Exceptions and Investigations bank-to-bank service, in the test & training or the live environment.

The application must provide the messaging interface with the above information to enable the appropriate must header to be generated.

The service name for Exceptions and Investigations for corporate-to-bank (swift.corp.eni) in the header of the InterAct message differs from the one used in the bank-to-bank environment (swift.eni). For example:

- a corporate sending an investigation to a bank uses swift.corp.eni (live environment) or swift.corp.eni!p (test and training environment)
- a bank forwarding this investigation to another bank uses swift.eni (live environment) or swift.eni!p (test and training environment)
- a bank sending a notification to its corporate uses swift.corp.eni (live environment) or swift.corp.eni!p (test and training environment)

## 3.6 Message Reconciliation

The application must be able to reconcile technical messages such as SWIFTNet acknowledgements and delivery notifications. If the application connects to Alliance Access, the reconciliation of the local Alliance Access message status is also required.

## 3.7 Message Validation

All MX messages must be validated against the relevant XML schemas and against Extended Validation Rules that are provided in the Rulebook and *SWIFT Standards MX Message Reference Guides 1.2*.

The application must provide validation on field and message level:

- On field level, the data structure such as length and structure of currency, BIC/BEI, date format and field length must be validated. The user must be prompted to correct the information if this is not according to the specified rules.

- On field content level, the user must be stopped if its action is not in line with the User Handbook or *Exceptions and Investigations Rulebook* (for example, a RequestToModifyPayment must never be sent to request the modification of the currency of the original payment instruction).
- On message level, the application must provide the correct mapping, that is, including business information in the right XML tag.

It is important to clarify the date/time usage in messages. An application is often using local date/time but without indication, so that the receiver does not know what is the sender's local time. It is therefore strongly recommended to provide a non-ambiguous way of specifying date/time by either referring to GMT time or by giving the time offset as required by the ISO date time used in the schema.

## **3.8 Business Workflows**

### **3.8.1 Automating the Case Assignment Messages**

The application must have the ability to provide a minimum level of straight-through processing.

For the case assignment messages:

- when appropriate, the application must automatically generate a NotificationOfCaseAssignment,
- before closing a case the application must automatically generate a ResolutionOfInvestigation,
- when receiving a CaseStatusReportRequest, the application must be able to automatically generate a CaseStatusReport,
- for all other messages (if not fully automated) the operator must be offered a drop-down list of appropriate (not all) messages to select from. The application must also provide automation such as pre-filling/copying fields, from the underlying payment message into the appropriate Exceptions and Investigations message and from an incoming Exceptions and Investigations message into an outgoing Exceptions and Investigations message.

### **3.8.2 Support of the Unique Case Identifier**

The application must be capable of generating a unique case identifier. This unique case identifier must not be changeable by the operator.

In order to make the case identifier unique for all the parties involved in a workflow, it is composed of two distinct parts: the case creator identification (usually a financial institution BIC or non-financial institution BIC) and a unique number (Casecreator reference).

If a sequential number is used for the Case creator reference, the range of numbers must be large enough to avoid ambiguity when restarting the sequence. Alternatively, date and time can be used followed by a sequential number.

### **3.8.3 Re-Use of the Unique Case Identifier (Case ID)**

The case assignee must be able to re-use the unique case identifier (the combination of the case creator and case creator reference) in all its communications with both its case assigner and possible further case assignees during the case life cycle.

### **3.8.4 Implementation of the Re-Open Flag**

Closed cases can be re-opened and re-assigned. When this happens, the same unique case identifier is to be used as the one in the initial case, with a flag indicating that this is a re-opened case.

The application must enable for a case to be re-opened and the same case identifier (Case ID) to be re-used. The case can be re-opened as a new type by the initiating or the final party (that is, an UnableToApply can be re-opened as a RequestToCancelPayment).

The application has to ensure that a message received with a re-open flag triggers the re-open flag to be passed on in all subsequent messages.

### 3.8.5 Relating the Underlying Payment Instruction Identification to Unique Case Identifier

When a case is assigned to a case assignee, the case assignee must first check the validity of the assignment. If the assignment is valid, the case assignee must check that there is no other case open on this underlying instruction.

- If there is no other case open for the same payment instruction, the case assignee must accept the case. Acceptance is implicit.
- If there is an open case for the same payment instruction, the case assignee will request the closure of one of the open cases. This is achieved by sending a ResolutionOfInvestigation message indicating that the case is a duplicate of another case (with the reference to the case). The receipt of the ResolutionOfInvestigation with the DuplicateOf filled in will close the current case.

The application must guide the investigator also on how to handle concurrent workflows by prompting the investigator to select the assignment, which has priority, as stated in the table below, and close other assignment with an informative message.

When assignee has	Unable to apply	ClaimNonReceipt
Request to Modify Payment	Continue with Request to Modify Payment	Continue with Request to Modify Payment
Request to Cancel Payment	Continue with Request to Cancel Payment	Continue with Request to Cancel Payment
Unable to Apply	N/A	Continue with Unable to Apply

Some examples:

- When a RequestToCancelPayment is received as well as an UnableToApply for the same payment, the application must be able to identify these investigation messages as relating to the same underlying payment and must update the case. The application must warn the investigator of the concurrent enquiry requests and prompt the investigator to take the appropriate action, that is, send a ResolutionOfInvestigation to the assigner of the UnableToApply indicating that cancellation will follow and process the RequestToCancelPayment.
- When the same investigation has been received twice for the same underlying payment, the application must warn the investigator that a case is already open and prompt him to send a ResolutionOfInvestigation confirming duplication.

### 3.8.6 Support of the No By-Pass Rule

The "no by-pass" rule specifies that no party involved in the original payment transaction can be by-passed in the Exceptions and Investigations workflow. The application must prevent operators from violating this rule for example by pre-populating the party field with information from the underlying payment instruction.

### 3.8.7 Messaging Grouping by Case

The application must be able to allocate a message to the corresponding "case ID" and to present all messages that have been exchanged in relation to a specific case (ID). The application must group incoming and outgoing messages using, amongst others, date/time, Case ID, Assigner, Assignee.

The application must also be able to store the incoming and outgoing messages in the right order using date/time.

## 3.9 User Interface

The application must enable for manual entry/display capability and repair for XML and FIN (n92, n95, n96, n99) Exceptions and Investigations messages. The application must enable the creation of an MX/MT message and manual repair before re-inserting the message into the output queue.

SWIFT expects the application to offer a Graphical User Interface:

- enabling a user to manually input or modify any message
- offering normalised fields for input (independent from underlying syntax and business meaning)
- validating data input at field level – any invalid entry must be flagged, and the user prompted to correct the input
- providing the user with an intuitive method to follow the status of a particular case

## 3.10 User Profile Management

The application must provide a user profile management functionality to ensure that only authorised users can perform specific tasks. The partner must demonstrate how their application handles user profile creation, update and deletion and that access is denied or an operation is refused if a user is not entitled to perform this operation.

The partner must also demonstrate that the application supports the "four eyes principle" by showing that a specific operation (for example, payment initiation) requires a second person to validate it before execution.

## 3.11 Marketing and Sales

The partner will work together with SWIFT developing and generating more business. To optimize the collaboration, the partner is expected to provide SWIFT with administrative and marketing information. In particular the partner must provide SWIFT, under non-disclosure agreement, following customer-related information:

- a list of all customers active in the finance sector. The list must provide institution names, locations, and an overview of the integration scope (domain, features, and sites) for the present and previous year.
- a product roadmap for 2012 and 2013, containing the plans for further developments, Solutions support and new releases.
- a complete set of documentation, including features overview, where appropriate SWIFT adapters, workflow engine capability and user manuals.
- a dedicated web page on Partner web site for the SWIFTReady label.

# Legal Notices

## Copyright

SWIFT © 2012. All rights reserved.

You may copy this publication within your organisation. Any such copy must include these legal notices.

## Confidentiality

This publication contains SWIFT or third-party confidential information. Do not disclose this publication outside your organisation without the prior written consent of SWIFT.

## Disclaimer

The information in this publication may change from time to time. You must always refer to the latest available version on [www.swift.com](http://www.swift.com).

## Translations

The English version of SWIFT documentation is the only official and binding version.

## Trademarks

SWIFT is the trade name of S.W.I.F.T. SCRL. The following are registered trademarks of SWIFT: SWIFT, the SWIFT logo, the Standards Forum logo, 3SKey, Innotribe, Sibos, SWIFTNet, SWIFTReady, and Accord. Other product, service, or company names in this publication are trade names, trademarks, or registered trademarks of their respective owners.