



SWIFT Certified Application

Supply Chain Finance

Label Criteria 2017

This document explains the criteria required to obtain the SWIFT Certified Application - Supply Chain Finance 2017 label aimed at Trade Applications in banking back-office environments.

27 January 2017

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Preface

Purpose of the document

This document explains the criteria required to obtain the 2017 SWIFT Certified Application - Supply Chain Finance label, aimed at Trade Applications in banking back-office environments.

Audience

This document is for the following audience:

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

Related documentation

www.swift.com > User Handbook > A-Z > [Partners](#)

- [SWIFT Certified Application Programme Overview](#)

The document provides an overview of the SWIFT Certified Application programme. It describes the benefits for SWIFT users and for application vendors that want to certify a software application for compliance against SWIFT standards, messaging services, and connectivity. This document also describes the validation processes that SWIFT uses to check the compliance of vendor products.

www.swift.com > User Handbook > A-Z > [Trade Services](#):

- [Trade Services Utility Service Description](#)
- [Trade Services Utility Integration Guide](#)
- [Trade Services Utility Interface User Guide](#)
- [Standards MX - Message Reference Guide](#)
- [Standards MX - Samples](#)
- [Standards MX - Schemas](#)

www.swift.com > User Handbook > Standards > [Standards MX](#):

- [Standards MX General Information](#)

www.swift.com > Products & services > Trade Services Utility > [Additional Information](#):

- [Trade Digitisation](#)

www.swift.com > Resource centre > Business areas > Resource centre > Trade and Supply Chain:

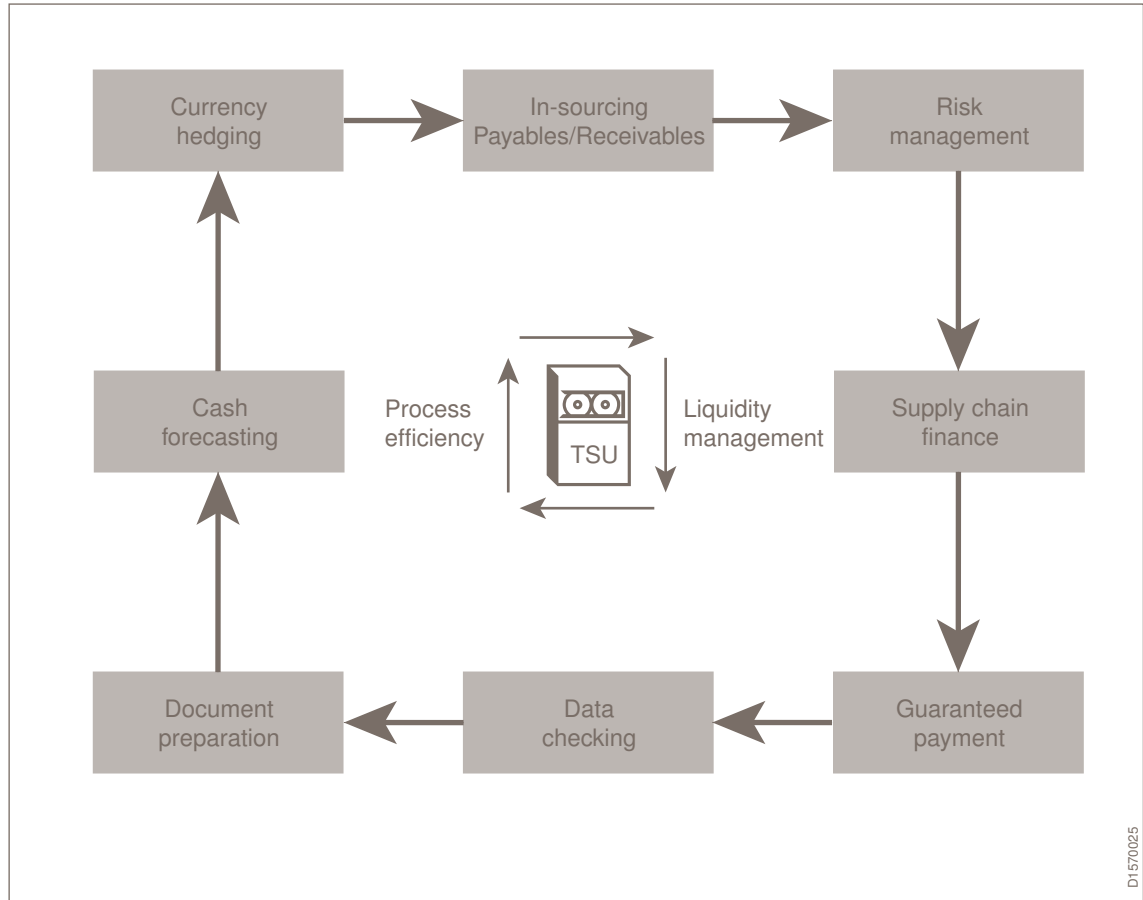
- [TSU - Corporate-to-Bank Guidelines for ISO 20022 standards](#)
- [SWIFT Certified Application - Supply Chain Finance - Test scenarios](#) (to be provided during the course of 2016).

This document contains the test scenarios provided by SWIFT for the Supply Chain Finance label.

1 SWIFT Supply Chain Finance Solution

The Trade Services Utility (TSU) is a collaborative, centralised matching and workflow engine for use by the SWIFT banking community. It is designed to help banks provide competitive supply chain services to their corporate customers. It builds on SWIFT traditional strengths in providing standards and messaging, and reuses the SWIFT infrastructure already in place in banks' back-offices. All communication is Bank-to-Trade Services Utility or Trade Services Utility-to-Bank.

Bank Services based on the TSU



The Trade Services Utility primary functions are to compare data sets as submitted by the bank(s) and then report the results back to the bank(s). The Trade Services Utility deals with data that corresponds to underlying commercial transactions between corporations. The workflow is defined by the "status" or "states" that a TSU transaction can have and the messages that are permitted in each state. A TSU transaction may go through all the states but it is not required to do so.

1.1 SWIFTNet Messaging Services

The following services are available as described in the table below.

Messaging Service	Mode Used
For bank-to-TSU communication	InterAct and FileAct in real-time
TSU-to-bank communication	InterAct and FileAct in store-and-forward

See the relevant *Service Descriptions* and the [Trade Services Utility Integration Guide](#) for a complete description of the features and functions.

1.2 The TSU Application

The TSU application is described in detail in the [Trade Services Utility Integration Guide](#).

1.3 The (Optional) TSU Interface

SWIFT has developed an optional product for banks that choose not to integrate the TSU application with their back-offices. This product is described in detail in the [Trade Services Utility Interface User Guide](#).

2 **The SWIFT Certified Application - Supply Chain Finance Label**

The SWIFT Certified Application - Supply Chain Finance label is granted to Trade applications that work in a banking back-office context. The label is awarded after a successful technical and functional certification by SWIFT using the SWIFT test scenarios over the SWIFT integration testbed service, and a successful product demonstration with a functional and/or business validation by SWIFT experts, as appropriate.

All XML messages of the TSU 2.0 release must be supported. SWIFT will verify this by means of the test scenarios that simulate workflows using a subset of these messages.

3 SWIFT Certified Application - Supply Chain Finance Criteria 2017

3.1 Changes Compared to 2016

New label

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

Label renewal from previous year

The existing labels which present no Product List information at this moment will need to implement this with their next release (see [Product Information](#) on page 11).

3.2 Installed Customer Base

The 2017 label does not require you to have a live customer reference.

3.3 Messaging

The application must be able to support FileAct Real-time (bank-to-TSU communication) and FileAct in store-and-forward mode messaging (TSU-to-bank communication).

Support of ISO20022 messages (tsmt) for corporate to bank (including bank payment obligation) is optional.

3.4 Connectivity

3.4.1 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 - Supply Chain Finance 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
InterAct in store-and-forward mode	MX XML	Alliance Access 7.0 or 7.2	AFT or MQHA or SOAP
InterAct in real-time mode	MX XML	Alliance Access (client) or 7.2	AFT or MQHA or SOAP
FileAct in real-time mode	Any	Alliance Access 7.0 or 7.2	AFT or MQHA or SOAP
FileAct in store-and-forward mode	Any	Alliance Access 7.0 (client) 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.*

3.4.2 Provisioning on the Integration Test Bed (ITB)

How to be provisioned on the ITB

To be provisioned on the ITB, you must subscribe to the TSU service through the [e-ordering forms](#). Subscription to these services is free of charge to SWIFT vendors, as is the test traffic sent on the ITB.

Note *ITB provisioning forms can be found on the [Developer Resource Centre](#).*

Select the following service names: `swift.tsu!x` and `swift.tsu.st!x`.

It is your responsibility to install new releases or patches linked to the TSU and to set up and maintain your connection to the ITB. It is not mandatory to have your own connection to the ITB. You can use the connection of another SWIFT vendor to exchange messages on the ITB provided the test traffic sent can be identified as coming from your application, that is, using your vendor identification code.

It is also your responsibility to ensure that your connectivity to the ITB has been successfully tested before you apply for certification.

If you use the live or Test and Training connection of another SWIFTNet TSU test or production customer, then SWIFT Partner Management will accept proof of your compliance only in exceptional circumstances. In this case, SWIFT Partner Management reserves the right to contact the relevant financial institution for further information.

Setting up your own ITB

Even if you do not have an ITB environment, it is possible for you to set up your own ITB environment completely from the beginning. However, if you do this then SWIFT strongly recommends that you plan accordingly.

There are many aspects to setting up an ITB environment (for example ordering, set up and testing). If you feel that in-house development would be too long or take too many resources, then SWIFT recommends you to either follow specialised training or order consultancy services.

If you would like more information on this, then please contact your local account manager.

3.5 Standards

The application must support all TSU Release 2.0 messages as described in the *Trade Services Utility 2.0, Standards MX Message Reference Guide*.

The messages must be created to send to the TSU or processed when received from the TSU. All changes to the messages must be supported by the application before their live release date on the SWIFT network. When new messages are introduced or significant modifications have been made to existing messages, we expect the application provider to provide adequate testing time to customers prior to these messages going live.

On message level, the application must provide the correct mapping including business information to the correct XML tag.

Support of ISO20022 messages (tsmt) for corporate to bank (including bank payment obligation) is optional for the 2015 label.

3.6 TSU Application Support

The application must support the functionality and message flows as described in the [Trade Services Utility Service Description](#) and [Trade Services Utility Integration Guide](#).

All changes to the TSU application must be supported by the application before the live release date on the SWIFT network. When new functionality is introduced or significant modifications have been made to the existing TSU application, SWIFT expects the application provider to provide adequate testing time to customers prior to this functionality going live.

Whenever SWIFT implements a new release it will become available on the ITB 3-4 months before going in Production. The fixed time for customer testing, release in Production Pilot, is 2 months. Providers should respect those times and make their updates available to their customers two months before going Live.

3.6.1 Lodge and Push Through Model Support

SWIFT has developed and documented a comprehensive set of test scenarios for the use of banks and vendors. These scenarios describe an example of the TSU messages that may be exchanged under various circumstances.

SWIFT expects the application provider to be able to execute these scenarios as documented by exchanging correctly formatted TSU messages with the TSU engine over SWIFT ITB.

In order to execute the test scenarios, you must create a test environment simulating the different counterparties (that is, both the buyer's bank and the seller's bank and the Submitting or Obligor bank). All banks should be enabled to initiate a TSU transaction and to respond to the initiation of a TSU transaction by another financial institution. All entities must also be provisioned on the TSU services on the ITB.

Note *In order to execute the test scenarios and simulate the different counterparties, the provider is advised to order two additional branch codes (free of charge) at www.swift.com > Ordering > Ordering for partners.*

For more information, see the [SWIFT Certified Application Supply Chain Finance Certification Scenarios](#) (to be provided during the course of 2017).

3.6.2 Message Identifiers

The application must be able to assign and associate identifiers to expedite the business processing of TSU transactions.

3.6.3 Reminder and Timeout Support

The application will also need to provide mechanisms to interpret the reminders and timeout notifications sent by the TSU application during the life cycle of a particular transaction and to create the appropriate operator alerts.

3.6.4 Product Information

The use of the ProductInfo (Sw:ProductInfo) field in the header of the XML messages is mandatory. This field is used in every request to identify the application. Both Sw:ProductName and Sw:ProductVersion can be used for proper identification of the product and, if applicable, any applications.

The Product List is composed of:

- swVendorName (V="name" 8 Char max)
- swProductName (P="8 Char" max)
- swProductVersion (R="8 Char" max)

3.7 Business Workflow

SWIFT acknowledges that TSU transactions will require Financial Institutions staff to intervene at given points in order to make business decisions. The application must, however, minimise the need for manual entry of data.

For some vendors this may mean converting data received in alternative message formats into the prescribed TSU XML format. For other vendors it may mean enabling operators to choose from pre-filled templates of all appropriate TSU XML messages. In some cases, it may mean routing TSU decision requests to the decision maker through internal mail.

SWIFT expects the application to:

- validate data input at the field level. Any invalid entry must be flagged, and the user must be prompted to correct the input
- provide the user with an intuitive method of following the status of a particular transaction
- enable manual intervention as needed in the TSU life-cycle, given the nature of the application (for example, display capability, creation of messages, repair of messages)
- enable the user to access incoming and outgoing messages by filtering (for example, using date/time, reference, Transaction Identifier)
- provide audit trail of performed actions

3.8 User Profile Management

The application must ensure the security of the Financial Institution processes.

SWIFT expects this security to include ensuring that only authorised users (whether people or applications) can perform a specific task. You must demonstrate how profile management is assured and how access is denied to unauthorised users.

In a non-automated environment the application must also be able to support the "4-eyes principle".

3.9 Reference Data Integration (Optional)

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

Optional directories are clearly identified as such.

3.9.1 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) 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 [SWIFTRef Access Point](#) 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.

3.9.2 Bank Directory Plus

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 [SWIFTRef Access Point](#) in full and delta versions. Upon request it can also be delivered through FileAct.

3.9.3 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

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 [SWIFTRef Access Point](#) in full and delta versions. Upon request it can also be delivered through FileAct.

3.9.4 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 swiftref.swift.com/swiftref-business-applications.

4 Marketing and Sales

Requirements

In order to maximise the business value of the SWIFT Certified Application - Supply Chain Finance 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 TSU 2.0 XML Messages

A.1 List of SWIFT TSU 2.0 XML Messages Required for the 2017 SWIFT Certified Application - Supply Chain Finance Label

The following table shows the messages required for the 2017 SWIFT Certified Application - Supply Chain Finance Label application.

Message Type	Business Message
tsmt.001.001.03	Acknowledgement
tsmt.002.001.03	Activity Report
tsmt.003.001.03	Activity Report Request
tsmt.004.001.02	Activity Report Set Up Request
tsmt.005.001.02	Amendment Acceptance
tsmt.006.001.03	Amendment Acceptance Notification
tsmt.007.001.02	Amendment Rejection
tsmt.008.001.03	Amendment Rejection Notification
tsmt.009.001.03	Baseline Amendment Request
tsmt.010.001.03	Baseline Match Report
tsmt.011.001.03	Baseline Report
tsmt.012.001.03	Baseline ReSubmission
tsmt.013.001.03	Data Set Match Report
tsmt.014.001.03	Data Set Submission
tsmt.015.001.03	Delta Report
tsmt.016.001.03	Error Report
tsmt.017.001.03	Forward Data Set Submission Report
tsmt.018.001.03	Full Push Through Report
tsmt.019.001.03	Initial Baseline Submission
tsmt.020.001.02	MisMatch Acceptance

Message Type	Business Message
tsmt.021.001.03	MisMatch Acceptance Notification
tsmt.022.001.02	MisMatch Rejection
tsmt.023.001.03	MisMatch Rejection Notification
tsmt.024.001.03	Action Reminder
tsmt.025.001.03	Status Change Notification
tsmt.026.001.02	Status Change Request
tsmt.027.001.02	Status Change Request Acceptance
tsmt.028.001.03	Status Change Request Notification
tsmt.029.001.02	Status Change Request Rejection
tsmt.030.001.03	Status Change Request Rejection Notification
tsmt.031.001.03	Status Extension Acceptance
tsmt.032.001.03	Status Extension Notification
tsmt.033.001.03	Status Extension Rejection
tsmt.034.001.03	Status Extension Rejection Notification
tsmt.035.001.03	Status Extension Request
tsmt.036.001.03	Status Extension Request Notification
tsmt.037.001.03	Status Report
tsmt.038.001.03	Status Report Request
tsmt.040.001.03	Time Out Notification
tsmt.041.001.03	Transaction Report
tsmt.042.001.03	Transaction Report Request
tsmt.044.001.01	IntentToPayNotification
tsmt.045.001.01	ForwardIntentToPayNotification
tsmt.046.001.01	IntentToPayReport
tsmt.047.001.01	SpecialRequest
tsmt.048.001.01	SpecialNotification

Message Type	Business Message
tsmt.049.001.01	RoleAndBaselineAcceptance
tsmt.050.001.01	RoleAndBaselineRejection
tsmt.051.001.01	RoleAndBaselineAcceptanceNotification
tsmt.052.001.01	RoleAndBaselineRejectionNotification

B ISO 20022 Messages

B.1 ISO 20022 Messages

The following functions are required for corporate-to-bank communication:

- baseline establishment
- baseline amendment
- data set submission
- intent to pay

Documentation of messages:

- XML schemas and documentation (MDR - Message Definition Report) are on the iso20022 web site at the following location http://www.iso20022.org/full_catalogue.page

www.swift.com > Resource centre > Business areas > Resource centre > Trade and Supply Chain:

- [TSU - Corporate-to-Bank Guidelines for ISO 20022 standards](#)

The TSU messages that are in scope for corporate-to-bank are as follows:

Incoming (to TSU)	Message Identifier
InitialBaselineSubmissionV03	tsmt.019.001.03
BaselineReSubmissionV03	tsmt.012.001.03
DataSetSubmissionV03	tsmt.014.001.03
BaselineAmendmentRequestV03	tsmt.009.001.03
AmendmentAcceptanceV02	tsmt.005.001.02
AmendmentRejectionV02	tsmt.007.001.02
MisMatchAcceptanceV02	tsmt.020.001.02
MisMatchRejectionV02	tsmt.022.001.02
IntentToPayNotificationV01	tsmt.044.001.01

Outgoing (from TSU)	Message Identifier
AcknowledgementV03	tsmt.001.001.03
AmendmentAcceptanceNotificationV03	tsmt.006.001.03
AmendmentRejectionNotificationV03	tsmt.008.001.03
BaselineAmendmentRequestV03	tsmt.009.001.03

Outgoing (from TSU)	Message Identifier
BaselineMatchReportV03	tsmt.010.001.03
BaselineReportV03	tsmt.011.001.03
DataSetMatchReportV03	tsmt.013.001.03
DeltaReportV03	tsmt.015.001.03
ErrorReportV03	tsmt.016.001.03
ForwardDataSetSubmissionReportV03	tsmt.017.001.03
FullPushThroughReportV03	tsmt.018.001.03
MisMatchAcceptanceNotificationV03	tsmt.021.001.03
MisMatchRejectionNotificationV03	tsmt.023.001.03
ActionReminderV03	tsmt.024.001.03
TimeOutNotificationV03	tsmt.040.001.03
ForwardIntentToPayNotificationV01	tsmt.045.001.01
IntentToPayReportV01	tsmt.046.001.01

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