



## SWIFT securities tracking initiative

# Generation and communication of unique transaction identifiers (UTI) for settlement of securities trades

### Market Guidelines and Implementation Summary

May 2022

# Preface

## About this document

This document represents the results of the consultative process to establish market guidelines for the integration of a unique transaction identifier into the securities settlement lifecycle.

## Intended audience

This document is for the following audience:

- All organisations that participate in the post-trade lifecycle for the settlement of securities transactions
  - Securities settlement processing teams & support squads

## Significant changes

The following tables list all significant changes to the content of these market guidelines and implementation summary since the March 2022 version. The tables do not include editorial changes that SWIFT makes to improve the usability and comprehension of the document.

New information	Location
Updates to UTI generation logic to emphasize the role(s) that service providers play, incorporate manual processes notably in bi-lateral exchange.	Section 4

# 1 Introduction

The implementation of a Unique Transaction Identifier into the securities settlement lifecycle helps drive the capital markets goals of harmonization and efficiency. The consolidation and standardization of data via a shared reference enables transaction visibility, consensus, cost reductions and greater interoperability between systems and counterparties.

This document represents the market and implementation guidelines for the generation & communication of a UTI for settlement of securities trades, and aligns with current industry standards and market practices: [CPMI & IOSCO](#); [ISO](#); [ESMA](#); [ISDA](#); [GFMA](#);

This document can be used by the teams responsible to generate and communicate the UTI in the settlement and reconciliation flows.

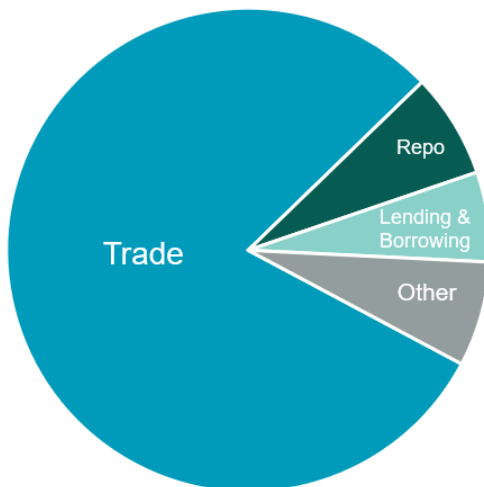
## 2 Scope: Settlement of securities ‘trades’

Financial firms have multiple activities that create securities transactions between counterparties. Various factors contribute to the volume, content and complexity of these transactions including, workflows, asset class, technology, regulation, organization type and size.

This market practice covers the settlement of a securities **trade**, which occurs as part of the post trade life cycle following an execution between an initiating instructing party and their trade executing counterparty. These represent the majority of instruction messages on SWIFT.

### S&R All (MT 541-548) by transaction types

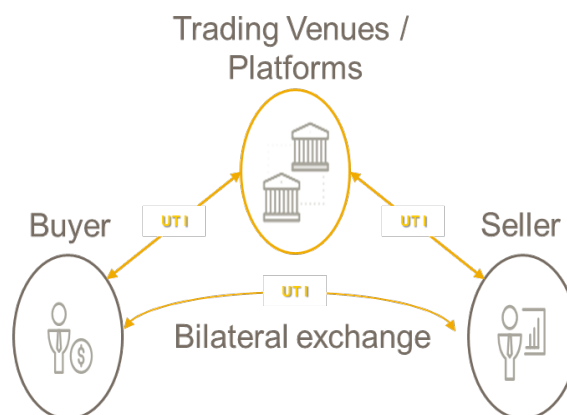
# of MT traffic in 2021 FY  
Source: SWIFT Watch



### 3 Integration of UTI to post-trade processes

Once a buyer and seller have completed the order, fill and execution for a securities trade, the post-trade processes convert and enrich both party's version of the execution transaction into their corresponding settlement transactions. The instructing party (or their service providers) communicate or pre-advise the allocation data including the quantity of securities for each settlement to their trade executing counterparty. The post trade process also sources any additional information required to create settlement instructions to deliver/receive agreed instrument & quantities between their respective settlement agents and a place of settlement.

The market guideline is that generation and initial exchange of a UTI value occurs as part of the trade allocation and confirmation process between the buyer and seller entities. UTI values are to be generated by the allocating entity and / or electronic platforms that facilitate the allocation and confirmation process between an instructing party and their executing counterparty. Subsequent communication of a UTI and onward exchange continues through the settlement lifecycle between account owners and account servicers.



The following sections describe the implementation of a UTI within securities post trade processes, with corresponding use case scenarios.

## 4 UTI implementation

Generating entities should apply the following conventions when creating UTI values. These conventions apply to all types of financial entities that play a role in the post trade lifecycle of securities transactions.

### 4.1 Follow the ISO-registered format (ISO 23897:2020)

Unique number/reference of a financial transaction to be allocated as agreed among the parties and/or within the initiative (or regulatory system) under which it is formed.

The format enables the reference to be carried across disparate systems and processes, so it can be referenced unambiguously by all parties involved or interested in the transaction.

First 20 characters (18!c and 2!n:fixed length) = Legal Entity Identifier (LEI) specific to the generating entity for example: HB7FFAZI0OMZ8PP8OE26.

The LEI used should be valid i.e., published by [GLEIF](#).

The LEI has no business intelligence value, it only ensures that the UTI is unique as each firm should be able to guarantee this at the level of their institution.

Subsequent up to 32 characters (32c:maximum length) identifier assigned to the transaction by the generating entity and unique for the entity.

Current UTI generators often use existing transaction references and / or time values. The [annex](#) includes various examples which satisfy the requirement of a unique value.

## 4.2 UTI generation logic

The generation of the UTI follows existing technical guidance and principles<sup>1</sup>, notably the “first touch” concept and usage of electronic confirmation platforms.

Generation of a UTI should be performed by platforms that support electronic post trade allocation / confirmation process and can share the value to the respective buyer and seller. For workflows without an allocation/confirmation platform or for platforms that do not support UTI generation, the instructing party or their service provider should generate the UTI and share the value as part of the allocation process to the executing counterparty.

Buyers & Sellers can use the following logic to determine the source of the UTI to include on their settlement instructions.

- a) Trades are allocated and confirmed on a platform that supports UTI generation: the buyer and seller will consume the UTI values from the platform.
- b) Trades are allocated and confirmed on a bi-lateral basis, or via a platform that does not support UTI generation.
  - a. The instructing party, or their service provider should generate a UTI and share it with their executing counterparty as part of the confirmation process.
  - b. The executing party (counterparty to the instructing party) will consume the UTI as part of the confirmation process with the instructing party.

Note: Bi-lateral exchanges can include email, blotter, chat messages, automated allocation point to point messaging, manual file (tables, spreadsheets) exchange and reconciliation. This guidance aims to cover the majority of cases. There may be cases that are not covered by this guidance.

The consultative process for this guidance also identified that instructing parties (or their service providers) may wish to generate a UTI on all trades, rather than use a platform's UTI. For these scenarios the platform should be used as the mechanism to communicate the UTI to the executing counterparty, using the same approach as a platform generated UTI.

### Message protocols

The transmission of UTI values between parties should be as distinct fields within trade allocation/confirmation/settlement messages. Existing integrations and connectivity between firms uses various combinations of industry standard and/or proprietary message formats. The annex includes industry message formats that support the exchange of a UTI as part of the allocation record.

### Existing reference convention

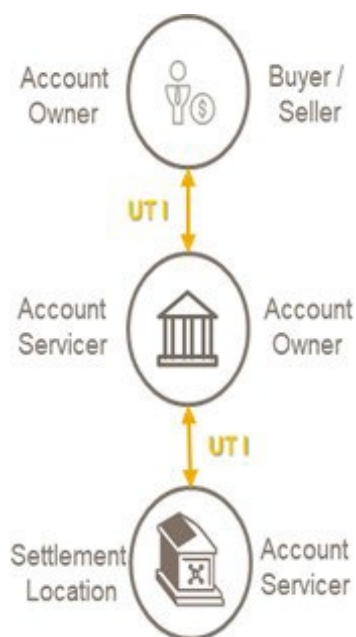
The consultative process identified that if current platform messages do not include a specific field for a UTI value, then it may be possible to use an existing reference as part of a convention (see [scenario 4](#)).

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<sup>1</sup> <https://www.iosco.org/library/pubdocs/pdf/IOSCOPD557.pdf>

### 4.3 UTI communication on settlement messages

Once a UTI is available to the buyer / seller it should be communicated as part of the messages between settlement parties, including instruction, status and confirmation messages exchanged between account owners and account servicers.



Users acting as 'account owners' sending instruction messages to their 'account servicers' should:

**Populate a UTI:** include a UTI value which has been received and/or generated as part of the trade allocation / confirmation process.

**Maintain a UTI:** include same UTI value for version changes (cancel/rebook) and applicable lifecycle events

**Persist the UTI:** include same UTI value when instructing onward delivery or receipt for received instructions.

Users acting as 'account servicers' receiving instruction messages from their 'account owners' and sending status and confirmation messages to their 'account owners' should

**Echo the UTI:** include the same UTI value on status updates and confirmations sent for received instructions.

**Persist the UTI:** include the same UTI value when instructing onward delivery or receipt for received instructions.

Note: settlement transactions may pass through multiple levels of clearing between account owners and account servicers depending on custody networks.

### 4.4 Settlement transaction lifecycle events

When a UTI is allocated to a settlement transaction, it should remain as the identifier for that transaction throughout its life. If new information is available or a change in prior information occurs for an existing transaction then the same UTI should be maintained, examples of situations where the original UTI should be maintained include:

- Status updates, including changes in processing, matching or settlement status
- Cancellation of transaction
- Cancellation and replacement to correct previously reported information, unless the UTI was incorrect
- Partial settlement, including where one unique instruction settles in multiple phases and split settlement where existing instructions are replaced by two or more instructions which should contain the same UTI

When a new transaction or transactions are required new UTIs should be used and created by the entity that creates the new transaction. Within the trade lifecycle there are various activities that require new transactions such as Block order split in several allocations (1-to-n) or CCP netting (n-to-1). Within the context of a settlement transaction, new transactions could be required when:

- The transaction is compressed or netted
- The transaction is novated

## 4.5 Trade allocation and settlement scenarios

The following section describe the logical business flows for the initiation of the settlement of a securities trade between various actors with steps on UTI generation and exchange.

- Scenario 1 - Trades are allocated on a bi-lateral basis, UTI is generated by the trade instructing party (or their service provider) who are either the seller or buyer.
- Scenario 2 - Trades are allocated via a platform who allocates the UTI.
- Scenario 3 - Trades are allocated via a platform, UTI is generated by the trade instructing party.
- Scenario 4 - Trades are allocated via a platform or venue. UTI is created by the buyer and seller based on another unique reference shared.

The consultative process for this guidance identified that the scenario's above represent the majority of trade workflows between instructing parties and their trade executing counterparties, and the guidance is to focus implementation efforts on these. The scenarios below represent other workflows and functional recommendations for UTI integration.

- Scenario 5 - Trades are pre-allocated through contractual agreements. The instructing party does not allocate an order but does receive confirmations from the executing party after ordering, the so-called 'contract-only' investment manager scenario; UTI is generated by the executing party.
- Scenario 6 - Trades are pre-allocated through contractual agreements. UTI is generated by the venue.

Generic description of activities	
Trade Instructing Party	Trade Executing Party
A. <u>Place the trade order:</u>	<u>B. Advise that the order (block) has been executed:</u> inform the instructing party of the key economic details of an executed block trade.
C. <u>Allocate the order:</u> establish the individual breakdown of the block for settlement.	
D. <u>Communicate allocation details:</u> Communicate allocation details, inform the executing party of the individual breakdown of the block for settlement	
	<u>E. Confirmation / Affirmation / Matching:</u> confirm the allocation details from the instructing party, and additional settlement details including relevant settlement accounts and amounts
E. <u>Confirmation / Affirmation / Matching:</u> acknowledge / match the confirmation details from the executing party	
F. <u>Send for Settlement processing:</u> create settlement instructions for submission to account servicers	F. <u>Send for Settlement processing:</u> create settlement instructions for submission to account servicers

#### 4.5.1 Scenario 1: Trades are allocated on a bi-lateral basis, UTIs generated by the trade instructing party.

Descriptions of the activities	
Trade Instructing Party	Trade Executing Party
<u>A. Place the trade order:</u>	<u>B. Advise that the order (block) has been executed:</u> inform the instructing party of the key economic details of an executed block trade.
<u>C. Allocate the order:</u> establish the individual breakdown of the block for settlement.	
<u>D. Generate UTI values for each allocation:</u> using a combination of a legal entity identifier (LEI) and a unique identifier for each allocation	
<u>E. Communicate allocation details:</u> inform the executing party of the individual breakdown of the block for settlement including UTI values for each settlement transaction	
	<u>F. Confirmation:</u> confirm the allocation details from the instructing party, add the breakdown of the settlement amount and details
<u>G. Affirm the confirmation:</u> acknowledge the confirmation from the executing party (Some instructing party's omit this step)	
<u>H. Send f or Settlement processing:</u> create settlement instruction messages including the UTI value for submission to account servicers	<u>H. Send f or Settlement processing:</u> create settlement instruction messages including the UTI value f or submission to account servicers

#### 4.5.2 Scenario 2 - Trades are allocated via a platform who allocates the UTI

Descriptions of the activities		
Trade Instructing Party	Platform / Venue	Trade Executing Party
<u>A. Place the trade order:</u>		<u>B. Advise that the order (block) has been executed:</u> inform the instructing party of the key economic details of an executed block trade.
<u>C. Allocate the order:</u> establish the individual breakdown of the block for settlement.		
<u>D. Communicate allocation details:</u> inform the matching platform of the individual breakdown of the block for settlement including UTI values f or each settlement transaction	<u>E. Exchange allocation details:</u> facilitate communication of details between counterparties	
	<u>F. UTI generation:</u> Generate UTI values f or each allocation using a combination of a platform/venue (LEI) and a unique identifier for each allocation. This step may also	<u>G. Retrieve allocation details:</u> process allocation details of the instructing party from the matching platform, add the breakdown of the settlement amount and details



	occur later as part of the matching process	
<u>H. Confirmation / Affirmation / Matching</u> : acknowledge / match the confirmation details from the executing party	<u>H. Confirmation / Affirmation / Matching</u> : facilitate electronic trade confirmation	<u>H. Confirmation / Affirmation / Matching</u> : submit confirmations of the allocation details for the instructing party to the matching platform, for matching and electronic trade confirmation.
<u>I. Send f or Settlement processing</u> : create settlement instruction messages including the UTI value for submission to account servicers		<u>I. Send f or Settlement processing</u> : create settlement instruction messages including the UTI value for submission to account servicers

#### 4.5.3 Scenario 3: Trades are allocated via a platform, UTI is generated by the trade instructing party.

Descriptions of the activities		
Trade Instructing Party	Platform	Trade Executing Party
<u>A. Place the trade order</u> :		<u>B. Advise that the order (block) has been executed</u> : inform the instructing party of the key economic details of an executed block trade.
<u>C. Allocate the order</u> : establish the individual breakdown of the block for settlement.		
<u>D. Generate UTI values f or each allocation</u> : using a combination of a legal entity identifier (LEI) and a unique identifier for each allocation		
<u>E. Communicate allocation details</u> : inform the matching platform of the individual breakdown of the block for settlement including UTI values f or each settlement transaction	<u>F. Exchange allocation details</u> : facilitate communication of details between counterparties	<u>G. Retrieve allocation details</u> : process allocation details of the instructing party from the matching platform, add the breakdown of the settlement amount and details
<u>H. Confirmation / Affirmation / Matching</u> : acknowledge / match the confirmation details from the executing party	<u>H. Confirmation / Affirmation / Matching</u> : facilitate electronic trade confirmation	<u>H. Confirmation / Affirmation / Matching</u> : submit confirmations of the allocation details for the instructing party to the matching platform, for matching and electronic trade confirmation.
<u>I. Send f or Settlement processing</u> : create settlement instruction messages including the UTI value for submission to account servicers		<u>I. Send f or Settlement processing</u> : create settlement instruction messages including the UTI value for submission to account servicers

**4.5.4 Scenario 4 - Trades are allocated via a platform or venue. The UTI is created by the buyer and seller based on a shared unique reference.**

Descriptions of the activities		
Trade Instructing Party	Platform/ Venue	Trade Executing Party
<u>A. Place the trade order:</u>		<u>B. Advise that the order (block) has been executed:</u> inform the instructing party of the key economic details of an executed block trade.
<u>C. Allocate the order:</u> establish the individual breakdown of the block for settlement.		
<u>D. Communicate allocation details:</u> inform the matching platform of the individual breakdown of the block for settlement including UTI values for each settlement transaction	<u>E. Exchange allocation details:</u> facilitate communication of details between counterparties	<u>F. Retrieve allocation details:</u> process allocation details of the instructing party from the matching platform, add the breakdown of the settlement amount and details
<u>G. Confirmation / Affirmation / Matching:</u> acknowledge / match the confirmation details from the executing party	<u>G. Confirmation / Affirmation / Matching:</u> facilitate electronic trade confirmation	<u>G. Confirmation / Affirmation / Matching:</u> submit confirmations of the allocation details for the instructing party to the matching platform, for matching and electronic trade confirmation.
<u>H. Unique identifier reference:</u> Share the common unique reference for each allocation, this typically occurs as part of the matching process	<u>H. Unique identifier reference:</u> Share the common unique reference for each allocation, this typically occurs as part of the matching process	<u>H. Unique identifier reference:</u> Share the common unique reference for each allocation, this typically occurs as part of the matching process
<u>J. UTI construction:</u> Create UTI value combining an agreed LEI for the platform / venue with the shared reference in H.		<u>J. UTI construction:</u> Create UTI value combining an agreed LEI for the platform / venue with the shared reference in H.
<u>K. Send for Settlement processing:</u> create settlement instruction messages including the UTI value for submission to account servicers		<u>K. Send for Settlement processing:</u> create settlement instruction messages including the UTI value for submission to account servicers

**4.5.5 Scenario 5 - Trades are pre-allocated through contractual agreements. The instructing party does not allocate an order but does receives confirmations from the executing party after ordering, the so-called ‘contract-only’ investment manager scenario; The UTI is generated by the executing party.**

Trade Instructing Party	Trade Executing Party
<u>A. Place the trade order:</u>	<u>B. Advise that the order (block) has been executed:</u> inform the instructing party of the key economic details of an executed block trade.
	<u>C. Allocate block using pre-existing static:</u> process block using default logic for the instructing party adding settlement amount and details

	<b>D. UTI Generation and Confirmation:</b> Generate UTI values for each confirmation and include when confirming the allocation details from the instructing party, adding the breakdown of the settlement amount and details
<b>E. Affirm the confirmation:</b> acknowledge the confirmation from the executing party (Some instructing party's omit this step)	
<b>F. Send for Settlement processing:</b> create settlement instruction messages including the UTI value for submission to account servicers	<b>F. Send for Settlement processing:</b> create settlement instruction messages including the UTI value for submission to account servicers

**4.5.6 Scenario 6 - Trades are pre-allocated through contractual agreements. UTI are generated by the venue.**

Descriptions of the activities		
Trade Instructing Party	Platform/ Venue	Trade Executing Party
<b>A. Place the trade order:</b>		<b>B. Advise that the order (block) has been executed:</b> inform the instructing party of the key economic details of an executed block trade.
	<b>C. UTI generation:</b> Venue generates UTI as part of the postexecution process for counterparties that pre-allocate using a combination of a platform/venue (LEI) and a unique identifier for each allocation.	
<b>D. Retrieve allocation details:</b> process allocation details of the instructing party from the matching platform, adding any additional settlement amount details		<b>D. Retrieve allocation details:</b> process allocation details of the instructing party from the matching platform, adding any additional settlement amount details
<b>E. Send for Settlement processing:</b> create settlement instruction messages including the UTI value for submission to account servicers		<b>E. Send for Settlement processing:</b> create settlement instruction messages including the UTI value for submission to account servicers

## Annex

### UTI generation examples

These examples represent possible methods that meet UTI standards.

Example 1: Generation by an Investment Manager

LEI + portfolio management system id

Investment Manager LEI =

ABCDE0123456789VWXYZ Allocation order

management system id = 012345678

UTI = ABCDE0123456789VWXYZ012345678

Example 2: Generation by an Outsourcer

Outsourcer LEI + order management system id + datestamp

Outsourcer LEI = BCDEF0123456789VWXYZ

order management system id = 123456789

datestamp = 01012022 (ddmmyyyy)

UTI = BCDEF0123456789VWXYZ12345678901012022

Example 3: Generation by an Instructing Party service provider

Entity LEI + order allocation system id + timestamp

Service provider LEI =

CDEFG0123456789VWXYZ order allocation

system id = BCD0123456789123

timestamp = 220101100000 (yymmddhhmmss)

UTI = CDEFG0123456789VWXYZBCD0123456789123220101100000

Example 4: Generation by a matching platform

Platform provider LEI + match id + datestamp

Platform provider LEI = DEFGH0123456789VWXYZ

Match id = ABC012345678

datestamp = 220101 (yymmdd)

UTI = DEFGH0123456789VWXYZABC012345678220101

Example 5: Generation by a trade venue

Trade venue LEI + counterparty a transaction id + counterparty b transaction id

Trade venue LEI = EFGHI0123456789VWXYZ

counterparty a transaction id = 01ABCDE012

counterparty b transaction id = 02ABCDE012

UTI = EFGHI0123456789VWXYZ01ABCDE01202ABCDE012

## Industry Messages - Allocation

Format	Example Message	Field Name	Link
FIX	[AllocationInstruction]	Tag1903	<a href="#">more info</a>
SWIFT	MT 514	Field 20a (option U)	<a href="#">more info</a>
XML (CTM)	Trade Detail	<AllocationUTI>	<a href="#">more info</a>

## Industry Messages – Settlement Instruction, Status & Confirmation

ISO 15022 messages

Organisation Role	Party Type	Sending Messages	UTI Source
Account Owner	Buyer/Seller	MT540, 1,2,3	Allocation / confirmation process
Account Owner	Receiver/Deliverer	MT540, 1,2,3	Buyer / Seller Instruction
Account Servicer	Receiver/Deliverer/PSET	MT544,5,6,7,8	Account owner Instruction

541 Receive Against Payment (SR2021)			
General Information (A)	GENL	M	N
:16R: Start of Block	GENL	M	N
> :20C: Reference	:4c//16x	M	N
> :23G: Function of the Message	4c[41c]	M	N
> :98: Date/Time		O	N
> :99B: Number Count		O	R
Linkages (A1)	LINK	O	R
:16R: Start of Block	LINK	M	N
> :22F: Indicator	:4c[8c]41c	O	N
> :13: Number Identification		O	N
> :20: Reference		M	N
> :36B: Quantity of Financial Instrument		O	N
:16S: End of Block	LINK	M	N
:16S: End of Block	GENL	M	N

Deal Reference [TRRF]			
> :20C:		:4c//16x	
> :20U:		:4c//52x	
Qualifier		4c	M N
UTI Reference		52x	M N

**Example**

```

:16R:GENL
:20C::SEME//MESSAGEREFERENCE
:23G:NEWM
:16R:LINK
:20C::TRRF//1256356365
:16S:LINK
:16R:LINK
:20U::TRRF//1256356365ABCDEFEJKEJEKJEKJEKJEKJEK
:16S:LINK
:16S:GENL
    
```

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