



## Derivatives Service Bureau

# Foreign Exchange : Forward : Forward

## UPI Product Definition

Version 3

Date	Status	Version	Revision Details
8 Aug 2022	Draft	1	Initial Version
24 Jan 2023	Draft	2	<ul style="list-style-type: none"><li>Update example values in the Request and Record templates layout</li><li>Insert Underlier Name attribute and Derivation rules</li></ul>
05 Sep 2023	Draft	3	<ul style="list-style-type: none"><li>Update Associated Documentation to include Best Practice Guidelines and FAQs.</li><li>Update Best Practice Guidelines to include the link to Best Practice Guidelines and FAQs.</li></ul>

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# 1 INTRODUCTION

This document is designed to act as a manual for users to interpret the Product Definitions in the DSB UPI Service.

This document provides the user with the detailed description of the UPI Product Definition content such as attribute enumerations, validation, normalization, and derivation where applicable.

## 1.1 Associated Documentation

Each UPI Product Definition template links to reference documents where values will be maintained for the sake of consistency and ease of access e.g., Enumerations, Data Dictionary, Validation and Normalizations, etc.

These documents are made available for references as follows:

- UPI Enumerations Document can be found in the Enumerations section on the [DSB website](#).
- UPI Product Definition Data Dictionary can be found in the Other Documents section on the [DSB website](#).
- UPI Product Definition Validations and Normalizations Document can be found in the Other Documents section on the [DSB website](#).
- UPI Underlier Input Method can be found in the Other Documents section on the [DSB website](#).
- Best Practice Guidelines and FAQs can be found in the Other Documents section on the [DSB website](#).
- Links to the relevant JSON templates can be found in the GitHub Environment Section on the [DSB website](#).

## 2 PRODUCT TAXONOMY

### 2.1 CFI Taxonomy

Source: [ISO 10962](#) (CFI Code) – Third edition 2015-07-15

Attr #	Title	Values	Name	Description
	<b>Instrument (Category)</b>	<b>J</b>	Forward	
	<b>Asset Class (Group)</b>	<b>F</b>	Foreign Exchange	
<b>Attr #1</b>	<b>Underlying Assets</b>	<b>T</b>	Spot	An option on an FX transaction in which two parties agree to buy one currency against selling another currency at an agreed price for settlement on the spot date
<b>Attr #2</b>	<b>Not applicable/undefined</b>	<b>X</b>	Not applicable/undefined	Not applicable/undefined
<b>Attr #3</b>	<b>Return or Payout Trigger</b>	<b>F</b>	Forward price of underlying instrument	Forward price of underlying instrument
<b>Attr #4</b>	<b>Delivery Type</b>	<b>C</b>	Cash	The discharge of an obligation by payment or receipt of a net cash amount instead of payment or delivery by both parties
		<b>P</b>	Physical	The meeting of a settlement obligation under a derivative contract through the receipt or delivery of the actual underlying instrument(s) instead of through cash settlement

### 2.2 ISDA Taxonomy

The table below is based on the products identified as part of the [ISDA 2.0 taxonomy](#).

Asset Class	Base Product	Sub-Product	DSB Product Definition Name
Foreign Exchange	Forward		Forward

### 3 REQUEST TEMPLATE

This section describes the input message received by UPI service.

Template name	Template details	Release
Request.Foreign_Exchange.Forward.Forward.UPI.json	Initial version	Initial

Section	Attribute	Format	Cat	Example Value	Validation / Derivation
Header Section	Asset Class	Set	M	Foreign_Exchange	
	Instrument Type	Set	M	Forward	
	Product	Set	M	Forward	
	Level	Set	M	UPI	
Attribute Section	Underlier ID	Enum	M	EUR	Enumerated List
	Underlier ID Source	String	M	CCY	[CCY]
	Other Underlier ID	Enum	M	USD	Enumerated List
	Other Underlier ID Source	String	M	CCY	[CCY]
	Delivery Type	Enum	M	PHYS	[CASH, PHYS]

#### 3.1 Underlier Input Method

For products that has a Single Underlier, users have an option to select a Primary or Alternate Underlier, if available.

Title	Description	
Select Underlier ID Source	User is able to select a single required Underlier Source <ul style="list-style-type: none"> <li>Currency Pair [CCY]</li> </ul>	
Input Underlier ID	CCY	This is validated against ISO Currency Code List.

#### 3.2 Validation Rules

For non-specific product validation rules, please refer to UPI Product Definition Validations and Normalizations Document can be found in the Other Documents section on the [DSB website](#).

## 4 RECORD TEMPLATE

This section describes the record returned by the UPI service.

Version	Template name	Template details	Release
V.1	Foreign_Exchange.Forward.Forward.UPI.V1.json	Initial version	Initial

Section	Attribute	Format	Cat	Example Value	Derivation
Header Section	Asset Class	Set	M	Foreign_Exchange	
	Instrument Type	Set	M	Forward	
	Product	Set	M	Forward	
	Level	Set	M	UPI	
	Template Version	Integer	D	1	
Attribute Section	Notional Currency	Enum	M	EUR	Enumerated List
	Other Notional Currency	Enum	M	USD	Enumerated List
	Delivery Type	Enum	M	PHYS	[CASH, PHYS]
Identifier Section	UPI	String	D	QZGK726WP2G9	
	Status	String	D	New	[New; Updated; Deleted; Deprecated]
	Status Reason	String	D	<null>	
	Last Update Date Time	DtTm	D	2020-11-30T00:00:13	YYYY-MM-DDThh:mm:ss
Derived Section	Classification Type	String	D	JFTXFP	See Derivation Rules
	Short Name	String	D	NA/Fwd EUR USD	See Derivation Rules
	Underlier Name	String	D	EUR USD	See Derivation Rules
	Underlying Asset type	String	D	Spot	Fixed value
	Return or Payout Trigger	String	D	Forward Price of Underlying Instrument	Fixed value
	CFI Delivery Type	String	D	[Cash; Physical]	See Derivation Rules

## 4.1 Normalization Rules

For non-specific product normalization rules, please refer to UPI Product Definition Validations and Normalizations Document can be found in the Other Documents section on the [DSB website](#).

## 4.2 Derivation Rules

This section describes the derivations of product attributes highlighted in the Record Template.

### 4.2.1 Classification Type

Attribute		Classification Type	
Structure	Instrument Type + Asset Class + Underlying Asset Type + NA + Return or Payout Trigger + Delivery Type		
Example	JFTXFP		
Source	<a href="#">ISO 10962</a> (CFI) – Third edition 2015-07-15		
Source Attribute	Source Value	Derivation Method	Result
Instrument Type	Forward	Fixed Mapping	J
Asset Class	Foreign Exchange	Fixed Mapping	F
Underlying Asset Type	Spot	Fixed Mapping	T
Not Applicable / Undefined	Not applicable / undefined	Fixed Mapping	X
Return or Payout Trigger	Forward Price of the Underlying	Fixed Mapping	F
Delivery Type	CASH	Mapped to =>	C
	PHYS	Mapped to =>	P

### 4.2.2 Short Name

Attribute	Short Name		
Structure	“NA” + "/" + Instrument Type + Notional Currency + Other Notional Currency		
Example	NA/ Fwd EUR USD		
Source	<a href="#">ISO 18774</a> (Financial Instrument Short Name) - First edition 2015-11		
Source Attribute	Source Value	Derivation Method	Result
Issuer Name	None	Fixed Value	NA/
Instrument Type	Forward	Fixed Abbreviation	Fwd
Notional Currency	Notional Currency	Mapped Enumeration	e.g., USD, EUR, GBP
Other Notional Currency	Other Notional Currency	Mapped Enumeration	e.g., USD, EUR, GBP

### 4.2.3 Underlier Name

Attribute		Underlier Name	
Underlying Asset	Underlier Name Source	Underlier Name Source Attribute	Underlier Name
Currency Pair	UPI record	Notional Currency / Other Notional Currency	EUR USD

## 4.2.4 CFI Delivery Type

Attribute CFI Delivery Type			
Source Attribute	Source Value	Derivation Method	Result
Delivery Type	CASH	Mapped to =>	Cash
	PHYS	Mapped to =>	Physical



## 5 SUPPLEMENTARY INFORMATION

### 5.1 Best Practice Guidelines

Please refer to Best Practice Guidelines and FAQs that can be found in the Other Documents section on the [DSB website](#).

### 5.2 Additional Comments

- The additional attribute (Settlement currency) for Forward product is based on the ISO 4914 (UPI) specification (CD) even if the DSB OTC ISIN does not currently support the attribute for specific product.
- The Settlement Currency for the UPI will follow the behavior / definition of the equivalent OTC ISIN templates – including the attribute where the OTC ISIN has one and excluding it where OTC ISIN excludes it.

## 6 APPENDIX 1 – ISO 4914 EQUIVALENCE

This section describes the attributes as per the ISO 4914 Unique Product Identifier (UPI).

ISO 4914 Reference Data Elements		Request Attribute	Record Attribute
Asset Class	M	Asset Class	Asset Class
Instrument Type	M	Instrument Type	Instrument Type
Delivery Type	M	Delivery Type	Delivery Type
			CFI Delivery Type
Return, pricing method or Payout Trigger	M	Not Required	Return or Payout Trigger
Settlement Currency*	C	Not Required	
Underlier ID	C	Underlier ID	Notional Currency
	C	Other Underlier ID	Other Notional Currency
Underlier ID source	C	Underlier ID Source	Not Required
	C	Other Underlier ID Source	Not Required
Underlier Type	M	Not Required	Underlying Asset Type

\*Settlement Currency does not apply for this product, refer to Additional Comments section above.

## 7 APPENDIX 2 - OTC ISIN-UPI MAPPING

This section describes the mapping between the ISIN and UPI input attributes.

ISIN Input Attributes	Mapping Logic	UPI Input Attributes	Sample UPI Values	Comments
Asset Class	Direct Map	Asset Class	Foreign_Exchange	
Instrument Type	Direct Map	Instrument Type	Forward	
Use Case	Direct Map	Product	Forward	
Level	Set to "UPI"	Level	UPI	
Notional Currency	Map To	Underlier ID	EUR	
	Set to "CCY"	Underlier ID Source	CCY	
Expiry Date	No Mapping			
Other Notional Currency	Map To	Other Underlier ID	USD	
	Set to "CCY"	Other Underlier ID Source	CCY	
Delivery Type	Direct Map	Delivery Type	PHYS	
Price Multiplier	No Mapping			