



**Derivatives Service Bureau**

# **Foreign Exchange : Forward : NDF**

UPI Product Definition

Version 3

Date	Status	Version	Revision Details
8 Aug 2022	Draft	1	Initial Version
25 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

### 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	NDF		NDF

### 3 REQUEST TEMPLATE

This section describes the input message received by UPI service.

Template name	Template details	Release
Request.Foreign_Exchange.Forward.NDF.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	NDF	
	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	KRW	Enumerated List
	Other Underlier ID Source	String	M	CCY	[CCY]
	Settlement Currency	Enum	M	EUR	Enumerated List

#### 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.NDF.UPI.V1.json	Initial version	Initial

Section	Attribute	Format	Cat	Example Value	Derivation
<b>Header Section</b>	Asset Class	Set	M	Foreign_Exchange	
	Instrument Type	Set	M	Forward	
	Product	Set	M	NDF	
	Level	Set	M	UPI	
	Template Version	Integer	D	1	
<b>Attribute Section</b>	Notional Currency	Enum	M	EUR	Enumerated List
	Other Notional Currency	Enum	M	KRW	Enumerated List
	Settlement Currency	Enum	M	EUR	Enumerated List
<b>Identifier Section</b>	UPI	String	D	QZGK726P32G2	
	Status	String	D	New	[New; Update; Deleted; Deprecated]
	Status Reason	String	D	<null>	
	Last Update Date Time	DtTm	D	2020-11-30T00:00:13	YYYY-MM-DDThh:mm:ss
<b>Derived Section</b>	Classification Type	String	D	JFTXFC	See Derivation Rules
	Short Name	String	D	NA/Fwd NDF EUR KRW	See Derivation Rules
	Underlier Name	String	D	EUR KRW	See Derivation Rules
	Underlying Asset type	String	D	Spot	Fixed value
	Return or Payout Trigger	String	D	Forward Price of Underlying Instrument	Fixed value
	Delivery Type	String	D	CASH	Fixed value
	CFI Delivery Type	String	D	Cash	Fixed value

## 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	JFTXFC		
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 Instrument	Fixed Mapping	F
Delivery Type	CASH	Fixed Mapping	C

### 4.2.2 Short Name

Attribute		Short Name	
Structure	"NA" + "/" + Instrument Type + Product + Notional Currency + Other Notional Currency		
Example	NA/Fwd NDF EUR KRW		
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
Product	Non-Deliverable Forward	Fixed Abbreviation	NDF
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 KRW

## 4.2.4 Delivery Type

Attribute		Delivery Type	
Source Attribute	Source Value	Derivation Method	Result
Delivery Type	N/A	Fixed Value	CASH

## 4.2.5 CFI Delivery Type

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



## 5 SUPPLEMENTARY INFORMATION

### 5.1 Best Practice Guidelines

The DSB supports the generation of UPIs for several types of FX Forwards such as Non-Deliverable Forward (NDF) where one or both currencies are non-deliverable (in the context of the trade) and requires a Settlement Currency.

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

For NDF products, only “CASH” is supported as Delivery type and will display the value in the derived section. The value will differ in the request since DSB OTC ISIN added the delivery type in the request attributes but does not allow to choose “Physical” as Delivery type.

## 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
<b>Asset Class</b>	M	Asset Class	Asset Class
<b>Instrument Type</b>	M	Instrument Type	Instrument Type
<b>Delivery Type</b>	M	Not Required	Delivery Type
			CFI Delivery Type
<b>Return, pricing method or Payout Trigger</b>	M	Not Required	Return or Payout Trigger
<b>Settlement Currency</b>	C	Settlement Currency	Settlement Currency
<b>Underlier ID</b>	C	Underlier ID	Notional Currency
		Other Underlier ID	Other Notional Currency
<b>Underlier ID source</b>	C	Underlier ID Source	Not Required
		Other Underlier ID Source	Not Required
<b>Underlier Type</b>	M	Not Required	Underlying Asset Type

## 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	NDF	
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	KRW	
	Set to "CCY"	Other Underlier ID Source	CCY	
Settlement Currency	Direct Map	Settlement Currency	EUR	
Delivery Type	No Mapping			Delivery Type attribute for the UPI is in the Derived section of the Record template.
Price Multiplier	No Mapping			