Derivatives Service Bureau

Rates : Forward : FRA_Index

UPI Product Definition

Version 3

Date	Status	Version	Revision Details
17 Aug 2022	Draft	1	Initial Version
23 Jan 2023	Draft	2	Insert Underlier Name attribute and Derivation rules
31 Aug 2023	Draft	3	• Remove "Classified as Confidential" in the Footer section. • Update Associated Documentation to include Best Practice Guidelines and FAQs. • Update Best Practice Guidelines to include the link to Best Practice Guidelines and FAQs.

TABLE OF CONTENTS

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
	Instrument (Category)	**J**	Forward	
	Asset Class (Group)	**R**	Rates	
Attr #1	**Underlying Assets**	**I**	Interest Rate Index	Interest Rate Index
Attr #2	**Not applicable/undefined**	**X**	Not applicable/undefined	
Attr #3	**Return or payout trigger**	**F**	Forward price of underlying instrument	Forward price of underlying instrument
Attr #4	**Delivery Type**	**C**	Cash	The discharge of an obligation by payment or receipt of a net cash amount instead of payment or delivery by both parties
		P	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
Rates	FRA	Fixed Float*	FRA_Index

*There is no exact match in the ISDA Taxonomy 2.0 for this product template. The current taxonomy 2.0 only provides for base product [FRA]. This product template is a catch all for products that fall outside of these specified transaction types.

3 REQUEST TEMPLATE

This section describes the input message received by UPI service.

Template name	Template details	Release
Request.Rates.Forward.FRA_Index.UPI.json	Initial version	Initial

Section	Attribute	Format	Cat	Example Value	Validation / Derivation
Header Section	Asset Class	Set	M	Rates	
	Instrument Type	Set	M	Forward	
	Product	Set	M	FRA_Index	
	Level	Set	M	UPI	
Attribute Section	Underlier ID	Enum	M	EUR-EURIBOR-Reuters	Floating Rate Index
	Underlier ID Source	String	M	FPML	[FPML]
	Reference Rate Term Value	Integer	M	12	-999 to 999 (excluding 0)
	Reference Rate Term Unit	Enum	M	MNTH	[DAYS, WEEK, MNTH, YEAR]
	Notional Currency	Enum	M	EUR	Enumerated List
	Delivery Type	Enum	M	CASH	[CASH; PHYS]

3.1 Underlier Input Method

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

Title	Description	
Select Underlier ID Source	User is able to select a Primary or Alternate Underlier from the available options. • FPML	
Input Underlier ID	FPML	This is validated against Floating Rate Index Enumerated 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	**Rates.Forward.FRA_Index.UPI.V1.json**	Initial version	Initial

Section	Attribute	Format	Cat	Example Value	Derivation
Header Section	Asset Class	Set	M	Rates	
	Instrument Type	Set	M	Forward	
	Product	Set	M	FRA_Index	
	Level	Set	M	UPI	
	Template Version	Integer	D	1	
Attribute Section	Reference Rate	Enum	M	EUR-EURIBOR-Reuters	Enumerated List
	Reference Rate Term Value	Integer	M	1	-999 to 999 (excluding 0)
	Reference Rate Term Unit	Enum	M	YEAR	[DAYS, WEEK, MNTH, YEAR]
	Notional Currency	Enum	M	EUR	Enumerated List
	Delivery Type	Enum	M	CASH	[CASH, PHYS]
Identifier Section	UPI	String	D	QZV4MT8C9FB8	
	Status	String	D	New	[New; Updated; Deleted; Deprecated]
	Status Reason	String	D	<null>	
	Last Update Date Time	DtTm	D	2021-04-27T07:01:29	YYYY-MM-DDThh:mm:ss
Derived Section	Classification Type	String	D	JRIXFC	See Derivation Rules
	Short Name	String	D	NA/Fwd Pr Int Rt Idx EUR	See Derivation Rules
	Underlier Name	String	D	EUR-EURIBOR-Reuters	See Derivation Rules
	Underlying Asset Type	String	D	Interest Rate Index	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	JRIXFC		
Source	ISO 10962 (CFI) – Third edition 2015-07-15		
Source Attribute	**Source Value**	**Derivation Method**	**Result**
Instrument Type	Forward	Fixed Mapping	J
Asset Class	Rates	Fixed Mapping	R
Underlying Asset Type	Interest Rate Index	Fixed Mapping	I
Not applicable/undefined	Not applicable/undefined	Fixed Mapping	X
Return or Payout Trigger	Forward price of underlying instrument	Fixed Mapping	F
Delivery Type	CASH	Mapped to =>	C
	PHYS	Mapped to =>	P

4.2.2 Short Name

Attribute	Short Name		
Structure	"NA" + "/" + Return or Payout Trigger + Underlying Asset Type + Notional Currency		
Example	NA/Fwd Pr Int Rt Idx EUR		
Source	ISO 18774 (Financial Instrument Short Name) - First edition 2015-11		
Source Attribute	**Source Value**	**Derivation Method**	**Result**
Issuer Name	None	Fixed Value	NA/
Return or Payout Trigger	Forward price of underlying instrument	Fixed Abbreviation	Fwd Pr
Underlying Asset Type	Interest Rate Index	Fixed Abbreviation	Int Rt Idx
Notional Currency	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**
Reference Rate	UPI record	Reference Rate	EUR-EURIBOR-Reuters

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

No additional comment is provided for this product.

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
Currency associated with an underlying reference rate	M	Notional Currency	Notional Currency
Delivery Type	M	Delivery Type	Delivery Type
			CFI Delivery Type
Return, pricing method or payout trigger	M	Not Required	Return or Payout Trigger
Underlier ID	C	Underlier ID	Reference Rate
Underlier ID source	C	Underlier ID Source	Not Required
Underlier Type	M	Not Required	Underlying Asset Type
Underlying rate index tenor period	C	Reference Rate Term Unit	Reference Rate Term Unit
Underlying rate index tenor period multiplier	C	Reference Rate Term Value	Reference Rate Term Value

7 Appendix 2 - OTC ISIN-UPI Mapping

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

oneOf	ISIN Input Attributes	Mapping Logic	UPI Input Attributes	Example UPI Values	Comments
	Asset Class	Direct Map	Asset Class	Rates	
	Instrument Type	Direct Map	Instrument Type	Forward	
	Use Case	Direct Map	Product	FRA_Index	
	Level	Set to "UPI"	Level	UPI	
A	Term of Contract (By Effective Date)				
A	Notional Currency	Direct Map	Notional Currency	EUR	
A	Expiry Date	No Mapping			
A	Effective Date	No Mapping			
A	Expiry Date Adjusted	No Mapping			
A	Tenor Calculator Method	No Mapping			
A	Reference Rate	Map To	Underlier ID	EUR-EURIBOR-Reuters	
A	Reference Rate	Set to "FPML"	Underlier ID Source	FPML	
A	Reference Rate Term Value	Direct Map	Reference Rate Term Value	12	
A	Reference Rate Term Unit	Direct Map	Reference Rate Term Unit	MNTH	
B	Term of Contract (By Tenor)				
B	Notional Currency	Direct Map	Notional Currency	EUR	
B	Expiry Date	No Mapping			
B	Term of Contract Value	No Mapping			
B	Term of Contract Unit	No Mapping			
B	Reference Rate	Map To	Underlier ID	EUR-EURIBOR-Reuters	
B	Reference Rate	Set to "FPML"	Underlier ID Source	FPML	
B	Reference Rate Term Value	Direct Map	Reference Rate Term Value	12	
B	Reference Rate Term Unit	Direct Map	Reference Rate Term Unit	MNTH	
	Delivery Type	Direct Map	Delivery Type	CASH	
	Price Multiplier	No Mapping			

