DERIVATIVES SERVICE BUREAU (DSB) LTD

Rates : Swap : Cross_Currency_Basis

ISIN Product Definition

Version 1

Date	Status	Version	Revision Details
5 Oct 2023	Draft	1	Initial Version

Contents

1. Introduction

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

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

1.1 Associated Documentation

The reference documents below contain values and information maintained by the DSB for consistency and ease of access.

These documents are made available on the ANNA DSB website (Product Definitions page):

<table>
<tr><th>Title</th><th>Description</th><th>Location</th></tr>
<tr><td>Enumerations Document</td><td>Lists all fixed values used for a product</td><td>Enumerations section</td></tr>
<tr><td>Product Definition Data Dictionary</td><td>Defines attributes in the Request and Record templates; and from which they are referenced on</td><td rowspan="4">Other Documents section</td></tr>
<tr><td>Product Definition Validations and Normalizations Document</td><td>Specifies details on validation and normalization rules</td></tr>
<tr><td>Best Practice Guidelines and FAQs</td><td>Lists answers to queries raised by users and provides guidance on the use of the templates</td></tr>
<tr><td>GitHub Environment Section</td><td>ANNA DSB Github Environment where the JSON templates for each product is found</td></tr>
</table>

2. Product Taxonomy

2.1 CFI Taxonomy

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

Attr #	Title	Values	Name	Description
	Instrument (Category)	**S**	Swap	
	Asset Class (Group)	**R**	Rates	
Attr #1	**Underlying Assets**	**A**	Basis swap (Float-Float)	An interest rate swap where the cash flows that are exchanged between each party are based on different floating rates or prices (i.e., one party pays an agreed floating rate multiplied by a notional amount, in exchange for receipt of periodic payments based on another agreed floating rate multiplied by the same notional amount, from the other party)
Attr #2	**Notional Schedule**	**C**	Constant	The notional amount is constant through the life of the contract
		I	Accreting	The notional amount increases through the life of the contract
		D	Amortizing	The notional amount decreases through the life of the contract
		Y	Custom	Customized notional step schedule
Attr #3	**Single or Multi Currency**	**C**	Cross Currency	Cross Currency (multi currency)
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	Cross Currency	Basis	Cross_Currency_Basis

3. Request Template

The Request Template describes the input message received by the OTC ISIN service.

Users can find the detailed description of this template in the Rates spreadsheet that contains the layout of all templates. This can be found in the Rates section of the Product Definitions page on the ANNA DSB website.

Change details of the template can be found on the appropriate Github page.

Template name	Template details	Release
Request.Rates.Swap.Cross_Currency_Basis.InstRefDataReporting.json	Initial version	Initial

3.1 Validation Rules

- For non-specific product validation rules, please refer to ISIN Product Definition Validations and Normalizations Document (See Section 1.1).
- For enumerations, please refer to the associated ISIN Product Definition Enumeration document for the impacted attributes (See Section 1.1).

4. Record Template

The Record Template describes the record returned by the OTC ISIN service.

Users can find the detailed description of this template in the Rates spreadsheet that contains the layout of all templates. This can be found in the Rates section of the Product Definitions page on the ANNA DSB website.

Change details of the template can be found on the appropriate Github page.

Version	Template name	Template details
V1	**Rates.Swap.Cross_Currency_Basis.InstRefDataReporting.V1.json**	Initial version
V1M1	**Rates.Swap.Cross_Currency_Basis.InstRefDataReporting.V1M1.json**	Added Parent UPI
V2	**Rates.Swap.Cross_Currency_Basis.InstRefDataReporting.V2.json**	Dynamic Enumeration
V2M1	**Rates.Swap.Cross_Currency_Basis.InstRefDataReporting.V2M1.json**	Added Parent UPI

4.1 Normalization Rules

For non-specific product normalization rules, please refer to the Product Definition Validations and Normalizations (See Section 1.1).

4.2 Derivation Rules

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

4.2.1 Full Name

Attribute	Full Name		
Structure	Asset Class + Instrument Type + Product + Term of Contract Value/Unit + Notional Currency/Other Notional Currency + Reference Rate + Reference Rate Term Value/Unit + Other Leg Reference Rate + Other Leg Reference Rate Term Value/Unit + Expiry Date		
Example	Rates Swap Cross_Currency_Basis 3 YEAR EURUSD EUR-EURIBOR-Reuters 3 MNTH USD-LIBOR-BBA 6 MNTH 20190614		
Source	RTS23/Field2 - Instrument Full Name		
Source Attribute	**Source Value**	**Derivation Method**	**Result**
Asset Class	Rates	Fixed Value	Rates
Instrument Type	Swap	Fixed Abbreviation	Swap
Product	Cross_Currency_Basis	Fixed Abbreviation	Cross_Currency_Basis
Term of Contract Value/Unit	e.g., 3 YEAR	Copy value =>	3 YEAR
Notional Currency/Other Notional Currency	Notional Currency/Other Notional Currency	Mapped Enumeration	e.g., EURUSD, JPYGBP etc
Reference Rate	e.g., EUR-EURIBOR-Reuters	Mapped Enumeration	EUR-EURIBOR-Reuters
Reference Rate Term Value/Unit	e.g., 3 MNTH	Copy value =>	3 MNTH
Other Leg Reference Rate	USD-LIBOR-BBA	Mapped Enumeration	USD-LIBOR-BBA
Other Leg Reference Rate Term Value/Unit	e.g., 6 MNTH	Copy value =>	6 MNTH
Expiry Date	Expiry Date	Date Format (YYYYMMDD)	20190614

4.2.2 Classification Type

Attribute	Classification Type		
Structure	Instrument Type + Asset Class + Underlying Asset Type + Notional Schedule + Single or Multi Currency + Delivery Type		
Example	SRACCP		
Source	ISO 10962 (CFI) – Third edition 2015-07-15		
Source Attribute	**Source Value**	**Derivation Method**	**Result**
Instrument Type	Swap	Fixed Mapping	S
Asset Class	Rates	Fixed Mapping	R
Underlying Asset Type	Basis Swap (Float - Float)	Fixed Mapping	A
Notional Schedule	Constant	Mapped to =>	C
	Accreting	Mapped to =>	I
	Amortizing	Mapped to =>	D
	Custom	Mapped to =>	Y
Single or Multi Currency	Cross Currency	Fixed Mapping	C
Delivery Type	CASH	Mapped to =>	C
	PHYS	Mapped to =>	P

4.2.3 Short Name

Attribute	Short Name		
Structure	“NA” + "/" + Instrument Type + Underlying Asset Type + Notional Currency + Other Notional Currency + Expiry Date		
Example	NA/Swap Flt Flt EUR USD 20190614		
Source	ISO 18774 (Financial Instrument Short Name) - First edition 2015-11		
Source Attribute	**Source Value**	**Derivation Method**	**Result**
Issuer Name	None	Fixed Value	NA/
Instrument Type	Swap	Fixed Abbreviation	Swap
Underlying Asset Type	Float - Float	Fixed Abbreviation	Flt Flt
Notional Currency	Notional Currency	Mapped Enumeration	e.g., USD, EUR, GBP
Other Notional Currency	Other Notional Currency	Mapped Enumeration	e.g., USD, EUR, GBP
Expiry Date	Expiry Date	Date Format (YYYYMMDD)	20190614

4.2.4 ISO Reference Rate/ISO Other Leg Reference Rate

The ISO Reference Rate is derived from ISO20022 BenchmarkCurveName2Code codeset or ISO20022 BenchmarkCurveNameCode codeset where available. If value is not found, see the Best Practice document for complete derivation details.

Attribute	ISO Reference Rate		
Source Attribute	**Source Value**	**Derivation Method**	**Result**
Reference Rate	e.g., EUR-EURIBOR-Reuters	See Best Practice document	e.g., EURI
Other Leg Reference Rate	e.g., USD-LIBOR-BBA	See Best Practice document	e.g., LIBO

5. Supplementary Information

5.1 Best Practice Guidelines

Please refer to Best Practice Guidelines and FAQs (See Section 1.1).

5.2 Additional Comments

Existing OTC ISIN product definition methodology of the Short Name abbreviation (Issuer of TV + "/" + Instrument Type) for Equity Asset Class has “NA/Swaps” whereas Rates has “NA/Swap”.

6. Appendix 1 - 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	Swap	
	Use Case	Direct Map	Product	Cross_Currency_Basis	
	Level	Set to "UPI"	Level	UPI	
A	Term of Contract (By Effective Date)				
	Notional Currency	Direct Map	Notional Currency	EUR	
	Expiry Date	No Mapping			
	Effective Date	No Mapping			
	Expiry Date Adjusted	No Mapping			
	Tenor Calculator Method	No Mapping			
	Reference Rate	Map To	Underlier ID	EUR-EURIBOR-Reuters	
		Set to "FPML"	Underlier ID Source	FPML	
	Reference Rate Term Value	Direct Map	Reference Rate Term Value	3	
	Reference Rate Term Unit	Direct Map	Reference Rate Term Unit	MNTH	
	Other Notional Currency	Direct Map	Other Notional Currency	USD	
	Other Leg Reference Rate	Map To	Other Leg Underlier ID	USD-LIBOR-BBA	
		Set to "FPML"	Other Leg Underlier ID Source	FPML	
	Other Leg Reference Rate Term Value	Direct Map	Other Leg Reference Rate Term Value	6	
	Other Leg Reference Rate Term Unit	Direct Map	Other Leg Reference Rate Term Unit	MNTH	
	Notional Schedule	Direct Map	Notional Schedule	Constant	
	Delivery Type	Direct Map	Delivery Type	PHYS	
	Price Multiplier	No Mapping			
B	Term of Contract (By Tenor)				
	Notional Currency	Direct Map	Notional Currency	EUR	
	Expiry Date	No Mapping			
	Term of Contract Value	No Mapping			
	Term of Contract Unit	No Mapping			

	Reference Rate	Map To	Underlier ID	EUR-EURIBOR-Reuters	
		Set to "FPML"	Underlier ID Source	FPML	
	Reference Rate Term Value	Direct Map	Reference Rate Term Value	3	
	Reference Rate Term Unit	Direct Map	Reference Rate Term Unit	MNTH	
	Other Notional Currency	Direct Map	Other Notional Currency	USD	
	Other Leg Reference Rate	Map To	Other Leg Underlier ID	USD-LIBOR-BBA	
		Set to "FPML"	Other Leg Underlier ID Source	FPML	
	Other Leg Reference Rate Term Value	Direct Map	Other Leg Reference Rate Term Value	6	
	Other Leg Reference Rate Term Unit	Direct Map	Other Leg Reference Rate Term Unit	MNTH	
	Notional Schedule	Direct Map	Notional Schedule	Constant	
	Delivery Type	Direct Map	Delivery Type	PHYS	
	Price Multiplier	No Mapping			