

## DERIVATIVES SERVICE BUREAU (DSB) LTD

### Rates : Swap : Non\_Standard

#### ISIN Product Definition

#### Version I

Date	Status	Version	Revision Details
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## Contents

1	Introduction.....	2
1.1	Associated Documentation.....	2
2	Product Taxonomy.....	3
2.1	CFI Taxonomy .....	3
2.2	ISDA Taxonomy .....	3
3	Request Template.....	4
3.2	Validation Rules .....	4
3.2.1	Notional Currency and Other Notional Currency .....	4
3.2.2	Reference Rate Term Value .....	4
4	Record Template.....	5
4.1	Normalization Rules.....	5
4.2	Derivation Rules.....	5
4.2.1	Full Name.....	5
4.2.2	Classification Type .....	6
4.2.3	Short Name .....	7
4.2.4	Single or Multi Currency .....	7
4.2.5	ISO Reference Rate / ISO Other Leg Reference Rate.....	8
5	Supplementary Information.....	9
5.1	Best Practice Guidelines .....	9
5.2	Additional Comments .....	9
6	Appendix I - OTC ISIN-UPI Mapping.....	10

# I. 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.

## I.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):

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

## 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>S</b>	Swap	
	<b>Asset Class (Group)</b>	<b>R</b>	Rates	
<b>Attr #1</b>	<b>Underlying Assets</b>	<b>M</b>	Others	Others (miscellaneous)
<b>Attr #2</b>	<b>Notional Schedule</b>	<b>C</b>	Constant	The notional amount is constant through the life of the contract
		<b>I</b>	Accreting	The notional amount increases through the life of the contract
		<b>D</b>	Amortizing	The notional amount decreases through the life of the contract
		<b>Y</b>	Custom	Customized notional step schedule
<b>Attr #3</b>	<b>Single or Multi Currency</b>	<b>S</b>	Single Currency	Single Currency
		<b>C</b>	Cross-Currency	Cross-Currency (multi-currency)
<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	Transaction Type	DSB Product Definition Name
Rates	Exotic	Various entries	Various entries	Non-Standard Swap

### 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.Non_Standard.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 I.I](#)).
- For enumerations, please refer to the associated ISIN Product Definition Enumeration document for the impacted attributes (See [Section I.I](#)).

##### 3.1.1 Notional Currency and Other Notional Currency

- User can select Notional Currency only or both Notional Currency/Other Notional Currency.
- Notional Currency is a required field, whereas the Other Notional Currency is an optional field.

Attribute	Validation Type	Validation	Error Message
Notional Currency / Other Notional Currency	Unique Validation	Input currencies have the same currency.	Error: Notional Currency and Other Notional Currency cannot be identical
	Conditional Attribute Validation	Only Notional Currency is selected.	Error: Reference Rate and Other Leg Reference Rate cannot be identical

##### 3.1.2 Reference Rate Term Value

Attribute	Validation Type	Validation	Error Message
Reference Rate Term Value	Numeric Validation	Attribute value is 0 for a single Reference Rate.	Error: Term Value must not be 0 if only one Reference Rate is selected

## 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.Non_Standard.InstRefDataReporting.V1.json	Initial version
V1M1	Rates.Swap.Non_Standard.InstRefDataReporting.V1M1.json	Added Parent UPI
V2	Rates.Swap.Non_Standard.InstRefDataReporting.V2.json	Dynamic Enumeration
V2M1	Rates.Swap.Non_Standard.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		
<b>Structure</b>	Asset Class + Instrument Type + Product + Term of Contract Value/Unit + Notional Currency + ISO Reference Rate + Other Notional Currency + ISO Other Leg Reference Rate + Expiry Date		
<b>Example</b>	Rates Swap Non_Standard   DAYS EUR BBR-AUBBSW NZD BBSW 20230718		
<b>Source</b>	RTS23/Field2 - Instrument Full Name		
Source Attribute	Source Value	Derivation Method	Result
<b>Asset Class</b>	Rates	Fixed Value	Rates
<b>Instrument Type</b>	Swap	Fixed Abbreviation	Swap
<b>Product</b>	Non_Standard	Fixed Abbreviation	Non_Standard
<b>Term of Contract Value/Unit</b>	e.g., 1 DAYS	Copy value =>	1 DAYS

<b>Notional Currency</b>	Notional Currency	Mapped Enumeration	e.g., USD, EUR, GBP
<b>ISO Reference Rate</b>	e.g., BBR-AUBBSW	Copy value =>	BBR-AUBBSW
	Multiple input Reference Rates	Mapped to =>	Multiple Reference Rates
<b>Other Notional Currency</b>	Other Notional Currency	Mapped Enumeration	e.g., USD, EUR, GBP
<b>ISO Other Leg Reference Rate</b>	e.g., BBSW	Copy value =>	BBSW
	Multiple input Reference Rates	Mapped to =>	Multiple Reference Rates
<b>Expiry Date</b>	Expiry Date	Date Format (YYYYMMDD)	20230718

## 4.2.2 Classification Type

Attribute	Classification Type		
<b>Structure</b>	Instrument Type + Asset Class + Underlying Asset Type + Notional Schedule + Single or Multi Currency + Delivery Type		
<b>Example</b>	SRMCCC		
<b>Source</b>	<a href="#">ISO 10962</a> (CFI) – Third edition 2015-07-15		
Source Attribute	Source Value	Derivation Method	Result
<b>Instrument Type</b>	Swap	Fixed Mapping	S
<b>Asset Class</b>	Rates	Fixed Mapping	R
<b>Underlying Asset Type</b>	Other	Fixed Mapping	M
<b>Notional Schedule</b>	Constant	Mapped to =>	C
	Accreting	Mapped to =>	I
	Amortizing	Mapped to =>	D
	Custom	Mapped to =>	Y
<b>Single or Multi Currency</b>	Single Currency	Mapped to =>	S
	Cross Currency	Mapped to =>	C
<b>Delivery Type</b>	CASH	Mapped to =>	C

	PHYS	Mapped to =>	P
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### 4.2.3 Short Name

Attribute	Short Name		
<b>Structure</b>	"NA" + "/" + Asset Class + Instrument Type + Underlying Asset Type + Notional Currency + Other Notional Currency + Expiry Date		
<b>Example</b>	NA/Rts Swaps Oth EUR NZD 20230718		
<b>Source</b>	<a href="#">ISO 18774</a> (Financial Instrument Short Name) - First edition 2015-11		
Source Attribute	Source Value	Derivation Method	Result
<b>Issuer Name</b>	None	Fixed Value	NA/
<b>Asset Class</b>	Rates	Fixed Abbreviation	Rts
<b>Instrument Type</b>	Swap	Fixed Abbreviation	Swaps
<b>Underlying Asset Type</b>	Other	Fixed Abbreviation	Oth
<b>Notional Currency</b>	Notional Currency	Mapped Enumeration	e.g., USD, EUR, GBP
<b>Other Notional Currency</b>	Other Leg Notional Currency	Mapped Enumeration	e.g., USD, EUR, GBP
<b>Expiry Date</b>	Expiry Date	Date Format (YYYYMMDD)	20230718

### 4.2.4 Single or Multi Currency

Attribute	Single or Multi Currency		
Source Attribute	Source Value	Derivation Method	Result
Single or Multi Currency	If "Notional Currency" only	Mapped to =>	Single Currency
	If "Notional Currency" and "Other Notional Currency"	Mapped to =>	Cross Currency



#### 4.2.5 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 Guidelines and FAQs for complete derivation details (see [Section 5](#)).

Attribute	ISO Reference Rate		
Source Attribute	Source Value	Derivation Method	Result
Reference Rate	e.g., AUD-BBR-AUBBSW	See Best Practice document	e.g., BBR-AUBBSW
Other Leg Reference Rate	e.g., AUD-BBR-BBSW	See Best Practice document	e.g., BBSW

## 5. Supplementary Information

### 5.1 Best Practice Guidelines

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

### 5.2 Additional Comments

No Additional comment is provided for this product.

## 6. Appendix I - OTC ISIN-UPI Mapping

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

One Of	ISIN Input Attributes	Condition	Mapping Logic	UPI Input Attributes	Example UPI Value	Comments	
	Asset Class		Direct Map	Asset Class	Rates		
	Instrument Type		Direct Map	Instrument Type	Swap		
	Use Case		Direct Map	Product	Non_Standard		
	Level		Set to "UPI"	Level	UPI		
A	Term of Contract (By Effective Date)						
	Notional Currency		Direct Map	Notional Currency	EUR		
	Expiry Date		No Mapping				
	Price Multiplier		No Mapping				
	Effective Date		No Mapping				
	Expiry Date Adjusted		No Mapping				
	Tenor Calculator Method		No Mapping				
	Reference Rate	If Reference Rate = I		If Reference Rate = I = "Single Underlier"	Underlying Structure	Single Underlier	"One Of" Underlying Structure
				Map To	Underlier ID	EUR-EXT-CPI	
				Set to "FPML"	Underlier ID Source	FPML	
		If Reference Rate > I		If Reference Rate > I = "Basket"	Underlying Structure	Basket	"One Of" Underlying Structure
	Reference Rate Term Value	If Reference Rate = I		Direct Map	Reference Rate Term Value	3	
		If Reference Rate > I		No Mapping			
	Reference Rate Term Unit	If Reference Rate = I		Direct Map	Reference Rate Term Unit	MNTH	
		If Reference Rate > I		No Mapping			
Notional Schedule			Direct Map	Notional Schedule	Constant		
Delivery Type			Direct Map	Delivery Type	PHYS		

	Other Notional Currency		Direct Map	Other Notional Currency	GBP	
	Other Leg Reference Rate	If Reference Rate = I	If Reference Rate = I = "Single Underlier"	Underlying Structure	Single Underlier	"One Of" Underlying Structure
			Map To	Other Leg Underlier ID	GBP-LIBOR-BBA	
			Set to "FPML"	Other Leg Underlier ID Source	FPML	
		If Reference Rate > I	If Reference Rate > I = "Basket"	Underlying Structure	Basket	"One Of" Underlying Structure
	Other Leg Reference Rate Term Value	If Reference Rate = I	Direct Map	Other Leg Reference Rate Term Value	7	
		If Reference Rate > I	No Mapping			
	Other Leg Reference Rate Term Unit	If Reference Rate = I	Direct Map	Other Leg Reference Rate Term Unit	DAYS	
		If Reference Rate > I	No Mapping			
	B	Term of Contract (By Tenor)				
Notional Currency			Direct Map	Notional Currency	EUR	
Expiry Date			No Mapping			
Price Multiplier			No Mapping			
Term of Contract Value			No Mapping			
Term of Contract Unit			No Mapping			
Reference Rate		If Reference Rate = I	If Reference Rate = I = "Single Underlier"	Underlying Structure	Single Underlier	"One Of" Underlying Structure
			Map To	Underlier ID	EUR-EXT-CPI	
			Set to "FPML"	Underlier ID Source	FPML	
		If Reference Rate > I	If Reference Rate > I = "Basket"	Underlying Structure	Basket	"One Of" Underlying Structure
Reference Rate Term Value	If Reference Rate = I	Direct Map	Reference Rate Term Value	3		
	If Reference Rate > I	No Mapping				

	Reference Rate Term Unit	If Reference Rate = 1	Direct Map	Reference Rate Term Unit	MNTH		
		If Reference Rate > 1	No Mapping				
	Notional Schedule		Direct Map	Notional Schedule	Constant		
	Delivery Type		Direct Map	Delivery Type	PHYS		
	Other Notional Currency		Direct Map	Other Notional Currency	GBP		
	Other Leg Reference Rate	If Reference Rate = 1	If Reference Rate = 1 = "Single Underlier"		Underlying Structure	Single Underlier	"One Of" Underlying Structure
			Map To		Other Leg Underlier ID	GBP-LIBOR-BBA	
			Set to "FPML"		Other Leg Underlier ID Source	FPML	
		If Reference Rate > 1	If Reference Rate > 1 = "Basket"		Underlying Structure	Basket	"One Of" Underlying Structure
	Other Leg Reference Rate Term Value	If Reference Rate = 1	Direct Map	Other Leg Reference Rate Term Value	7		
		If Reference Rate > 1	No Mapping				
	Other Leg Reference Rate Term Unit	If Reference Rate = 1	Direct Map	Other Leg Reference Rate Term Unit	DAYS		
		If Reference Rate > 1	No Mapping				