DERIVATIVES SERVICE BUREAU (DSB) LTD

Rates : Option : Swaption

ISIN Product Definition

Version 3

Date	Status	Version	Revision Details
4 Oct 2023	Draft	1	Initial Version
18 Oct 2024	Change	2	• Update on Record Template Section for DSB-2959 • Update Derivation rules for Underlying Asset Type
25 March 2025	Change	3	Updated ISO 10962 (CFI)

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):

Title	Description	Location
Enumerations Document	Lists all fixed values used for a product	Enumerations section
Product Definition Data Dictionary	Defines attributes in the Request and Record templates; and from which they are referenced on	Other Documents section
Product Definition Validations and Normalizations Document	Specifies details on validation and normalization rules	
Best Practice Guidelines and FAQs	Lists answers to queries raised by users and provides guidance on the use of the templates	
GitHub Environment Section	ANNA DSB Github Environment where the JSON templates for each product is found	GitHub Environment section
CFI Array Component	Describes the attributes and derivations for CFI 2015 and CFI 2021	CFI Array Component section

2. Product Taxonomy

2.1 CFI Taxonomy

Sources: ISO 10962 (CFI) – Third edition 2015-07 ; ISO 10962 (CFI) – Fifth edition 2021-05

Description	CFI Taxonomy	
Structure	Instrument (Category) + Asset Class (Group) + Underlying assets + Option style and type + Valuation method or trigger + Delivery	
CFI Version	2015	2021
Example Value	HRCGVP	HRCGVP

Version	Instrument (Category)	Asset Class (Group)	#1 : Underlying assets		#2 : Option style and type		#3 : Valuation method or trigger		#4 : Delivery	
2015	**H**	**R**	A	Basis Swap (Float-Float)	A	European-Call	V	Vanilla	C	Cash
			C	Fixed-Floating	B	American-Call	A	Asian	P	Physical
			D	Fixed-Fixed	C	Bermudan-Call	D	Digital (Binary)	E	Elect at exercise
			G	Inflation Rate Index	D	European-Put	B	Barrier		
			H	Overnight Index Swap (OIS)	E	American-Put	G	Digital Barrier		
			M	Zero Coupon	F	Bermudan-Put	L	Lookback		
			M	Others	G	European-Chooser	P	Other Path Dependent		
					H	American-Chooser	M	Others		
					I	Bermudan-Chooser				
2021	**H**	**R**	A	Basis swap (float-float)	A	European-Call	V	Vanilla	C	Cash
			C	Fixed-floating swap	B	American-Call	A	Asian	P	Physical
			D	Fixed-fixed swap	C	Bermudan-Call	D	Digital (Binary)	E	Elect at exercise
			G	Inflation rate index	D	European-Put	B	Barrier		
			H	OIS	E	American-Put	G	Digital barrier		
			M	Others (miscellaneous)	F	Bermudan-Put	L	Lookback		
					G	European-Chooser	P	Other path dependent		
					H	American-Chooser	C	Cap		
					I	Bermudan-Chooser	F	Floor		
							M	Others (miscellaneous)		

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
Interest Rate	Option	Swaption	Swaption

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.Option.Swaption.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.Option.Swaption.InstRefDataReporting.V1.json**	Initial version
V1M1	**Rates.Option.Swaption.InstRefDataReporting.V1M1.json**	Added Parent UPI
V1M2	**Rates.Option.Swaption.InstRefDataReporting.V1M2.json**	Updated Underlying Asset Type from Request Attribute to Record Derived Attribute

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 + Option Type + Underlying Instrument ISIN + Notional Currency + Expiry Date		
Example	Rates Option Swaption Chooser EZ2R85LC13L3 EUR 20230816		
Source	RTS23/Field2 - Instrument Full Name		
Source Attribute	**Source Value**	**Derivation Method**	**Result**
Asset Class	Rates	Fixed Value	Rates
Instrument Type	Option	Fixed Value	Option
Product	Swaption	Fixed Value	Swaption
Option Type	CALL	Mapped to =>	Call

	PUTO	Mapped to =>	Put
	OPTL	Mapped to =>	Chooser
Underlying Instrument ISIN	e.g., EZ2R85LC13L3	Copy value =>	e.g., EZ2R85LC13L3
Notional Currency	Notional Currency	Mapped Enumeration	e.g., USD, EUR, GBP
Expiry Date	Expiry Date	Date Format (YYYYMMDD)	20230816

4.2.2 Classification Type

This is a legacy field containing ISO 10962 (CFI) – Third edition 2015-07-15 values.

Attribute	Classification Type		
Structure	Instrument Type + Asset Class + Underlying Asset Type + Option Type/Style + Valuation Method or Trigger + Delivery Type		
Example	HRCGVP		
Source	ISO 10962 (CFI) – Third edition 2015-07-15		
Source Attribute	**Source Value**	**Derivation Method**	**Result**
Instrument Type	Non-listed and complex listed options	Fixed Mapping	H
Asset Class	Rates	Fixed Mapping	R
Underlying Asset Type	Basis Swap (Float-Float)	Mapped to =>	A
	Fixed-Floating	Mapped to =>	C
	Fixed-Fixed	Mapped to =>	D
	Inflation Rate Index	Mapped to =>	G
	Overnight Index Swap	Mapped to =>	H
	Zero Coupon	Mapped to =>	M
	Others	Mapped to =>	M
Option Style and Type	PUTO/EURO	Mapped to =>	D
	CALL/EURO	Mapped to =>	A
	OPTL/EURO	Mapped to =>	G
	PUTO/AMER	Mapped to =>	E
	PUTO/BERM	Mapped to =>	F
	CALL/AMER	Mapped to =>	B
	CALL/BERM	Mapped to =>	C
	OPTL/AMER	Mapped to =>	H
	OPTL/BERM	Mapped to =>	I

Valuation Method or Trigger	Vanilla	Mapped to =>	V
	Asian	Mapped to =>	A
	Digital (Binary)	Mapped to =>	D
	Barrier	Mapped to =>	B
	Digital Barrier	Mapped to =>	G
	Lookback	Mapped to =>	L
	Other Path Dependent	Mapped to =>	P
	Other	Mapped to =>	M
Delivery Type	CASH	Mapped to =>	C
	PHYS	Mapped to =>	P
	OPTL	Mapped to =>	E

4.2.3 Short Name

Attribute	Short Name		
Structure	"NA" + "/" + Instrument Type + Option Type + Option Exercise Style + Underlying Asset Type + Notional Currency + Expiry Date		
Example	NA/O Opt Epn Fxd Flt EUR 20230816		
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	Option	Fixed Abbreviation	O
Option Type	CALL	Mapped to =>	Call
	PUTO	Mapped to =>	P
	OPTL	Mapped to =>	Opt
Option Exercise Style	EURO	Mapped to =>	Epn
	AMER	Mapped to =>	Amr
	BERM	Mapped to =>	Brm
Underlying Asset Type	Basis (Float-Float)	Mapped to =>	Flt Flt
	Fixed-Floating	Mapped to =>	Fxd Flt
	Fixed-Fixed	Mapped to =>	Fxd Fxd
	Inflation Rate Index	Mapped to =>	Infl Idx
	Overnight Index Swap	Mapped to =>	OIS
	Zero Coupon	Mapped to =>	Oth
	Others	Mapped to =>	Oth
Notional Currency	Notional Currency	Mapped Enumeration	e.g., USD, EUR, GBP
Expiry Date	Expiry Date	Date Format (YYYYMMDD)	20230816

4.2.4 Underlying Asset Type

- The value of the Underlying Asset Type is derived from the input Underlying Instrument ISIN.
- The derived value of the Underlying Asset Type is translated to the CFI values as per table below and should be used in the generation of the CFI code of the Parent Swaption.

Source Attribute	Source Value	Derivation Method	Underlying Asset Type
Underlying Asset Type (from the Underlying Instrument ISIN record)	Basis Swap (Float - Float	Mapped to =>	Basis Swap (Float – Float)
	Fixed - Floating	Mapped to =>	Fixed - Floating
	Fixed - Fixed	Mapped to =>	Fixed - Fixed
	Inflation Rate Index	Mapped to =>	Inflation Rate Index
	Overnight Index Swap (OIS)	Mapped to =>	Overnight Index Swap (OIS)
	Zero Coupon	Mapped to =>	Other
	Other	Mapped to =>	Other

5. Supplementary Information

5.1 Best Practice Guidelines

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

5.2 Additional Comments

The short name abbreviation for option type – Put is “P” for rates option while in equity option, short name abbreviation for the option type – Put is “Put”.