DERIVATIVES SERVICE BUREAU (DSB) LTD

Foreign_Exchange : Option : Vanilla_Option

ISIN Product Definition

Version 1

Date	Status	Version	Revision Details
20 Sep 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):

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	

2. Product Taxonomy

2.1 CFI Taxonomy

Source: ISO 10962 (CFI Code) – Third edition 2015-07-1

Attr #	Title	Values	Name	Description
	Instrument (Category)	**H**	Non-listed and complex listed options	
	Asset Class (Group)	**F**	Foreign Exchange	
Attr #1	**Underlying Assets**	**T**	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
Attr #2	**Option style and type**	**A**	European-Call	An option on a contract which allows its holder (buyer) to exercise the right to buy specified assets (interest rates product) at a fixed price only on the expiration date of the call
		B	American-Call	An option on a contract which allows its holder (buyer) to exercise the right to buy specified assets (interest rates product) at a fixed price at any time during the term of the call option, up to and including the expiration date of the call
		C	Bermudan-Call	An option on a contract which allows its holder (buyer) to exercise the right to buy specified assets (interest rates product) at a fixed price on a number of specific dates within the exercise period of the call
		D	European-Put	An option on a contract which allows its holder (buyer) to exercise the right to sell specified assets (interest rates product) at a fixed price only on the expiration date of the put
		E	American-Put	An option on a contract which allows its holder (buyer) to exercise the right to sell specified assets (interest rates product) at a fixed price at any time during the term of the put option, up to and including the expiration date of the put
		F	Bermudan-Put	An option on a contract which allows its holder (buyer) to exercise the right to sell specified assets (interest rates product) at a fixed price on a number of specific dates within the exercise period of the put
		G	European-Chooser	An option on a contract which allows its holder (buyer) to exercise the right to buy (call) or sell (put) specified assets (interest rates product) at a

				fixed price, only on the contract's expiration date; the buyer does not have to decide whether the contract will be a put or a call until an agreed future date, prior to expiration
		H	American-Chooser	An option on a contract which allows its holder (buyer) to exercise the right to buy (call) or sell (put) specified assets (interest rates product) at a fixed price at any time during the term of the contract, up to and including the expiration date of the call or put; the buyer does not have to decide whether the contract will be a put or a call until an agreed future date, prior to expiration
		I	Bermudan-Chooser	An option on a contract which allows its holder (buyer) to exercise the right to buy (call) or sell (put) specified assets (interest rates product) at a fixed price on a number of specific dates within the exercise period of the contract; the buyer does not have to decide whether the contract will be a put or a call until an agreed future date, prior to expiration
Attr #3	**Valuation method or trigger**	**V**	Vanilla	An option for which all terms are standardized
Attr #4	**Delivery Type**	**C**	Cash	Cash
		P	Physical	Physical
		E	Elect at Exercise	Elect at exercise

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	Vanilla Option		Vanilla_Option

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 Foreign Exchange spreadsheet that contains the layout of all templates. This can be found in the Foreign Exchange 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.Foreign_Exchange.Option.Vanilla_Option.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 Foreign Exchange spreadsheet that contains the layout of all templates. This can be found in the Foreign Exchange 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	**Foreign_Exchange.Option.Vanilla_Option.InstRefDataReporting.V1.json**	Initial version
V1M1	**Foreign_Exchange.Option.Vanilla_Option.InstRefDataReporting.V1M1.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 + Notional Currency + Other Notional Currency + Expiry Date		
Example	Foreign Exchange Option Vanilla_Option EUR USD 20230810		
Source	RTS23/Field2 - Instrument Full Name		
Source Attribute	**Source Value**	**Derivation Method**	**Result**
Asset Class	Foreign_Exchange	Fixed Value	Foreign_Exchange
Instrument Type	Option	Fixed Value	Option
Product	Vanilla_Option	Fixed Value	Vanilla_Option
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)	20230810

4.2.2 Classification Type

Attribute	Classification Type		
Structure	Instrument Type + Asset Class + Underlying Asset Type + Option Type/Style + Valuation Method or Trigger + Delivery Type		
Example	HFTDVP		
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	Foreign Exchange	Fixed Mapping	F
Underlying Asset Type	Spot	Fixed Mapping	T
Option Type / Style	PUTO/AMER	Mapped to =>	E
	PUTO/BERM	Mapped to =>	F
	PUTO/EURO	Mapped to =>	D
	CALL/AMER	Mapped to =>	B
	CALL/BERM	Mapped to =>	C
	CALL/EURO	Mapped to =>	A
	OPTL/AMER	Mapped to =>	H
	OPTL/BERM	Mapped to =>	I
	OPTL/EURO	Mapped to =>	G
Valuation Method or Trigger	Vanilla	Fixed Mapping	V
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 + Valuation Method or Trigger + Option Type + Notional Currency + Other Notional Currency + Expiry Date		
Example	NA/O Van Put EUR USD 20230810		
Source	[ISO 18774](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
Valuation Method or Trigger	Vanilla	Fixed Abbreviation	Van
Option Type	PUTO	Fixed Abbreviation	Put
	CALL	Fixed Abbreviation	Call
	OPTL	Fixed Abbreviation	O
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)	20230810

4.2.4 FX Type

Attribute	FX Type		
Source Attribute	**Criteria**	**FX Type**	**Result**
Notional Currency / Other Notional Currency	All others	FX Cross Rates	**FXCR**
	Non-G8 currency pairs	FX Emerging Markets	**FXEM**
	G8 currency pairs	FX Majors	**FXMJ**

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 shortname abbreviation for option type – Put is "P" for Rates option while in Equity and Foreign Exchange, shortname abbreviation for the option type – Put is "Put". Same as for Option Type – OPTL whereas in FX it is "O" and "Opt" for Rates and Equity.

6. Appendix 1 - 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	Option	
Use Case	Direct Map	Product	Vanilla_Option	
Level	Set to "UPI"	Level	UPI	
Notional Currency	Map To	Underlier ID	EUR	
	Set to "CCY"	Underlier ID Source	CCY	
Expiry Date	No Mapping			
Option Type	Direct Map	Option Type	PUTO	
Option Exercise Style	Direct Map	Option Exercise Style	EURO	
Other Notional Currency	Map To	Other Underlier ID	USD	
	Set to "CCY"	Other Underlier ID Source	CCY	
Delivery Type	Direct Map	Delivery Type	PHYS	
Price Multiplier	No Mapping			