DERIVATIVES SERVICE BUREAU (DSB) LTD

Equity : Swap : Portfolio_Swap_Single_Index

ISIN Product Definition

Version 1

Date	Status	Version	Revision Details
3 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):

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 2015-07-15

Attr #	Title	Values	Name	Description
	Instrument (Category)	**S**	Swap	
	Asset Class (Group)	**E**	Equity	
Attr #1	**Underlying Assets**	**I**	Index	An equity index swap in which cash flows are exchanged based on the percentage change in one or more stock indices for a specific period with previously agreed re-set dates; the swap is cash settled and based on notional principal amounts
Attr #2	**Return or payout trigger**	**P**	Price	Price return equity swap, similar to a total return swap, except that dividends are not passed through to the buyer
		D	Dividend	A fixed-term contract between two parties where one party will make an interest rate payment for each interval and the other party will pay the total dividends received as pay-out by a selected underlying asset
		V	Variance	A forward swap that uses the variance (being the volatility squared) of an underlying's price movement over a period as the basis for the payoff calculation
		L	Volatility	The variability of movements in a security or underlying instrument's price; it is a measure of the amount by which an asset's price is expected to fluctuate over a given period of time; it is normally measured by the annual standard deviation of daily price changes
		T	Total Return	Total return
		C	Contract for Difference	Contract for difference
		M	Other	Miscellaneous
Attr #3	**Not applicable/ undefined**	**X**	Not applicable/ undefined	Not applicable/undefined
Attr #4	**Delivery Type**	**C**	Cash	Cash
		P	Physical	Physical

		E	Elect at Settlement	Elect at 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
Equity	Portfolio Swap	Price Return Basic Performance*	Single Index	Portfolio_Swap_Single_Index

**There is no exact match in the ISDA Taxonomy 2.0 for this product template. The current taxonomy 2.0 only provides for Sub-Product value [Price Return Basic Performance]. This product template is a catch all for products that fall outside of these specified transaction types.*

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 Equity spreadsheet that contains the layout of all templates. This can be found in the Equity 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.Equity.Swap.Portfolio_Swap_Single_Index.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 Equity spreadsheet that contains the layout of all templates. This can be found in the Equity 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	**Equity.Swap.Portfolio_Swap_Single_Index.InstRefDataReporting.V1.json**	Initial version
V1M1	**Equity.Swap.Portfolio_Swap_Single_Index.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 + Underlying Instrument ISIN/ISO Underlying Instrument Index + Notional Currency + Expiry Date		
Example	Equity Swap Portfolio_Swap_Single_Index JCFNAMR EUR 20790103		
Source	RTS23/Field2 - Instrument Full Name		
Source Attribute	**Source Value**	**Derivation Method**	**Result**
Asset Class	Equity	Fixed Value	Equity
Instrument Type	Swap	Fixed Abbreviation	Swap
Product	Portfolio_Swap_Single_Index	Fixed Abbreviation	Portfolio_Swap_Single_Index
Underlying Instrument ISIN/ISO Underlying Instrument Index	e.g., 34810-JCFNAMR	Extracted value =>	e.g., JCFNAMR
Notional Currency	Notional Currency	Mapped Enumeration	e.g., USD, EUR, GBP

Expiry Date	Expiry Date	Date Format (YYYYMMDD)	20790103

4.2.2 Classification Type

Attribute	Classification Type		
Structure	Instrument Type + Asset Class + Underlying Asset Type + Return or Payout Trigger + X + Delivery Type		
Example	SEIPXC		
Source	ISO 10962 (CFI) – Third edition 2015-07-15		
Source Attribute	**Source Value**	**Derivation Method**	**Result**
Instrument Type	Swap	Fixed Mapping	S
Asset Class	Equity	Fixed Mapping	E
Underlying Asset Type	Index	Fixed Mapping	I
Return or Payout Trigger	Price	Mapped to =>	P
	Dividend	Mapped to =>	D
	Variance	Mapped to =>	V
	Volatility	Mapped to =>	L
	Total Return	Mapped to =>	T
	Contract for Difference	Mapped to =>	C
	Other	Mapped to =>	M
Not applicable/undefined	Not applicable/undefined	Fixed Mapping	X
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 + Underlying Asset Type + Return or Payout Trigger + Notional Currency + Expiry Date		
Example	NA/Swaps Idx Pr EUR 20790103		
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	Swaps
Underlying Asset Type	Index	Fixed Abbreviation	Idx
Return or Payout Trigger	Price	Mapped to =>	Pr
	Dividend	Mapped to =>	Div
	Variance	Mapped to =>	Var
	Volatility	Mapped to =>	Vol
	Total Return	Mapped to =>	Tot Rtn
	Contract for Difference	Mapped to =>	CFD
	Other	Mapped to =>	Oth
Notional Currency	Notional Currency	Mapped Enumeration	e.g., USD, EUR, GBP
Expiry Date	Expiry Date	Date Format (YYYYMMDD)	20790103

4.2.4 ISO Underlying Instrument Index

Attribute	ISO Underlying Instrument Index		
Source Attribute	**Source Value**	**Derivation Method**	**Result**
Underlying Instrument Index	e.g., MSCI EM USD	Extracted value =>	e.g., MSCI EM
Underlying Instrument Index Prop	e.g., 34810-JPCFNAMR	Extracted value =>	e.g., JCFNAMR

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 Instrument Type within the Equity Asset Class is “Swaps” whereas Rates Asset Class uses “Swap”.

6. Appendix I - OTC ISIN-UPI Mapping

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

One Of	ISIN Input Attributes	Mapping Logic	UPI Input Attributes	Example UPI Value	Comments
	Asset Class	Direct Map	Asset Class	Equity	
	Instrument Type	Direct Map	Instrument Type	Swap	
	Use Case	Direct Map	Product	Portfolio_Swap_Single_Index	
	Level	Set to "UPI"	Level	UPI	
	Notional Currency	No Mapping			
	Expiry Date	No Mapping			
A	Underlying Instrument ISIN	Set to "Equity Index Identifier"	Underlier Type	Equity Index Identifier	"One Of" Underlier Type
		Map to	Underlier ID	GB0001383545	
		Set to "ISIN"	Underlier ID Source	ISIN	
B	Underlying Instrument Index	Set to "Equity Index Name"	Underlier Type	Equity Index Name	"One Of" Underlier Type
		Map to	Underlier ID	MSCI EM USD	
		Set to "EQIDX"	Underlier ID Source	EQIDX	
C	Underlying Instrument Index Prop	Set to "Proprietary Index"	Underlier Type	Proprietary Index	"One Of" Underlier Type
		Map to	Underlier ID	34810-JPCFNAMR	
		Set to "PROP"	Underlier ID Source	PROP	
	Return or Payout Trigger	Direct Map	Return or Payout Trigger	Price	
	Delivery Type	Direct Map	Delivery Type	CASH	
	Price Multiplier	No Mapping			