DERIVATIVES SERVICE BUREAU (DSB) LTD

Equity : Swap : Non_Standard

ISIN Product Definition

Version 1

Date	Status	Version	Revision Details
4 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**	Swaps	
	Asset Class (Group)	**E**	Equity	
Attr #1	**Underlying Assets**	**S**	Single stock	Single name security
		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
		B	Basket	A bespoke, synthetic portfolio of underlying assets whose components have been agreed for a specific over-the-counter (OTC) derivative by the parties to the transaction
		M	Others	Others (miscellaneous)
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	Others	Others (miscellaneous)
Attr #3	**Not applicable/undefined**	**X**	Not applicable/undefined	Not applicable/undefined
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
		E	Elect at settlement	Determined at the time of 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	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 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.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 1.1).
- For enumerations, please refer to the associated ISIN Product Definition Enumeration document for the impacted attributes (See Section 1.1).

3.1.1 Equity Non-Standard SWAP Validations

Underlying Asset Type Validation			
Source Attribute	**Source Value**	**Derivation Method**	**Result**
Underlying Instruments	Single Index ONLY	Mapped to =>	'Index'
	Single Index Prop ONLY	Mapped to =>	
	Single ISIN ONLY	Mapped to =>	'Single Stock', 'Index' or 'Other'
	Multiple Index ONLY	Mapped to =>	'Basket'
	Multiple Index Prop ONLY	Mapped to =>	
	Multiple ISIN ONLY	Mapped to =>	
	Any combination of ISIN and Index/Index Prop above	Mapped to =>	

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.Non_Standard.InstRefDataReporting.V1.json**	Initial version
V1M1	**Equity.Swap.Non_Standard.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 Instruments + Notional Currency + Expiry Date			
Example	Equity Swap Non_Standard GB00BH4HKS39 Multiple Indices USD 20300801			
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	Non-Standard		Fixed Abbreviation	Non-Standard
Underlying Instruments	Underlying Instrument ISIN	e.g., GB00BH4HKS39	Extracted value =>	e.g., GB00BH4HKS39
		Multiple Input ISIN	Mapped to =>	Multiple ISINs
		e.g., MSCI EM USD	Extracted value =>	e.g., MSCI EM

	Underlying Instrument Index	Multiple Instrument Indices	Mapped to =>	Multiple Indices
	Underlying Instrument Index Prop	e.g.,34810-JPCFNAMR	Extracted value =>	e.g., 34810-JPCFNAMR
		Multiple Index Props	Mapped to =>	Multiple Indices
	Combination of Instrument Indices and Instrument Index Props	e.g., MSCI EM USD, 34810-JPCFNAMR	Mapped to =>	Multiple Indices
Notional Currency	Notional Currency		Mapped Enumeration	e.g., USD, EUR, GBP
Expiry Date	Expiry Date		Date Format (YYYYMMDD)	20300801

4.2.2 Classification Type

Attribute	Classification Type		
Structure	Instrument Type + Asset Class + Underlying Asset Type + Return or Payout Trigger + X + Delivery Type		
Example	SEBMXC		
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	Single Stock	Mapped to =>	S
	Index	Mapped to =>	I
	Basket	Mapped to =>	B
	Other	Mapped to =>	M
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 (CFD)	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 + Product Type + Underlying Asset Type + Notional Currency + Expiry Date		
Example	NA/Swaps Nstd Sgle Stk USD 20300801		
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
Product Type	Non-Standard	Fixed Abbreviation	Nstd
Underlying Asset Type	Single Stock	Mapped to =>	Sgle Stk
	Index	Mapped to =>	Idx
	Basket	Mapped to =>	Bskt
	Other	Mapped to =>	Oth
Notional Currency	Notional Currency	Mapped Enumeration	e.g., USD, EUR, GBP
Expiry Date	Expiry Date	Date Format (YYYYMMDD)	20300801

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 WORLD PR USD	Extracted value =>	e.g., MSCI WORLD PR
	Multiple Input Index	Mapped to =>	Multiple Indices
Underlying Instrument Index Prop	e.g., 34810-JPOSTEDM	Extracted value =>	e.g., JPOSTEDM
	Multiple Input Index Prop	Mapped to =>	Multiple Indices

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".

- The short name abbreviation for Underlying Asset Type [Single Stock] within the Equity Asset Class is "Sgle Stk" whereas Equity Swap Portfolio Swap Single Name uses "SStk".

6. Appendix 1 – 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	Equity	
	Instrument Type		Direct Map	Instrument Type	Swap	
	Use Case		Direct Map	Product	Non_Standard	
	Level		Set to "UPI"	Level	UPI	
	Notional Currency		No Mapping			
	Expiry Date		No Mapping			
	Price Multiplier		No Mapping			
A	Underlying Instrument ISIN	If Underlying Asset Type = "Single Stock" or "Other" AND If Underlying Instrument = 1	Set to "Single Stock"	Underlier Type	Single Stock	"One Of" Underlier Type
			Map to	Underlier ID	GB00BH4HKS39	
			Set to "ISIN, FIGI, CUSIP, SEDOL"	Underlier ID Source	ISIN	
		If Underlying Asset Type = "Index"	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	
		If Underlying Asset Type = "Basket" AND If Underlying Instrument > 1	Map to	Underlying Structure	Basket	
B	Underlying Instrument Index	If Underlying Asset Type = "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	
		If Underlying Asset Type = "Basket" AND If Underlying Instrument > 1	Map to	Underlying Structure	Basket	

C	Underlying Instrument Index Prop	If Underlying Asset Type = "Index"	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	
		If Underlying Asset Type = "Basket" AND If Underlying Instrument > 1	Map to	Underlying Structure	Basket	
	Underlying Asset Type		Direct Map	Underlying Asset Type	Other	
	Return or Payout Trigger		Direct Map	Return or Payout Trigger	Contract for Difference (CFD)	
	Delivery Type		Direct Map	Delivery Type	CASH	