DERIVATIVES SERVICE BUREAU (DSB) LTD

Other : Forward : Non_Standard

ISIN Product Definition

Version 1

Date	Status	Version	Revision Details
12 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):

<table>
<tr><th>Title</th><th>Description</th><th>Location</th></tr>
<tr><td>Enumerations Document</td><td>Lists all fixed values used for a product</td><td>Enumerations section</td></tr>
<tr><td>Product Definition Data Dictionary</td><td>Defines attributes in the Request and Record templates; and from which they are referenced on</td><td rowspan="4">Other Documents section</td></tr>
<tr><td>Product Definition Validations and Normalizations Document</td><td>Specifies details on validation and normalization rules</td></tr>
<tr><td>Best Practice Guidelines and FAQs</td><td>Lists answers to queries raised by users and provides guidance on the use of the templates</td></tr>
<tr><td>GitHub Environment Section</td><td>ANNA DSB Github Environment where the JSON templates for each product is found</td></tr>
</table>

2. Product Taxonomy

2.1 CFI Taxonomy

Source: ISO 10962 (CFI Code) – Third edition 2015-07-15

Attr #	Title	Values	Name	Description
	Instrument (Category)	**M**	Others (miscellaneous)	
	Asset Class (Group)	**M**	Other assets (miscellaneous)	
Attr #1	**Further Grouping**	**S**	Other OTC derivative products	Other OTC derivative products
Attr #2	**Not applicable/undefined**	**X**	Not applicable/undefined	Not applicable/undefined
Attr #3	**Not applicable/undefined**	**X**	Not applicable/undefined	Not applicable/undefined
Attr #4	**Not applicable/undefined**	**X**	Not applicable/undefined	Not applicable/undefined

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
All	Exotic			Non-Standard Forward

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 Non Standard spreadsheet that contains the layout of all templates. This can be found in the Non Standard 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.Other.Forward.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 Underlying Asset Class = "Null"

- If user did not select any values in the Underlying Asset Class, an error message shall apply "Error: At least one Underlying Asset Class must be 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 Non Standard spreadsheet that contains the layout of all templates. This can be found in the Non Standard 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	**Other.Forward.Non_Standard.InstRefDataReporting.V1.json**	Initial version
V1M1	**Other.Forward.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 + Term of Contract Value/Unit + Underlying Instruments + Base Product + Additional Sub Product + ISO Reference Rate + Notional Currency + Other Notional Currency + Expiry Date		
Example	Other Forward Non_Standard 1 DAYS Multiple ISINs Multiple Indices METL LEAD CPI Multiple Currencies EUR 20230912		
Source	RTS23/Field2 - Instrument Full Name		
Source Attribute	**Source Value**	**Derivation Method**	**Result**
Asset Class	Other	Fixed Value	Other
Instrument Type	Forward	Fixed Abbreviation	Forward
Product	Non_Standard	Fixed Abbreviation	Non_Standard

Term of Contract Value/Unit	e.g., 1 DAYS		Copy value =>	1 DAYS
Underlying Instruments	Underlying Instrument ISIN	e.g., GB0008706128	Extracted value =>	GB0008706128
		Multiple Input ISIN	Mapped to =>	Multiple ISINs
	ISO Underlying Instrument Index	e.g., MSCI EM USD	Extracted value =>	MSCI EM
		e.g., 34810-JP16LMO	Extracted value =>	JP16LMO
		Multiple Instrument Indices/Index Prop	Mapped to =>	Multiple Indices
Base Product	e.g., Metal[METL]		Mapped to =>	METL
Additional Sub Product	e.g., Lead[LEAD]		Mapped to =>	LEAD
ISO Reference Rate	e.g., CPI		Copy value =>	CPI
	Multiple input Reference Rates		Mapped to =>	Multiple Indices
Notional Currency	Notional Currency		Mapped Enumeration	e.g., USD, EUR, GBP
	Multiple input currencies		Mapped to =>	Multiple Currencies
Other Notional Currency	Other Notional Currency		Mapped Enumeration	e.g., USD, EUR, GBP
Expiry Date	Expiry Date		Date Format (YYYYMMDD)	20230912

4.2.2 Classification Type

Attribute	Classification Type		
Structure	Instrument Type + Asset Class + Further Grouping + X + X + X		
Example	MMSXXX		
Source	ISO 10962 (CFI) – Third edition 2015-07-15		
Source Attribute	**Source Value**	**Derivation Method**	**Result**
Instrument Type	Others (miscellaneous)	Fixed Mapping	M
Asset Class	Other assets	Fixed Mapping	M
Further Grouping	Other OTC derivative products	Fixed Mapping	S
Not applicable/undefined	Not applicable/undefined	Fixed Mapping	X
Not applicable/undefined	Not applicable/undefined	Fixed Mapping	X
Not applicable/undefined	Not applicable/undefined	Fixed Mapping	X

4.2.3 Short Name

Attribute	Short Name		
Structure	"NA" + "/" + Instrument Type + Asset Class + Product Type + Notional Currency + Expiry Date		
Example	NA/Fwd Oth Nstd Mlt 20230912		
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	Forward	Fixed Abbreviation	Fwd
Asset Class	Other assets	Fixed Abbreviation	Oth
Product Type	Non-Standard	Fixed Abbreviation	Nstd
Notional Currency	Notional Currency	Mapped Enumeration	e.g., USD, EUR, GBP

	Multiple input currencies	Mapped to =>	Mlt
Expiry Date	Expiry Date	Date Format (YYYYMMDD)	20230912

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
	Multiple Input Index	Mapped to =>	Multiple Indices
Underlying Instrument Index Prop	e.g., 34810-JP16LMO	Extracted value =>	e.g., JP16LMO
	Multiple Input Index Prop	Mapped to =>	Multiple Indices

*Underlying Instrument Index input value is from Underlying Asset Class Equity.

*Underlying Instrument Index Prop input value is from Underlying Asset Class Equity & Commodities.

4.2.5 ISO 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-CPI	See Best Practice document	e.g., CPI
	Multiple input Reference Rates	Mapped to =>	Multiple Indices

4.2.6 ISO Place of Settlement

Attribute	ISO Place of Settlement		
Source Attribute	**Source Value**	**Derivation Method**	**Result**
Place of Settlement	e.g., Hong Kong	Mapped to =>	e.g., HK

4.2.7 ISO Delivery Type

Attribute	ISO Delivery Type		
Source Attribute	**Source Value**	**Derivation Method**	**Result**
Delivery Type	Cash	Mapped to =>	CASH
	Physical	Mapped to =>	PHYS
	Non-Deliverable	Mapped to =>	OPTL

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 1 - OTC ISIN-UPI Mapping

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

AnyOf	ISIN Input Attributes	Condition	Mapping Logic	UPI Input Attributes	Sample UPI Value	Comments
	Asset Class		Direct Map	Asset Class	Other	
	Instrument Type		Direct Map	Instrument Type	Forward	
	Use Case		Direct Map	Product	Non_Standard	
	Level		Set to "UPI"	Level	UPI	
	Expiry Date		No Mapping			
	Price Multiplier		No Mapping			
	Delivery Type		Direct Map	Delivery Type	CASH	
Underlying Asset Class.Rates						
	By Tenor					
	Term of Contract Value		No Mapping			
	Term of Contract Unit		No Mapping			
	By Effective Date					
	Effective Date		No Mapping			
	Expiry Date Adjusted		No Mapping			
	Tenor Calculator Method		No Mapping			
	Notional Currency		Direct Map	Notional Currency	EUR	
	Reference Rate	If Reference Rate = 1 & Underlying Instrument ISIN = 0	If Reference Rate =1 & Underlying Instrument ISIN = 0 = "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 > 1 & Underlying Instrument ISIN ≥ 1	If Reference Rate > 1 = "Basket"	Underlying Structure	Basket	"One Of" Underlying Structure
	Reference Rate Term Value	If Reference Rate = 1	Direct Map	Reference Rate Term Value	3	

AnyOf	ISIN Input Attributes	Condition	Mapping Logic	UPI Input Attributes	Sample UPI Value	Comments
		If Reference Rate > 1	No Mapping			
	Reference Rate Term Unit	If Reference Rate = 1	Direct Map	Reference Rate Term Unit	MNTH	
		If Reference Rate > 1	No Mapping			
	By Non-Rates					
	Underlying Instrument ISIN	If Underlying Instrument ISIN = 1 & Reference Rate = 0	If Underlying Instrument ISIN = 1 & Reference Rate = 0 = "Single Underlier"	Underlying Structure	Single Underlier	
			Map To	Underlier ID	US92857WBQ2 4	
			Set to "ISIN; FIGI; CUSIP; SEDOL"	Underlier ID Source	ISIN	
		If Underlying Instrument ISIN > 1 and Reference Rate is ≥ 1	If Reference Rate > 1 = "Basket"	Underlying Structure	Basket	"One Of" Underlying Structure
Underlying Asset Class.Foreign_Exchange						
	Notional Currency		Map To	Underlier ID	EUR	
			Set to "CCY"	Underlier ID Source	CCY	
	Other Notional Currency		Map To	Other Underlier ID	USD	
			Set to "CCY"	Other Underlier ID Source	CCY	
	Return or Payout Trigger		Direct Map	Return or Payout Trigger	Forward price of underlying instrument	
	Settlement Currency		Direct Map	Settlement Currency	EUR	
	Place of Settlement		Direct Map	Place of Settlement	Hong Kong	
Underlying Asset Class.Credit						
	Return or Payout Trigger		Direct Map	Return or Payout Trigger	Forward price of underlying instrument	

AnyOf	ISIN Input Attributes	Condition	Mapping Logic	UPI Input Attributes	Sample UPI Value	Comments
	Underlying Instrument ISIN	If Underlying Instrument ISIN = 1	If Underlying Instrument ISIN = 1 = "Single Underlier"	Underlying Structure	Single Underlier	"One Of" Underlying Structure
			Set to "Fixed Income Security"	Underlier Type	Fixed Income Security	"One Of" Underlier Type
			Map to	Underlier ID	US92857WBQ24	
			Set to "ISIN; FIGI; CUSIP; SEDOL"	Underlier ID Source	ISIN	
		If Underlying Instrument ISIN > 1	If Underlying Instrument ISIN > 1 = "Basket"	Underlying Structure	Basket	"One Of" Underlying Structure
Underlying Asset Class.Equity						
	Return or Payout Trigger		Direct Map	Return or Payout Trigger	Forward price of underlying instrument	
	Underlying Instrument ISIN	If Underlying Instrument ISIN = 1	If Underlying Instrument ISIN = 1 = "Single Underlier"	Underlying Structure	Single Underlier	"One Of" Underlying Structure
			Set to "Equity Identifier"	Underlier Type	Equity Identifier	"One Of" Underlier Type
			Map to	Underlier ID	GB0001383545	
			Set to "ISIN; FIGI; CUSIP; SEDOL"	Underlier ID Source	ISIN	
		If Underlying Instrument ISIN > 1	If Underlying Instrument ISIN > 1 = "Basket"	Underlying Structure	Basket	"One Of" Underlying Structure
	Underlying Instrument Index	If Underlying Instrument Index = 1	If Underlying Instrument Index = 1 = "Single Underlier"	Underlying Structure	Single Underlier	"One Of" Underlying Structure
			Set to "Equity Index Name"	Underlier Type	Equity Index Name	"One Of" Underlier Type
			Map to	Underlier ID	FTSE 200 Index	
			Set to "EQIDX"	Underlier ID Source	EQIDX	
		If Underlying Instrument Index > 1	If Underlying Instrument Index > 1 = "Basket"	Underlying Structure	Basket	"One Of" Underlying Structure
	Underlying Instrument Index Prop	If Underlying Instrument Index Prop = 1	If Underlying Instrument Index Prop = 1 = "Single Underlier"	Underlying Structure	Single Underlier	"One Of" Underlying Structure

AnyOf	ISIN Input Attributes	Condition	Mapping Logic	UPI Input Attributes	Sample UPI Value	Comments
			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 Instrument Index Prop > 1	If Underlying Instrument Index Prop > 1 = "Basket"	Underlying Structure	Basket	"One Of" Underlying Structure
Underlying Asset Class.Commodities						
	Notional Currency		Direct Map	Notional Currency	USD	
	Return or Payout Trigger		Direct Map	Return or Payout Trigger	Forward price of underlying instrument	
	Underlying Instrument Index	If Underlying Instrument Index = 1	If Underlying Instrument Index = 1 = "Single Underlier"	Underlying Structure	Single Underlier	"One Of" Underlying Structure
			Set to "Commodity Index"	Underlier Type	Commodity Index	"One Of" Underlier Type
			Map to	Underlier ID	OTHER	
			Set to "COIDX"	Underlier ID Source	COIDX	
		If Underlying Instrument Index > 1	If Underlying Instrument Index > 1 = "Basket"	Underlying Structure	Basket	"One Of" Underlying Structure
	Underlying Instrument Index Prop	If Underlying Instrument Index Prop = 1	If Underlying Instrument Index Prop = 1 = "Single Underlier"	Underlying Structure	Single Underlier	"One Of" Underlying Structure
			Set to "Proprietary Index"	Underlier Type	Proprietary Index	"One Of" Underlier Type
			Map to	Underlier ID	11339-BABXSG01	
			Set to "PROP"	Underlier ID Source	PROP	
		If Underlying Instrument Index Prop > 1	If Underlying Instrument Index Prop > 1 = "Basket"	Underlying Structure	Basket	"One Of" Underlying Structure
	Reference Rate	If Reference Rate = 1	If Reference Rate = 1 = "Single Underlier"	Underlying Structure	Single Underlier	"One Of" Underlying Structure

AnyOf	ISIN Input Attributes	Condition	Mapping Logic	UPI Input Attributes	Sample UPI Value	Comments
			Set to "Commodity Ref Price"	Underlier Type	Commodity Ref Price	"One Of" Underlier Type
			Map to	Underlier ID	SILVER-FIX	
			Set to "COMM"	Underlier ID Source	COMM	
		If Reference Rate > 1	If Reference Rate > 1 = "Basket"	Underlying Structure	Basket	"One Of" Underlying Structure
	Base Product		Direct Map	Base Product	METL	
	Sub Product		Direct Map	Sub Product	PRME	
	Additional Sub Product		Direct Map	Additional Sub Product	SLVR	
	Transaction Type		No Mapping			
	Final Price Type		No Mapping			