DERIVATIVES SERVICE BUREAU (DSB) LTD

Credit : Swap : Total_Return_Swap

ISIN Product Definition

Version 1

Date	Status	Version	Revision Details
26 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 2015-07-15

Attr #	Title	Values	Name	Description
	Instrument (Category)	**S**	Swap	
	Asset Class (Group)	**C**	Credit	
Attr #1	**Underlying Assets**	**I**	Index	Family of standardized credit derivative indices, where the underlying reference entities are a defined basket of credit from a particular geographic region (for instance, Asia, North America, Europe, etc.), and/or credit rating level (for instance Emerging Markets, high yield, investment grade, etc.); credit default indices trade in standard maturities, and the reference entities are typically the most liquid; the reference portfolio is reassessed periodically to maintain this
		U	Single Name	The underlying risk is a single reference entity or reference obligation
Attr #2	**Return or payout trigger**	**T**	Total Return	Total Return
Attr #3	**Underlying Issuer Type**	**C**	Corporate	The underlying exposure is a corporate (a private sector entity)
Attr #4	**Delivery Type**	**C**	Cash	Cash
		P	Physical	Physical
		A	Auction	An independently administered synthetic auction process on a set of defined deliverable obligations that sets a reference final price that can be used to facilitate cash settlement of all covered transactions following a credit event

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
Credit	Total Return Swap			Total Return 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 Credit spreadsheet that contains the layout of all templates. This can be found in the Credit 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.Credit.Swap.Total_Return_Swap.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 Instrument Index Term Value / Term Unit

If Underlying Instrument Index Prop is selected, the following validation will apply:

- Underlying Instrument Index Term Value / Term Unit will be present in the REQUEST and RECORD messages.
- Underlying Instrument Index Term Value / Term Unit will have a constant value of “0 DAYS”.

3.1.2 Underlying Credit Index Series / Index Version

If Underlying Instrument Index Prop is selected, the following validation will apply:

- Underlying Credit Index Series / Index Version will be present in the REQUEST and RECORD messages.
- Underlying Credit Index Series / Index Version will have a constant value of “0”.

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 Credit spreadsheet that contains the layout of all templates. This can be found in the Credit 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	**Credit.Swap.Total_Return_Swap.InstRefDataReporting.V1.json**	Initial version
V1M1	**Credit.Swap.Total_Return_Swap.InstRefDataReporting.V1M1.json**	Added Parent UPI
V2	**Credit.Swap.Total_Return_Swap.InstRefDataReporting.V2.json**	Updated Debt Seniority attribute
V2M1	**Credit.Swap.Total_Return_Swap.InstRefDataReporting.V2M1.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 Asset Type + Underlying Input + Notional Currency + Expiry Date		
Example	Credit Swap Total_Return_Swap ITRAXX CEEMEA EUR 20230821		
Source	RTS23/Field2 - Instrument Full Name		
Source Attribute	**Source Value**	**Derivation Method**	**Result**
Asset Class	Credit	Fixed Value	Credit
Instrument Type	Swap	Fixed Abbreviation	Swap
Product	Total_Return_Swap	Fixed Abbreviation	Total_Return_Swap

Underlying Asset Type	Single Name		Mapped to =>	Single Name
	Index Tranche		Mapped to =>	Index Tranche
	Index		Mapped to =>	Index
	Basket		Mapped to =>	Basket
	Other		Mapped to =>	Other
Underlying Input	Underlying Instrument ISIN	e.g., US92857WBQ24	Extracted value =>	e.g., US92857WBQ24
	Underlying Instrument LEI	e.g., INR2EJN1ERAN0W5ZP974	Extracted value =>	e.g., INR2EJN1ERAN0W5ZP974
	Underlying Instrument Index	e.g., ITRAXX CEEMEA	Extracted value =>	e.g., ITRAXX CEEMEA
	Underlying Instrument Index Prop	e.g., 11339-MLSREISU	Extracted value =>	e.g., 11339-MLSREISU
Notional Currency	Notional Currency		Mapped Enumeration	e.g., USD, EUR, GBP
Expiry Date	Expiry Date		Date Format (YYYYMMDD)	20230821

4.2.2 Classification Type

Attribute	Classification Type		
Structure	Instrument Type + Asset Class + Underlying Asset Type + Return or Payout Trigger + Underlying Issuer Type + Delivery Type		
Example	SCITCC		
Source	ISO 10962 (CFI) – Third edition 2015-07-15		
Source Attribute	**Source Value**	**Derivation Method**	**Result**
Instrument Type	Swap	Fixed Mapping	S
Asset Class	Credit	Fixed Mapping	C
Underlying Asset Type	Index	Mapped to =>	I
	Single Name	Mapped to =>	U
Return or Payout Trigger	Total Return	Fixed Mapping	T
Underlying Issuer Type	Corporate	Fixed Mapping	C
Delivery Type	CASH	Mapped to =>	C
	PHYS	Mapped to =>	P
	OPTL	Mapped to =>	A

4.2.3 Short Name

Attribute	Short Name		
Structure	"NA" + "/" + Instrument Type + Underlying Issuer Type + Underlying Asset Type + Notional Currency + Expiry Date		
Example	NA/CDS Corp Idx EUR 20230821		
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	CDS

Underlying Issuer Type	Corporate	Fixed Abbreviation	Corp
Underlying Asset Type	Index	Mapped to =>	Idx
	Single Name	Mapped to =>	SN
Notional Currency	Notional Currency	Mapped Enumeration	e.g., USD, EUR, GBP
Expiry Date	Expiry Date	Date Format (YYYYMMDD)	20230821

4.2.4 Underlying Asset Type

Attribute	Underlying Asset Type		
Source Attribute	**Source Value**	**Derivation Method**	**Result**
Underlying Instrument LEI	e.g., INR2EJN1ERAN0W5ZP974	Mapped to =>	Single Name
Underlying Instrument ISIN	e.g., US92857WBQ24		
Underlying Instrument Index	e.g., ITRAXX CEEMEA	Mapped to =>	Index
Underlying Instrument Index Prop	e.g., 11339-MLSREISU		

4.2.5 ISO Underlying Instrument Index

Attribute	ISO Underlying Instrument Index		
Source Attribute	**Source Value**	**Derivation Method**	**Result**
Underlying Instrument Index	e.g., ITRAXX CEEMEA	Extracted value =>	e.g., ITRAXX CEEMEA
Underlying Instrument Index Prop	e.g., 11339-MLSREISU	Extracted value =>	e.g., 11339-MLSREISU

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 Contract Specification attribute only applies to Credit.Swap.Corporate; Credit.Swap.Municipal; Credit.Swap.Sovereign and Credit.Swap.Non_Standard. It does not apply to Credit.Swap.Loan; Credit.Swap.ABS; Credit.Swap.Index; Credit.Swap.Index_Tranche and Credit.Swap.Total_Return_Swap.

- Underlying Instrument Index Term Value and Term Unit has a constant value of “0 DAYS” if Underlying Instrument Index Prop is selected.

- Underlying Credit Index Series and Index Version has a constant value of “0” if Underlying Instrument Index Prop is selected.

6. Appendix 1 - 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	Sample UPI Value	Comments
	Asset Class	Direct Map	Asset Class	Credit	
	Instrument Type	Direct Map	Instrument Type	Swap	
	Use Case	Direct Map	Product	Total_Return_Swap	
	Level	Set to "UPI"	Level	UPI	
	Notional Currency	No Mapping			
	Expiry Date	No Mapping			
A	Underlying Instrument ISIN	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	
	Debt Seniority	Direct Map	Debt Seniority	SNDB	
B	Underlying Instrument LEI	Set to "Legal Entity"	Underlier Type	Legal Entity	"One Of" Underlier Type
		Map to	Underlier ID	INR2EJN1ERAN0W5ZP974	
		Set to "LEI"	Underlier ID Source	LEI	
	Debt Seniority	Direct Map	Debt Seniority	SNDB	
C	Underlying Instrument Index	Set to "Credit Index"	Underlier Type	Credit Index	"One Of" Underlier Type
		Map to	Underlier ID	ITRAXX EUROPE	
		Set to "CRIDX"	Underlier ID Source	CRIDX	
	Underlying Instrument Index Term Value	Direct Map	Underlying Instrument Index Term Value	12	
	Underlying Instrument Index Term Unit	Direct Map	Underlying Instrument Index Term Unit	MNTH	
	Underlying Credit Index Series	Direct Map	Underlying Credit Index Series	5	
	Underlying Credit Index Version	Direct Map	Underlying Credit Index Version	10	

D	Underlying Instrument Index Prop	Set to "Proprietary Index"	Underlier Type	Proprietary Index	"One Of" Underlier Type
		Map to	Underlier ID	11339-MLSREISU	
		Set to "PROP"	Underlier ID Source	PROP	
	Underlying Instrument Index Term Value	Direct Map	Underlying Instrument Index Term Value	0	
	Underlying Instrument Index Term Unit	Direct Map	Underlying Instrument Index Term Unit	DAYS	
	Underlying Credit Index Series	Direct Map	Underlying Credit Index Series	0	
	Underlying Credit Index Version	Direct Map	Underlying Credit Index Version	0	
	Delivery Type	Direct Map	Delivery Type	CASH	
	Price Multiplier	No Mapping			