DERIVATIVES SERVICE BUREAU (DSB) LTD

Other : Swap : Non_Standard

UPI Product Definition

Version 5

Date	Status	Version	Revision Details
06 Sep 2022	Draft	1	Initial Version
21 Sep 2022	Draft	2	• Update Request and Record templates layout and validation rules • Update OTC ISIN-UPI Mapping for Underlying Asset Class. Commodities
19 Dec 2022	Draft	3	Update Request and Record templates layout and validation rules
13 Jan 2023	Draft	4	• Update example values in the Request and Record templates layout • Rename Underlier ID Source values • Insert Underlier Name attribute and Derivation rules
08 Sep 2023	Draft	5	• Remove "Classified as Confidential" in the Footer section. • Remove "RIC" as Alternate Underlier ID Source. • Update Associated Documentation to include Best Practice Guidelines and FAQs. • Update Best Practice Guidelines to include the link to Best Practice Guidelines and FAQs. • Update Classification Type for Delivery Type based on CFI values.

Contents

1. Introduction

This document is designed to act as a manual for users to interpret the Product Definitions in the DSB UPI Service.

This document provides the user with the detailed description of the UPI 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	
UPI Underlier Input Method	Defines the structure for the input of the underlier following the rules that allow users to identify the Asset Class, Underlying Structure, Underlying Type, and Underlying ID Source.	
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)	**M**	Others (miscellaneous)	Others (miscellaneous)
Attr #1	**Underlying Assets**	**M**	Others	Others (miscellaneous)
Attr #2	**Not applicable/undefined**	**X**	Not applicable/undefined	-
Attr #3	**Not applicable/undefined**	**X**	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

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	Various entries	Various entries	Non-Standard Swap

3. Request Template

The Request Template describes the input message received by the UPI 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.Swap.Non_Standard.UPI.json	Initial version	Initial

3.1 Underlier Input Method

This section describes the underlier input method to support products that are based on multiple asset classes.

Title	Description	
Select Underlier Asset Class	User is allowed to identify and select the underlying asset class of a certain product. • Rates • Credit • Equity • Foreign Exchange • Commodities	
Select Underlying Structure	User is able to select whether the underlying is a single underlier or basket based on its product. • Single Underlier • Basket	

Select Underlier Type	User is able to select a single required underlier type from the available options based on the selected Underlying Asset Class.
	
	• Commodities
	   o Commodity Ref Price
	   o Commodity Index
	   o Proprietary Index
	
	• Credit
	   o Fixed Income Security
	   o Legal Entity
	   o Credit Index
	   o Proprietary Index
	
	• Equity
	   o Equity Identifier*
	   o Equity Index Name
	   o Proprietary Index
	
	*For Underlier Type "Equity Identifier", user is able to enter an ISIN of a Single Stock or an Equity	

	Index.

Select Underlier ID Source	User is able to select a single required Underlier ID Source from the available options based on the selected Underlier Type.
	
	• Commodities
	
	    o Commodity Ref Price [COMM]
	
	    o Commodity Index [COIDX]
	
	    o Proprietary Index [PROP]
	
	• Credit
	
	    o Fixed Income Security [ISIN; FIGI; CUSIP; SEDOL]
	
	    o Legal Entity [LEI]
	
	    o Credit Index [CRIDX]
	
	    o Proprietary Index [PROP]
	
	• Equity
	
	    o Equity Identifier [ISIN; FIGI; CUSIP; SEDOL]
	
	    o Equity Index Name [EQIDX]
	
	    o Proprietary Index [PROP]
	
	• Rates
	
	    o Floating Rate Index (FPML]
	
	    o Inflation Rate Index [FPML]
	
	• Foreign Exchange
	
	    o Currency Pair [CCY]

Input Underlier ID	User enters a valid Underlier ID based on the selected Underlier ID Source.

3.2 Validation Rules

For non- non-specific product validation rules, please refer to UPI Product Definition Validations and Normalizations Document can be found in the Other Documents section on the DSB website.

3.2.1   Underlying Asset Class.Rates

a. Underlying Structure [oneOf structure]
- User can only select either Single Underlier (Single value) or Basket (Multiple values) and is a required field.
- If "Single Underlier" is selected, the Underlier ID and its Source [FPML], Reference Rate Term Value/Unit will be present in the REQUEST message.
- If "Basket" is selected, the underlier ID and its associated attributes will not be present in the REQUEST and RECORD template.
- Only "Basket" is allowed value in REQUEST message for multiple underliers.

b. Other Leg Underlying Structure [oneOf structure]
- Other Leg Underlying Structure is an optional field.
- Only one can be selected in the request message if attribute is selected, either Single Underlier (single value) or Basket (multiple value).
- If "Single Underlier" is selected, the Other Leg Underlier ID Source [FPML], Other Leg Reference Rate Term Value/Unit will be present in the REQUEST message.
- If "Basket" is selected, the Other Leg Underlier ID and its associated attributes will not be present in the REQUEST and RECORD template.
- Only "Basket" is allowed value in REQUEST message for multiple underliers.

3.2.2   Underlying Asset Class.Credit

a. Underlying Structure [oneOf structure]
- User can only select either Single Underlier (Single value) or Basket (Multiple values) and is a required field.
- If "Single Underlier" is selected, the Underlier ID and its source [ISIN; FIGI; CUSIP; SEDOL; LEI; CRIDX; PROP] will be present in the request message.
- If "Basket" is selected, the underlier ID and its associated attributes will not be present in the REQUEST and RECORD template.
- Only "Basket" is allowed value in REQUEST message for multiple underliers.

b. Underlying Instrument Index Term Value and Term Unit
  i. If the Underlier ID Source selected is CRIDX or PROP, the following validations will apply:
- Underlying Instrument Index Term Value and Underlying Instrument Index Term Unit must be present in the REQUEST and RECORD messages.
- Underlying Instrument Index Term Unit: [DAYS; WEEK; MNTH; YEAR].
- Underlying Instrument Index Term Value: Input text must be an integer from -999 to 999 (including 0).
- If the input text is more than the value of 999, an error message will apply "Value must be at most 999."
- If the input text is more than the value of -999, an error message will apply "Value must be at least -999."

- If the input contains negative (-) after the integer, an error message will apply: "Value must be of type integer. Value must be at most 999. Value must be at least -999."

   ii.   If the Underlier ID Source selected is [ISIN; FIGI; CUSIP; SEDOL; LEI], Underlying Instrument Index Term Value and Term Unit attributes will not be present in the REQUEST and RECORD templates.

c.   Underlying Credit Index Series and Version
   i.   If the Underlier ID Source selected is PROP, the following validations will apply:
- Underlying Credit Index Series and Underlying Credit Index Version attributes must be present in the REQUEST and RECORD messages.
- The input text by the user must be a positive integer from 0 to 999.
- If the input text has a prefix of negative (-), an error message will apply: "Value must be at least 0."
- If the input contains negative (-) after the integer, an error message will apply "Value must be of type integer. Value must be at most 999. Value must be at least 0".
- If the input text contains character, remove the character and retain the integer if exists.

3.2.3 Underlying Asset Class.Equity

a.   Underlying Structure [oneOf structure]
- User can only select either Single Underlier (Single value) or Basket (Multiple values) and is a required field.
- If "Single Underlier" is selected, the Underlier ID and its Source [ISIN; FIGI; CUSIP; SEDOL; EQIDX; PROP] will be present in the REQUEST template.
- If "Basket" is selected, the underlier ID and Underlier ID Source will not be present in the REQUEST and RECORD template.
- Only "Basket" is allowed value in REQUEST message for multiple underliers.

3.2.4 Underlying Asset Class.Commodities

a.   Underlying Structure [oneOf structure]
- User can only select either Single Underlier (Single value) or Basket (Multiple values) and is a required field.
- If "Single underlier" is selected, the Underlier ID and its Source [COMM; COIDX; PROP], Base Product, Sub Product and Additional Sub Product will be present in the REQUEST template.
- If "Basket" is selected, the Underlier ID and its associated attributes will not be present in the REQUEST and RECORD templates. However, Base Product, Sub Product and Additional Sub Product must be present in the REQUEST template.
- Only "Basket" is allowed value in REQUEST template for multiple underliers.

b. Other Underlying Structure [oneOf Structure]
- Other Underlying structure is an optional field.
- If "Single underlier" is selected, the Other Underlier ID and its Source [COMM], Other Base Product, Other Sub Product and Other Additional Sub Product will be present in the request message.
- If "Basket" is selected, the Other underlier ID and its associated attributes will not be present in the REQUEST and RECORD template. However, Other Base Product, Other Sub Product, Other Additional Sub Product must be present in the REQUEST template.
- Only "Basket" is allowed value in REQUEST message for multiple underliers.

c. Notional Currency and Other Notional Currency
- User can select Notional Currency only or both Notional/Other Notional Currency.
- Notional Currency is a required field, whilst the Other Notional Currency is an optional field.
- Currency for both legs cannot be identical.
- If the following attributes have the same currency, an error message will apply "Error: Notional Currency and Other Notional Currency cannot be identical".

3.2.5   Underlying Asset Class = "Null"

- If user did not select any value 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 UPI 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	Release
V.1	**Other.Swap.Non_Standard.UPI.V1.json**	Initial version	Initial

4.1 Normalization Rules

For non-specific product normalization rules, please refer to UPI Product Definition Validations and Normalizations Document can be found in the Other Documents section on the DSB website.

4.2 Derivation Rules

This section describes the derivations of product attributes highlighted in the Record Template.

4.2.1 Classification Type

Attribute	Classification Type		
Structure	Instrument Type + Asset Class + Underlying Asset Type + N/A + N/A + Delivery Type		
Example	SMMXXP		
Source	ISO 10962 (CFI) – Third edition 2015-07-15		
Source Attribute	**Source Value**	**Derivation Method**	**Result**
Instrument Type	Swap	Fixed Mapping	S
Asset Class	Others (miscellaneous)	Fixed Mapping	M
Underlying Asset Type	Others (miscellaneous)	Fixed Mapping	M
Not applicable/undefined	Not applicable/undefined	Fixed Mapping	X
Not applicable/undefined	Not applicable/undefined	Fixed Mapping	X
Delivery Type	Cash	Mapped to =>	C
	Physical	Mapped to =>	P

4.2.2　Short Name

Attribute	Short Name		
Structure	"NA" + "/" + Instrument Type + Asset Class + Product Type		
Example	NA/Swaps Oth Nstd		
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
Asset Class	Others (miscellaneous)	Fixed Abbreviation	Oth
Product Type	Non-Standard	Fixed Abbreviation	Nstd

4.2.3　Underlier Name

Attribute	Underlier Name					
Underlying Asset Class	**Underlying Structure**	**Other Underlying Structure**	**Underlying Asset**	**Underlier Name Source**	**Underlier Name Source Attribute**	**Underlier Name**
Rates	Single Underlier	Single Underlier	Reference Rate / Other Leg Reference Rate	UPI record	Reference Rate vs Other Leg Reference Rate	EUR-EXT-CPI vs GBP-LIBOR-BBA
	Basket	Basket	N/A	Constant	N/A	Basket vs Basket
	Single Underlier	Basket	Reference Rate	UPI record vs Constant	Reference Rate	EUR-EXT-CPI vs Basket
	Basket	Single Underlier	Other Leg Reference Rate	Constant vs UPI record	Other Leg Reference Rate	GBP-LIBOR-BBA vs Basket
	Single Underlier	-	Reference Rate	UPI record	Reference Rate	EUR-EXT-CPI
	Basket	-	N/A	Constant	N/A	Basket
Credit	Single Underlier	-	Underlying ISIN	ISIN Reference Data	longName of Underlying Instrument ISIN	Vodafone Group PLC
	Single Underlier	-	Underlying LEI	LEI Reference Data	The name of the legal entity	MICROSOFT CORPORATION

	Single Underlier	-	Underlying Index	UPI record	Underlying Instrument Index	ITRAXX EUROPE
	Single Underlier	-	Underlying Index Prop	UPI record	Underlying Instrument Index Prop	11339-MLSREISU
	Basket	-	N/A	Constant	N/A	Basket
Equity	Single Underlier	-	Underlying ISIN	ISIN Reference Data	longName of Underlying Instrument ISIN	Vodafone Group PLC
	Single Underlier	-	Underlying Index	UPI record	Underlying Instrument Index	FTSE 200 Index
	Single Underlier	-	Underlying Index Prop	UPI record	Underlying Instrument Index Prop	34810-JPCFNAMR
	Basket	-	N/A	Constant	N/A	Basket
Foreign Exchange	-	-	Notional Currency / Other Notional Currency	UPI record	Notional Currency vs Other Notional Currency	EUR USD
Commodities	Single Underlier	-	Reference Rate	UPI record	Reference Rate	GOLD-A.M. FIX
	Single Underlier	-	Underlying Index	UPI record	Underlying Instrument Index	OTHER
	Single Underlier	-	Underlying Index Prop	UPI record	Underlying Instrument Index Prop	11339-BABXSG01
	Basket	-	N/A	Constant	N/A	Basket
	Single Underlier	Single Underlier	Reference Rate / Other Reference Rate	UPI record	Reference Rate vs Other Reference Rate	GOLD-A.M. FIX vs SILVER-FIX
	Single Underlier	Basket	**Reference Rate** / N/A	UPI record vs Constant	**Reference Rate**	GOLD-A.M. FIX vs Basket
	Basket	Single Underlier	N/A / **Other Reference Rate**	Constant vs UPI record	**Other Reference Rate**	SILVER-FIX vs Basket
	Basket	Basket	N/A	Constant vs Constant	N/A	Basket vs Basket

5. Supplementary Information

5.1 Best Practice Guidelines

Please refer to Best Practice Guidelines and FAQs that can be found in the Other Documents section on the DSB website.

5.2 Additional Comments

The Delivery Type enumerated values [Cash, Physical] are the CFI 2015 values for this product. Thus, CFI Delivery Type is no longer required as a derived value in the RECORD message.

6. Appendix 1 – ISO 4914 Equivalence

This section describes the attributes as per the ISO 4914 Unique Product Identifier (UPI).

ISO 4914 Reference Data Elements		Request Attribute	Record Attribute
Asset class	M	Asset Class	Asset Class
Instrument type	M	Instrument Type	Instrument Type
Currency associated with an underlying reference rate	C	Notional Currency	Notional Currency
Delivery type	M	Delivery Type	Delivery Type
Notional schedule	C	Not Required	Not Required
Return, pricing method or payout trigger	M	Return or Payout Trigger	Return or Payout Trigger
Seniority	C	Debt Seniority	Debt Seniority
Settlement currency	C	Settlement Currency	Settlement Currency
Single or multiple currency*	C	Not Required	Not Required
Standard contract specification*	C	Not Required	Not Required
Underlier ID	C	Underlier ID	Reference Rate
			Other Leg Reference Rate
			Other Reference Rate
			Underlying Instrument ISIN
			Underlying Instrument LEI
			Underlying Instrument Index
			Underlying Instrument Index Prop
			Notional Currency
			Other Notional Currency
Underlier ID source	C	Underlier ID Source	Not Required
Underlier type	M	Not Required	Underlying Asset Type
Underlier sub-type (first level)	C	Base Product	Base Product
		Other Base Product	Other Base Product
Underlier sub-type (second level)	C	Sub Product	Sub Product

		Other Sub Product	Other Sub Product
Underlying credit index series	C	Underlying Credit Index Series	Underlying Credit Index Series
Underlying credit index version	C	Underlying Credit Index Version	Underlying Credit Index Version
Underlying rate index tenor period	C	Reference Rate Term Unit	Reference Rate Term Unit
		Other Reference Rate Term Unit	Other Reference Rate Term Unit
		Underlying Instrument Index Term Unit	Underlying Instrument Index Term Unit
Underlying rate index tenor period multiplier	C	Reference Rate Term Value	Reference Rate Term Value
		Other Reference Rate Term Value	Other Reference Rate Term Value
		Underlying Instrument Index Term Value	Underlying Instrument Index Term Value

Single or multiple currency and Standard contract specification attributes are not included in the OTC ISIN and are Conditional attributes in ISO 4914 (UPI) specification.

7. Appendix 2 - 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	Example UPI Value	Comments
	Asset Class		Direct Map	Asset Class	Other	
	Instrument Type		Direct Map	Instrument Type	Swap	
	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	If Reference Rate = 1 = "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	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	
		If Reference Rate > 1	No Mapping			

anyOf	ISIN Input Attributes	Condition	Mapping Logic	UPI Input Attributes	Example UPI Value	Comments
	Reference Rate Term Unit	If Reference Rate = 1	Direct Map	Reference Rate Term Unit	MNTH	
		If Reference Rate > 1	No Mapping			
	Other Notional Currency		Direct Map	Other Notional Currency	GBP	
	Other Leg Reference Rate	If Reference Rate = 1	If Reference Rate = 1 = "Single Underlier"	Underlying Structure	Single Underlier	"One Of" Underlying Structure
			Map to	Other Leg Underlier ID	GBP-LIBOR-BBA	
			Set to "FPML"	Other Leg Underlier ID Source	FPML	
		If Reference Rate > 1	If Reference Rate > 1 = "Basket"	Underlying Structure	Basket	"One Of" Underlying Structure
	Other Leg Reference Rate Term Value	If Reference Rate = 1	Direct Map	Other Leg Reference Rate Term Value	3	
		If Reference Rate > 1	No Mapping			
	Other Leg Reference Rate Term Unit	If Reference Rate = 1	Direct Map	Other Leg Reference Rate Term Unit	MNTH	
		If Reference Rate > 1	No Mapping			
Underlying Asset Class.Foreign Exchange						
	Notional Currency		Map to	Underlier ID	EUR	
			Set to "CCY"	Underlier ID Source	CCY	
	Other Notional Currency		Map to	Underlier ID	USD	
			Set to "CCY"	Underlier ID Source	CCY	
	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	Credit Default	

anyOf	ISIN Input Attributes	Condition	Mapping Logic	UPI Input Attributes	Example 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 Instrument LEI	If Underlying Instrument LEI = 1	If Underlying Instrument LEI = 1 = "Single Underlier"	Underlying Structure	Single Underlier	"One Of" Underlying Structure
			Set to "Legal Entity"	Underlier Type	Legal Entity	"One Of" Underlier Type
			Map to	Underlier ID	INR2EJN1ERAN0W5ZP974	
			Set to "LEI"	Underlier ID Source	LEI	
		If Underlying Instrument LEI > 1	If Underlying Instrument LEI > 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-MLSREISU	
			Set to "PROP"	Underlier ID Source	PROP	
		If Underlying Instrument Index Prop > 1	If Underlying Instrument PROP > 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

anyOf	ISIN Input Attributes	Condition	Mapping Logic	UPI Input Attributes	Example UPI Value	Comments
			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	
		If Underlying Instrument Index > 1	If Underlying Instrument Index > 1 = "Basket"	Underlying Structure	Basket	"One Of" Underlying Structure
	Underlying Instrument Index Term Value	If Underlying Instrument Index = 1	Direct Map	Underlying Instrument Index Term Value	7	
		If Underlying Instrument Index > 1	No Mapping			
	Underlying Instrument Index Term Unit	If Underlying Instrument Index = 1	Direct Map	Underlying Instrument Index Term Unit	DAYS	
		If Underlying Instrument Index > 1	No Mapping			
	Underlying Credit Index Series	If Underlying Instrument Index = 1	Direct Map	Underlying Credit Index Series	3	
		If Underlying Instrument Index > 1	No Mapping			
	Underlying Credit Index Version	If Underlying Instrument Index = 1	Direct Map	Underlying Credit Index Version	5	
		If Underlying Instrument Index > 1	No Mapping			
	Debt Seniority		Direct Map	Debt Seniority	SNDB	
Underlying Asset Class.Equity						
	Strike Price Type		No Mapping			
	Strike Price		No Mapping			
	Strike Price Currency		No Mapping			

anyOf	ISIN Input Attributes	Condition	Mapping Logic	UPI Input Attributes	Example UPI Value	Comments
	Return or Payout Trigger		Direct Map	Return or Payout Trigger	Price	
	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
			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 PROP > 1 = "Basket"	Underlying Structure	Basket	"One Of" Underlying Structure
Underlying Asset Class.Commodities						

anyOf	ISIN Input Attributes	Condition	Mapping Logic	UPI Input Attributes	Example UPI Value	Comments
	Notional Currency		Direct Map	Notional Currency	EUR	
	Return or Payout Trigger		Direct Map	Return or Payout Trigger	Total Return	
	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 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
			Set to "Commodity Ref Price"	Underlier Type	Commodity Ref Price	"One Of" Underlier Type
			Map to	Underlier ID	GOLD-A.M. FIX	
			Set to "COMM"	Underlier ID Source	COMM	
		If Reference Rate > 1	If Reference Rate > 1 = "Basket"	Underlying Structure	Basket	"One Of" Underlying Structure

anyOf	ISIN Input Attributes	Condition	Mapping Logic	UPI Input Attributes	Example UPI Value	Comments
	Base Product		Direct Map	Base Product	METL	
	Sub Product		Direct Map	Sub Product	PRME	
	Additional Sub Product		Direct Map	Additional Sub Product	GOLD	
	Other Notional Currency		Direct Map	Other Notional Currency	USD	
	Other Reference Rate	If Reference Rate = 1	If Reference Rate = 1 = "Single Underlier"	Underlying Structure	Single Underlier	"One Of" Underlying Structure
			Map to	Other Underlier ID	SILVER-FIX	
			Set to "COMM"	Other Underlier ID Source	COMM	
		If Reference Rate > 1	If Reference Rate > 1 = "Basket"	Underlying Structure	Basket	"One Of" Underlying Structure
	(Other) Base Product		Direct Map	Other Base Product	METL	
	(Other) Sub Product		Direct Map	Other Sub Product	PRME	
	(Other) Additional Sub Product		Direct Map	Other Additional Sub Product	SLVR	
	Transaction Type		No Mapping			
	Final Price Type		No Mapping			