

DERIVATIVES SERVICE BUREAU (DSB) LTD

Rates : Forward : Debt

UPI Product Definition

Version 4

Date	Status	Version	Revision Details
05 Sep 2022	Draft	1	Initial Version
24 Jan 2023	Draft	2	<ul style="list-style-type: none"> Update example values in the Request and Record templates layout Insert Underlier Name attribute and Derivation rules
28 Feb 2023	Draft	3	Update Request and Record templates layout to include Spreadbets as enumerated value of Return or Payout Trigger attribute
01 Sep 2023	Draft	4	<ul style="list-style-type: none"> 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.

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I. 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.

I.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)	J	Forwards	
	Asset Class (Group)	R	Rates	
Attr #1	Underlying Assets	M	Others	Others (miscellaneous)
Attr #2	Not applicable/undefined	X	Not applicable/undefined	Not applicable/undefined
Attr #3	Return or payout trigger	F	Forward price of underlying instrument	Forward price of underlying instrument
		S	Spread-bet	The payout is determined by the movement in the reference price of the underlying instrument to its price at expiry (or the price when the holder wishes to close out) multiplied by an agreed amount per point movement
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
Interest Rate	Forward	Debt		Debt Forward

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 Rates spreadsheet that contains the layout of all templates. This can be found in the Rates 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.Rates.Forward.Debt.UPI.json	Initial version	Initial

3.1 Underlier Input Method

For products that have an option for a single or multiple underliers, users must select an Underlying Structure applicable [Single Underlier, Basket]. If a Basket is selected, underlier entry is not required.

Title	Description
Select Underlying Structure	User is able to select whether the underlying is a single underlier or basket based on its product. <ul style="list-style-type: none">• Single Underlier• Basket
Select Underlier ID Source	User is able to select a single required Underlier ID Source from the available options. <ul style="list-style-type: none">• ISIN• FIGI• CUSIP• SEDOL
Input Underlier ID	User enters a valid Underlier ID based on the selected Underlier ID Source.

3.2 Validation Rules

For 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 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] 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.
- Only “Basket” is allowed value in REQUEST template for multiple underliers.

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 Rates spreadsheet that contains the layout of all templates. This can be found in the Rates 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	Rates.Forward.Debt.UPI.VI.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 + NA + Return or Payout Trigger + Delivery Type		
Example	JRMXFP		
Source	ISO 10962 (CFI) – Third edition 2015-07-15		
Source Attribute	Source Value	Derivation Method	Result
Instrument Type	Forwards	Fixed Mapping	J
Asset Class	Rates	Fixed Mapping	R
Underlying Asset Type	Other	Fixed Mapping	M
Not applicable/undefined	Not applicable/undefined	Fixed Mapping	X
Return or Payout Trigger	Forward price of underlying instrument	Fixed Mapping	F
	Spreadbets	Fixed Mapping	S
Delivery Type	CASH	Mapped to =>	C

	PHYS	Mapped to =>	P
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4.2.2 Short Name

Attribute	Short Name		
Structure	"NA" + "/" + Instrument Type + Product Type + Underlying Asset Type + Notional Currency		
Example	NA/Fwd Dbt Oth EUR		
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
Product Type	Debt	Fixed Abbreviation	Dbt
Underlying Asset Type	Other	Fixed Abbreviation	Oth
Notional Currency	Notional Currency	Mapped Enumeration	e.g., USD, EUR, GBP

4.2.3 Underlier Name

Attribute	Underlier Name			
Underlying Asset	Underlier Name Source	Underlier Name Source Attribute		Underlier Name
Underlying ID with Underlying ID Source [ISIN, FIGI, CUSIP, SEDOL]	ISIN Reference Data	longName of Underlying Instrument ISIN	ISIN is found in ISIN Reference Data.	VODAFONE GROUP PLC
			ISIN is found in ISIN Reference Data, but its description is missing.	No name available
			ISIN is not found in ISIN Reference Data.	No name obtainable
Basket	Constant	N/A		Basket

4.2.4 CFI Delivery Type

Attribute	CFI Delivery Type		
Source Attribute	Source Value	Derivation Method	Result
Delivery Type	CASH	Mapped to =>	Cash
	PHYS	Mapped to =>	Physical

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

No Additional Comments is provided for this product.

6. Appendix I – 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	M	Notional Currency	Notional Currency
Delivery Type	M	Delivery Type	Delivery Type
			CFI Delivery Type
Return, pricing method or payout trigger	M	Return or Payout Trigger	Return or Payout Trigger
Underlier ID	C	Underlier ID	Underlying Instrument ISIN
Underlier ID source	C	Underlier ID Source	Not Required
Underlier type	M	Not Required	Underlying Asset Type
Underlying rate index tenor period*	C	Not Required	Not Required
Underlying rate index tenor period multiplier*	C	Not Required	Not Required

**Underlying rate index tenor period/multiplier applies only if the underlying is a Reference Rate (Index). For this product, the underlying is assumed to be a Debt Instrument [ISIN, FIGI, CUSIP, SEDOL] and so these attributes are not required.*

7. Appendix 2 - OTC ISIN-UPI Mapping

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

ISIN Input Attributes		Mapping Logic	UPI Input Attributes	Example UPI Value	Comments
Asset Class		Direct Map	Asset Class	Rates	
Instrument Type		Direct Map	Instrument Type	Forward	
Use Case		Direct Map	Product	Debt	
Level		Set to "UPI"	Level	UPI	
Notional Currency		Direct Map	Notional Currency	EUR	
Expiry Date		No Mapping			
Price Multiplier		No Mapping			
Underlying Instrument ISIN	If Underlying Instrument = 1	Map to	Underlier ID	US92857WBQ24	
		Set to "ISIN, FIGI, CUSIP, SEDOL "	Underlier ID Source	ISIN	
	If Underlying Instrument > 1	Map to	Underlying Structure	Basket	
Return or Payout Trigger		Direct Map	Return or Payout Trigger	Forward price of underlying instrument	
Delivery Type		Direct Map	Delivery Type	PHYS	