Derivatives Service Bureau

Credit : Forward : Non_Standard

Version 3

Date	Status	Version	Revision Details
01 Sep 2022	Draft	1	Initial Version
06 Feb 2023	Draft	2	• Update example values in the Request and Record templates layout • Insert Underlier Name attribute and Derivation rules
30 Aug 2023	Draft	3	• 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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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

Each UPI Product Definition template links to reference documents where values will be maintained for the sake of consistency and ease of access e.g., Enumerations, Data Dictionary, Validation and Normalizations, etc.

These documents are made available for references as follows:

- UPI Enumerations Document can be found in the Enumerations section on the DSB website.
- UPI Product Definition Data Dictionary can be found in the Other Documents section on the DSB website.
- UPI Product Definition Validations and Normalizations Document can be found in the Other Documents section on the DSB website.
- UPI Underlier Input Method can be found in the Other Documents section on the DSB website.
- Best Practice Guidelines and FAQs can be found in the Other Documents section on the DSB website.
- Links to the relevant JSON templates can be found in the GitHub Environment Section on the DSB website.

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)	**C**	Credit	
Attr #1	**Underlying Assets**	**A**	Single Name	The underlying risk is a single reference entity or reference obligation
		B	Basket	A synthetic credit derivative where the underlying reference entities are a bespoke portfolio whose constituents have been agreed to by the parties to the trade
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
Credit	Exotic	Various entries	Various entries	Non_Standard_Forward

3   REQUEST TEMPLATE

This section describes the input message received by UPI service.

Template name	Template details	Release
Request.Credit.Forward.Non_Standard.UPI.json	Initial version	Initial

Section	Attribute	Format	Cat	Example Value	Validation
Header Section	Asset Class	Set	M	Credit	
	Instrument Type	Set	M	Forward	
	Product	Set	M	Non_Standard	
	Level	Set	M	UPI	
Attribute Section	Underlying Structure (oneOf)	Object	(M)	Single Underlier	See Validation Rules
	Underlier ID Source	Enum	(M)	ISIN	[ISIN, FIGI, CUSIP, SEDOL]
	Underlier ID	String	(M)	US92857WBQ24	Syntactic Validation
	Underlying Structure (oneOf)	Object	(M)	Basket	See Validation Rules
	Return or Payout Trigger	Enum	M	Forward price of underlying instrument	[Spreadbets, Forward price of underlying instrument]
	Delivery Type	Enum	M	PHYS	[CASH, PHYS]

3.1   Underlier Input Method

For products that has 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. • Single Underlier • Basket
Select Underlier ID Source	User is able to select a single required Underlier ID Source from the available options: • 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]

- If Underlying Structure selected is a "Single Underlier", attributes Underlier ID and Underlier ID Source [ISIN, FIGI, CUSIP, SEDOL] will be required in the REQUEST message.

- If Underlying Structure selected is a "Basket", attributes Underlier ID and Underlier ID Source will not be present in the REQUEST and RECORD templates.

4   RECORD TEMPLATE

This section describes the record returned by the UPI service.

Version	Template name	Template details	Release
V.1	**Credit.Forward.Non_Standard.UPI.V1.json**	Initial version	Initial

Section	Attribute	Format	Cat	Example Value	Derivation
Header Section	Asset Class	Set	M	Credit	
	Instrument Type	Set	M	Forward	
	Product	Set	M	Non_Standard	
	Level	Set	M	UPI	
	Template Version	Integer	D	1	
Attribute Section	Underlier Characteristic	Enum	M	Single	[Single, Basket]
	Underlying Instrument ISIN	String	C	US92857WBQ24	Syntactic Validation
	Return or Payout Trigger	Enum	M	Forward price of underlying instrument	[Spreadbets, Forward price of underlying instrument]
	Delivery Type	Enum	M	PHYS	[CASH, PHYS]
Identifier Section	UPI	String	D	QZ92PHD32T52	
	Status	String	D	New	[New; Updated; Deleted; Deprecated]
	Status Reason	String	D	<null>	
	Last Update Date Time	DtTm	D	2021-02-23T00:00:13	YYYY-MM-DDThh:mm:ss
Derived Section	Classification Type	String	D	JCAXFP	See Derivation Rules
	Short Name	String	D	NA/Fwd Nstd SN	See Derivation Rules
	Underlier Name	String	D	VODAFONE GROUP PLC	See Derivation Rules
	Underlying Asset Type	String	D	[Single Name, Basket]	See Derivation Rules
	CFI Delivery Type	String	D	[Cash, Physical]	See Derivation Rules

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	JCAXFP		
Source	ISO 10962 (CFI) – Third edition 2015-07-15		
Source Attribute	**Source Value**	**Derivation Method**	**Result**
Instrument Type	Forwards	Fixed Mapping	J
Asset Class	Credit	Fixed Mapping	C
Underlying Asset Type	Single Name	Mapped to =>	A
	Basket	Mapped to =>	B
Not applicable/undefined	Not applicable/undefined	Fixed Mapping	X
Return or Payout Trigger	Forward price of underlying instrument	Mapped to =>	F
	Spreadbets	Mapped to =>	S
Delivery Type	CASH	Mapped to =>	C
	PHYS	Mapped to =>	P

4.2.2   Short Name

Attribute	Short Name		
Structure	"NA" + "/" + Instrument Type + Product + Underlying Asset Type		
Example	NA/Fwd Nstd SN		
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	Non_Standard	Fixed Abbreviation	Nstd
Underlying Asset Type	Single Name	Mapped to =>	SN
	Basket	Mapped to =>	Bskt

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]	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   Underlying Asset Type

Attribute	Underlying Asset Type		
Source Attribute	**Source Value**	**Derivation Method**	**Result**
Underlying Asset Type	Single Underlier	Mapped to =>	Single Name
	Basket	Mapped to =>	Basket

4.2.5   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

- 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.

- Underlier sub-type (first level) will be represented by the Underlier Characteristic which varies depending on the underlying structure of the product, i.e., a single underlier or a multiple underliers (Basket).

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
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
Seniority*	M	Not Required	Not Required
Standard Contract Specification**	C	Not Required	Not Required
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
Underlier sub-type (first level)***	M	Underlying Structure	Underlier Characteristic
Underlying credit index series****	C	Not Required	Not Required
Underlying credit index version****	C	Not Required	Not Required

*Seniority whilst mandatory for Credit Forwards in the ISO 4914 standards has not been included as an attribute for this product. The underlier for this Credit Forwards is the ISIN, FIGI, CUSIP or SEDOL of a bond and seniority is not applicable to bonds.
**Standard Contract Specification applies only to specific Credit Default Swap products, refer to Additional Comments above.
***Underlier sub-type (first level) is represented by Underlier Characteristic, refer to Additional Comments above.
****Underlying credit index series/version applies only if the underlying is a Credit Index or a Proprietary Index. For this product, the underlying is an ISIN, FIGI, CUSIP or SEDOL of a bond 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	Sample UPI Value	Comments
Asset Class		Direct Map	Asset Class	Credit	
Instrument Type		Direct Map	Instrument Type	Forward	
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			
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	