



Derivatives Service Bureau

Equity : Swap : Parameter_Return_Volatility_Basket

UPI Product Definition

Version 3

| Date | Status | Version | Revision Details |
|-------------|--------|---------|--|
| 17 Aug 2022 | Draft | 1 | Initial Version |
| 26 Jan 2023 | Draft | 2 | Insert Underlier Name attribute and Derivation rules |
| 04 Sep 2023 | Draft | 3 | <ul style="list-style-type: none">Remove “Classified as Confidential” in the Footer section.Update Associated Documentation to include Best Practice Guidelines and FAQs.Update Best Practice Guidelines to include the link to Best Practice Guidelines and FAQs. |

TABLE OF CONTENTS

| | | |
|-------|---|----|
| 1 | Introduction | 3 |
| 1.1 | Associated Documentation | 3 |
| 2 | Product Taxonomy | 4 |
| 2.1 | CFI Taxonomy | 4 |
| 2.2 | ISDA Taxonomy | 4 |
| 3 | Request Template | 5 |
| 3.1 | Underlier Input Method | 5 |
| 3.2 | Validation Rules..... | 5 |
| 4 | Record Template..... | 6 |
| 4.1 | Normalization Rules | 7 |
| 4.2 | Derivation Rules | 7 |
| 4.2.1 | Classification Type..... | 7 |
| 4.2.2 | Short Name | 7 |
| 4.2.3 | Underlier Name..... | 8 |
| 4.2.4 | CFI Delivery Type..... | 8 |
| 5 | Supplementary Information..... | 9 |
| 5.1 | Best Practice Guidelines | 9 |
| 5.2 | Additional Comments..... | 9 |
| 6 | Appendix 1 – ISO 4914 Equivalence | 10 |
| 7 | Appendix 2 - OTC ISIN-UPI Mapping | 11 |

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) | S | Swap | |
| | Asset Class (Group) | E | Equity | |
| Attr #1 | Underlying Assets | B | Basket | A bespoke, synthetic portfolio of underlying assets whose components have been agreed for a specific over-the-counter (OTC) derivative by the parties to the transaction |
| Attr #2 | Return or payout trigger | L | Volatility | The variability of movements in a security or underlying instrument's price; it is a measure of the amount by which an asset's price is expected to fluctuate over a given period of time; it is normally measured by the annual standard deviation of daily price changes |
| Attr #3 | Not applicable/undefined | X | Not applicable/undefined | Not applicable/undefined |
| Attr #4 | Delivery Type | C | Cash | Cash |
| | | P | Physical | Physical |
| | | E | Elect at Settlement | Elect at 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 |
|-------------|--------------|-----------------------------|------------------|------------------------------------|
| Equity | Swap | Parameter Return Volatility | Basket | Parameter_Return_Volatility_Basket |

3 REQUEST TEMPLATE

This section describes the input message received by UPI service.

| Template name | Template details | Release |
|---|------------------|---------|
| Request.Equity.Swap.Parameter_Return_Volatility_Basket.UPI.json | Initial version | Initial |

| Section | Attribute | Format | Cat | Example Value | Validation |
|-------------------|-----------------|--------|-----|------------------------------------|--------------------|
| Header Section | Asset Class | Set | M | Equity | |
| | Instrument Type | Set | M | Swap | |
| | Product | Set | M | Parameter_Return_Volatility_Basket | |
| | Level | Set | M | UPI | |
| Attribute Section | Delivery Type | Enum | M | CASH | [CASH, PHYS, OPTL] |

3.1 Underlier Input Method

This product is assumed to be a "Basket" in all cases, hence in accordance with ISO 4914 (UPI), there is no need to define individual constituents within this template (*see Appendix 1 - ISO 4914 Equivalence*) and so Underlier Input Method does not apply for this product.

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](#).

4 RECORD TEMPLATE

This section describes the record returned by the UPI service.

| Version | Template name | Template details | Release |
|---------|--|------------------|---------|
| V.1 | Equity.Swap.Parameter_Return_Volatility_Basket.UPI.V1.json | Initial version | Initial |

| Section | Attribute | Format | Cat | Example Value | Derivation |
|--------------------|--------------------------|---------|-----|---------------------------------------|-------------------------------------|
| Header Section | Asset Class | Set | M | Equity | |
| | Instrument Type | Set | M | Swap | |
| | Product | Set | M | Parameter_Return_Volatility_Basket | |
| | Level | Set | M | UPI | |
| | Template Version | Integer | D | 1 | |
| Attribute Section | Delivery Type | Enum | M | CASH | [CASH, PHYS, OPTL] |
| Identifier Section | UPI | String | D | QZZP2MT4B1N5 | |
| | Status | String | D | New | [New; Updated; Deleted; Deprecated] |
| | Status Reason | String | D | <null> | |
| | Last Update Date Time | DtTm | D | 2021-05-14T14:46:21 | YYYY-MM-DDThh:mm:ss |
| Derived Section | Classification Type | String | D | SEBLXC | See Derivation Rules |
| | Short Name | String | D | NA/Swaps Bskt Vol | See Derivation Rules |
| | Underlier Name | String | D | Basket | See Derivation Rules |
| | Underlying Asset type | String | D | Basket | Fixed value |
| | Return or Payout Trigger | String | D | Volatility | Fixed value |
| | CFI Delivery Type | String | D | [Cash, Physical, Elect at Settlement] | 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 + Return or Payout Trigger + NA + Delivery Type | | |
| Example | SEBLXC | | |
| Source | ISO 10962 (CFI) – Third edition 2015-07-15 | | |
| Source Attribute | Source Value | Derivation Method | Result |
| Instrument Type | Swap | Fixed Mapping | S |
| Asset Class | Equity | Fixed Mapping | E |
| Underlying Asset Type | Basket | Fixed Mapping | B |
| Return or Payout Trigger | Volatility | Fixed Mapping | L |
| Not applicable/undefined | Not applicable/undefined | Fixed Mapping | X |
| Delivery Type | CASH | Mapped to => | C |
| | PHYS | Mapped to => | P |
| | OPTL | Mapped to => | E |

4.2.2 Short Name

| Attribute | Short Name | | |
|--------------------------|---|--------------------|--------|
| Structure | "NA" + "/" + Instrument Type + Underlying Asset Type + Return or Payout Trigger | | |
| Example | NA/Swaps Bskt Vol | | |
| 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 |
| Underlying Asset Type | Basket | Fixed Abbreviation | Bskt |
| Return or Payout Trigger | Volatility | Fixed Abbreviation | Vol |

4.2.3 Underlier Name

| Attribute | | Underlier Name | |
|------------------|-----------------------|---------------------------------|----------------|
| Underlying Asset | Underlier Name Source | Underlier Name Source Attribute | Underlier Name |
| 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 |
| | OPTL | Mapped to => | Elect at Settlement |

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 short name abbreviation for Instrument Type within the Equity and Foreign_Exchange Asset Classes is “Swaps” whereas Rates and Commodities Asset Classes uses “Swap”.

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 | Not Required | Return or Payout Trigger |
| Underlier ID* | C | Not Required | |
| Underlier ID source* | C | Not Required | |
| Underlier type | M | Not Required | Underlying Asset Type |

**Underlier ID/source are not required for a custom basket defined in the ISO 4914 (UPI) specification.*

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 | Equity | |
| Instrument Type | Direct Map | Instrument Type | Swap | |
| Use Case | Direct Map | Product | Parameter_Return_Volatility_Basket | |
| Level | Set to "UPI" | Level | UPI | |
| Notional Currency | No Mapping | | | |
| Expiry Date | No Mapping | | | |
| Underlying Instrument ISIN | No Mapping | | | |
| Underlying Instrument Index | No Mapping | | | |
| Underlying Instrument Index Prop | No Mapping | | | |
| Price Multiplier | No Mapping | | | |
| Delivery Type | Direct Map | Delivery Type | CASH | |